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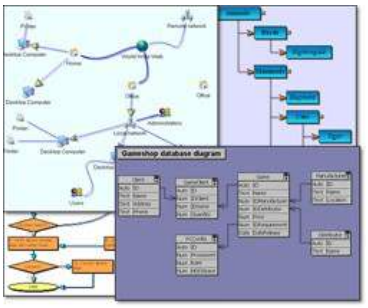
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Introduction

MindFusion.Diagramming for Java Swing (JDiagram for short) is a Java class library that that lets you create and display various types of diagrams and charts. The library includes model classes that describe the structure and appearance of a flow diagram, and view classes that can be integrated into any application that targets the Java Swing framework. By providing your software with ready to use capabilities for visualizing and editing relational data, JDiagram saves you from hundreds of hours of coding and debugging efforts.

JDiagram can give graphical representation to:



- Workflow processes
- Class relationships
- Graphs and networks
- Entity-relationship / database diagrams
- IVR systems
- Industrial automation processes
- Genealogy trees
- Algorithms and flowcharts
- Mind maps
- Organizational charts
- XML documents
- Classification hierarchies
- Data mappings

JDiagram provides intuitive user-interaction model for creating or editing diagrams. In addition, its programmatic interface places at your disposal many useful functions, ranging from printing, XML serialization, exporting to PDF and SVG to path-finding and automatic layout algorithms.

The control has been tested with the most popular Java development environments, and is used by companies from all around the world to create applications in Java.

General Information

The JDiagram Library

- Redistribution is royalty free
- Can be purchased with source code
- Is written in Java
- Implements the Document/View architecture
- Includes applet class for use in Web pages

User Interaction

- Several user interaction modes
- Free-form drawing
- Scrolling and zooming
- Copy and paste to/from the system clipboard
- Panning
- Automatic scrolling while dragging items with the mouse
- Alignment to grid
- Node alignment guides
- Multiple selection
- Tool-tips
- Docking points can be defined for nodes
- Magnifier tool
- Undo / redo support

- Rotate and flip shapes

Programming

- Programmatic access to the diagram elements
- Builder classes for fluent API
- Numerous properties for customizing appearance and behavior
- Numerous utility methods
- Path finding and cycle detection
- Rich event set
- The applet fires events that can be handled using JavaScript

Store and Retrieve Diagrams into/from

- Files on disk
- Java streams
- ASCII strings
- XML documents
- JSON strings

Output

- To display through Java Swing
- Printing and print preview
- To a browser using HTML image maps

Export and Import

- Export Portable Document Format (PDF) files
- Export Scalable Vector Graphics (SVG) files
- Export images in jpeg, gif, tiff, and png formats
- Export Visio 2013 drawing (.vsdx) documents
- Export Excel Open XML Format (XLSX) files
- Import OpenOffice Draw documents
- Import Visio 2013 drawing (.vsdx) documents

Diagram Elements

- More than 100 predefined node shapes
- Each diagram item can display multiple labels and icons
- Display SVG drawings in nodes
- Ability to define custom shapes and shape libraries
- Rotation of shapes at arbitrary angles
- Use any Java Swing component as a diagram node
- Container nodes
- Display hierarchical data in TreeView nodes
- Support for custom node and link types
- Assign diagram items to layers
- Tables with unlimited number of rows and columns
- Table cells can span several columns and rows
- Sections of table rows can be expanded or collapsed
- Links can comprise multiple segments
- Link segments can be straight lines or curves

Automatic Layout

- Spring-Embedder graph layout
- Directional tree layout
- Radial tree layout
- Fractal tree layout
- Layered graph layout

- Grid layout
- Simulated Annealing graph layout
- One-way graph layout
- Orthogonal graph layout
- Circular graph layout
- Orthogonal link router
- Source code flowchart layout
- Decision flowchart layout
- Triangular graph layout
- Hierarchical graph layout
- Cascading graph layout
- Tree map layout
- Process diagrams layout
- Automatic link routing

Appearance

- Styles and themes
- Nodes can display images and text
- Multiple text labels per item
- Various text alignment styles
- Text can be laid out in polygonal areas
- Glass visual effects
- Styled HTML-like text formatting
- Customizable fonts and colors
- Custom painting of nodes
- Shadows
- User-assigned mouse cursors
- Z-order
- Rich choice of pen and brush styles
- Transparent nodes
- Invisible nodes
- A background swimlane grid

Behavior

- Lock diagram elements
- Read-only mode supported
- Tables can be scrolled
- Collapse and expand hierarchy branches
- In-place text editing
- Dynamic positioning of links relative to connected nodes

Link Diagram Items

- Nodes to nodes
- Table rows to table rows
- Nodes to table rows
- Unconnected links

Hierarchical Grouping

- Attaching nodes to other nodes
- Attaching nodes to link control points
- Attaching nodes to link segments

Auxiliary Controls

- Overview control
- Ruler control
- Shapes listbox

- Node list control
- Layer list control
- Zoom control
- Item list control
- Palette control

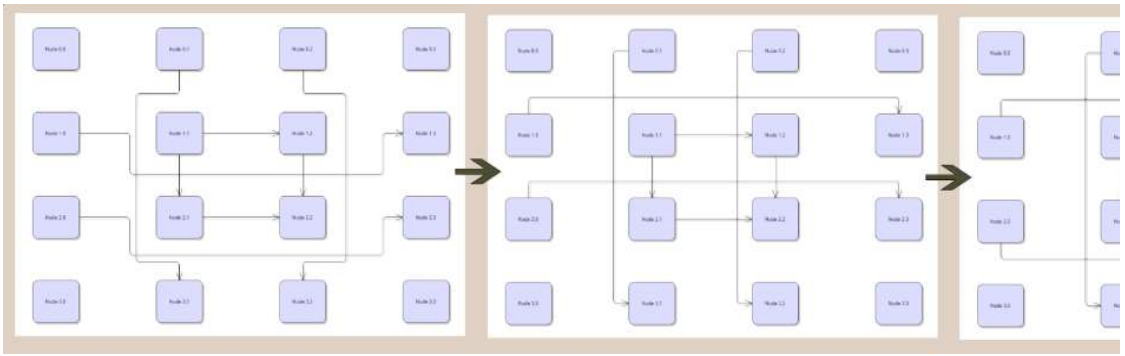
What's New in this Release

The list below describes recent changes and additions to JDiagram:

New in version 4.9.2

Auto-routing improvements

- Set the WhileModifying flag in TriggerRerouting to reroute links while users drag their end points.
- Enable the MinimizeCrossings property of PatternRouter to make it select routes with fewer crossings. Note that this adds an additional loop to the algorithm, which may affect performance for large diagrams.
- New EvaluateFarPoints property of RoutingOptions, considered by **PatternRouter** and GridRouter, selects the best route from the possible start/end point combinations of the link's incident nodes. Note that this adds an additional loop to the algorithms, which may affect performance for large diagrams.
- Set the MinLinkSpacing property of CompositeRouter to specify the padding between nearby links.
- This screenshot demonstrates the effects of **EvaluateFarPoints** and **MinimizeCrossings** properties:



Custom lasso tools

If you set the Behavior property of DiagramView to DrawLasso, the control lets users draw selection lasso without changing actual Selection. You could use that in conjunction with initializeLasso and lassoDrawn events to implement custom tools or selection logic, such as:

- Opening a custom context menu or UI panel styled for bulk operations.
- Creating a visual screenshot / export of only the selected region.
- Implementing custom selection logic or filters (e.g. select nodes of a specific type, or select only links).
- Bookmarking the selected area (adding it to Bookmarks).

Miscellaneous

- NodeElement property of LinkValidationEvent returns the TreeViewItem or TableNode cell related to the event.
- Fixed bitmap deserialization exception when loading pre-v4.1.4 XML files.

API changes

- **ZoomBehavior** class renamed to LassoBehavior (it now implements both DrawLasso and **Zoom** behaviors).

New in version 4.9.1

Serialization improvements

- **Json** element added to SaveToStringFormat enumeration, and can be used with saveToString and loadFromString methods.
- For naming consistency with XML serialization methods, JSON methods (**saveToJsonFile**, **saveToJsonObject**, etc) have been renamed to saveToJson and loadFromJson.
- JSON serialization methods extended to provide full set of **OutputStream** / **InputStream** overloads.
- XML serialization methods extended to provide full set of **OutputStream** / **InputStream** overloads (previously missing from DiagramDocument).
- AutoDeleteItems now saved in JSON format.
- Custom dash styles of DiagramItem's Pen property are now saved in JSON format.
- LaneGrid cell border styling now saved in JSON format.
- **LaneGrid** header fonts now saved in JSON format.
- The order of OutgoingLinks and IncomingLinks is now preserved in JSON format.

Miscellaneous

- nodeModified event is now also raised when users adjust the shape of a FreeFormNode by moving a FreeFormHandle. The AdjustmentHandle property of NodeEvent now reports the AdjustmentHandle instance used to modify a node. Previous move/resize/rotate enumeration value is now returned by getNodeHandleType method.

API changes

- Attention: loadFromJson(string) parameter now specifies file name. Call loadFromString to load from JSON data string instead. Replace saveToJson -> String calls with saveToString(SaveToStringFormat.Json);
- **saveToJsonFile** and **saveToJsonObject** replaced by saveToJson overloads.
- **loadFromJsonFile** and **loadFromJsonObject** replaced by loadFromJson overloads.
- The type of AdjustmentHandle property of NodeEvent changed from NodeHandleType enum to AdjustmentHandle reference. Previous move/resize/rotate enumeration value is now returned by getNodeHandleType method.

New in version 4.9

ItemListView control

ItemListView supersedes NodeListView and lets you show both nodes and links in the list. Items can be added by calling addItem method, and removed by calling removeItemAt. DefaultNodeSize property from **NodeListView** is called NewInstanceSize in the new class. The AutoConnectLinks and AutoConnectDistance properties control whether links created via drag-and-drop should connect to nearby nodes in the target diagram. For compatibility with legacy code, **NodeListView** won't be removed from the library, but it won't be getting any new improvements.

Palette control

The Palette control represents a tool palette that displays DiagramItem objects grouped into categories. It implements Accordion user interface that displays ItemListView components as its child panels, and category icon, title and collapse/expand button in pane headers. Each child **ItemListView** displays the items added to its corresponding category. Call the addCategory method to define a category and create its respective accordion pane. Call addItem to add an item to specified category. The control can also be configured by setting its Model to an object implementing PaletteModel interface. **Palette** provides same behavior and appearance properties as the **ItemListView** class.

Miscellaneous

- The jsonSerializeTag event now lets you set a new Representation (previous version allowed only modifying the provided JSON object).
- Fixed JSON serialization of Tag values of char type.

API changes

- **DiagramNodeEventArgs** used by NodeListView events has been renamed to NodeListEvent.
- A few ***EventArgs** classes renamed to ***Event** to follow Java conventions.

New in version 4.8.1

- Improved padding in BPMN shapes' geometries.
- VisioExporter improvements.
- Fix for items remaining in spatial index if calling some APIs from deleted events.
- getDiagramListeners method.
- Fix for GridRouter not updating spatial index.

New in version 4.8

ItemLabel image

New Image property added to ItemLabel lets you display icons along a link's geometry, or add more images to a ShapeNode. If a label contains both Text and Image, their relative position is specified by ImageAlign property (by default the image is placed on left side of text), and distance by ContentPadding. The image is rendered using intrinsic size reported by **java.awt.Image**, unless you override it by setting ImageSize property. You can treat label images as clickable icons by handling linkClicked or nodeClicked events and checking Label argument passed to their handlers.

Customize node action icons

The Renderers class lets you customize the appearance of nodes' fold, scroll and collapse icons, by providing **Graphics2D** drawing callbacks, bitmap images or SVG drawings:

- Set ExpandIconRenderer to override the appearance of collapse / expand buttons displayed by Expandable nodes.
- Set ScrollIconRenderer to override the appearance of scroll arrows displayed by Scrollable tables.
- Set FoldIconRenderer to override the appearance of fold / unfold buttons displayed by Foldable containers.

Miscellaneous

- Label argument now provided with click and double click events.
- Locked property added to ItemLabel. It lets you prevent users from editing label's text, and moving it when Behavior is set to MoveLabels.
- SVG rendering improvements.
- JSON serialization fixes and improvements.

API changes

- XmlException moved to **com.mindfusion.common** package.

New in version 4.7.3

- Improved render quality of bitmaps assigned to node's Image property.
- Improved render quality of Overview control.
- The Brush property of pens is now serialized in binary and XML formats.

New in version 4.7.2

Support for custom in-place edit controls

Handle the createEditControl event to display a custom Java Swing component for users to edit item's content. This event is raised when entering in-place editing mode, either interactively by users or by calling the beginEdit method. You could handle the event to return a composite control for editing many of the item's properties, and not only text. When leaving in-place editing mode, the Diagram raises destroyEditControl to let you copy to the item any values entered by the user and close the custom editor.

Miscellaneous

- Set the AutoDeleteLinks property to **false** to prevent deleting links along with a node they connect, and disconnect the links instead.
- FreeFormNode objects now support rotation.
- DividerPen property added to ContainerNode, TableNode and TreeViewNode classes. It lets you customize the appearance of the divider line drawn between a node's caption bar and content area.
- nodeHovered and linkHovered events raised when the mouse pointer rests over items for HoverDelay milliseconds.
- Improved in-place editing of ItemLabels.

New in version 4.7.1

Drag-and-drop improvements

- The control now displays a ghost image of nodes dragged from NodeListView. Set the DragIndicatorOpacity property to set the image opacity.
- Set HorizontalDropAlignment and VerticalDropAlignment to specify placement of dropped node relative to mouse pointer

Miscellaneous

- The Opacity property lets you create translucent DiagramItem by applying it to the alpha channel of all colors in the item.
- TableNode copy constructor fixes.
- Improved in-place editing of ItemLabels.

New in version 4.7

Spatial index

Set the EnableSpatialIndex property of Diagram to create an index of item positions for faster hit-testing and viewport clipping queries. This should greatly improve user interaction and rendering speed for diagrams containing tens of thousands or more items.

Java

```
// it will take some time to populate the diagram with a million nodes,
// but subsequent redraws and hit-tests should be very fast
Diagram diagram = new Diagram();
diagram.setAutoResize(AutoResize.None);
diagram.setDefaultShape(Shape.fromId("Rectangle"));
diagram.setValidityChecks(false);
diagram.setSelectAfterCreate(false);

for (int c = 0; c < 1000; c++)
{
    for (int r = 0; r < 1000; r++)
    {
        ShapeNode node = diagram.getFactory().createShapeNode(
            20 + c * 40, 20 + r * 40, 25, 25);
        node.setText(
            Integer.toString(
                diagram.getNodes().size()));
    }
}
diagram.resizeToFitItems(20);
diagram.setEnableSpatialIndex(true);

diagramView.setDiagram(diagram);
```

Note that rendering speed improves only when showing a smaller part of the diagram inside DiagramView's viewport. Rendering a lot of items at small zoom levels or in overview's fit-all mode will still need a lot of processing, so you might want to apply constraints on minimal zoom level of diagram view and overview controls for large diagrams.

Pattern router

New PatternRouter class routes links by applying patterns of segment and turn sequences and accepting them when resulting paths do not cross nodes. A path is accepted if its final segment ends in target point and is orthogonal to respective side of target node. If there are several possible paths, the router selects the shortest one. The MinimumDistance property specifies minimum allowed distance of link segments from nodes. The PreferredDistance property specifies distance of first or last link bend from associated node. **PatternRouter** includes several predefined patterns designed to create consistent-looking paths, and allows creation of custom patterns. Custom patterns can be defined as sequence of RouteStep objects specifying whether the path advances by relative or absolute distance, or changes direction:

Java

```
RoutePattern rightZigzag = new RoutePattern();
rightZigzag.getSteps().add(
    new RouteStep(RouteStepKind.AdvanceRelative, 0.5f));
rightZigzag.getSteps().add(
    new RouteStep(RouteStepKind.TurnRight));
rightZigzag.getSteps().add(
    new RouteStep(RouteStepKind.AdvanceRelative, 1));
rightZigzag.getSteps().add(
    new RouteStep(RouteStepKind.TurnLeft));
rightZigzag.getSteps().add(
    new RouteStep(RouteStepKind.AdvanceRelative, 0.5f));
router.getPatterns().add(rightZigzag);

// this can be defined in shorter form using a pattern string
// RoutePattern rightZigzag2 = new RoutePattern(
//     "ADR0.5 TRR ADR1 TRL ADR0.5");
```

Composite router

The CompositeRouter class lets you chain link routers (objects implementing LinkRouter interface) so that a link passes through the sequence until it gets routed successfully. Diagram's default router is now set to a **CompositeRouter** instance containing a PatternRouter and GridRouter sequence. This applies the several standard pattern paths when possible, and otherwise routes links using the cost minimizing heuristics-based grid router.

Miscellaneous

- Disabling AvoidOverlaps property of RoutingOptions lets you create routes with overlapping segments.
- Improved keyboard focus handling for CompositeNode components.
- Fixed exception in EditComponent drawing code.

API changes

- **suspend** and **resume** methods removed from LinkRouter interface. Call Diagram's suspendLinkRouter and resumeLinkRouter methods instead.
- Default LinkRouter changed from QuickRouter to CompositeRouter instance.
- boolean **SmartPolylineEnds** property of RoutingOptions replaced by PolylineRouting enum property, which also provides an option to prevent inclined link segments for Polyline routes.

Version History

The list below describes past changes and additions to JDiagram:

New in version 4.6.2

Multiple labels per node

The NodeLabel class allows multiple captions to be displayed for a single DiagramNode of any type. Node labels provide a set of properties allowing full customization of their display and positioning. Label position is defined by specifying a pin point and offset from it, set through setCornerPosition, setEdgePosition, setCenterPosition methods. In addition, the HorizontalAlign and VerticalAlign properties of **NodeLabel** specify on which side of pin point to draw the label's caption.

For example, following code adds extra labels to top-left and bottom-right corners of a ShapeNode:

Java

```
ShapeNode node = diagram.getFactory().createShapeNode(10, 50, 40, 30);
node.setText("text"); // centered main text

NodeLabel lb1 = node.addLabel("label 1");
lb1.setCornerPosition(0, 0, 0);
lb1.setHorizontalAlign(Align.Near);
lb1.setVerticalAlign(Align.Near);
lb1.setBrush(new SolidBrush(Color.red));
lb1.setTextColor(Color.white);

NodeLabel lb2 = node.addLabel("label 2");
lb2.setCornerPosition(2, 0, 0);
lb2.setHorizontalAlign(Align.Far);
lb2.setVerticalAlign(Align.Far);
lb2.setBrush(new SolidBrush(Color.yellow));
lb2.setTextColor(Color.red);
```

Miscellaneous

- Improved text rendering quality on high-resolution displays.
- Fixed automatic scrolling and ZoomControl panning on high-resolution displays.
- Improved **ZoomControl** rendering quality.
- More precise vertical centering of text in table captions and cells.
- The MoveLabels behavior lets user move link and node labels interactively.
- ExcelExporter exports pen width of links.
- **ExcelExporter** sets more precise positions of link end points.
- HorizontalOffset and VerticalOffset now work for link labels positioned using setLinkLengthPosition method.
- DashStyle.DashDotDot serialization fix.

New in version 4.6.1

TableNode improvements

- The CaptionBackBrush property lets you customize the fill of table's caption bar.
- Tables can be custom-drawn by setting their CustomDraw property and handling the drawNode event.
- Table cells can be custom-drawn by setting the CellCustomDraw property and handling the drawCell event.
- Fixed thick appearance of caption divider line when using CellFrameStyle.Simple.

TreeViewNode improvements

- The Brush property of TreeViewItem allows assigning different backgrounds to individual items.
- The ShowLines property lets you toggle visibility of items' connecting lines.

Miscellaneous

Fixed exception when serializing LinkLabel in JSON format.

New in version 4.6

Scrollable containers

Set the Scrollable property of ContainerNode to let users scroll the container's contents. The node then displays scrollbars at right and bottom edges that can be used to scroll interactively. The ScrollX and ScrollY properties let you determine current scroll position or change it programmatically. Note that in order to let container's content overflow and become scrollable, you must either disable AutoGrow, or allow users reduce container size by changing HandlesStyle and EnabledHandles properties from their default MoveOnly / Move values.

Container improvements

- ContainerNode containment is no longer implemented via a Group object. Child nodes are now stored in a dedicated Children list, and a node's container is returned by the Container property.
- Enable the AutoDeleteChildren property to automatically delete child nodes when a container is deleted.
- Drag-and-drop operations from NodeListView and ShapeListBox automatically add the newly created node to a container if one is found at the drop position.
- Call the resizeToFitChildren method to resize a container, making it big enough to contain its child nodes.
- The KeepInsideParent constraint of child nodes now also prevents them from overlapping the container's caption bar.
- The AutoGrow property lets you prevent **ContainerNode** from growing when adding child nodes to it.

Text rendering improvements

- If WrapAtCharacter is disabled, long words that do not fit on a single line are now rendered clipped by default instead of stopping rendering at their position.
- WrapOverflowingSingleWordLines property of TextFormat enables wrapping of long words that would not fit on a single line, while other text lines keep wrapping only at word boundaries.

Lasso zoom tool

The control now supports several ways to zoom using lasso tool:

- Set the Behavior property to Zoom to always draw zoom lasso.
- Set the Zoom flag for one of the keys in ModifierKeyActions to let users draw zoom-lasso with respective modifier key pressed and the left mouse button.
- Assign Zoom value to RightButtonActions or MiddleButtonActions property to zoom using respective mouse button.

Modifier keys

The ModifierKeyActions property of DiagramView lets you bind modifier keys to diagram actions defined in ModifierKeyAction enum to execute when dragging with left mouse button with respective key pressed:

- **None**: disables the modifier.
- **Pan**: pans the view.
- **Select**: draws selection lasso.
- **OverrideBehavior**: draws a new item instead of grabbing adjustment handle.
- **Magnify**: shows magnifier.
- **ExtendSelection**: adds to selection without deselecting items outside of lasso.
- **Zoom**: draws zoom lasso.

Button bindings

RightButtonActions and MiddleButtonActions properties of DiagramView let you map mouse buttons to members of the MouseButtonAction enum (Pan, Cancel, Select, Draw, Magnify, Zoom) specifying how mouse click or drag operations affect the diagram.

Miscellaneous

- The initializeLasso event lets you customize appearance of selection lasso before it shows on screen.
- New bringIntoView overload lets you scroll to specified rectangular area.

- New zoomToRect overload lets you zoom to a rectangular area while keeping it centered in the viewport.
- ImageAlign supports new **FitLeft**, **FitTop**, **FitRight** and **FitBottom** alignment styles, which resize Image to fit node's boundaries and align it to respective border.
- Layout classes now process DiagramLinks connected to TreeViewItems.
- Fixed background drawing glitch when the diagram is smaller than current viewport and grows due to AutoResize.

API changes

- Container's child nodes are no longer accessible via SubordinateGroup; use the container's Children list instead.
- A node's container is no longer accessible via MasterGroup; use the Container property instead.
- Java Applet classes removed.

New in version 4.5.1

- The MoveNodes behavior allows grabbing nodes to drag them without using adjustment handles.
- Fixed tooltips when Windows 10 display scaling is enabled.
- Fixed inplace-edit when Windows 10 display scaling is enabled.
- FillMode enum moved from **com.mindfusion.diagramming** to **com.mindfusion.drawing** package.

New in version 4.5

SVG nodes

The SvgNode class represents nodes that can display SVG drawings in addition to the rendering provided by its base ShapeNode class. SVG elements are rendered after the associated bitmap Image and just before the drawNode event is raised for Additional custom drawing. SVG elements are parsed and associated with the node through a com.mindfusion.svg.SvgContent object, which should be initialized and then assigned to the Content property. The Factory class contains createSvgNode overloaded methods for creating nodes from SVG files or from already loaded **SvgContent** instances.

JSON serialization improvements

- HatchBrush objects are now serialized in JSON files.
- saveToJson now encodes the JSON content in UTF8 format.
- Fixed JSON serializaton of pens with null DashStyle.

Miscellaneous

- ImagePadding property of ShapeNode, TableNode and Cell lets you set padding space between element's borders and the contained Image.
- FoldIconSize property added to ContainerNode.
- Tag property added to the **Cell** class lets you associate custom data with cells.
- Fixed drawing glitches when Windows 10 display scaling is enabled.

New in version 4.4.1

JSON Serialization

Diagrams can now be serialized in JSON format. This can be used for interoperability with MindFusion JavaScript diagramming library, or for general storage in JSON files or databases. To serialize a Diagram to a JSON string, call its saveToJsonString method. To deserialize a diagram back from its JSON representation, call the loadFromJsonString method. Custom item classes can implement JSON serialization for their additional properties by overriding the saveToJson and loadFromJson methods of DiagramItem. Such classes must be registered for serialization by calling the registerItemClass method and providing a string identifier for the *clientClass* parameter.

Miscellaneous

- New createDiagramLink overload of the Factory class makes it easier to create links between TreeViewNode items.
- Fixed misplaced tracker rectangle in Overview control when Windows resolution scaling is enabled.

New in version 4.4

New CompositeNode components

Component classes that support user interaction can now be used as part of CompositeNode templates:

- ButtonComponent implements clickable buttons inside nodes.
- CheckBoxComponent represents a check-box that lets users select true / false values.
- EditComponent implements editable text area.
- NumericEditComponent implements number-entry area.
- SliderComponent allows selecting a value from numerical range by dragging a slider.
- SpinnerComponent represents a spin-edit component.

Improved FlowchartLayout

FlowchartLayout can now arrange more types of graphs, no longer requiring them to represent strictly-nested source code structures.

New in version 4.3.3

Text improvements

- Caption text of TableNode and ContainerNode objects can wrap to multiple lines in plain-text mode.
- Table cell text can wrap to multiple lines in plain-text mode too (i.e. when EnableStyledText is disabled).
- TextPadding now works for **ContainerNode** captions.

Bug fixes

- Automatic layouts should now preserve shape of multi-segment links in containers.
- Fixed exceptions in CascadeLayout and LayeredLayout with LinkType set to Cascading.
- Fixed LinkLabel loading code from old XML diagram formats.

New in version 4.3.2

Export Excel files

The ExcelExporter class from com.mindfusion.diagramming.export package exports diagrams to Excel Open XML format (XSLX). Diagrams are exported as Excel AutoShapes drawings. The export overload that takes a DiagramDocument parameter creates a sheet for each DiagramPage in the document. The export(Diagram) overload creates a single Excel sheet.

Java

```
ExcelExporter ex = new ExcelExporter();
ex.setTemplatePath(
    templatesFolder + "/ExcelTemplate.xlt");
ex.export(diagram, fileChooser.getSelectedFile().getAbsolutePath());
```

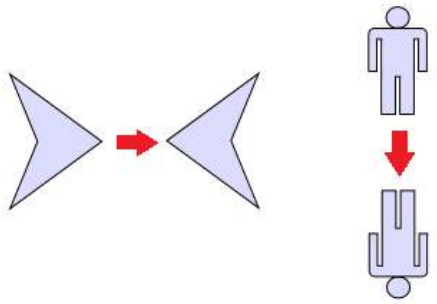
Miscellaneous

Improved back-buffer allocation code. The memory footprint of the diagram should now be much lower and drawing should be slightly faster.

New in version 4.3.1

Flip shapes

The shape of a ShapeNode can be flipped horizontally or vertically. Enable the AllowFlip property and the shape flips when an edge is dragged over its opposite edge. You can get or set current flip state using FlipX and FlipY properties.



DiagramLink improvements

- AllowSplitLinks now works for Bezier links too. Users can insert a new Bezier segment by dragging any point (other than a control point) of a selected link. Adjacent segments can be merged back into a single one by dragging a tangent control point (square adjustment handle) onto a pass-through control point (round adjustment handle).
- IntermediateShape shapes are now rendered at correct position for **Spline** links.

Miscellaneous

- The PanAndModify behavior lets you select and modify when the mouse pointer is over an item, or pan the view otherwise.
- The updateRuntimeIndices method of Diagram assigns unique integer identifiers to items, accessible via getRuntimeIndex. Identifiers are transient and valid only for the current state of diagram immediately after the updateRuntimeIndices() call.

API changes

- Brush, Pen and DashStyle classes have been moved to com.mindfusion.drawing package.
- Support for Java 7 dropped, JDiagram.jar is now compiled using Java 8 compiler.

New in version 4.3

Fluent API

Builder classes in **com.mindfusion.diagramming.builders** package add support for fluent programming style. Static with and instance init methods in DiagramItem, DiagramItemStyle and Layout -derived classes return a builder instance that can be used to set up respective new or existing objects:

Java

```
diagram.getNodes().add(
    ShapeNode.with()
        .brush(Color.LIGHT_GRAY)
        .font("Arial", 4)
        .enableStyledText(true)
        .text("Task <i>1</i>")
        .toolTip("This is the task")
        .create());

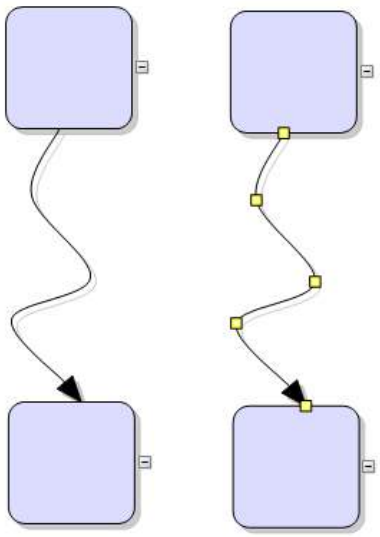
diagram.getFactory()
    .createShapeNode(20, 20, 20, 20).init()
        .brush(Color.LIGHT_GRAY)
        .font("Arial", 4)
        .enableStyledText(true)
        .text("Task <i>2</i>")
        .toolTip("This is the second task");

TreeLayout.with()
```

```
    .levelDistance(20)
    .nodeDistance(20)
    .linkStyle(TreeLayoutLinkType.Cascading3)
    .create()
    .arrange(diagram);
```

DiagramLink improvements

- The component no longer keeps a separate segmentCount field, removing a common source of errors. The SegmentCount property now calculates its value from ControlPoints elements. The updateFromPoints(updateGroups, updateSegments) overload has been removed too.
- SegmentCount setter no longer refuses changing number of segments if auto-routing is enabled or the link is a self-loop.
- The new **Spline** element of LinkShape enumeration draws links as interpolating splines that pass through all of their control points:



Enum types

Old-style enumeration classes with static finals have been replaced by enum types, improving type checking and auto-completion support. This change will not affect your code if only passing enum members to methods from the API. If storing them in fields on the other hand, you must change the field type from int to respective enum type.

The types changed to enum are - Action, Align, Anchoring, AttachToLink, AttachToNode, AutoResize, Behavior, CellFrameStyle, ColumnStyle, CustomDraw, DelKeyAction, DirectionConstraint, EffectPhase, ExpandButtonAction, ExpandButtonPosition, GlassEffectType, Granularity, GraphicsUnit, GridStyle, GroupRotation, HandlesStyle, HatchStyle, HitTestPriority, HyperLinkStyle, ImageAlign, LayeredLayoutLinkType, LinkCrossings, LinkShape, LinkTextStyle, MarkStyle, ModificationStart, MouseInputMode, MultipleGraphsPlacement, NodeHandleType, Orientation, Relationship, RelativeToLink, RerouteLinks, RestrictToBounds, SaveToStringFormat, SelectionStyle, ShadowsStyle, ShowAnchors, SimpleShape, SnapToAnchor, TableConnectionStyle, TickPosition, TreeLayoutBalance, TreeLayoutDirection, TreeLayoutLinkType, TreeLayoutType, TreeViewConnectionStyle.

Type of EnabledHandles and TriggerRerouting properties has been changed to EnumSet.

Fixes

- Fixed a problem where setLicenseKey did not work on non-Oracle implementations of the Java runtime.
- Fixed SvgExporter bug where incorrect offset would be applied to nodes' Image bitmaps.

New in version 4.2

Free-form nodes

A FreeFormNode collects all points from users' mouse or touch input and displays them as node's outline. To let users draw free-form nodes interactively, set Behavior to DrawFreeForms or LinkFreeForms. Use the Points property of **FreeFormNode** to get or set outline points programmatically. If the Closed property is set, the node is drawn as a closed shape and its interior filled, or otherwise the node is drawn as a poly-line. If the distance between first and last points drawn by user is shorter than AutoCloseDistance, the node's **Closed** property is automatically set to **true**. AutoCloseDistance default value is Float.MAX_VALUE, so free-form nodes are always closed.

Convert free-form drawings to ShapeNodes

Additional drawing modes, convenient for touch input, convert FreeFormNode objects drawn by user to ShapeNode objects with matching shapes. To enable them, set Behavior to DrawFreeShapes or LinkFreeShapes. The shapes against which the user's input is matched are set via diagram's FreeFormTargets property. By default it contains Rectangle, Decision and Ellipse shapes.

Fixed bugs

- Text outside of node boundaries was not repainted correctly after loading custom shape library from XML.
- TreeViewNode scrollbar arrow buttons did not scroll correctly in some situations.
- HandlesStyle is now serialized by the base DiagramNode class. This automatically saves the value for custom node types and fixes lost non-default values for CompositeNode and **TreeViewNode** after serialization.

API changes

Adjustment handles are no longer identified by integer values but by instances of AdjustmentHandle and derived classes. This changes the signatures of DiagramItem.hitTestHandle methods and the InteractionState constructor. Standard handle classes included are NodeAdjustmentHandle for changing a node's position and size, LinkAdjustmentHandle for changing link control point positions, and FreeFormHandle for changing the position of a FreeFormNode outline point.

New in version 4.1.4

Resize table columns and rows

Columns and rows of a TableNode can now be resized interactively if its AllowResizeColumns or AllowResizeRows properties are enabled. In order to resize, move the mouse pointer to the border line on column's right side or row's bottom side until it shows resize cursor and start dragging. The control raises tableColumnResizing and tableRowResizing events to let you validate new size or prevent resizing some elements. The tableColumnResized and tableRowResized events are raised after the operation completes.

License keys

There is no separate trial build of the control's JAR archive provided anymore. Instead, call the setLicenseKey method of DiagramView to disable the component's evaluation mode and stop displaying trial messages. **setLicenseKey** is static and you can call it just once before creating any views. License key strings are now listed on the Keys & Downloads page at MindFusion's customer portal.

Miscellaneous

- Undo/redo records for in-place edit operations are now created automatically.
- KeepInsideDiagram constraint prevents a node from leaving diagram boundaries during user interaction (the older RestrictItemsToBounds property does not stop nodes from leaving diagram area but returns them to original position if dropped outside).
- Dashed selection frames are now drawn in two colors and should be visible on both the default white background and custom darker backgrounds. You can change the second dash color via DashBackground property of HandlesVisualStyle.
- Improved mouse capture for composite controls hosted inside ControlNodes.

- StartPoint and EndPoint properties provide a shortcut to setting the first and last control points of a DiagramLink.

Fixed bugs

- Fixed text clipping problem when magnifier is over TreeViewNode.
- Links to contained nodes were left visibly disconnected from them after deleting a folded ContainerNode.
- Lasso selection could not select strictly horizontal or vertical straight-line links when IncludeItemsIfIntersect is disabled.

New in version 4.1.3

- Type of LayoutTraits keys, such as TreeLayoutTraits and SpringLayoutTraits, has been changed from custom objects to Java enumerations.
- **LayoutTraits** values are now saved also by binary serialization methods, while older versions saved them only in XML format.
- The changeUnit method now also scales pen widths.
- A new setBounds overloaded method lets you move a node without updating positions of its links or attached nodes.
- Fixed a bug where setMeasureUnit would not switch away from Centimeter unit.
- Fixed a bug where folding a ContainerNode would not hide its child nodes after loading from XML until Z order cache is invalidated.
- Fixed all compiler warnings from component's source code and sample projects.
- Fixed obfuscation problem where nested XDimension2D.Double type wasn't accessible.

New in version 4.1.2

AnchorPatern improvements

- The XUnit and YUnit properties allow specifying the coordinates of an AnchorPoint as a fixed offset from the node's top-left corner rather than in percentage, so that the point position does not change when the node is resized.
- The AnchorPattern property of Shape class lets you associate anchor points with shape definitions. If a ShapeNode instance does not contain its own AnchorPattern, it will derive the one defined by the node's Shape.

Miscellaneous

- Type of Margin property of LinkLabel has been changed from **float** to Thickness.
- The changeUnit method sets a new MeasureUnit and scales the coordinates of diagram items to keep them the same size.
- Fixed node spacing in bottom-to-top TreeLayout.
- TabbedScrollPane allows reordering tabs when AllowTabReorder property is enabled.
- Improved quality of print preview page images.
- DisableTextClipping property added to PdfExporter.

New in version 4.1.1

Improved arrowhead rendering

- Arrowheads are rendered as a single path when possible and several arrowhead Shape definitions have been changed to implement mitered joints when HeadPen is set to a thick pen.
- The point where end segments connect to arrowheads can be specified via the LinkSegmentInset property of shapes. Shape definitions from the ArrowHeads class set it to suitable default value. This allows using transparent or semi-transparent brushes without seeing the link line drawn behind arrowheads.
- Arrowhead shadows are no longer filled if the link's EffectiveBrush is **null** or fully transparent.
- IntermediateShape is now also rendered for Bezier links.

Miscellaneous

- Set the Brush property of LinkLabel to fill the background of link labels.
- Multiple-resize of rotated nodes fixed to apply same offsets in nodes' local coordinate system.
- Fixed a bug where setting the CaptionBackBrush property of containers would hide the caption-bar borders.

New in version 4.1

Tree map layout

Tree maps represent hierarchies by nesting child nodes within their parents, where the areas of leaf nodes are proportional to their Weight values. Unlike other layout algorithms, TreeMapLayout expects hierarchies to be defined via grouping or containment (see attachTo method and ContainerNode class), and will ignore any links in the diagram. The diagram area covered by the topmost nodes in a hierarchy is specified via the LayoutArea property. By default, the layout tries to keep the ratio of node sides as close as possible to one. However this could make it hard to distinguish separate levels of the hierarchy. To alleviate that, set Squarify to **false**, and child nodes will be arranged either as a row or a column inside their parent node, alternating directions for each level. The drawback is that when **Weight** ratios differ greatly or nodes contain many children, some nodes could end up with very narrow rectangles.

Decision flowchart layout

DecisionLayout arranges simple flowcharts consisting of decision boxes with up to three outgoing links per node and activity boxes with a single outgoing link per node. The nodes are arranged in columns and rows, whose distance depends on the HorizontalPadding and VerticalPadding property values. When links share the same row or column, they are placed at a distance specified via LinkPadding. The layout arranges nodes recursively starting from StartNode. If **StartNode** is not specified, the algorithm selects the root of the deepest branch of the graph's spanning tree as start node.

Composite nodes

The CompositeNode class implements nodes whose appearance can be defined via composition of components and layout containers. The content of a composite node can be loaded from XML files similar to .NET Xaml templates and Android XML layouts. This initial release includes layout containers such as StackPanel and GridPanel, and read-only components like ImageComponent, TextComponent, ShapeComponent, BorderComponent. Future versions will add interactive components like buttons and text editors.

Export Visio 2013 files

The VisioExporter class can export the content of Diagram and DiagramDocument objects to Visio 2013 VSDX files. In order to use it, import the **com.mindfusion.diagramming.export** namespace. **VisioExporter** relies on a template file, called *Visio2013.vxt*, containing some boilerplate Visio XML code. The template must be either located in same folder as the application, or its path must be specified via the TemplatePath property. At this time the exporter supports shapes from Visio basic stencil. Support for more shapes will be added upon request.

Miscellaneous

- Layout algorithms now automatically resize diagram's Bounds if it's not large enough to fit the arranged content. To revert to old behavior and keep fixed **Bounds** size, set GrowToFit to **false**.
- Improved PdfExporter performance.
- VisioImporter now supports Visio group shapes. Child shapes in groups are no longer lost when importing, and their corresponding diagram nodes are attached to the corresponding group node.

New in version 4.0.5

Resize multiple nodes

Now it is possible to resize multiple selected nodes simultaneously. To enable that, set the AllowMultipleResize property to **true**. When enabled, dragging a corner or side adjustment handle of any node resizes all nodes in the selection. The operation will be cancelled for all nodes if any of them does not accept its new size, e.g. if it's smaller than minimum allowed node size.

VisioImporter improvements

- The Item argument of VisioImportListener.importItem event handlers is now pre-set to a DiagramItem instance created for the imported Visio shape, letting you avoid parsing some standard data such as Bounds or Text. You can either modify this item's properties, or replace it with a new instance of a different type.
- ImportItemEvent now provides properties for accessing the XML content of Visio shape masters.
- NURBS lines are now imported as Bezier links.
- Fixed a crash when a shape master does not have a name attribute (this happens with custom stencils).
- Fixed a bug where one-segment connectors were imported at wrong positions.
- Fixed a crash when theme1.xml is missing from the imported vsdx archive (this happens with files converted from old Visio versions to 2013 format)

ZoomControl improvements

- Changing DiagramView's ZoomFactor now updates zoom control slider automatically.
- The pan widget now fills the ZoomControl width or height instead of having fixed size.
- Setting **ZoomControl**'s width larger than its height makes the zoom slider horizontal.

Miscellaneus

- Fixed a bug where Ruler alignment guides were not positioned correctly for diagrams starting at negative coordinates.

API changes

- The **selectionMoved** event has been renamed to selectionModified, and is also raised if nodes are resized when AllowMultipleResize is enabled. Event handlers now receive SelectionEvent parameter instead of **EventObject**.
- The **selectionMoving** event has been renamed to selectionModifying, and is also raised if nodes are resized when **AllowMultipleResize** is enabled. Event handlers now receive SelectionValidationEvent parameter instead of **ValidationEvent**.

New in version 4.0.4

Import Visio 2013 files

The VisioImporter class can import .vsdx files created by Visio 2013. In order to use it, you must import the com.mindfusion.diagramming.importers namespace. Various overloads of the import method can be used to import the file into a DiagramDocument whose pages correspond to the Visio drawing pages, or into a single Diagram whose content is merged from all imported pages. At this time **VisioImporter** supports the basic flowchart and data flow Visio stencils. For each node shape from the .vsdx file, the importer creates a ShapeNode object whose Shape, Text, Brush and Pen properties are set to values corresponding to the imported Visio shape. For each connector shape, the importer creates a DiagramLink object whose Origin and Destination are set to the corresponding imported nodes, and whose ControlPoints reflect the geometry of the connector.

Import OpenOffice Draw files

The DrawImporter class can import .odg files, created by the OpenOffice Draw vector graphics editor. In order to use it, you must import the com.mindfusion.diagramming.importers namespace. **DrawImporter** supports shapes from the General and Flowchart shape palettes in Draw. Various overloads of the import method can be used to import the OpenOffice drawing into a DiagramDocument whose pages correspond to the Draw pages, or into a single Diagram whose content is merged from all imported pages. For each node shape from the .odg file, the importer creates a ShapeNode object whose Shape, Text, Brush and Pen properties are set to values corresponding to the imported OpenOffice shape. For each connector shape,

the importer creates a DiagramLink object whose Origin and Destination are set to the corresponding imported nodes, and whose ControlPoints reflect the geometry of the connector.

Zoom control

The ZoomControl class lets users change interactively the current zoom level and scroll position of a DiagramView. To set it up, add a **ZoomControl** to the frame, place it anywhere over a **DiagramView**, and set the control's View property to that view. Set the ZoomStep and ScrollStep properties to specify the amount added to view's zoom level or scroll position by **ZoomControl**'s buttons. You can customize the control's appearance by setting properties such as Fill, BorderColor, CornerRadius and TickPosition.

Miscellaneous

- Links can now snap to nodes from a distance when their AutoSnapToNode property is enabled. The maximum snap distance is specified via the AutoSnapDistance property. AutoSnapToNode supersedes the old **SnapToNodeBorder** property, which worked only for nodes under mouse pointer.
- Set the RoundedLinks and RoundedLinksRadius property to draw arcs at the joints of Cascading and Polyline links' segments.
- Selection.IncludeItemsIfIntersect property specifies if lasso-selection should select items that intersect the selection rectangle, or otherwise are entirely inside it.
- Several new shapes added for better compatibility with Visio 2013 basic stencil: RightTriangle, Decagon, Trapezoid, Star4Pointed, Star5Pointed, Star6Pointed, Star7Pointed, Star16Pointed, Star24Pointed, Star32Pointed, Donut, Plaque.
- **Permissions** attribute added to JAR manifest file to allow loading DiagramApplet under Java 7 update 51.

New in version 4.0.3

Pattern brushes

The HatchBrush class allows filling shapes with a pattern. Supported patterns are exposed as members of the HatchStyle class. Points or lines from the patterns are painted using the brush' ForegroundColor property, while the space between points or lines is filled using BackgroundColor.

Adjustment handles improvements

- MoveOnly and HatchHandles3 handle styles now have the same default appearance as in .NET versions of the control, based on a HatchBrush with Percent50 pattern. The brush can be changed using the PatternBrush property of HandlesVisualStyle.
- Two new HandlesStyle members added, RoundAndSquare and RoundAndSquare2, that draw corner resize handles as circles and remaining handles as squares.
- RotationHandleBrush property added to **HandlesVisualStyle**.

Miscellaneous

- Scrollable property added to TreeViewNode.
- Decoration elements in Shape definitions can now be accessed using the getDecorations method.
- You can change the text region of existing shapes using the setTextArea method.
- The colors of multiple-selection frame can now be customized using the Pen and Brush properties.
- The MeasureUnit property now supports Centimeter and WpfPoint values. The latter allows loading diagram files saved by WPF and Silverlight versions of the control with their default units.

API changes

For source code compatibility with Android version of the control, and eventual multi-touch support in future Java Swing versions, these members has been renamed to follow the W3C pointer events specification:

- **getMousePosition** method in NodeEvent, LinkEvent and DiagramEvent has been renamed to getPointerPosition.

- **mousePressed**, **mouseMoved**, **mouseDragged** and **mouseReleased** members of BehaviorBase have been renamed to pointerDown, pointerOver, pointerMove and pointerUp respectively.
- **nodeMouseEnter**, **nodeMouseLeave**, **linkMouseEnter**, **linkMouseLeave** events in DiagramListener have been renamed to nodePointerEnter, nodePointerLeave, linkPointerEnter, linkPointerLeave.

New in version 4.0.2

ContainerNode improvements

- child nodes are now drawn by their containers; when containers overlap, the children of a lower container cannot appear in front of the upper container anymore;
- the ClipChildren property specifies whether to clip child items to container's boundaries;
- the ZIndex property no longer changes automatically when dropping nodes into a container;
- the Visible property of child items no longer changes when folding or unfolding containers; this lets you keep invisible items inside containers;
- when selection including a container and its child node is dropped into another container, the child node now remains in its original container;

Miscellaneous

- The ScrollZoneSize property of DiagramView can be used to specify the size of the area near the control edges that starts auto-scrolling.
- Improved placement of link labels along shorter link segments.
- The arrangeLinkLabels method rearranges link labels whose AutoArrange flag is set.
- DiagramLink.intersects checks whether two links intersect.
- The hitTest method determines whether a diagram item or any of its child items contain the specified point.
- Overriding hitTestHandle in a derived item type lets you implement custom adjustment handle testing for the type.
- The getFlatItemList returns a list of all TreeViewNode items.
- The GridOffsetX and GridOffsetY properties let you change the origin of the alignment grid.

New in version 4.0.1

Preserve order in tree layout

The Balance property of TreeLayout can be set to Preserve to keep the original geometric order of child nodes when arranging them under their parent. This can be used to arrange tree branches in a specific order by first placing them in increasing horizontal or vertical positions. Another possibility is to apply **TreeLayout** from nodeModified handler to let users rearrange the tree branches by dragging and dropping a node.

Undirected path finding

PathFinder now supports undirected mode. Its methods have been changed from static to instance, and its constructor takes an ignoreDirection parameter. If ignoreDirection is enabled, the underlying graph is treated as undirected and link direction is not considered when looking for paths.

Selection improvements

- DiagramView.Behavior can be set to SelectOnly to let users select existing items, but not modify them or draw new ones.
- The SetsDirtyFlag property of the Selection class specifies whether the Dirty flag should be set when selection changes.

Miscellaneous

- Style classes now contain a FontUnit property specifying the unit of measure of FontSize. Important: the default FontUnit value is Point, while font sizes were always measured in diagram's MeasureUnit in previous versions. If using styles instead of setting items' Font property, when upgrading to version

4.0.1 you must either adjust **FontSize** for the **Point** units, or change FontUnit to **World**, which makes it compatible with previous versions.
- the last row in a TableNode will now be rendered clipped if it fits only partially inside the node, whereas in previous versions the row would not be rendered at all.
- the HandlesStyle of a link can now be set to Invisible to stop rendering its selection handles, but still allow dragging control points.
- the AllowAddChildren and AllowRemoveChildren properties of ContainerNode specify whether users are allowed to add or remove child nodes to / from the container.
- the getNearestBorderPoint method of DiagramNode can be used to find a point from the node's border closest to a specified point.
- the Ruler control now raises nodeModified events when nodes are moved using alignment guides.
- styled text can contain <br> tags to force line breaks.
- HeadBrush, BaseBrush and IntermediateBrush properties allow setting distinct brushes for respective arrowhead shapes.
- the Cell.TextPadding property allows customizing text margins of table cells.

Fixed bugs

- fixed crash in LayerListView control.
- TableNode.resizeToFitText did not work correctly with styled text.
- fixed bug when cloning DashStyle objects.
- zTop and zBottom methods did not work correctly with layers.

New in version 4

Styles and themes

The appearance of the items in a diagram can now be modified using styles. The style represents a set of properties, which can be applied to an individual diagram item (by assigning it to the DiagramItem.Style property) or to all items of a specific type (by using a Theme). The styles can be easily expanded to include the properties in derived item classes.

The theme represents a collection of styles. Each style in the theme is associated with the diagram items of a specific type and affects all items of this type. Themes can be loaded from XML files. New themes can be created using the Theme Editor tool. Several pre-defined theme files are installed under the Themes subfolder of the control's root installation folder.

For more information about this new feature, check Styles and Themes.

Node effects

Two visual effects, represented by GlassEffect and AeroEffect classes, can be applied to nodes. To apply an effect, create an instance of the respective class, set up its properties, then add the instance to the Effects collection of a node (or to Diagram.NodeEffects collection to apply it to all nodes). Effects can be added, removed or modified at any time and this will immediately reflect on the diagram. Effects of different types can be applied simultaneously. It is also possible to apply more than one effect of the same type.

Diagram documents and tabbed views

The DiagramDocument class represents a collection of diagram pages or sheets, represented by DiagramPage objects. DiagramPage is derived from Diagram and only adds a Title property, so any current code that processes **Diagram** objects will work with **DiagramPage** objects too. New pages can be added to the document and existing pages can be removed and reordered via the Pages collection. The diagram document provides higher level of events for the pages contained inside it. The document supports the notion of an active page.

A DocumentView object placed inside a TabbedScrollPane can be used to display **DiagramDocument** objects. The view displays tabs for the individual pages in the document. The active page can be changed interactively by activating its associated tab. New pages can be added and removed to/from the document through buttons in the tab tray and the pages can be rearranged by dragging their associated tabs with the mouse.

One-way graph Layout

The OneWayLayout class ensures that links enter into nodes from the same general direction and exit them from the opposite side. If the graph contains cycles, some links bend around the nodes to keep the enter/exit direction consistent. The algorithm aims to minimize the number of such links.

Rotation improvements

- All built-in node types can now be rotated by setting their RotationAngle property, or interactively through the rotation handle. To enable interactive rotation, you must set the respective bit in DiagramNode.EnabledHandles;
- Attached nodes can rotate together with their master node if the group's FollowMasterRotation property is set to RotateChildren;

Node list control

The NodeListView is a **JList** control that can host any type of DiagramNode objects. Nodes from to the **NodeListView** control can be drag-and-dropped onto a Diagram, which creates a clone of the dragged node at the drop position.

Layers

Items can now be assigned to layers, and layers can be hidden, locked or moved up/down in the Z order as a group. Call the setLayerIndex method of items to associate them with layers in the Diagram.Layers collection. The Layer objects provide Visible, Locked and ZIndex properties, which will affect all items in the respective layer. Layers also expose a Title property shown in the LayerListView control. Newly drawn items are added to the layer specified via Diagram.setActiveLayer.

For additional information about layers, refer to Layers.

Layer list control

The LayerListView control provides user interface for working with Layer objects. The control displays a list of all layers in a specified Diagram with a title and an overview area, and also allows editing of layer's Title, Visible and Locked properties and choosing the **Diagram**'s currently active layer. New layers can be added to the **Diagram** by clicking the '+' button. The selected layer can be deleted by clicking the '-' button.

Magnifier

The new magnifier tool allows users to interactively zoom in (or out) portions of the diagram by holding down a modifier key or pressing a mouse button. The magnifier's zoom factor and appearance can be customized. Additional information can be found in the corresponding section of Scrolling and Zooming.

Ruler improvements

The ruler units can now be specified more precisely through instances of the new MeasureUnit class. The **MeasureUnit** class provides several built-in units as well as the opportunity to create custom units of measure. As a result, the **RulerUnit** enumeration has been removed and the type of the Unit property has been changed. The **InchDivisions** property of the Ruler class has been removed as well - the division information is now built into the **MeasureUnit** type and no longer needs to be specified explicitly. Custom divisions can still be specified for any unit by creating a custom **MeasureUnit** instance and providing the appropriate value in the standardDivisons constructor parameter.

Miscellaneous

- The value of DiagramItem.ZIndex property is no longer required to be unique and smaller than the number of items;
- The **Shape** property in ContainerNode and TreeViewNode can be set to Rectangle or RoundedRectangle;
- Link labels are arranged automatically by the control when their AutoArrange property is enabled. Auto-arranged labels will avoid overlapping nodes or other labels.
- HeaderFont property added to PrintOptions, specifies the font used to draw the page header.

- The new TextPadding property specify the distance between node's text and the node borders

API changes

- RotationAngle property moved from ShapeNode to base DiagramNode;
- Inherited node classes should now override the drawLocal method instead of draw to get built-in support for node rotation. Overriding **draw** still works, but any custom drawing code would have to take care of rotation;
- Type of Group.FollowMasterRotation changed from **boolean** to enum GroupRotation;
- **LinkStyle** enum renamed to LinkShape;
- **DiagramLink.Style** property renamed to Shape;
- **TableStyle** enum renamed to SimpleShape;
- **TableNode.Style** property renamed to Shape;
- The type of **TextColor** and **CaptionColor** properties have been changed to Brush; the properties have been renamed to TextBrush and CaptionBrush;
- The default value of **Pen**, **Brush** and **Font** properties of items is now **null** to allow for inheritance from DiagramItem.Style or Diagram.Theme. Custom drawing code in inherited classes should use the values returned by getEffectivePen, getEffectiveBrush or getEffectiveFont to get the actual object that should be used when drawing;
- zLevelUp, zLevelDown, zTop and zBottom methods now require a boolean argument specifying whether items are allowed to change layers;
- ZIndex no longer corresponds to the position of items within Diagram.Items collection. Items however still contains the items sorted by Z order, as defined by item's **ZIndex** and LayerIndex;

New in Version 3.5

Use Java Swing components as nodes

ControlNode is an adapter class that allows using any **java.awt.Component** -derived object as a diagram node. Such nodes can be used to implement advanced entity viewers or editors using the Java Swing framework. A Component instance can be assigned to the Control property of the host node. It could be a standard Java Swing component such as a JTable or your own custom control. If the Behavior property of DiagramView is set to DrawControls or LinkControls, then users are allowed to draw control host nodes interactively. Such host nodes will have their Control initialized to an instance of the type specified via DefaultControlType.

Loading UI controls in the same applet instance

Recent Java and browser versions do not work very well when more than one applets are loaded on the page (e.g. IE crashes when reloading such pages, in some browsers Java objects cannot be passed between two applets). Hence the DiagramApplet, used to host a DiagramView control, has been modified to also show the miscellaneous UI controls such as Overview, ShapeListBox and Ruler. The applet parameters used to create and customize these controls are listed in the Diagram Applet topic.

Miscellaneous

- Improved path-finding for long links in QuickRouter.
- The print header string now can contain a %T format specifier that will display the total number of pages.
- SwimlaneLayout improvements.

New in Version 3.4

Automatic node alignment

If AutoAlignNodes is enabled, the node currently being drawn or resized is aligned to another node so that a pair of their vertical or horizontal sides become collinear. To specify the maximal distance at which nodes are aligned, set the AutoAlignDistance property. The pair of aligned nodes is indicated visually by drawing an alignment guide using the pen assigned to AlignmentGuidePen.

Fractal tree layout

FractalLayout is a tree layout algorithm that places child nodes symmetrically around their parent node. Nodes at the lowest level are arranged directly in a circle around their parent. At the upper level, the already arranged nodes form branches that are arranged in a circle around the new parent node. The algorithm is recursively repeated till the highest level is reached. If nodes in the tree have uniform number of children, the end result has fractal-like appearance (subsets of the graph look like scaled-down copies of the whole graph). You can choose which node should be displayed at the center of the topmost circle by setting the Root property. If it is not specified, the algorithm automatically selects a root that leads to more balanced distribution of nodes.

New node constraints

- If KeepInsideParent is enabled, a node cannot be moved outside the boundaries of its ContainerNode or group's master node.
- If KeepRatio is enabled, a node's width-to-height ratio is preserved when the user resizes the node.
- The user cannot move a node's side past its opposite side if the DisableMirroring constraint is set.

Miscellaneous

- getAllIncomingLinks, getAllOutgoingLinks, getAllLinks methods return all links connected to a node and its elements (TableNode rows or TreeViewNode items).
- Rotated nodes are now aligned to the grid when moved.
- PdfExporter could not be used from Java 7 because of a removed deprecated method (FontManager.getFont). This is now fixed by using equivalent API members.
- Fixed a bug where a link would align to incorrect anchor point when the target node is rotated.

New in Version 3.3

Layout class enhancements

- OrthogonalLayout now produces more compact layouts with less link bends if MinimizeLinkBends is enabled.
- If there is only one used execution path after a branching and up to two empty ones, FlowchartLayout will now center the used path under the branching start node.
- Specify start and end nodes in LayeredLayout via the setStartNode and setEndNode methods.

Relationship queries

The query method of DiagramItem can be used to find items that can be reached from the current one by following a path described in the query expression specified as argument. The expression includes selectors separated by a / character, where each selector returns the items from the result set of the previous step. The expressions can also include boolean predicates that filter the results using boolean and arithmetic expressions.

Miscellaneous

- createFlowchartLayout method added to ScriptHelper.
- Find out a link's length via the getLength method of DiagramLink.
- Display multiple link labels via the addLabel method.

New in Version 3.2

Swimlanes

The swimlane grid lets you emphasize the relationship between a group of diagram items by displaying them in a distinct lane or cell within the grid. To display the lane grid, set the EnableLanes property of the Diagram class to **true**. In order to customize the grid, set the various attributes exposed by the LaneGrid property, which lets you specify the number of rows and columns, add headers, customize the cell appearance, etc. The new *Lanes* sample project uses the lane grid to let users draw Gantt charts.

SwimlaneLayout algorithm

SwimlaneLayout can be used to arrange process diagrams in which nodes representing activities are placed in swimlanes representing resources. The index of the resource allocated to an activity should be assigned to the corresponding node's LayoutTraits via the SwimlaneLayoutTraits.Lane key.
By default, the algorithm works with the diagram's LaneGrid, but its SwimlaneGrid property can be set to any class that implements the SwimlaneGrid interface. This allows applying the layout to a custom-drawn grid rendered through the drawBackground event, or one composed of locked background nodes.

CascadeLayout algorithm

CascadeLayout places nodes on a virtual grid and arranges links orthogonally, such that if the source graph is planar all links are guaranteed to have no more than two bends and will not intersect. By default the layout method arranges nodes in rows and link segments in columns; this can be changed by setting the Orientation property.

TriangularLayout algorithm

TriangularLayout places nodes on a virtual grid, such that if the source graph is planar, all links are guaranteed to have a single segment and not intersect. If the graph is not planar, its intersecting links can be optionally segmented and bended in order to improve readability. The layout method places the nodes from the external face on a triangle and recursively adds the rest of the nodes as vertices of internal triangles. As a result, it is very effective for near maximal-planar (a.k.a. triangular) graphs.

HierarchicalLayout algorithm

HierarchicalLayout places nodes on user-defined levels, such that if the source graph is level-planar, all links are guaranteed to have a single segment and will not intersect. A graph is considered level-planar if it is possible to draw it without link intersections when its nodes are positioned on predefined levels. The layout method requires that for each node LayoutTraits contains a HierarchicalLayoutTraits.Level entry specifying the level, and no two connected nodes must be on the same level.

Miscellaneous

- selectionChanged event raised when items are selected or deselected.
- drawStyledText draws a formatted text string similarly to shape nodes whose EnableStyledText property is enabled.
- UBendMaxLen property added to QuickRouter.
- The FoldedSize property of ContainerNode specifies the container's size when it is folded.
- The Id property added to DiagramItem allows assigning custom identifiers to items. It can also be used to just store additional custom data similarly to Tag.

New in Version 3.1

Support for custom arrowheads

The type of the HeadShape, BaseShape and IntermediateShape properties of DiagramLink has been changed from enum **ArrowHead** to class Shape, which is also used to define ShapeNode shapes. The ArrowHeads class now exposes **Shape** definitions that correspond to the **ArrowHead** enumeration members from previous versions. It is also possible to set any other predefined or custom shape accessible through the fromId method as an arrowhead. When used for arrowheads, position (50, 0) in the shape definition corresponds to the arrowhead's tip point.

Topological graph layout

If the underlying graph if acyclic, TopologicalLayout arranges the nodes linearly in such a way that each node comes before all destination nodes of its outgoing links. The links are drawn as curves above the chain of nodes, with their height proportional to the distance between the nodes. If the graph is not acyclic, the layout algorithm finds an ordering with a minimal number of back links, and draws the back links below the chain of nodes.

Miscellaneous

- Shadows can be painted using any brush type and not only in solid color. The **ShadowColor** property has been replaced by ShadowBrush.
- Granularity property added to QuickRouter.
- ShowToolTips property added to DiagramView

New in Version 3

TreeView nodes

The TreeViewNode class represents nodes that can display hierarchical data. The root items displayed in the node can be accessed through the getRootItems method. New items can be added to and removed from the returned collection. The root items can have child items on their own and so on. For more information, refer to the TreeViewItem class.

Ruler control

The Ruler control provides horizontal and vertical scales that helps users measure and align diagram items. In order to set the **Ruler** as a parent of a DiagramView, call its setDiagramView method. The control also implements support for scrolling and can be used instead of a **JScrollPane**.

Export to SVG

The SvgExporter class creates a Scalable Vector Graphics (SVG) drawing from the content of a Diagram. Custom-drawn elements are exported too through an SVG implementation of the **Graphics2D** interface provided by *JDiagram*.

Link routing enhancements

A much faster link routing algorithm has been implemented. It can arrange a thousand links for just a few seconds, while older versions would require several minutes. Now it is also possible to create custom routing classes to be used when a link must be routed by implementing the LinkRouter interface. An instance of such class can be set through the LinkRouter property of the Diagram class. *JDiagram* provides two classes that implement **LinkRouter** - GridRouter and QuickRouter. By default **LinkRouter** is set to a **QuickRouter** instance.

Flowchart graph layout

FlowchartLayout recognizes program code-like patterns in the graph, such as loops, sequences and if/switch branchings, and arranges them recursively. **FlowchartLayout** could be used to arrange other types of graphs as well, though with some restrictions. For example it treats all back links as loops in the code, and expects that they are nested - loop links starting closer to the stop node should end closer to the start node. Another similar restriction is that there shouldn't be any cross-links that connect different branches of a decision sub-graph.

Layout enhancements

- If StraightenLongLinks is enabled, LayeredLayout straightens links that cross multiple layers of the graph.
- Add SpringLayoutTraits.Frozen to a node's LayoutTraits to make SpringLayout ignore forces acting on a node but still consider the node's repulsion force on other nodes.
- The EnableAssistants property of TreeLayout allows creating organizational charts as in MS Office.
- The speed of GridLayout and OrthogonalLayout has been improved.

Adjustment handles styling

The ActiveItemHandlesColor, SelectedItemHandlesColor and DisabledHandlesColor properties have been replaced by ActiveItemHandlesStyle, SelectedItemHandlesStyle and DisabledHandlesStyle. The HandlesVisualStyle objects returned by them provide sub-properties for greater control over the

appearance of selection handles. The adjustment handles can now be painted not only in solid color but with arbitrary brushes, such as GradientBrush and TextureBrush objects.

New ScriptHelper methods

- The createColor method creates a **Color** instance.
- Use createPaper and createPageFormat to create objects required for print job setup.
- createSize and createSizeF create **Dimension** and **Dimension2D** instances.

Miscellaneous

- DiagramApplet provides local clipboard support through the copyToClipboard and pasteFromClipboard methods, which avoids the security checks done by the corresponding DiagramView methods.
- Elements of Shape definitions can be assigned distinct color and pen style attributes.
- The ShowLabels property of ShapeListBox specifies whether the control should display item labels.
- Links can be custom draw by setting their CustomDraw property and handling the drawLink event.
- PdfExporter creates hyperlinks for nodes whose HyperLink property is set.
- The drawForeground event lets render custom graphics in the diagram foreground.

API changes

serializeTag and deserializeTag handlers should call the setHandled method in order for the control to use the custom tag xml.

New in Version 2.2

Export to PDF

The PdfExporter class lets you exports diagrams to Adobe Portable Document Format (PDF) files. In order to do that, create a **PdfExporter** instance and call its export method. If you need to set the page size and orientation, call the setPageSize, and setPageOrientation methods.

New in Version 2.1

OrthogonalLayout

The OrthogonalLayout class implements an orthogonal graph layout algorithm. Each link is drawn as a chain of alternating horizontal and vertical segments. Nodes are placed in a way that facilitates few links bends and crossings. This algorithm was designed for planar graphs where the nodes have at most four incident links, and produces best results with such graphs as input. It can arrange any arbitrary graph as well, by adding some dummy nodes and links to planarize the graph and reduce its vertex degree, and removing them after the layout.

CircularLayout

CircularLayout distributes nodes evenly on the circumference of a circle at positions that result in as few link crossing as possible. Set its Radius attribute to specify the size of the layout circle. Call setSiftingRounds to specify the number of fine-tuning crossing-reduction iterations.

Miscellaneous

- The mergeUndoRecords method lets you merge several undo records into a single composite record.
- A custom position for the collapse/expand button displayed for expandable nodes can be specified through the setExpandButtonPosition method.
- The draw method of Diagram is now public, and can be used to draw the diagram content on a custom **Graphics2D** object.
- Link labels can be edited in place. linkTextEdited and linkTextEditing events have been added.

API changes

The **OrthogonalLayout** class from previous JDiagram versions has been renamed to OrthogonalRouter.

New in Version 2

Document/View Architecture

JDiagram implements the Model-View-Controller (MVC) architectural pattern in its new version 2. The MVC design pattern as applied to JDiagram separates the diagram data (model) from its representation to the user (view) and controlling it by the user (controller). According to the MVC design pattern, JDiagram Version 2 provides two new classes instead of the **FlowChart** class, namely Diagram and DiagramView.

Support for Custom Diagram Item Types

The JDiagram API has been redesigned to allow for seamless integration of custom node and link types. You can define a custom item type by deriving from DiagramLink or DiagramNode. You can also derive from more specific node types such as ShapeNode or ContainerNode. New items can be added to a diagram by instantiating them and adding them to the Nodes or Links collections. To improve support for custom types, many type-specific methods have been replaced with more generic versions, for example, findNode instead of **findBox** and **findTable**. For more information on the API changes, take a look at the Moving to JDiagram 2 section of the help file.

Containers

The ContainerNode class implements diagram nodes that can function as containers for other nodes. Containers can be folded to hide their content, and unfolded to show it again. Containers can be nested one within another, without limitation on the depth of nesting. The containerChildAdded and containerChildRemoved methods are called when nodes are added to or removed from containers.

OrthogonalRouter

OrthogonalRouter is a secondary layout algorithm that can be used to arrange links after an initial node arrangement has already been applied. The orthogonal layout is useful when there are much more links than nodes in a graph. The algorithm strives to achieve the following criteria, while preserving as much of the initial node configuration as possible: links must not overlap; only vertical and horizontal routing lines are used; graph routing is performed with respect to the specified main layout direction; links crossings are minimized; bends are minimized.

Layout Algorithm Improvements

Now, it is possible to place the unconnected subgraphs in such a way that the diagram covers a minimal area. To enable that, choose MinimalArea for the MultipleGraphsPlacement object.

Clipboard Operations

A single diagram item or a selection of items can be copied or cut to the system clipboard. This is done programmatically using the copyToClipboard and cutToClipboard methods. To paste the clipboard contents into the current diagram call pasteFromClipboard.

API Changes

For more information on the API changes, take a look at the Moving to JDiagram 2 section of the help file.

Getting Started

The following topics describe how to integrate the Diagramming for Java Swing API into your project, and create an instance of the DiagramView control.

Add Diagramming Library

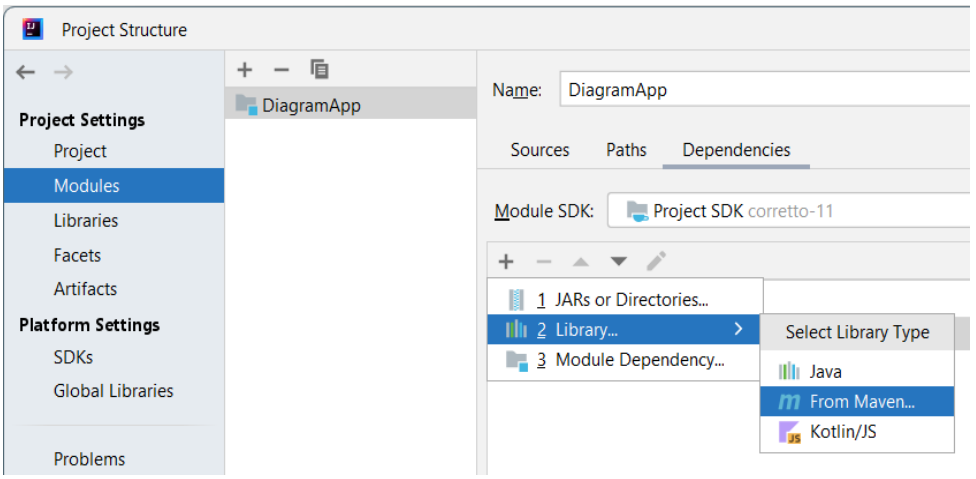
You can add diagram library's JAR file to your project either from the Maven Central repository, or from locally installed distribution.

Add From Maven Central

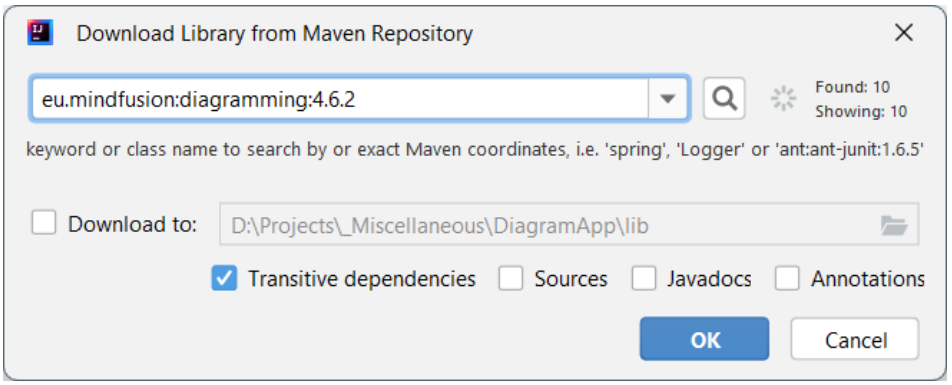
You can install the MindFusion.Diagramming library from Maven Central. After integrating it by following any of the following steps, you should be able to import com.mindfusion.diagramming classes and add controls from the library to your UI (DiagramView, NodeListView, Overview, etc).

IntelliJ IDE

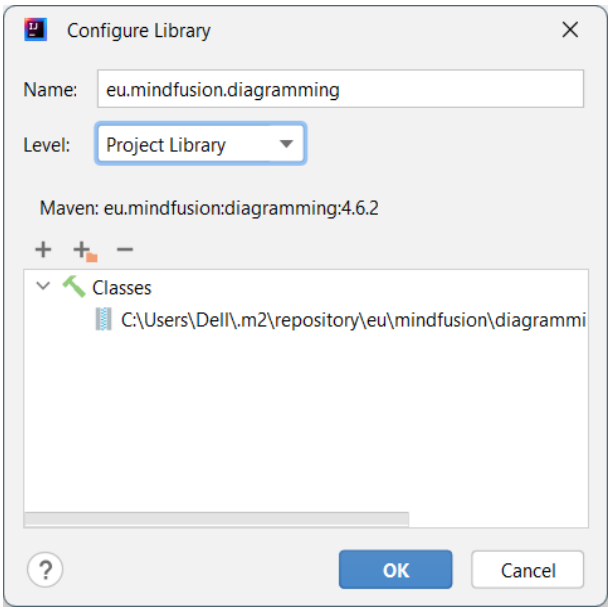
In order to integrate Diagramming for Java Swing into your IntelliJ project, select the Project Structure command from File menu, open Modules -> Dependencies page, click the + button and select Library -> From Maven command:



On the *Download Library from Maven* screen, search for "mindfusion:diagramming", select latest version of the package and click OK:

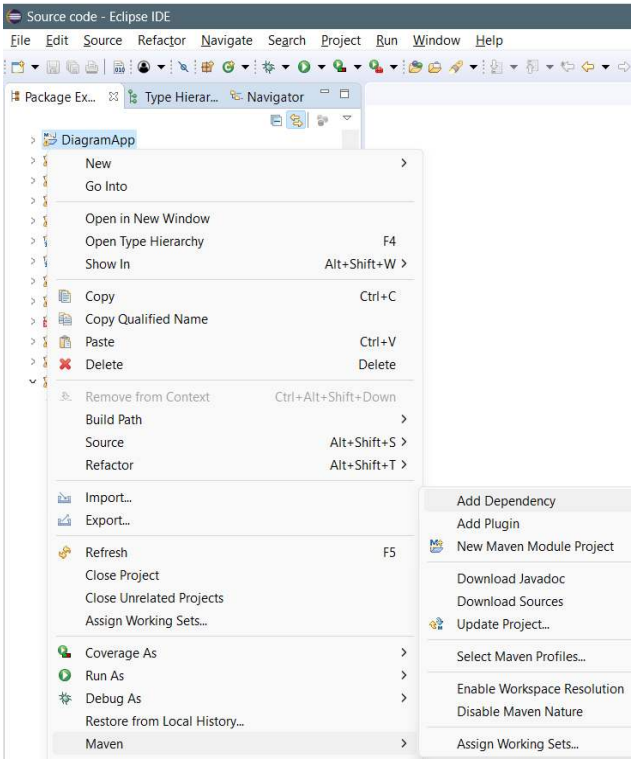


On *Configure Library* screen, select the library level and click OK:

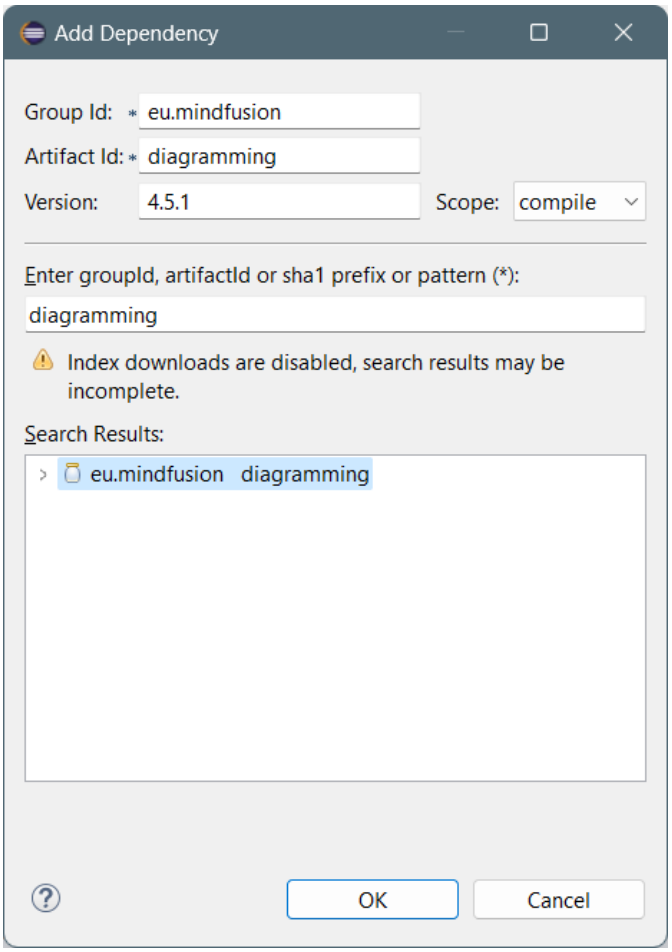


Eclipse IDE

From Maven-based project's context menu, select Maven -> Add Dependency command:



On *Add Dependency* screen, search for "diagramming", select the latest version and click OK:



Maven Projects

In any Maven-based project, you can list eu.mindfusion.diagramming package as dependency in pom.xml and let the build system take care of downloading and integrating the jar file:

pom.xml

```
<dependency>
    <groupId>eu.mindfusion</groupId>
    <artifactId>diagramming</artifactId>
    <version>4.5.1</version>
</dependency>
```

Gradle Projects

In any Gradle-based project, you can list eu.mindfusion.diagramming package as dependency in build.gradle and let the build system take care of downloading and integrating the jar file:

build.gradle

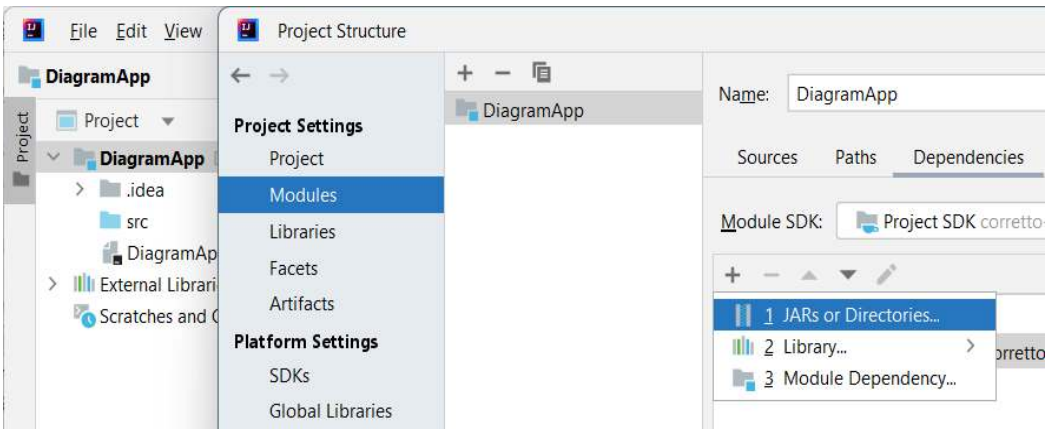
```
dependencies {
    implementation 'eu.mindfusion:diagramming:4.5.1'
}
```

Add Local JAR

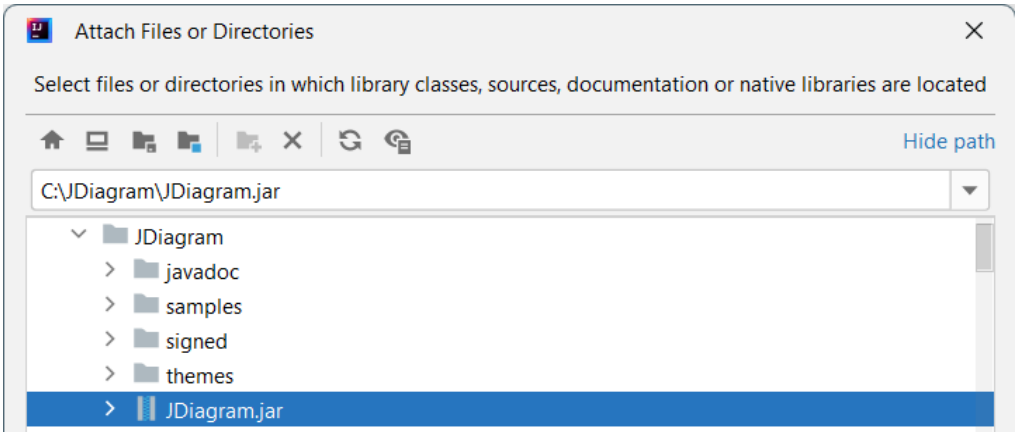
You can use the diagram library archive (JDiagram.jar) from locally installed distribution. After adding it to your project's dependencies, you should be able to import com.mindfusion.diagramming classes and add controls from the library to your UI (DiagramView, NodeListView, Overview, etc).

IntelliJ IDE

In order to integrate Diagramming for Java Swing into your IntelliJ project, select the Project Structure command from File menu, open Modules -> Dependencies page, click the + button and select the JARs or Directories command:



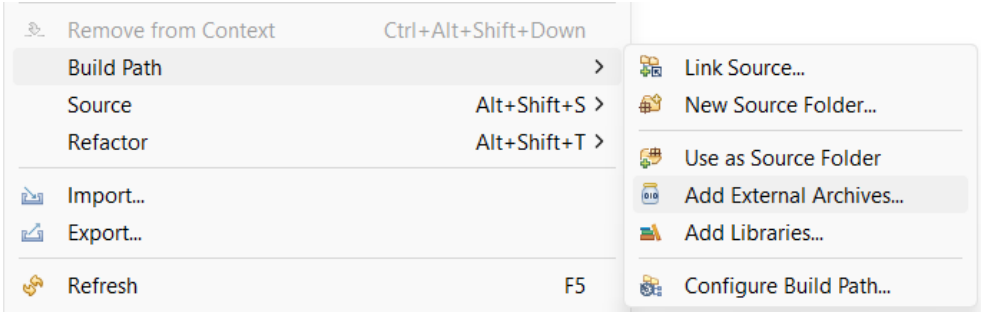
On the *Attach Files* screen, browse to the location where you have unarchived JDiagram.zip and select JDiagram.jar.



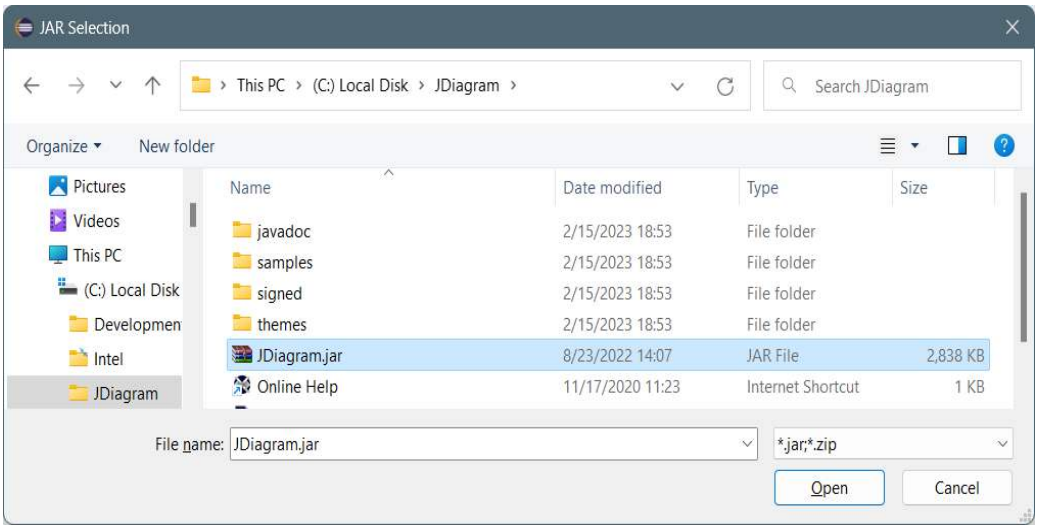
Press OK to confirm all dialogs.

Eclipse IDE

In order to integrate Diagramming for Java Swing into your Eclipse project, select the Build Path -> Add External Archives command from project's context menu:



On *JAR Selection* screen, browse to the location where you have unarchived JDiagram.zip and select JDiagram.jar.



Create DiagramView Instance

Once you have added a JDiagram reference to your project, you can access the public classes defined in JDiagram packages. The most important classes are Diagram, which represents the diagram data, and DiagramView, which is a Swing component that displays the diagram. You usually create and initialize a new instances of the **Diagram** and **DiagramView** classes in the same place where you create and initialize the rest of the user interface of your application. Associate the diagram to be displayed by this view by calling the setDiagram method. To let users scroll the diagram, add the **DiagramView** object to a JScrollPane container. Thus, a minimal application containing a scrollable diagram that can be used to draw flowcharts looks like this:

Java

```
package flowcharter;

import java.awt.Dimension;
import java.awt.Toolkit;

import javax.swing.JFrame;
import javax.swing.JScrollPane;

import com.mindfusion.diagramming.*;


public class MainWindow
    extends JFrame
{
    public MainWindow()
    {
        diagram = new Diagram();
        diagramView = new DiagramView();
        diagramView.setDiagram(diagram);

        JScrollPane scrollPane = new JScrollPane(diagramView);
        getContentPane().add(scrollPane);

        Dimension size = Toolkit.getDefaultToolkit().getScreenSize();
        setSize(size);
    }

    public static void main(String[] args)
    {
        MainWindow window = new MainWindow();
        window.setVisible(true);
    }


    private DiagramView diagramView;
```

```
    private Diagram diagram;
}
```

The initialization of the JDiagram control can be very different depending on what you will use it for, but there are certain properties you will most likely need to adjust in all cases. Here they are:

- Choose a Behavior for the control, which defines how JDiagram must interpret actions done with the mouse by users of your application. The default value, **LinkShapes** specifies that users can draw diagram nodes and connect them with diagram links. Another value, **LinkTables** allows drawing tables and relationships between them. The **Pan** behavior allows panning the view by dragging the mouse. Modify bans users from drawing new items, but allows them to modify existing ones. Call the setBehavior method of the **DiagramView** class to adjust the control's behavior.
- There are other methods of the **DiagramView** class for customizing the behavior of the diagram and its items - take a look at getCustomBehavior and setCustomBehavior, getCustomLinkType and setCustomLinkType, getCustomNodeType and setCustomNodeType.
- There are various methods that let you customize the general appearance of your diagram, such as setBackBrush, setBackgroundImage, setBoundsPen, setGridColor and so on.
- There is a set of methods that let you specify default attributes for diagram items. The names of these methods usually correspond to the name of the attribute they provide a default value for, prefixed by the name of the appropriate item class. For example, the method that lets you specify the text of the link's label is called DiagramLink.setText, while the default value for new links can be set through Diagram.setLinkText.

Once you have initialized JDiagram, you usually use the DiagramListener interface to handle various events, such as linkCreated and linkModified. These events let you take specific actions when diagram items are created or modified, such as updating the internal state of your application.

Browse the other sections of this help file to learn more about the functionality provided by the MindFusion.Diagramming classes, methods and properties. Follow the tutorials to learn how to populate the diagram model programmatically or create custom item types.

User Interaction

Most likely an application would use JDiagram to enable users to interactively create diagrams, flowcharts and other kinds of presentation documents. A user composes or edits a diagram by drawing its elements on the JDiagram canvas area. With the help of a mouse or another pointing device users draw shapes, tables and links, possibly connecting them in complex hierarchies, graphs, trees or other structures they might need.

Creating New Items

New items can be created by drawing them with the mouse. While a user drags the mouse, the view of the control is updated to show what the new item would look like at the pointer location. If the operation cannot be completed at the current mouse position, the cursor changes to a crossed out circle. When the user releases the button, the item is created. The control does not let users create very tiny nodes which would be hard to select and modify. By default, links can be drawn only between nodes, unless the AllowUnconnectedLinks attribute is enabled. Users can cancel item creation by pressing the right mouse button while drawing.

Modifying Items

A user modifies an item by dragging its adjustment handles. The setModificationStart method specifies when these handles appear. The first option, AutoHandles, makes the handles appear when the mouse hovers over an item; modification of the item can start immediately by pointing it and dragging a handle. The second option is **SelectedOnly**: in order to be modified, an item should first be selected. Adjustment handles appear around the item to indicate that now it can be moved or resized. The number and functionality of the handles depend on the item type and the value specified through the setHandlesStyle method.

Modifying a Node

Usually nodes have nine adjustment handles. The one at the center can be used to move the node. When dragged, each corner handle resizes the node by moving the two edges adjacent to the corresponding corner. The edge handles placed at the center of each side can be used to resize a node either horizontally or vertically. Shape nodes can be rotated using an additional round handle drawn above them. Each handle can be enabled or disabled by setting or clearing the respective bit through the setEnabledHandles method.

Modifying a Link

Variety and behavior of link adjustment handles depend on the link's Style and SegmentCount. Control-points stay at both ends of each segment that constitutes a link. JDiagram offers three link styles. The following sections discuss how to modify links of each style.

- The first style called Polyline defines links, which consist of a series of straight segments, drawn between control-points. There are no restrictions as to the number of segments. Dragging a control-point modifies each segment adjacent to the point. If the setAllowSplitLinks method is called, users are allowed to insert new control points or to remove existing ones. Inserting a control point is done by pressing the left mouse button over a segment and dragging. The new point appears at the mouse location and splits the pointed segment in two.
- If link's style is set to Bezier, each segment has 4 manipulation handles that define a curve. Each curve goes through the end-points, which are shaped as circles. Bend of the curve is defined by the middle two points shaped as rectangles. If a user drags an end-point modification handle, the adjacent control points will be moved with same translation vector as that of the end-point. If a bend control point is dragged, the symmetric control point of the neighboring curve is also moved to ensure the two stay on the same line with the end-point and on the same distance from it.
- Cascading links consist of straight horizontal and vertical segments, each one orthogonal to its neighbors. If a control-point is dragged, the segments adjacent to it are moved and resized preserving their orthogonal orientation to each other. If the **setAllowSplitLinks** method is called, users are allowed to insert new control points to Cascading links or remove existing ones. The orientation of the link segments can be changed if LinkCascadeOrientation is set to Auto.

Modifying a Table

By default, table modification handles are drawn as dotted lines over its borders. To move a table, drag its caption bar. To resize a table, drag any of its borders or corners.

Selecting Items

Multiple items are selected by dragging while CTRL key is down. Selection can also be toggled with CTRL + clicking an item. A rectangle appears around selected items, allowing a user to move all of them at once.

Scrolling and Panning

The DiagramView can be scrolled if its placed inside a **JScrollPane**. Users scroll the view by dragging the scrollpane's scrollbars, which appear when the diagram area is larger than the view. The user could also pan the diagram view by pressing the left mouse button and dragging while the ALT key is down.

Interpreting Users Actions

Mouse operations can be interpreted in different ways depending on the value of the Behavior property. It defines whether for example dragging the mouse creates a node or selects existing items. Check the property description for more information on the built-in input modes.

You can also create a custom mouse input controller by deriving from the BehaviorBase class and calling the setCustomBehavior method of DiagramView. A custom controller could implement only the higher-level startDraw method to specify what kind of operation should start when the user begins to drag the mouse, or the createNode method to create an instance of a custom node class. Alternatively, override the lower-level pointerDown, pointerMove and pointerUp methods to completely overhaul user interaction. A custom **BehaviorBase**-derived class is demonstrated in the *Fishbone* sample project.

Programming Interface Overview

The next few chapters give you an overview of all JDiagram features, grouped by functionality. Hyperlinks refer to the detailed description of methods and classes.

Document-View Architecture

JDiagram implements the Model-View-Controller (MVC) architectural pattern. The MVC design pattern as applied to JDiagram separates the diagram data (model) from its representation to the user (view) and controlling it by the user (controller).

Single Diagram Canvas

The Diagram class represents the diagram data model and provides operations to process the data. It exposes properties and methods for adding new diagram elements, finding and accessing existing elements, or removing them.

The DiagramView class presents the relevant data from the **Diagram** class by drawing on the screen using the Java Graphics2D API. When the diagram is changed, the view automatically redraws the affected part of the image to reflect the changes. Multiple views can display the same diagram. Perform the setDiagram method of the **DiagramView** class to specify the diagram displayed by the view. Each view can have a different zoom level and scroll position.

Controllers responding to user interactions are represented by Behavior objects. The Behavior property of **DiagramView** and respective enumeration let you switch between different controllers, specifying how GUI actions should be interpreted to manipulate the diagram elements, or scroll / zoom the view itself.

Multiple Diagram Pages

The DiagramDocument class represents a collection of diagram pages or sheets, represented by DiagramPage objects. Document's pages are stored in its Pages collection. The **saveTo*** methods of **DiagramDocument** save all pages in a single file, and respectively the **loadFrom*** methods load all pages from the file.

DiagramPage is derived from Diagram and only adds a few properties, so any code that processes **Diagram** objects will work with **DiagramPage** objects too. A diagram document forwards each event raised by its pages, giving you a chance to use the same listener for events raised by different pages. If a page should implement distinct user interaction or validation logic, it is also possible to attach handlers to the **Diagram** events inherited by **DiagramPage**.

A single **DiagramPage** could be assigned to the Diagram property of DiagramView, and that lets you create your own user interface for presenting a list of pages to the user and selecting a current page.

The library includes the TabbedScrollPane and DocumentView classes, which work together to present all pages of a document in a tabbed user interface, with each tab corresponding to a page. The page displayed in the active tab is exposed through the CurrentPage property of **DocumentView**. Users can switch between pages by activating the corresponding tab. New pages can be added to and existing pages removed from the document using buttons in the tab strip, and pages can be rearranged by dragging their corresponding tabs with the mouse.

User Interface Components

DiagramView

DiagramView renders the contents of a Diagram and allows users to create new items or modify existing ones using a mouse or other pointing devices. The Behavior property defines how the control interprets user actions. Additional properties control scrolling and zooming of the view.

Palette

The Palette control represents a tool palette that displays DiagramItem objects grouped into categories. It implements Accordion user interface that displays ItemListView components as its child panels, and category icon, title and collapse/expand button in pane headers. Each child **ItemListView** displays the items added to its corresponding category. Call the addCategory method to define a category and create its respective accordion pane. Call addItem to add an item to specified category. The control can also be configured by setting its Model to an object implementing PaletteModel interface. **Palette** provides same behavior and appearance properties as the **ItemListView** class.

ItemListView

ItemListView represents a tool palette that contains uncategorized list of diagram items. Items can be added by calling addItem method, and removed by calling removeItemAt. Drag-and-drop operations from **ItemListView** to DiagramView create a copy of the dragged item, and set its size to NewInstanceSize.

Overview

Overview provides a scaled-down view of a target DiagramView, helping users work with larger diagrams. A tracker rectangle shows current viewport of the main **DiagramView**, and by dragging it users can change the scroll position. It can also be resized to zoom the target view.

ZoomControl

ZoomControl lets users change the zoom level of a target DiagramView by dragging a slider. It also includes arrow buttons for scrolling the view.

Ruler

The Ruler control displays horizontal and vertical scales that let users measure and align diagram nodes.

Diagram Structure

Standard Item Types

Diagram elements in JDiagram are represented by ShapeNode, TableNode, ContainerNode and DiagramLink instances. Combined and linked together, they can form complex data structures such as process or entity-relationship diagrams, class hierarchies, networks and graphs. Each of their rich features can be customized through numerous methods and properties. JDiagram also offers intuitive user interface for drawing and editing diagram items interactively.

Shape Nodes

Shape nodes can represent geometric shapes, flowchart elements, icons in network diagrams, and so on. They can hold both graphics and text in different fonts, sizes and colors. There are more than 100 predefined shapes and apart from them, JDiagram offers an easy way to define custom shapes. Shape nodes can be rotated, either interactively using the round selection handle drawn above them, or programmatically using the setRotationAngle method. The ShapeNode appearance can be customized further using several types of custom painting. The first type gives you full control over the painting. With the second one your painting code is performed additionally to the basic painting. The third one performs standard drawing of shape nodes and custom drawing of their shadows. Shape nodes can display background images and graphics. The file formats supported are GIF, JPEG and PNG.

SVG Nodes

The SvgNode class represents nodes that can display SVG drawings in addition to the rendering provided by its base ShapeNode class. SVG elements are rendered after the associated bitmap Image and just before the drawNode event is raised for Additional custom drawing. SVG elements are parsed and associated with the node through a com.mindfusion.svg.SvgContent object, which should be initialized and then assigned to the Content property.

Table Nodes

Table nodes can be used to represent table schemas in database diagrams or classes in class-hierarchies. A table contains cells arranged in a grid, and every cell can display text and/or image. Cells can span several rows and columns as set through the setRowSpan and setColumnSpan methods. Cells, columns and rows can be customized in various ways - there are appropriate methods available for setting their extents (setCaptionHeight, setRowHeight, setColumnWidth), frame style (setCellFrameStyle), image (setImageAlign, Cell.setImageAlign) and text format and alignment(Cell.setTextFormat, setCaptionFormat, setEnableStyledText). Tables' dimensions can be programmatically changed. Inserting (insertRow, insertColumn), appending (addRow, addColumn) or deleting rows and columns (deleteColumn, deleteRow) can be done in a very comprehensive, intuitive way whenever you might need it. Tables can also display background images and graphics. The file formats supported are GIF, JPEG and PNG.

Free-form Nodes

A FreeFormNode collects all points from users' mouse or touch input and displays them as node's outline. To let users draw free-form nodes interactively, set Behavior to DrawFreeForms. Use the Points property of **FreeFormNode** to get or set outline points programmatically. If the Closed property is set, the node is drawn as a closed shape and its interior filled, or otherwise the node is drawn as a poly-line. If the distance between first and last points drawn by user is shorter than AutoCloseDistance, the node gets closed automatically.

Control Hosts

A ControlNode can host any Java Swing control - instance of a **java.awt.Component** -derived class. The hosted control might be any of the standard component types such as JTable or JButton; custom controls are also supported. A **ControlNode** can be connected with links to any other nodes - control hosts, shapes or tables.

Container Nodes

A ContainerNode can contain other diagram nodes. When a container is moved, its child nodes move too. Containers can be folded to hide the contained nodes, and unfolded back to show them again. Nodes inside a container can be linked to nodes both inside and outside of it. When a container is folded, the links connected to contained nodes point to the container outlines. Containers can be nested within each other to unlimited depth.

TreeView Nodes

The TreeViewNode class represents nodes that can display hierarchical data. The root items displayed in the node can be accessed through the getRootItems method. New items can be added to and removed from the returned collection. The root items can have child items on their own and so on. For more information, refer to the TreeViewItem class.

Links

DiagramLinks represent various types of connections and relations in diagrams. JDiagram offers three basic link types:

- polyline links composed of straight-line segments (choose Polyline link style)
- curved links composed of Bezier-spline segments
- links composed of horizontal and vertical segments, alternating their orientation so that every segment is orthogonal to its neighbor

A link can be connected to a node at each of the link's ends. It is also possible to have unconnected links - having one or both of their ends not connected to nodes. Some customizable link's attributes are: arrowheads (setHeadShape, setHeadShapeSize, setHeadPen), shape (setShape, setCascadeOrientation),

color (setTextBrush), text (setText, setTextStyle), pen width and style, modification behavior (setAllowMoveStart, setAutoRoute, setAllowMoveEnd, setDynamic) and number of segments (setSegmentCount).

See Also

Text Formatting
Custom Item Types

Custom Item Types

You can create your own item types by deriving the DiagramNode and DiagramLink classes or their successors such as TableNode, ContainerNode and so on. Thus, you can add custom data fields to the diagram items, and implement custom visualization and interaction functionality.

Serialization

If you add custom fields to your item class, you will probably want their values saved when saving diagram files, and restored when loading files. To enable this, override the writeExternal and readExternal methods of the DiagramItem class, which let you use **ObjectOutputStream** and **ObjectInputStream** objects to implement binary serialization. To implement XML serialization, you must override the saveToXml and loadFromXml methods, and use the registerItemClass method to associate an element name with your class.

Clipboard operations

You must implement the clone method in order to enable copyToClipboard and pasteFromClipboard to work with your custom item type. If **clone** is not implemented, you will get an instance of the base class created for the pasted item, and this could lead to an exception when the base class deserialization code tries to load the item state from a data stream created by the derived class. If your class has any custom fields, it must also implement the writeExternal and readExternal methods for proper serialization.

Rendering

If you need to provide custom rendering for your items, override the drawLocal and drawShadowLocal methods. They receive as an argument a **Graphics2D** object, which provides methods for drawing vector graphics, text and images. The specified **Graphics2D** in drawLocal has a rotation transform applied to it to match the node's RotationAngle, and a translation transform to match the node's position, so that the coordinate system origin (0,0) is at the node's top-left corner. Alternatively, override the draw method to receive a **Graphics2D** without any local transformations applied to it.

Apart from drawing on screen via Java's **Graphics2D** objects, JDiagram provides PdfGraphics2D and SvgGraphics2D implementations of that interface, which are used when exporting to PDF and to SVG. That lets you use the same code regardless of where the item should draw itself.

User interaction

To allow the user to draw items from a custom class, set the Behavior of the diagram view to Custom, and call the setCustomNodeType and/or setCustomLinkType method with the Class object that corresponds to your type. If you need to change how items handle user interaction while they are being initially created, implement the startCreate, updateCreate and completeCreate methods. In order to change how items respond to user interaction while they are being modified, implement the startModify, updateModify and completeModify methods.

Creating and Deleting Items

Creating Items Programmatically

In order to add a new node or link to a diagram, create an instance of the item class by calling the **new** operator and add it to the diagram's Nodes or Links collection. This works the same way for adding both items from your custom class or ones from the predefined JDiagram types.

There are several shortcut methods provided for creating instances of the predefined node and link types. The methods are members of the diagram's Factory object:

- The createShapeNode method creates a ShapeNode at the specified position with the specified dimensions and shape.
- The createTableNode method creates a TableNode at a specified position. Tables have a method that connects them with other tables called addRelation.
- The createContainerNode method creates a ContainerNode at the specified position.
- There are several overloads of the createDiagramLink method that allow connecting two nodes of the same type or of different types.

Drawing New Items

Users can draw diagram elements with the mouse. Call setBehavior to specify what type of elements should be created when a user starts drawing. While items are being drawn, the control raises the validation events nodeCreating and linkCreating to let you validate the operation and prevent creating items at a specific location. When the user releases the mouse button, the item is added to the collection that contains items from the same type (for example, the collections returned by the getNodes).

Deleting Items

Call the **remove** method of the collection returned by the getItems method to delete an object from the diagram. The clearAll method clears diagram contents by deleting all objects.

By default, deleting a node also removes its links. Set the AutoDeleteLinks property to **false** to prevent that, and disconnect the links instead.

Accessing Items

One of the most common tasks when using the component is iterating over all items in the document or navigating through the connections between items - from a node to the incoming or outgoing links, or from a link to its origin and destination nodes. To enumerate items of a diagram, use the collections returned by the following methods: getItems, getLinks, and getNodes. The nodes connected through a link are returned by the link's getDestination and getOrigin methods. To access the links connected to a node, use its getIncomingLinks and getOutgoingLinks methods. The first collection contains references to all links pointing to the node, the second - to the links that start from it. Links can connect to rows of a table; to find such links, use the table's getRows method and the getIncomingLinks and getOutgoingLinks methods.

Selected Items

If only one chart object is selected, it is considered the active object and can be accessed with the getActiveItem method. Multiple objects can be selected when clicking or dragging with the Ctrl key pressed at the same time. Multiple- selection can be accessed through the getSelection method of the Diagram class. The Selection object provides methods to access the selected items: getItems, getLinks, getNodes.

Finding Items

You can search for chart objects by their tag using the findLink, findNode, findGroup methods. Tag objects are compared by calling the equals method of the **java.lang.Object** class. If there are more objects with the same tag, the first one will be returned. If no object with the specified tag exists, null object reference will be returned. Groups can also be searched by tag using **findGroup**.

Relationship Queries

The query method traverses the graph by following node/link connections and group's parent/child relationships to find items in specific relation to the current one. The method receives a string argument consisting of selectors and optional predicates. The query is executed in several steps. In each step the result set is constructed from the previous result set by following the relationship specified by the current selector. If a predicate is specified after the selector identifier, the result set is filtered to include only items for which the predicate evaluates to **true**.

Attaching and Grouping Items

JDiagram allows attaching a node to another diagram element, establishing a subordinate - master relationship between the two items. The easiest way to attach nodes is to call the attachTo method. When a master element is moved or resized, any subordinated node follows it, so that the initial distance between the two items stays constant. This happens both when a user moves the master item around, and when the item position is changed using a method.

> **Note**
>
> Recent versions of the API include NodeLabel and LinkLabel classes, which address several of the scenarios described below. We recommend using these classes when appropriate, as they offer a more lightweight and easily configurable alternative to attached nodes.

Possible Uses

- Attach a transparent shape node to another item and set its text by calling the setText method, so that the shape node acts as an additional label assigned to the main item (to make a shape node transparent, call its setTransparent method).
- Attach a shape node to another item and set the node's image by calling its setImage method, so that it acts as an additional icon displayed inside or near the main item.
- Attach a shape node or a table to another item and handle the nodeClicked or cellClicked event to perform some action on the main item. This makes the subordinated node act as a button or another type of UI element attached to the main item.
- In all previous cases, the attached nodes can be locked by a call to their setLocked method in order to use them only as a decorations embellishing the main item. That prevents users from selecting, modifying or drawing links to the subordinates.
- Attach child elements in a tree branch to the branch root, so that when a user moves a tree node, the node's children moves simultaneously with it. Modifying an item in such hierarchical group makes the modification propagate through all dependant subordinated items.

Hierarchical Grouping

An unit of attached items is represented by an instance of the Group class. To create a group, call the createGroup method passing the master object as argument, and use the Group methods to attach items. The attachTo method of nodes is a shortcut to creating a group and attaching an item to it. Every member of a group can be the master object of another group, that is, an item can be subordinate in one group and meanwhile be another group's master. JDiagram doesn't impose any limits to the depth and width of group hierarchies built that way. However, it is not possible to put an item as a subordinate in more than one groups because the hierarchy relations would become ambiguous.

Unions

It is possible to create such groups, where modifying any item in the hierarchy causes updating of all other items. This can be done by putting the items in circular chain of dependencies - that is, item1 is attached to item2, item2 to item3 ... itemN to item1. If any of these items is modified, the change will propagate through the chain until it reaches its originator.

Attaching Items to a Group

Links cannot be attached to groups but can be master items of groups. If a group's master item is a link, nodes can be attached to the control points or segments of the link. See the attachToLinkPoint and

attachToLinkSegment methods for details. If the master item is a node, other nodes can be attached to any of its corners, or to an area specified as percent of master-node's bounding rectangle. Check attachToCorner and attachProportional for details. A shortcut to creating Group instance and calling the appropriate attachTo method of the DiagramNode class.

Accessing Group Items

The master item of a group can be accessed through its getMainItem method and the subordinate items are returned by the getAttachedNodes method. To get the groups in which an item participates, use its getMasterGroup and getSubordinateGroup methods.

Destroying Groups

If a user deletes the master item of a group, the group is destroyed automatically. If getAutoDeleteItems returns true, subordinated items in the group are deleted too. If **getAutoDeleteItems** returns false, subordinated items are just detached from their master and remain intact. Groups can be destroyed programmatically using the destroyGroup method.

Layers

Layers

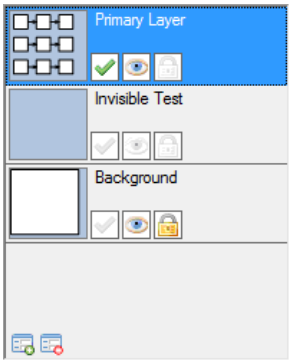
Items can be assigned to layers, and layers can be hidden, locked or moved up/down in the Z order as a group. Layer objects provide Visible, Locked and ZIndex properties, which will affect all items in the respective layer. Layers also expose a Title property shown in the LayerListView control. Newly drawn items are added to the layer specified via Diagram.setActiveLayer.

Call the setLayerIndex method of items to associate them with layers in the Diagram.Layers collection. If LayerIndex has the default value of -1, the item is not associated with any layer and its visibility depends only on the item's own Visible property.

Layer list control

The LayerListView control provides user interface for working with Layer objects. The control presents a list of the specified Diagram's layers, showing their title and an overview image of the objects in each layer, and also allows editing of layer's Visible and Locked properties and choosing the Diagram's currently active layer. New layers can be added to the Diagram by clicking the + button and removed by clicking the - button.

The image below illustrates a **LayerListView** with several layers.



Collapsing and Expanding Tree Branches

If your chart represents a tree structure, you might want to collapse a sub-tree starting from a node or expand a sub-tree that was previously collapsed. Use the setExpanded method of a node to do this

programmatically. You can also invoke the setExpandable method to show a +/- button beside the node; using this button the user will be able to collapse and expand the sub-tree, which has the specified node as root. To check if a sub-tree is expanded or collapsed call the getExpanded method.

Displaying Expand/Collapse Button

If the Expandable attribute of a node is set to **true**, there is a [±] button displayed beside the node to allow users to collapse or expand the tree branch starting there. The button location can be customized through the diagram's setExpandButtonPosition method. The appearance of the collapse / expand icon can be customized by setting Renderers.ExpandIconRenderer. By default, pressing that button automatically collapses or expands the tree branch and raises the treeExpanded or treeCollapsed events.

Defining Tree Direction

A node can be connected to other nodes through outgoing and incoming links. You can call the setExpandOnIncoming method to specify which items connected to a node will be regarded as its descendants. If you pass false (default value) then each node will be regarded as a parent of its outgoing links and the items attached to them. If you pass true, the node' incoming links will define its children. Thus this property specifies the parent-children relationship between chart items and respectively the overall direction in which collapsing / expanding is done.

Expanding a Branch Recursively

Use the setRecursiveExpand method to specify whether the whole sub-tree starting from a node will be shown when expanding, or only the first level of descendants.

Custom Expand/Collapse Functionality

The setExpandButtonAction method lets you override the standard functionality of the [±] button. Set this property to RaiseEvents and handle the expandButtonClicked event if you need to implement your own expand/collapse logic.

Multiple Diagram Pages

The DiagramDocument class represents a collection of diagram pages or sheets, represented by DiagramPage objects. New pages can be added to the document and existing pages can be removed and reordered via the Pages collection. The saveToXml and saveTo methods of **DiagramDocument** save all pages in a single file, and respectively the loadFromXml and loadFrom methods load all pages from the file. **DiagramDocument** can also load files created by the serialization methods of Diagram, and will show them in a single page. Note that the opposite is not true: **Diagram** cannot load directly a **DiagramDocument** file.

DiagramPage is derived from **Diagram** and only adds a Title property, so any code that processes **Diagram** objects will work with **DiagramPage** objects too. A diagram document forwards each event raised by its pages, giving you a chance to use the same handler for events raised by different pages. If a page should implement distinct user interaction or validation logic, it is also possible to attach handlers to the Diagram events inherited by **DiagramPage**.

A **DiagramDocument** can be exported to PDF using the new overloads available in the PdfExporter. Other export classes do not support multi-page export at this time, but still can be used to export individual pages via their Export(Diagram) method.

A single **DiagramPage** could be assigned to the Diagram property of DiagramView, and that lets you create your own user interface for presenting a list of pages to the user and selecting a current page. The package also includes a DocumentView and TabbedScrollPane classes that presents all pages of a document in a tabbed user interface where each tab corresponds to a page. The page displayed in the active tab is exposed by the CurrentPage property of **DocumentView**. The active page can be changed interactively by activating its associated tab. New pages can be added and removed to/from the document through buttons in the tab tray and the pages can be rearranged by dragging their associated tabs.

Components

The following topics are discussed in more details:

Using Components
General information on components and how to use them in diagram nodes.

Standard Component Types
A complete list and information about the standard JDiagram components, such as ButtonComponent, TextComponent and ShapeComponent.

Components and XML
How to define components hierarchies in XML and how to load those hierarchies.

Creating Custom Components
Information on how to implement and use custom components.

Using Components

The components in JDiagram are used through an instance of the CompositeNode class or a class deriving from **CompositeNode**. Simply create concrete component instances and add them to the Components collection of the **CompositeNode**.

Arranging Components

By default the composite node arranges its child components on top of each other, in the order they were added to the Components collection. To apply custom arrangement, the children should be organized in a component hierarchy using the appropriate panel components. For example, to arrange children horizontally, in a row, you can use the StackPanel with Orientation set to Horizontal. Here is an example on how to do this in code:

Java

```
StackPanel panel = new StackPanel();
panel.setOrientation(
    com.mindfusion.common.Orientation.Horizontal);
panel.setSpacing(1);

TextComponent text = new TextComponent();
text.setText("Hello world!");
panel.getComponents().add(text);

ButtonComponent button = new ButtonComponent();
TextComponent buttonContent = new TextComponent();
buttonContent.setText("Click me!");
button.setContent(buttonContent);
panel.getComponents().add(button);

node.getComponents().add(panel);
```

It is possible to create custom panel classes by deriving from ContentComponent and overriding the arrangeComponents method. For an example on how to implement custom panel classes, check the Creating Custom Components topic.

Another way to arrange child components is by deriving from CompositeNode and overriding the arrangeComponents method. Then, you can manually assign the position of individual nodes through their Bounds property.

Finding Components

The findComponent method of the CompositeNode class can be used to search for components by their Name. This method performs a recursive search of all components in the Components collection and returns a reference to the first component with the specified name. This is particularly useful when the component hierarchy is defined through XML and you need to obtain a reference to a specific component

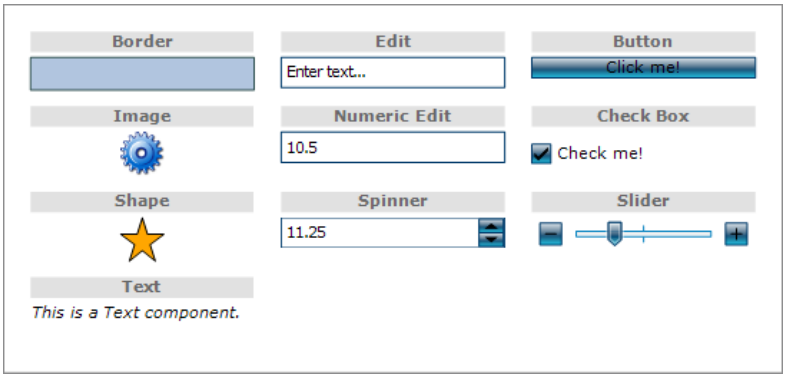
in the hierarchy for additional processing. For more information on how to define components in XML check Components and XML.

Hit-testing Components

To retrieve the topmost component at a specific location, use the getComponentAt method of the CompositeNode class. This method ignores components with any of the following properties set to **false**: IsEnabled, IsHitTestVisible.

Standard Component Types

The following image illustrates the standard components using the default appearance settings. Additional information about the individual components can be found below.



Border Components

The border components can adorn a single component with a border and a background. To nest a more complicated structure within a border, use one of the panel components as a parent. The border component exposes few properties. The Background and Pen can be used to define the border appearance. The derived Padding property can be used to specify the distance between the border sides and the child component. The border child can be assigned through the Content property.

Button Components

The button components represent a clickable button. The button components, similar to the border components, can host a single child component - usually a TextComponent. The default button appearance is controlled through a set of brush and pen properties - Brush, BrushHovered, BrushPressed, Pen, PenHovered and PenPressed. These properties define the appearance of the button in its different states. An alternative way to define the button appearance is through images by using the ImageList property. In addition the buttons can be custom drawn by handling the customDraw event. When a button component is clicked, the mouseClicked event is raised.

CheckBox Components

The check box components represent specialized buttons with an additional state - checked. The appearance of the check box in its checked state can be customized through the CheckedImageList. The state can be programmatically get or set through the isChecked property.

Text Components

Text components can display static text. Text components expose an array of properties for customizing the appearance of the displayed text, including Font, TextColor, TextFormat and Background. The text of the text components can be specified through the Text property.

Edit Components

The edit components display editable text content and are analogous to the WinForms text boxes. The following properties define the appearance of the text within the component - Font, TextColor, TextWrapping. In order to edit the text in an edit component, the component has to have keyboard input. This is achieved by setting IsFocused to **true**. The user can focus an edit component by clicking on it with the left mouse button. To enable single line edit mode set AcceptsReturn to **false**.

The edit components expose several events, most notably - textChanging and textChanged.

Selection

The current selection of the edit component is defined through the SelectionStart and SelectionLength properties. The appearance of the selection is defined through the SelectionColor, InactiveSelectionColor and HideSelection properties.

Undo/Redo

The edit components implement undo and redo internally. To undo the most recent changes press CTRL+Z while the edit component has the input focus. To redo the changes, press CTRL+Y.

Clipboard

All standard Clipboard operations are supported and can be accessed through the usual keyboard shortcuts: Copy - CTRL+C, Cut - CTRL+X, Paste - CTRL+V.

NumericEdit Components

The numeric edit components are similar to the generic edit components. The main difference is that the numeric edits (as the name suggests) allow only numeric input. In addition to the standard edit events, the numeric edits also expose the more specialized validateValue and valueChanged events. The numeric components support undo, redo and clipboard as well.

Image Components

The image components display an image in different alignment modes. The image and alignment can be specified through the Image and ImageAlign properties respectively.

Shape Components

The shape components can display arbitrary geometrical shapes. Any shape defined through a Shape object can be used, including all predefined shapes. The shape components can also be initialized using the specialized geometry syntax when defined in XML. For more information regarding this, check Components and XML. The appearance of the displayed shape is specified through the Brush and Pen properties and the shape itself is assigned through the Shape property.

Slider Components

The slider components provide a way to interactively select a single numeric value or a range of numeric values from within a fixed interval, by dragging one or more thumbs along a horizontal rail. In addition the slider component provides two buttons which can be used to adjust the value more precisely. The type of the slider component can be specified through the Type property. The interval of available values can be set through the Minimum and Maximum properties. The selected values can be get or set through the Value, StartValue and EndValue properties respectively depending on the type of the slider. The components expose a set of events, which are raised when the slider values are changed interactively. These events are batchValueChanged, endValueChanged, startValueChanged, and valueChanged.

Spinner Components

The spinner components represent a composition of a numeric edit box and two buttons. In addition to the core functionality provided by the numeric edit, the value can also be adjusted through the buttons or by pressing the Up, Down, PageUp and PageDown keys while the edit has the input focus. The interval in which the value can vary is specified through the Minimum and Maximum properties. The current value can

be accessed through the Value property. The events that are raised when the value is changed are valueChanged and batchValueChanged.

Simple Panels

The most basic of all three built-in panels. Simple panels arrange their child components on top of each other, in the order they were added in the Components collection. The children are positioned within the available space according to their HorizontalAlignment, VerticalAlignment, Width and Height.

Stack Panels

Stack panels arrange their children in a vertical or horizontal row, according to the value of the Orientation property.

Grid Panels

Grid panels arrange their children in a table. The rows and columns of this table are defined through GridRow and GridColumn objects which are added to the Rows and Columns collection of the GridPanel respectively. Each grid panel needs to define at least one column and row in order to be effective. The destination row and column of individual child components depends on the value of their GridRow and GridColumn properties.

Components and XML

As described in the Using Components topic, to use components in JDiagram you need to instantiate them and add them to the Components collection of a CompositeNode. JDiagram provides a more convenient method for defining component hierarchies - through XML.

Definition

Each node in the source XML represents a component or an object. The child nodes in the XML represent child components. The XML attributes represent either property assignments or event handler attachments. A simple component hierarchy defined in XML is illustrated below:

XML

```
<SimplePanel>

  <Shape Name="Shape" Shape="Rectangle" />

  <Border Padding="2">
    <GridPanel>
      <GridPanel.Columns>
        <GridColumn Width="30" />
        <GridColumn />
      </GridPanel.Columns>
      <GridPanel.Rows>
        <GridRow />
      </GridPanel.Rows>

      <Image Name="Image" ImageAlign="Fit" />

      <StackPanel Orientation="Vertical" GridColumn="1">
        <Text Name="Title" Font="Arial, 12pt, style=Bold" TextAlignment="Near" />
        <Text Name="FullName" TextColor="Blue" TextAlignment="Near" />
        <Text Name="Text" Font="Arial, 8pt" TextAlignment="Near" />
      </StackPanel>
    </GridPanel>
  </Border>

</SimplePanel>
```

Because the XML documents have a single root, the component hierarchies defined through XML can have a single root too. In the case when a hierarchy needs to have more than one root each root can be defined in its own XML or all the root components can be grouped under a single component container.

As is observed in the sample above the components can be specified through shortcut names. The following table lists all available shortcuts:

Component	Shortcut Name
BorderComponent	Border
ButtonComponent	Button
CheckBoxComponent	CheckBox
EditComponent	Edit
ImageComponent	Image
ShapeComponent	Shape
TextComponent	Text
NumericEditComponent	NumericEdit
SliderComponent	Slider
SpinnerComponent	Spinner

The components can also be defined using their full names.

Composite Properties

Some properties have too complex values and cannot be represented with attributes. Consider for example the collection properties, such as the Columns and Rows properties of the GridPanel. These properties can be defined as child nodes using the specialized syntax illustrated below:

XML

```
<ComponentName>
  <ComponentName.PropertyName>
    <PropertyValue />
  </ComponentName.PropertyName>
</Component>
```

For example, to define Content of a ButtonComponent, you can use the following syntax:

XML

```
<Button>
  <Button.Content>
    <Text Text="Hello world!" />
  </Button.Content>
</Button>
```

Images

Images can be defined in XML using **Bitmap** objects and string paths. Here is an example:

XML

```
<Image>
  <Image.Image>
    <Bitmap>Images/MyImage.png</Bitmap>
  </Image.Image>
</Image>
```

In the example above "Images/MyImage.png" will be interpreted as an image path and the loader will attempt to create a new **java.awt.Image** instance by passing the file path to the **Toolkit.getImage** method.

Shapes

The Shape of shape components can be defined in XML by either specifying the name of a predefined shape or by using the specialized syntax for graphical paths. The example below defines two ShapeComponent instances in a StackPanel. The first shape component uses the predefined Ellipse shape and the second uses a custom arrow shape:

XML

```
<StackPanel Spacing="1">
  <Shape Shape="Ellipse" Width="6" Height="6" Pen="Red" Brush="Yellow" />
  <Shape Shape="M0,30 L50,30 L50,0 L100,50 L50,100 L50,70 L0,70 z" Width="6" Height="6"
Pen="Green" Brush="LimeGreen" />
</StackPanel>
```

The specialized graphical path syntax supports the following subset of operations:

Command	Description
MX,Y	Moves to point (X, Y).
LX,Y	Draws a line from the current point to point (X, Y).
CX1,Y1 X2,Y2 X3,Y3	Draws a curve from the current point to (X3, Y3) using points (X1, Y1) and (X2, Y2) as control points.
AW,H R A D X,Y	Draws an arc with size (W, H) using rotation R and an end point (X, Y). A specifies whether to draw the large arc (1 - large arc, 0 - small arc) and D specifies direction - (1 - positive angle, 0 - negative).
z	Closes the figure.

Loading XML

Component hierarchies defined in XML can be loaded using the XmlLoader class. The class provides several static load method overloads for loading XML from different sources - a content string, **Stream** or XML **Document**. Each of the Load methods returns a ComponentBase representing the root of the loaded hierarchy. This component can then be added to a CompositeNode or as a child of another component. The following example illustrates how to use the **XmlLoader**:

C#

```
CompositeNode node = new CompositeNode();
node.getComponents().add(XmlLoader.load("<Edit Text=\"Some text\" />"));
```

Handling Events

Unlike MindFusion.Diagramming libraries for other platforms, Java version cannot attach handlers to events by names specified in XML. Instead, you will have to add an event listener explicitly after loading a template:

XML

```
<StackPanel Orientation="Vertical" GridColumn="1">
    <Button Name="Button" Width="10" Height="10"/>
    <Edit Name="Edit" Width="50" Height="30"/>
</StackPanel>
```

Java

```
ButtonComponent button = (ButtonComponent)node.findComponent("Button");
button.addComponentMouseEventListener(
    new ComponentMouseEventAdapter()
    {
        @Override
        public void mouseClicked(Object sender, ComponentMouseEvent e)
        {
            EditComponent edit = (EditComponent)node.findComponent("Edit");
            edit.setText("click");
        }
    });
```

Resolving Types

The XmlLoader is capable of resolving external (non-component) types found in the source XML by calling Class.forName. However, this can be slow in certain scenarios. In addition certain types might not resolve properly because the loader always uses the first type that matches the specified name regardless of namespace. For these reasons, the **XmlLoader** provides means to manually resolve external types. In order to take advantage of this, you have to implement the TypeResolver interface and pass an instance of your class to the corresponding load overload. For any external type found, the loader will invoke the resolveType method. If the method returns **null** the loader will attempt to resolve the type using its default logic.

Error Handling

It is not unusual for the XmlLoader to throw an exception when loading components from XML. There are many reasons for this to happen, including ill-formatted XML. Therefore it is recommended to always try and catch exceptions when loading components from XML.

Creating Custom Components

Custom Component

In order to create a custom component, simply derive from any of the built-in component classes, ultimately from the ComponentBase class. Usually you will want to override the draw method to render the component and eventually the getDesiredSize method. A simple custom component is illustrated below:

Java

```
import java.awt.Color;
import java.awt.Graphics2D;

import com.mindfusion.diagramming.RenderOptions;
import com.mindfusion.diagramming.components.ComponentBase;


public class RectangleComponent extends ComponentBase
{
    @Override
    public void draw(Graphics2D g2d, RenderOptions options)
    {
        g2d.setPaint(Color.RED);
        g2d.draw(getBounds());
    }
}
```

The above component only renders a red rectangle.

To provide custom component behavior based on the user input, override the onMouseDown, onMouseUp, onMouseMove, onKeyDown, onKeyUp and onKeyPress methods.

Custom Panel

To create a custom container component, you need to derive from the ContainerComponent class and override the arrangeComponents method and possibly the getDesiredSize method. From within the **arrangeComponents** method you position the individual child components by assigning values to their Bounds property according to their desired size and the arrangement logic of the panel. Below you can find the implementation of a very simple custom panel class, which arranges its children with a constant offset relative to each other.

Java

```
import java.awt.Graphics2D;
import java.awt.geom.Rectangle2D;
import java.awt.geom.Rectangle2D.Float;

import com.mindfusion.diagramming.XDimension2D.Double;
import com.mindfusion.diagramming.components.ComponentBase;
import com.mindfusion.diagramming.components.ContainerComponent;

public class OffsetPanel extends ContainerComponent
{
    @Override
    public void arrangeComponents(Float availableSpace, Graphics2D g2d)
    {
        float y = 0;
        for (ComponentBase component : getComponents())
        {
            // calculate the desired size of the component
            Double availableSize = new Double(availableSpace.getWidth(),
availableSpace.getHeight());
            Double desiredSize = component.getDesiredSize(availableSize, g2d);
            component.setBounds(
                new Rectangle2D.Float(
                    y, y, (float)desiredSize.getWidth(), (float)desiredSize.getHeight()));
            component.arrangeComponents(component.getBounds(), g2d);

            y += 2;
        }
    }

    @Override
    public Double getDesiredSize(Double availableSize, Graphics2D g2d)
    {
        double width = 0;
        double height = 0;

        double y = 0;
        for (int i = 0; i < getComponents().size(); i++)
        {
            ComponentBase component = getComponents().get(i);

            Double desiredSize = component.getDesiredSize(availableSize, g2d);

            width = Math.max(width, desiredSize.getWidth() + y);
            height = Math.max(height, desiredSize.getHeight() + y);

            y += 2;
        }

        return new Double(width, height);
    }
}
```

Using Custom Components in XML

If you want to use custom components in XML you may need to supply a custom TypeResolver object to the loader. This is especially true if you want to use shortcut names for your components. Consider the above RectangleComponent in the following example:

XML

```
<Rectangle />
```

Loading this XML will fail unless you supply an **TypeResolver**, which can resolve "Rectangle" to **RectangleComponent**.

User Interaction

Controlling User Interaction

There are several ways to control user actions on the document as a whole or on the separate items.

Specify How User Actions are Interpreted

The Behavior property provides several predefined sets of rules specifying how user input with the mouse/keyboard is interpreted . If set to LinkShapes, drawing over an empty document area is processed as a ShapeNode creation request and drawing over a node creates a link. Note that such behavior leads to some extra work when creating overlaying nodes - users need to draw the second node on an empty area and move it over the first one afterwards. If you want to avoid that you should use the **DrawShapes** behavior. If **LinkTables** is set, drawing over an empty area creates a table, and dragging over a table creates an link. Behavior options also include **DrawLinks**, **DrawTables** and **Modify**.

Setting Diagram Bounds

Document size can be get or set with the getBounds and setBounds methods respectively. By default, users are able to move items outside document bounds. To prevent this use setRestrictItemsToBounds method. It provides three RestrictToBounds options to restrict item positions. They might not be restricted at all. The most restrictive option is to keep items entirely inside the document area. Another option allows items to be partially outside the document area but having at least a small visible part inside.

Item Constraints

Constraints upon how users are allowed to modify a node are set through the setConstraints and setEnabledHandles methods. The former can be used to constrain the move direction, node size and aspect ratio. The latter enables or disables specific manipulation handles of a node. That allows making the node non-moveable, non-resizable, or resizable only horizontally/vertically.

Items can be locked by the setLocked method. Locked items are excluded from selection and users cannot select, move or modify them.

Control How Links Connect to Nodes

You can specify whether a DiagramNode accepts incoming and outgoing links by using the setAllowIncomingLinks and setAllowOutgoingLinks methods respectively.

Anchor points define where link's ends should be placed when a user attaches a link to a node. A pattern of anchor points can be assigned to a node by calling the node's setAnchorPattern method. To specify whether link ends are aligned to anchor points when creating or modifying links use the setSnapToAnchor method.

You can forbid users to move links' end points by calling setLinkEndsMovable passing **false**. This can also be controlled on a per-link basis through setAllowMoveEnd and setAllowMoveStart methods.

The setAllowSelfLoops method enables or disables drawing of reflexive links. They are allowed by default, but can be disabled if you consider them meaningless for your application. The setAllowLinksRepeat method can be used to control if two nodes can be linked more than once in the same direction.

In-place Text Editing

The text of nodes and tables can be edited in-place by double-clicking the respective items. To enable the feature invoke the setAllowInplaceEdit method passing true as its argument. For tables, both captions and cells can be edited in this way. Call the cellTextEditing method to enable/disable in-place editing per cell. Depending on the type of item being edited, one of these events can be fired when editing completes: nodeTextEdited, cellTextEdited.
In-place editing mode is exited when users click outside the text entry control or by pressing the ENTER or ESC keys if respectively setInplaceEditAcceptOnEnter and setInplaceEditCancelOnEsc are called.

Validation Events

When users try to create, delete or select an item one of the following events is fired. To ban the action, set corresponding event boolean argument to false:

Event	Description
nodeCreating	Raised while a user draws a new node.
linkCreating	Raised while a user draws a new link.
nodeSelecting	Raised when the user is trying to select a node.
linkSelecting	Raised when the user is trying to select a link.
nodeDeleting	Raised when the user is trying to delete a node.
linkDeleting	Raised when the user is trying to delete a link.
nodeModifying	Raised while a user modifies an existing node.
linkModifying	Raised while a user modifies an existing link.
nodeTextEditing	Raised while a user makes changes to the text of a node.
linkTextEditing	Raised while a user makes changes to the text of a link.

For more events that can be fired by user actions, please, visit the DiagramListener section of the documentation.

Miscellaneous

- To enable items to be automatically selected when they are created, call setSelectAfterCreate passing **true**.
- The ModifierKeyActions property allows assigning different functions to the CTRL, ALT and SHIFT keys.
- The RightButtonActions and MiddleButtonActions properties let you change the function of respective mouse buttons.

Single and Multiple Selection

Selecting and Modifying Items

In order to move or modify a diagram element, users manipulate its modification handles. Modification handles appear around an item when it is selected. Each handle can be dragged to perform specific transformation on the item. The appearance and behavior of modification handles can be altered by calling the setHandlesStyle method. You can also invoke the setModificationStart method to make those handles appear automatically for non-selected items when the mouse pointer hovers over them.

Active Item

If only one diagram item is selected, it is considered the 'active' item. One of the items in a multiple-selection is also regarded as active; it is usually the one selected last. The active item has white modification handles drawn around it, while other items in multiple-selection have gray handles. The active item is probably the one, users are most interested in while editing a diagram, and your program can update its state and user-interface according to that. Access to the active item is provided through the getActiveItem method of the Diagram class.

Multiple Selection

Selection of diagram objects in JDiagram is represented by an instance of the Selection class. This class provides methods to programmatically select or deselect items, as well as methods that modify how the selection looks and behaves. The selected items within the current document can be obtained through the getSelection method of the Diagram class. Multiple items can be selected, thus moved at the same time. To programmatically add or remove items to the multiple-selection invoke one of the addItem, toggle and removeItem methods. The clear method deselects all items and the change method selects a single item deselecting all other. To disable multiple selection, pass false to setAllowMultiple.

Drawing a Selection Rectangle

To select multiple items, users must draw a selection rectangle with the left mouse button while holding down the CTRL key. The MiddleButtonActions and RightButtonActions properties let you enable drawing the selection rectangle using the middle or right mouse button.

Custom Lasso Tools

If you set the Behavior property of DiagramView to DrawLasso, the control lets users draw selection lasso without changing actual Selection. You could use that in conjunction with initializeLasso and lassoDrawn events to implement custom tools or selection logic, such as:

- Opening a custom context menu or UI panel styled for bulk operations.
- Creating a visual screenshot / export of only the selected region.
- Implementing custom selection logic or filters (e.g. select nodes of a specific type, or select only links).
- Bookmarking the selected area (adding it to Bookmarks).

Appearance

The visual style of multiple-selection can be modified by the setStyle method of the Selection class. For example selection might be painted as a dashed rectangle or a semi-transparent filled rectangle. Another method related to selection visualization is the Diagram's setSelectionOnTop, which can be used to specify whether selected items should be painted according to their Z-order position or they should be painted on top of the non-selected items.

Enumerating Items

The Selection class exposes the selected items as lists of items. The selected items from a particular class can be accessed through the corresponding method. To get the list of all selected nodes and links, use the getNodes and getLinks methods. You can obtain a list with all selected items, disregarding class, by invoking the getItems method. Alternatively you might enumerate all items in the diagram and call their getSelected method.

Automatic Selection

To enable automatic selection of newly created objects, call setSelectAfterCreate passing **true**.

Automatic Alignment

The following features help the user align items interactively.

Alignment Grid

Items are aligned to a grid when AlignToGrid is enabled. More information is available in the Alignment Grid topic.

Align nodes to nodes

If AutoAlignNodes is enabled, the node currently being drawn or resized is aligned to another node so that a pair of their vertical or horizontal sides become collinear. To specify the maximal distance at which nodes are aligned, set the AutoAlignDistance property. The pair of aligned nodes is indicated visually by drawing an alignment guide using the pen assigned to AlignmentGuidePen.

Snap links to nearby nodes

The currently drawn or modified link can automatically snap to the nearest border point of the nearest node when AutoSnapLinks is set. The maximal distance at which links will connect to a nearby node is set via AutoSnapDistance.

Clipboard Operations

A single diagram item or a selection of items can be copied or cut to the system clipboard. This is done programmatically using the copyToClipboard and cutToClipboard methods. To paste the clipboard contents into the current diagram call pasteFromClipboard.

If you create a custom item type, its instances can be copied to the clipboard only if they are registered for serialization using registerItemClass and provide a copy constructor. If the class defines additional fields, they must be serialized by the respective save / load method overrides to allow copying their values to the clipboard.

JDiagram does not provide keyboard interface to clipboard operations. You might assign the standard CTRL+C, CTRL+X and CTRL+V shortcuts to menu items and handle them by calling the respective methods.

Scrolling and Zooming

Enable Scrolling

To enable scrolling, add the DiagramView instance to a **JScrollPane** container or to a Ruler.

Diagram Size

The diagram size is specified through the Bounds property. Its value is a **Rectangle2D** instance that specifies the origin of the diagram coordinate system and the diagram size. The scrollbar ranges also depend on the current ZoomFactor.

Automatic Scrolling

The setAutoScroll method enables or disables automatic scrolling. When a user drags a modification handle outside JDiagram visual area while manipulating an item, if automatic scrolling is enabled, the control will scroll its view towards the pointer position. The ScrollZoneSize property defines the size of the area near the view borders that triggers automatic scrolling.

Programmatic Scrolling

To scroll the document contents programmatically, you can use one of the scrollTo, setScrollX or setScrollY methods. To get the current scroll position, call getScrollX and getScrollY. The bringIntoView method scrolls the viewport to ensure that a specific diagram item can be seen in the view.

Scrolling Nodes

The contents of nodes such as ContainerNode, TableNode and TreeViewNode can be scrolled too. Set a container's Scrollable property to allow scrolling, with AutoGrow disabled to let the container's contents overflow. If a table's Scrollable property is set to **true**, there are up/down scroll buttons displayed in the table's caption bar. By clicking these buttons users can scroll the rows of the table. Scrolling can also be done programmatically using the CurrentRow property.

Zooming

Zooming is controlled by the setZoomFactor method. The zoom factor is expressed as a percentage, 100% meaning no zoom. Higher than 100% makes the diagram items look closer and bigger on the screen - zooming in. Less than 100% makes items look further and smaller on screen - zooming out. To zoom and scroll the view to fit the diagram contents to the control's client area, call zoomToFit. To zoom and scroll the view so it fits a specified rectangular document area to the control's client area, call zoomToFit(Rectangle2D**)**.

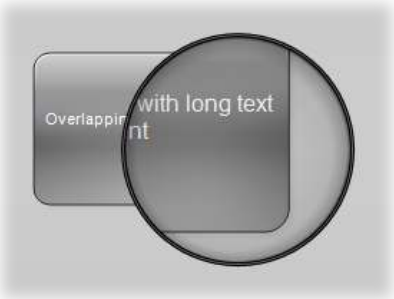
Lasso Zoom Tool

The control supports several ways to zoom using lasso tool:

- Set the Behavior property to Zoom to always draw zoom lasso.
- Set the Zoom flag for one of the keys in ModifierKeyActions to let users draw zoom-lasso with respective modifier key pressed and the left mouse button.
- Assign Zoom value to RightButtonActions or MiddleButtonActions property to zoom using respective mouse button.

Magnifying

The DiagramView provides an option for zooming in (or out) portions of the diagram through the Magnifier tool. The magnifier tool can be permanently activated by calling setMagnifierEnabled. Alternatively, on-demand magnification through a Magnify value to the view's Behavior property.



The magnification factor can be specified by calling the setMagnifierFactor method. The size of the tool and its border thickness can be set through the MagnifierWidth, MagnifierHeight and MagnifierFrameThickness properties.

Panning

The diagram view can be panned by holding ALT while dragging the mouse with the left button down. To let users pan the view with the left mouse button without using a modifier key, set the Behavior property of DiagramView to Pan. JDiagram displays the PanCursor while panning.

Tool-Tips

Tool-tips are short text messages displayed when the mouse pointer hovers over a diagram item for a while.

Tool-tips can be defined for each diagram element and for the whole document. If the mouse pointer stands still and it points to an item, then the tool-tip of the item is displayed. The tool-tip of the diagram appears if there is no item under the cursor or if there is an item but there isn't any tool-tip text defined for it. To associate a tool-tip with the diagram, use the setToolTip method. To associate tool-tips with individual items, use DiagramItem.setToolTip.

The tooltips can display HTML content, including links, images and formatted text. To enable this, enclose the tooltips' text between <html> and </html> tags, and then use HTML formatting tags as you would do in a web page.

Tool-tip's text is also used as a value of the ALT attribute of image map areas corresponding to items; see HtmlBuilder for more information.

In-place Editing the Contents of Items

Standard in-place editing

To activate the standard in-place editing of the text of JDiagram objects, call the setAllowInplaceEdit method passing **true**. The **setAllowInplaceEdit** method allows in-place editing the content of a diagram element by double-clicking it. In-place editing mode can be accepted and exited by clicking anywhere outside the text-field.

If you want to change the way of accepting / rejecting changes, the following DiagramView methods allow using the ENTER and ESC keys to perform that: setInplaceEditAcceptOnEnter and setInplaceEditCancelOnEsc. When **setInplaceEditAcceptOnEnter** indicates a **true** value, pressing the ENTER key causes accepting changes and exiting in-place editing mode. If **setInplaceEditAcceptOnEnter** indicates **false**, pressing ENTER inserts a new line in the text while in in-place editing mode. If **setInplaceEditCancelOnEsc** passes **true**, pressing the ESC key performs rejecting changes and exiting in-place editing mode.

In-place editing can be applied to the attributes enabled by the following methods: ShapeNode.setText, DiagramLink.setText, Cell.setText, TableNode.setCaption and ContainerNode.setCaption. For tables, both captions and cells can be edited in this way.

If you want to enable/disable in-place editing of a specific table's cell, handle the cellTextEditing event. To enable/disable in-place editing of nodes, handle the nodeTextEditing event. For a DiagramLink object, the linkTextEditing event is raised while in-place editing. These validation events let you prevent users from editing the text in the particular object if it is necessary.

When in-place editing of a node is completed, the nodeTextEdited event is raised. For a table's cell, handle the cellTextEdited event. The linkTextEdited event is raised when in-place editing of a **DiagramLink** object completes.

By default, JDiagram creates **JTextArea** control instance to let users edit item's text. The enterInplaceEditMode event allows customizing the properties of that control, or attaching event handlers to it. **enterInplaceEditMode** specifies the font of the in-place edited text box. The setInplaceEditFont method sets the font used to display text in the in-place editing text control.

When leaving in-place editing mode, the leaveInplaceEditMode event is raised. This event is raised in all cases of closing the in-place editing control, for example, when the user accepts or cancels the changes made to an item's text, or when the EndEdit method is called.

To enter in-place editing mode programmatically and let users edit an item's text inline, call the beginEdit method of DiagramView. The **endEdit** method exits in-place editing mode.

In-place editing of custom items

The InplaceEditable interface allows implementing the standard in-place editing for custom defined items. By means of the methods of this interface, you can specify the position of the in-place editing JTextArea control and copy the entered text to a property of the edited item.

The getEditRect method returns the destination rectangle of the in-place editing box. getTextToEdit represents the initial contents of the in-place editing box. setEditedText sets the edited text to the object after completing the in-place editing.

Using custom editor controls

Handle the createEditControl event to create a custom in-place editor control. This event is raised if AllowInplaceEdit is enabled and the user double-clicks an item, or when the application invokes the

beginEdit method of DiagramView. When the event is raised, set its EditControl argument to an instance of your custom editor class. You can use any Java Swing component as editor instead of the default **JTextArea**. It is your responsibility to set the editor control size and position. For an example, take a look at the *InteractiveTable* sample project.
When the user exits in-place editing mode by clicking outside the editor, MindFusion.Diagramming raises the destroyEditControl event. Handle it to transfer the values entered into the editor to the respective properties of the edited item, and finally destroy or hide the editor control.

Placement and Layout

Items Placement

Measure Unit

The setMeasureUnit method lets you specify the unit of measure for all location and size -related values assigned to JDiagram object attributes by passing as arguments to their methods.

Location and Size of Nodes

Use the setBounds or getBounds methods to change or get the location and size of a node. To move a node without changing its size, call the move method. To change only the size of a node, invoke the resize method. The ShapeNode's resizeToFitImage and TableNode's resizeToFitImage methods set nodes' sizes to fit that of their pictures.

Links Control Points

Links have two or more control points, depending on their style and segment count. You can get access to the control points by using the DiagramLink.getControlPoints method. You must call updateFromPoints after moving control points of a link in order to repaint the link and update its internal state variables. The smallest rectangle that bounds all link points can be obtained by calling the DiagramLink.getBounds method.

Link Dynamics

Use the Dynamic property of a link to enable it to automatically recalculate its end point positions if the nodes connected to the link are moved or resized; the end points are moved in such a way that the link points to the centers of the linked nodes. A related property is AutoSnapToNode, which can be enabled to make the link end points align to the border of their origin or destination nodes while a user move the link ends.

The setRetainForm and getRetainForm methods are useful for links that have more than two control points. If the nodes connected by a link are moved around, usually only the segments at the ends of that link are updated, so that they stay linked to their respective nodes. In that case all intermediate control points stay where they are. However, if **setRetainForm** is enabled, all control points will move simultaneously in a way they preserve their relative position to each other, and thus preserving the overall form of the link.

To enable or disable automatic routing of a link, use the setAutoRoute and getAutoRoute methods. Routed links avoid nodes by finding the shortest path between their origin and destination that does not cross any other nodes. The link routing algorithm can be tuned through the attributes accessed by getRoutingOptions. The getRouteLinks method gets whether newly created links will automatically find their way between nodes. To set links to find their route automatically, call setRouteLinks.

Interactive Moving or Resizing

End-users of your application can move around or resize diagram objects. They do this by selecting an item and dragging any of its adjustment handles, a point inside its interior, any of it sides or a selection frame.

The way diagram nodes can be interacted with can be controlled by using the setHandlesStyle and getHandlesStyle methods. The handle style also defines the visual representation of selected items on screen. setEnabledHandles and getEnabledHandles allow disabling specific manipulations to perform on a node, for example resizing the item horizontally or moving it. If a node is modified interactively, the nodeModified event is fired. When the user moves any control point of a link, the linkModified event is raised.

Controlling the Z-order

The Z-order defines how items are ordered on the Z-axis so that one looks above or below another. Members of the DiagramItem class give you full control over the Z-order. To move an item one level up or down, invoke the zLevelUp or zLevelDown methods. To move an item to the bottom of the Z-order, call its zBottom method. To move the item in front of all others, call its zTop method. You can use the setZIndex or getZIndex method to get or set the index of an item in the Z-order array.

Alignment Grid

JDiagram provides an alignment grid to help users place diagram items more precisely. To activate the grid, use the setAlignToGrid method. If the grid is active while an item is being created or modified, the item's control-points are aligned to the nearest grid points. The distance between adjacent grid points is set by calling the setGridSizeX and setGridSizeY methods. The GridOffsetX and GridOffsetY properties allow specifying the horizontal and vertical offset of the first point in the alignment grid.

Items created or modified by a user are automatically aligned to the grid. However, if items are placed in the diagram programmatically, their coordinates are set to the specified positions without aligning. In such cases use alignPointToGrid if items must be placed exactly at grid points.

The method setShowGrid can be used to turn the grid visible or invisible. The color and style of a visible grid can be adjusted through the setGridColor and setGridStyle methods respectively.

Lanes Grid

The classes from the com.mindfusion.diagramming.lanes namespace let you develop process maps and swimlane diagrams, useful in business process planning and reporting. Processes consist of consecutive operations accomplished by people involved, technical installations, means of contact, and flow of information. The swimlane grid features allow indicating and arranging related diagram items in complicated processes and systems, that is, Swim lane diagrams (known as Rummler-Brache diagram), Gantt Charts (planning and scheduling of projects). A lane in the grid can visually contain nodes, links, shapes or images, that represent tasks fulfilled in specified periods of time by people, companies or departments.

The **com.mindfusion.diagramming.lanes** namespace provides the Grid, Header, HeaderList and Style classes, the ICell interface and the ResizeType enumeration. These types expose additional properties and methods that let you define your own grids as required by your application logic. Grids can include varying number of lanes, divided into child rows and columns whose intersections form cells. The cells color and style can be customized too.

Use the EnableLanes property of the Diagram class to display lanes in your application. The LaneGrid lets you setup the rows and columns in the grid by defining horizontal and vertical lanes, where each lane can be titled by its own header and/or subheadings. The grid can be resized by setting the ColumnCount and RowCount properties or by adding headers to the ColumnHeaders and RowHeaders collections. A column or row can be divided into child elements by adding to the SubHeaders collection of a **Header**, which lets you form a complex hierarchy of unlimited depth. The intersection of rows and columns can be either a simple cell for bottommost elements in the hierarchy, or a group of cells for parent rows and columns. Cells or cell groups can be accessed via the grid class get method, that lets you index cells either by their integer positions, or by their **Header** objects.

If the AllowResizeHeaders property of the **Grid** class is enabled, users can resize the grid columns and rows as desired. LaneColumnResizeCursor and LaneRowResizeCursor properties get or set the mouse cursor

shown when resizing the lane column header or the lane row header. CellBoundsChanged event is raised when a cell is resized. An application can handle this event in order to rearrange or resize nodes so that they stay within a specific column or row of the grid.

The position of the grid and grid headers within the diagram is defined via TopMargin and LeftMargin, which specify the grid offset relative to Bounds. HookHeaders enables lane headers to be anchored to the left or right side of the control's visible area. The sizes of headers at different levels in the lane hierarchy can be set in a single operation by the RowHeadersWidths and ColumnHeadersHeights properties.

The appearance of the lanes grid can be customized further via the AlignCells property, which specifies whether cells are aligned to each other, the HeadersOnTop poperty, which specifies whether headers should appear on top of the Z-order, and the TopLeftAreaStyle specifying the appearance of the grid's top-left corner.

The **Grid** class provides many miscellaneous methods that can be used to find grid elements, for determining their bounds and for hit-testing: findColumn, findRow, getCellBounds, getCellColumn, getCellFromPoint, getCellRow, getColumn, getRow, getRowIndex, getColumnHeaderBounds, getColumnIndex, getHeaderBounds, getRowHeaderBounds, getHeaderFromPoint.

Laying out Diagrams Automatically

Applications that process hierarchical or more complex entity-relationship data might need to present that data to end-users in an aesthetical and visually appealing manner. Such applications would store their data as graph of connected nodes possibly having additional information attached to them. However, position and size coordinates of nodes might be unnecessary and/or unavailable. JDiagram provides a way to automatically arrange the nodes of a diagram, applying attractive layouts on the overall structure of the diagram. To utilize that functionality, an application can create a diagram by assigning generic coordinates to its nodes, instantiating a layout object and invoking the layout's arrange method. The **arrange** methods can be prevented from changing positions of individual items by setting the IgnoreLayout property of those items to **true**.

The classes that implement automatic layout algorithms are located in the com.mindfusion.diagramming namespace. The following sections list the available algorithms categorized by their general implementation strategy: force-directed algorithms, graph topology based algorithms and semantics based algorithms.

Force-directed layout algorithms

Force-directed algorithms simulate forces acting between objects in the graph and iteratively run a physical simulation that pulls the objects closer or pushes them apart. At each iteration the energy associated with the simulated system decreases, and the node positions calculated by this process usually lead to evenly distributed nodes and uniform link lengths.

Spring-Embedder Graph Layout

Spring-Embedder is force-directed layout algorithm. It simulates a physical system in which nodes repulse each other, and the links between them act as confining springs. Graphs processed by Spring-Embedder have their nodes distributed uniformly across the diagram area. The algorithm can be applied on a graph by creating a SpringLayout object and calling its arrange method. Members of SpringLayout allow you to set the desired distance between graph nodes and the number of iteration steps to use while calculating node positions. You can also specify that JDiagram should try to minimize link crossings. If you select that option, the algorithm would produce better result with more iteration steps. However, it needs more time to complete if more steps are specified. Spring-Embedder layout might be applied like this:

Java

```
import com.mindfusion.diagramming.*;

...
void someMethod()
```

```
{
    SpringLayout layout = new SpringLayout();

    layout.setIterations(500);
    layout.setNodeDistance(30);

    layout.arrange(diagram);
}
```

Grid Graph Layout

The GridLayout algorithm arranges diagram nodes in a grid, keeping connected nodes close together. The algorithm strives to achieve a small number of link crossings. It is based on an iterative process whose initial steps shuffle the grid nodes randomly. That can lead to very different results each time the algorithm is run. To apply the layout to a diagram, create a **GridLayout** instance, set its members and invoke the arrange method. The grid layout might be applied like this:

Java

```
import com.mindfusion.diagramming.*;

...
void someMethod()
{
    com.mindfusion.diagramming.GridLayout layout =
        new com.mindfusion.diagramming.GridLayout();

    layout.setGridSize(75);

    layout.arrange(diagram);
}
```

Simulated Annealing Graph Layout

The AnnealLayout class implements the Simulated Annealing graph layout algorithm. Simulated Annealing is a general-purpose optimization method used to solve large-scale combinatorial problems by simulating the process of heating and cooling of metal to achieve freedom from defects. Finding a nice arrangement of a graph is a combinatorial problem that can be reduced to assigning costs to graph configurations and finding the minimum cost configuration. **AnnealLayout** assigns costs to graph configurations by evaluating different aesthetic criteria such as distance between nodes, length of links and the number of link crossings. Thus the best configuration found will have good aesthetic properties.

Circular Graph Layout

CircularLayout distributes nodes evenly on the circumference of a circle at positions that result in as few link crossing as possible. Set its Radius attribute to specify the size of the layout circle. Set SiftingRounds to set the umber of fine-tuning crossing-reduction iterations.

Topology based layout algorithms

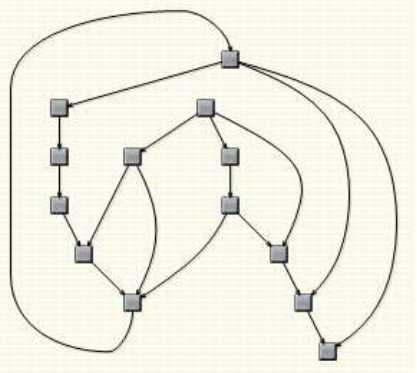
The following algorithms are based on the topological features of the graph being arranged, such as the size and adjacency of faces (a face is a region bounded by links) and the overall direction of links. The algorithms differ in the shape they apply to graph faces and the manner in which faces are embedded in the plane.

One-way Graph Layout

The OneWayLayout class ensures that links enter into nodes from the same general direction and exit them from the opposite side. If the graph contains cycles, some links bend around the nodes to keep the enter/exit direction consistent. The algorithm aims to minimize the number of such links.

Orthogonal Graph Layout

The OrthogonalLayout class implements an orthogonal graph layout algorithm. Each link is drawn as a chain of alternating horizontal and vertical segments. Nodes are placed in a way that facilitates few links bends and crossings. This algorithm was designed for planar graphs where the nodes have at most four incident links, and produces best results with such graphs as input. It can arrange any arbitrary graph as well, by adding some dummy nodes and links to planarize the graph and reduce its vertex degree, and removing them after the layout. However this might lead to using larger area than necessary, due to the space occupied by dummy elements.



Orthogonal Router

OrthogonalRouter is a secondary layout algorithm that can be used to arrange links after an initial node arrangement has already been applied. The orthogonal layout is useful when there are much more links than nodes in a graph. The algorithm strives to achieve the following criteria, while preserving as much of the initial node configuration as possible.

- links must not overlap;
- only vertical and horizontal routing lines are used;
- graph routing is performed with respect to the specified main layout direction;
- links crossings are minimized;
- bends are minimized;

Topological Layout

If the underlying graph if acyclic, TopologicalLayout arranges the nodes linearly in such a way that each node comes before all destination nodes of its outgoing links. The links are drawn as arcs above the chain of nodes, with their height proportional to the distance between the nodes. If the graph is not acyclic, the layout algorithm finds an ordering with a minimal number of back links, and draws the back links below the chain of nodes.

Cascading Graph Layout

CascadeLayout places nodes on a virtual grid and arranges links orthogonally, such that if the source graph is planar all links are guaranteed to have no more than two bends and will not intersect. By default the layout method arranges nodes in rows and link segments in columns; this can be changed by setting the Orientation property.

Triangular Graph Layout

TriangularLayout places nodes on a virtual grid, such that if the source graph is planar, all links are guaranteed to have a single segment and not intersect. If the graph is not planar, its intersecting links can be optionally segmented and bended in order to improve readability. The layout method places the nodes from the external face on a triangle and recursively adds the rest of the nodes as vertices of internal triangles. As a result, it is very effective for near maximal-planar (a.k.a. triangular) graphs.

Semantics based layout algorithms

The following algorithms arrange the diagram in a way that shows the semantics of individual items or the overall graph structure, such as hierarchical relations between objects, loops and decisions in flowcharts, assignments of nodes to layers or swimlanes.

Tree Layout

If application's data is structured hierarchically, it is appropriate to apply tree layout on it. To do this, create a TreeLayout object and call its arrange method. Members of TreeLayout control many aspects of the layout process. The type of layout can be directional or radial. You can choose how much space to leave between tree levels and between nodes on the same level. For directional layouts the style of links in the arranged

tree can be set to straight, orthogonal or curved. Global tree direction and alignment can be customized too. The tree layout might be applied as shown below:

Java

```
import com.mindfusion.diagramming.*;
import com.mindfusion.diagramming.jlayout.*;

...
void someMethod()
{
    TreeLayout layout = new TreeLayout();

    layout.setType(TreeLayoutType.Cascading);
    layout.setDirection(TreeLayoutDirection.LeftToRight);
    layout.setLinkStyle(TreeLayoutLinkType.Cascading2);
    layout.setLevelDistance(10);

    layout.arrange(diagram);
}
```

Fractal Tree Layout

FractalLayout is a tree layout algorithm that places child nodes symmetrically around their parent node. Nodes at the lowest level are arranged directly in a circle around their parent. At the upper level, the already arranged nodes form branches that are arranged in a circle around the new parent node. The algorithm is recursively repeated till the highest level is reached. If nodes in the tree have uniform number of children, the end result has fractal-like appearance (subsets of the graph look like scaled-down copies of the whole graph).

You can choose which node should be displayed at the center of the topmost circle by setting the Root property. If it is not specified, the algorithm automatically selects a root that leads to more balanced distribution of nodes.

Layered Graph Layout

The LayeredLayout algorithm arranges diagram nodes in layers according to several criteria, most important of which are: connected nodes must be placed close together; links must flow in one direction if possible; links must cross as few layers as possible; links must not cross other links. To apply the layout to a diagram, create a LayeredLayout instance, set its members and invoke the arrange method. The layered layout can be applied like this:

Java

```
import com.mindfusion.diagramming.*;

...
void someMethod()
{
    LayeredLayout layout = new LayeredLayout();

    layout.setOrientation(com.mindfusion.diagramming.jlayout.Orientation.Horizontal);
    layout.setSplitLayers(true);
    layout.setLayerDistance(35);

    layout.arrange(diagram);
}
```

Tree map layout

Tree maps represent hierarchies by nesting child nodes within their parents, where the areas of leaf nodes are proportional to their Weight values. Unlike other layout algorithms, TreeMapLayout expects hierarchies to be defined via grouping or containment (see attachTo method and ContainerNode class), and will ignore any links in the diagram. The diagram area covered by the topmost nodes in a hierarchy is specified via the LayoutArea property. By default, the layout tries to keep the ratio of node sides as close as possible to one. However this could make it hard to distinguish separate levels of the hierarchy. To alleviate that, set Squarify to **false**, and child nodes will be arranged either as a row or a column inside their parent node,

alternating directions for each level. The drawback is that when **Weight** ratios differ greatly or nodes contain many children, some nodes could end up with very narrow rectangles.

Decision flowchart layout

DecisionLayout arranges simple flowcharts consisting of decision boxes with up to three outgoing links per node and activity boxes with a single outgoing link per node. The nodes are arranged in columns and rows, whose distance depends on the HorizontalPadding and VerticalPadding property values. When links share the same row or column, they are placed at a distance specified via LinkPadding. The layout arranges nodes recursively starting from StartNode. If **StartNode** is not specified, the algorithm selects the root of the deepest branch of the graph's spanning tree as start node.

Flowchart Graph Layout

FlowchartLayout recognizes program code -like patterns in the graph, such as loops, sequences and if/switch branchings, and arranges them recursively. **FlowchartLayout** could be used to arrange other types of graphs as well, though with some restrictions. For example it treats all back links as loops in the code, and expects that they are nested - loop links starting closer to the stop node should end closer to the start node. Another similar restriction is that there shouldn't be any cross-links that connect different branches of a decision sub-graph.

Swimlane Layout

SwimlaneLayout can be used to arrange process diagrams in which nodes representing activities are placed in swimlanes representing resources. The index of the resource allocated to an activity should be assigned to the corresponding node's LayoutTraits via the SwimlaneLayoutTraits.Lane key.
By default, the algorithm works with the diagram's LaneGrid, but its SwimlaneGrid property can be set to any class that implements ISwimlaneGrid. This allows applying the layout to a custom-drawn grid rendered through the drawBackground event, or one composed of locked background nodes.

Hierarchical Graph Layout

HierarchicalLayout places nodes on user-defined levels, such that if the source graph is level-planar, all links are guaranteed to have a single segment and not intersect. The layout method requires that for each node LayoutTraits contains a HierarchicalLayoutTraits.Level entry specifying the level, and no two connected nodes must be on the same level.

Link Routing

Routed links avoid nodes marked as obstacles (call the getObstacle and setObstacle methods) by finding the shortest path between their origin and destination that does not cross any other nodes.

Setting Up a Link Router

The control finds paths for links affected by modifications of nearby nodes by calling methods of an object that implements the LinkRouter interface. This object can be get or set through the LinkRouter property of the Diagram class. JDiagram provides a few classes that implement **LinkRouter** - PatternRouter, GridRouter, QuickRouter and CompositeRouter. By default LinkRouter is set to a **CompositeRouter** instance.

Automatic or Explicit Routing

The routeAllLinks method can be invoked to explicitly rearrange links in a way they do not cross nodes. In addition, links have an AutoRoute property that enables or disables automatic routing of a link; that property is initialized from the diagram's RouteLinks value. The TriggerRerouting property of RoutingOptions class specifies when links should be rerouted automatically.

Tuning the Routing Algorithm

When a GridRouter is used, the RoutingOptions class allows customizing various aspects of the routing algorithm. That algorithm evaluates possible paths aiming to find one that has a minimal cost. The values

set through the setLengthCost, setTurnCost, setCrossingCost and setNodeVicinityCost methods are added to the total cost of a route and have a great influence over the shape of the chosen path. The orientation of the first and the last segment of the routed links can be specified by calling the setStartOrientation and setEndOrientation methods respectively.

Anchor Points and Patterns

Anchor Points

For each node you can define one or more points to which links should dock when connecting to that node. Such points are represented by instances of the AnchorPoint class. The position of an anchor point relative to node's bounding rectangle is specified by calling the setX and setY methods. Their values are expressed as percent of the node's width and height to accommodate for moving and resizing. The final location of an anchor point is determined by this simple calculation:

Java

```
return new Point2D.Float(
    nodeRect.x + nodeRect.width * x / 100,
    nodeRect.y + nodeRect.height * y / 100);
```

A point's position can also be defined as a fixed offset from the node's top-left corner, letting you define anchor positions that do not depend on the node's width or height. This is controlled independently for X and Y coordinates, by means of the XUnit and YUnit properties.

To control whether an anchor point accepts incoming or outgoing links or both, call the setAllowIncoming and setAllowOutgoing methods. When a link is drawn, its ends are aligned to the nearest anchors allowing docking of the respective end type. Another way to control whether links can be connected to an anchor point is to handle the validateAnchorPoint event.

Anchor Patterns

An AnchorPattern instance defines a set of anchor points to be used together. When creating an anchor pattern, pass to its constructor an array of AnchorPoint objects. The **AnchorPattern** class exposes several predefined patterns that can be accessed through the static fromId method. An existing pattern can be accessed and assigned as a single entity trough the getAnchorPattern and setAnchorPattern methods of nodes. The following example creates a pattern of four anchor points:

Java

```
pattern = new AnchorPattern(new AnchorPoint[] {
    new AnchorPoint((short)50, (short)0, true, true),
    new AnchorPoint((short)100, (short)50, true, true),
    new AnchorPoint((short)50, (short)100, true, true),
    new AnchorPoint((short)0, (short)50, true, true) }, "Decision");
```

The points are located at the middles of bounding rectangle sides of nodes to which the pattern is assigned. All four points accept both incoming and outgoing links.

Displaying Anchor Points

Anchor points can be hidden, always visible on the screen, or displayed automatically. This can be specified through the getShowAnchors and setShowAnchors method. The appearance of anchor point marks can be customized by calling their setMarkStyle and setColor methods.

Anchor Patterns and Tables

A distinct anchor pattern can be assigned to every row of a table. When a link is connected to a row, the respective end of the link is aligned to the nearest AnchorPoint assigned to that row. If a row does not have associated anchor points of the appropriate type (incoming/outgoing), the link will be connected to the

nearest row that has such anchors defined. If none of the rows of a table has an associated anchor pattern, links are connected to the middle of the left or right side of the pointed row.

Undo and Redo

Overview

Interactive actions, carried out by users, and programmatic commands that change the structure of a diagram are recorded in a history queue. While action records are still in that queue, the actions can be undone or redone. The queue has a fixed length - if it gets full, recording a new action makes the oldest one drop from the queue.

Undo is disabled by default. To enable it, call the setUndoEnabled method. To undo or redo an action, call the undo or redo methods of UndoManager. JDiagram does not provide keyboard shortcuts for undo/redo. Your application must have its own menu items and/or keyboard accelerators to provide the necessary user interface, and invoke the respective methods in response to UI events.

JDiagram automatically saves the following types of actions for later undo/redo:

- adding an item to the diagram
- removing an item from the diagram
- moving or resizing items
- creating a group
- destroying a group
- expanding or collapsing trees
- scrolling table rows
- adding or removing tables' rows

Changes of item values are not saved automatically in the history. If your application must be able to undo/redo changes, use the ChangeItemCmd command. **ChangeItemCmd** allows recording several changes as an atomic undoable action.

In some cases, you might need to create your own types of actions or commands. For example, suppose you need undo/redo for changes made to items' tag objects. However, JDiagram is not able to detect such changes, so it cannot undo them. To enable undo/redo, create a subclass of Command and implement the **execute**, undo and redo methods.

Actions and Commands

Undoable interactive actions and programmatic commands that can be carried out by JDiagram are represented by Command subclasses. The **Command** class provides the necessary interface to **execute**, undo or redo actions. In some cases, you will have to implement these methods in derived classes, but you should not call them directly. Use the undo or redo methods of the UndoManager to undo or redo a command. The UndoManager methods call the respective Command methods and in addition update the state of the command history and the Diagram.

The following JDiagram classes are derived from **Command**:

Command	Description
AddGroupCmd RemoveGroupCmd	Creates a new hierarchical group. Destroys a group.
AddItemCmd RemoveItemCmd ChangeItemCmd	Adds a new item to the diagram. Removes an item from the diagram. Handles undo/redo of item changes.

CompositeCmd	Allows several actions to be undo and redone at the same time.
AddToContainerCmd	Adds an item to a container.
FoldContainerCmd	Folds a container node.
GroupAttachCmd	Attaches an item to a group.
GroupDetachCmd	Detaches an item from a group.
ModifyItemCmd	Moves or resizes an item.
RedimTableCmd	Change number of table's columns or rows.
ExpandItemCmd	Expands or collapses a tree of items.
ScrollTableCmd	Scrolls table's rows.
ExpandHeaderRowCmd	Expands or collapses tables sections.
RemoveFromContainerCmd	Removes an item from the container node.

Instances of most of these classes are created implicitly by JDiagram in response to users' actions or method calls. You might need to explicitly instantiate only **ChangeItemCmd** - to undo or redo property changes - and **CompositeCmd** - to present several actions as single undoable operation.

The data of your application might be tightly integrated in JDiagram diagrams, for example through tag objects. In these cases, JDiagram cannot detect undo or redo changes to your data. To enable undo of such changes, you must inherit the **Command** class and implement your versions of the **execute**, **undo** and **redo** methods. To record your own action in the undo/redo history, call the executeCommand method of **Diagram**.

Undo Manager

The undo manager acts as a mediator between commands, the diagram and the command history. It is represented by the UndoManager class, whose only instance can be accessed by calling the Diagram's getUndoManager method.

By default, undo functionality is disabled - commands are executed, but are not recorded in history for later undo or redo. To enable undo, invoke setUndoEnabled and pass **true** as argument. You might need to disable undo before executing actions not intended to be undone by the end-users, for example creating special start/end nodes. Another situation in which you might want to disable undoing is when creating programmatically a lot of new diagram items - say hundreds or thousands. JDiagram creates an undo record for each item creation; if the capacity of the command history (getCapacity, setCapacity) is smaller than the number of items created, most of the records will drop from the history queue while adding new ones. That would waste processing power and memory for creating undo records that won't be used.

As an alternative, you can create a composite record by calling startComposite. All subsequent create-item actions are saved in the composite. The composite is saved in the undo history as a single record that allows undo or redo of all constituent actions as a single operation. **startComposite** creates and returns a CompositeCmd instance, which is marked as active composite in the undo manager. While there is an active composite, all actions that are carried out are added to it. Call the execute method of the active composite to stop recording sub-commands in it and save it in the history as atomic undoable operation.

Use the undo and redo methods of the undo manager to undo or redo actions. Do not call the respective methods of the Command class - they are called internally by the undo manager, and in addition the current command history position is updated and the diagram view is repainted.

Command History

The undo/redo history is represented by a CommandHistory instance. That instance is created by the UndoManager and can be accessed from its getHistory method.

The undo manager adds commands to the history after executing them. If the history queue is full, the oldest command records are removed when new ones are added. Use the setCapacity method of **CommandHistory** to specify how many action records to keep in the queue.

The history has a current-command pointer indicating which are the next commands to undo or redo. If a command is undone, the current pointer in the history queue is moved back and allows undoing even older actions. If the current pointer is not at the last record, any newer commands can be redone again.

To query which are the next commands to be undone or redone, use the getNextUndo and getNextRedo methods. They return the Command instances contained in the queue, which are referred by the current position pointer. If no further undo or redo is possible, these methods return **null**. You might use them to indicate to end-users, which are the next commands to undo/redo, for example

Java

```
if (diagram.getUndoManager().getHistory().getNextUndo() == null)
{
    // everything has been undone
    miUndo.setEnabled(false);
    miUndo.setLabel("Undo");
}
else
{
    if (diagram.getUndoManager().getHistory().getNextUndo() instanceof AddItemCmd)
    {
        // the next action to undo is item-creation
        miUndo.setEnabled(true);
        miUndo.setLabel("Undo Create");
    }
}
```

To ban end-users from undoing last commands, clear the command history by invoking the clear method.

Undo or Redo Item State Changes

Changes to the state of diagram items caused by invoking item methods that change the item's state are not recorded automatically for later undo. To enable undo of these changes, you must explicitly create a ChangeItemCmd instance and add it to the history queue.

The ChangeItemCmd constructor requires a reference to an item as argument and saves the item's initial state to be restored by later undo. Call the ChangeItemCmd.execute method after one or more item's method calls. **execute** records the final state of the item to be restored by later redo. This allows changes to several properties of an item to be saved within a single record, which can be undone or redone as a single operation:

Java

```
ShapeNode node = (ShapeNode)diagram.getNodes().get(0);

// save item state
ChangeItemCmd propChange = new ChangeItemCmd(diagram.getNodes().get(0), "Change");

// change properties
node.setText("new text");
node.setBrush(new SolidBrush(Color.blue));
node.setShape(Shape.fromId("Ellipse"));

// add to history
propChange.execute();
```

You might need to treat changes to several items as an atomic operation. To do so, create a CompositeCmd instance and add the **ChangeItemCmd** commands to the composite by calling the addSubCmd method:

Java

```
if (diagram.getSelection().getNodes().size() == 0) return;

// make all changes seem like a single operation by
// putting them in composite Command
CompositeCmd composite = new CompositeCmd(
    diagram, "Change selection");

for (DiagramNode node : diagram.getSelection().getNodes())
{
    ShapeNode shapeNode = (ShapeNode)node;

    // save item state
    ChangeItemCmd propChange = new ChangeItemCmd(shapeNode, "Change");

    // change properties
    shapeNode.setText("new text");
    shapeNode.setBrush(new SolidBrush(Color.blue));

    // add to the composite
    composite.addSubCmd(propChange);
}

// store final state of all contained commands
composite.execute();
```

Composite Commands

Sometimes you might prefer having a set of actions undo and redo as a single atomic operation. JDiagram provides the CompositeCmd class to help you with that. **CompositeCmd** objects act as containers of other Command-derived objects. When undo or redo are invoked on a composite command, all its subcommands are respectively undone or redone.

To add a command to the composite, call the addSubCmd method. Call execute to execute all subcommands contained in the composite. Subcommands are executed or redone in the same order in which they were added to the container, and are undone in the opposite order.

Often JDiagram implicitly generates **Command** objects in response to users actions or method calls, and automatically records them in the history queue. You do not have direct access to those commands and cannot add them to a composite by using **addSubCmd**. To enable creating composites in such cases, the undo manager provides the notion of active composite. Active composite is created by calling the startComposite method of UndoManager. Each action executed after that is made part of the composite, instead of adding it directly to the command history. Invoking the **execute** method of the current composite completes it and saves it in the history queue.

Subclassing the Command Class

JDiagram's diagrams can be just a part of the data model of your application, which might already have undo/redo functions implemented for its native data. To integrate JDiagram undo functionality into the application's undo mechanism you have to subclass Command and create classes responsible for changes in your application's data. When a change occurs outside the diagram, it can still be recorded by calling the Diagram's executeCommand method and integrated into JDiagram's command history.

A simpler scenario when you might have to subclass **Command** is using complex objects as tags. Actions that change these objects cannot be detected and handled automatically by JDiagram. To integrate such an action into the diagram's undo history, you must create a **Command** instance that knows how to carry out, undo or redo the action.

Command subclasses must implement execute, undo and redo methods. Actions represented by your subclass must be carried out by the **executeCommand** method of Diagram that invokes executing of the

command passed as argument, and then is added to the history queue whose **undo** and **redo** methods can be called multiple times later by the UndoManager. Usually you can implement **redo** as a call to **execute**, but if the latter is time consuming, its result state can be saved in an instance member and restored by redo.

Do not call the **undo** and **redo** methods of your class directly, just implement them and they will be invoked by **UndoManager**'s undo or redo methods when necessary.

The example below shows a simple implementation of Command methods:

Java

```
class PersonTag
{
    public String Name;
    public String Address;
    // and so on
}

class AddressChangeCmd extends Command
{
    public AddressChangeCmd(PersonTag p, String address)
    {
        super("Address change");

        this.p = p;
        this.oldAddress = p.Address;
        this.newAddress = address;
    }

    @Override
    public void execute(boolean undoEnabled)
    {
        p.Address = newAddress;
    }

    @Override
    public void undo()
    {
        p.Address = oldAddress;
    }

    @Override
    public void redo()
    {
        // undo manager is enabled if Redo is called
        // so pass true for the undoEnabled argument
        execute(true);
    }

    private PersonTag p;
    private String oldAddress;
    private String newAddress;
}

// somewhere in later code
PersonTag tag = (PersonTag)diagram.getActiveItem().getTag();
AddressChangeCmd command = new AddressChangeCmd(tag, "far far away");
diagram.executeCommand(command);
```

Diagram Serialization and Output

Serializing Diagrams

XML Serialization

A diagram can be saved as an XML document. To do that, call the saveToXml method of the Diagram class. To deserialize a digram back from its XML representation, call the loadFromXml method.

Custom item classes can implement XML serialization for their additional properties by overriding the saveToXml and loadFromXml methods. In addition, such classes must specify a string to use as their identifier in the XML document by calling registerItemClass.

The control raises serializeTag and deserializeTag to enable serialization of complex Id and Tag objects without overriding the item classes. The PropertyName event argument specifies which property is being serialized.

JSON Serialization

To serialize a diagram as a JSON string, call its saveToJsonString method. To deserialize a diagram back from its JSON representation, call the loadFromJsonString method. The saveToJson and loadFromJson methods serialize the JSON strings to / from files.

Custom item classes can implement JSON serialization for their additional properties by overriding the saveToJson and loadFromJson methods. Such classes must be registered for serialization by calling the registerItemClass method and providing a string identifier for the *clientClass* parameter.

The control raises jsonSerializeTag and jsonDeserializeTag to enable serialization of complex Id and Tag objects without overriding the item classes. The PropertyName event argument specifies which property is being serialized.

Binary Serialization

Diagrams can be serialized in byte sequences wrapped by Java streams. Such streams may represent files, memory buffers, communication pipes, TCP sockets and so on. In serialized form a diagram might be saved in a database record too. To save the current diagram into a stream call the saveTo method, and respectively to load a diagram from a stream call loadFrom. Three shortcut methods are provided for work with files. saveTo creates a disk file and a stream that wraps it and invokes saveTo. loadFrom opens a read-stream on a disk file and invokes loadFrom.

All objects referenced by the diagram, such as images and fonts, are serialized together with the diagram elements. The tag objects that are associated with diagram elements are also saved if they implement the **Serializable** interface. If a tag is not serializable it won't be saved by the save- methods.

Exporting the Diagram

Exporting Images

You can create a static image representing the current diagram using the createImage method. The method returns a **java.awt.image.BufferedImage** object. The BufferedImage can be further serialized as a Jpeg, Gif or Png file, as shown in the following example:

Java

```
try
{
    java.awt.image.BufferedImage image = diagram.createImage();
    javax.imageio.ImageIO.write(image, "png", new File("d:\\export.png"));
}
catch (IOException ex)
{
}
```

Exporting PDF files

In order to export to PDF, import the com.mindfusion.diagramming.export and com.mindfusion.pdf packages. Create a PdfExporter instance and call its export method. The margins setter methods lets you specify the page margins for all pages in the document. If you need to set the page size and

orientation, call the setPageSize, and setPageOrientation methods. The setAutoScale method allows scaling the diagram to fit in one or more PDF pages. The following example shows how to export a diagram to a Pdf file in response to pressing a button event and using the JFileChooser control where the location is selected and the name of the Pdf file is entered:

Java

```
btnExportPdf.addActionListener(new ActionListener(){
    public void actionPerformed(ActionEvent arg0) {
        JFileChooser saveFileDialog = new JFileChooser();
        saveFileDialog.setCurrentDirectory (new File ("."));
        saveFileDialog.setFileFilter(
            new javax.swing.filechooser.FileFilter()
            {
                public boolean accept(File f)
                {
                    return f.getName().toLowerCase().endsWith(".pdf")
                        || f.isDirectory();
                }

                public String getDescription()
                {
                    return "PDF files|*.pdf";
                }
            });

        if (saveFileDialog.showSaveDialog(MainFrame.this) == JFileChooser.APPROVE_OPTION)
        {
            PdfExporter pdfExp = new PdfExporter();
            pdfExp.export(diagramView.getDiagram(),
saveFileDialog.getSelectedFile().getAbsolutePath());
        }
    }
});
```

Exporting SVG files

Create an SvgExporter instance and call its export method, passing a Diagram object and the full path to the .svg file as parameters.

Export Excel files

The ExcelExporter class from com.mindfusion.diagramming.export package exports diagrams to Excel Open XML format (XSLX). Diagrams are exported as Excel AutoShapes drawings. The export overload that takes a DiagramDocument parameter creates a sheet for each DiagramPage in the document. The export(Diagram) overload creates a single Excel sheet.

Printing and Print Preview

Print or Preview a Diagram

Call the print method to print the current DiagramView. The printPreview method opens a preview window that shows how the diagram would look when printed on paper.

Settings for Printing

The PrintOptions class exposes the available settings for printing. An instance of this class is accessible by calling the DiagramView's getPrintOptions method. Apart from properties inherited from RenderOptions, the print options object exposes members for customizing the header of printed pages, such as DocumentName, HeaderFormat and HeaderFont.

Size of a Printed Diagram

If the background image is set and the printing of the background image is enabled by performing the RenderOptions.setEnableBackgroundImage method, the size of the printed diagram is defined solely by the document bounds (obtained through the getBounds method). If the actual diagram items occupy only a small portion of the document, there might be some pages printed that do not display any items but just a part of the background image. To avoid that, call resizeToFitItems before printing.

If no background image is used, JDiagram prints only the part of the document containing all items that are both visible (getVisible, setVisible) and printable (getPrintable, setPrintable). That avoids printing blank pages.

Print Scaling

Use the setScale method to print a diagram in larger or smaller proportions than the actual ones.

Appearance

Styles and Themes

The style and theme system provides a consistent way to customize the appearance of a Diagram and its items. By using styles and themes, it is easier to achieve coherent look and feel across the entire diagram. In addition, changing the look and feel can be achieved by simply replacing the current theme. New themes can be designed in the visual environment of the Theme Editor tool and subsequently used and distributed as XML files. Several pre-defined theme files are installed under the Themes subfolder of the control's root installation folder.

Styles

The style is a set of properties. Styles can be applied to diagrams and individual diagram items and this can potentially affect the values of some properties of the target object. More specifically, if the value of a style-affected property in the target object is **null**, then the value is obtained from the associated style. The style does not necessarily need to provide values for all of its properties. If a styled property is **null** and it is not defined in the associated style, the style system searches for a value in the current theme. A complete value precedence list can be found later in this topic.

The styles are represented by the Style class and its various subclasses. Styles can be applied to diagram objects through the Style property of the Diagram class and to diagram items through the Style property of the DiagramItem class. Styles can also participate in themes, in which case they affect all objects of specific type.

Themes

The theme is a set of styles, each associated with specific diagram or item type. When the theme is applied to a diagram, the styles registered in the theme affect all objects of their associated type.

Themes are represented by the Theme class and can be assigned to Diagram objects through the setTheme method. Styles are associated with types within the theme through the registerStyle method. The following code creates a new theme, with a single style for ShapeNode items and applies this theme to an existing diagram.

Java

```
Theme theme = new Theme();
ShapeNodeStyle style = new ShapeNodeStyle();
style.setFontFamily("Courier New");
theme.registerStyle(ShapeNode.class, style);
diagram.setTheme(theme);
```

Alternatively, themes can be loaded from XML files by calling the loadFromXml method. Such XML files can be produced by the Theme Editor tool, or by calling the saveToXml method of an existing theme.

Value Precedence

The style and theme system is hierarchical. This means that, when a value of a styled property is requested, the system starts searching for this value along a chain of defined styles. The system returns the first valid value encountered. If no valid value is encountered along the chain, the system returns a globally defined default value for the property. The following list explains the search order in more details:

1. If the local value of the object is not **null**, the local value is returned.
2. If the object has a style and the property in this style has value, this value is returned.
3. If the object is an item, which is part of a diagram, the local style of the diagram is searched.
4. If the object is an item, which is part of a diagram and the diagram has associated theme, the theme is searched for styles registered for the item's type or its base types. If a style with a defined property value is found, this value is returned.
5. Similar search as the previous one is performed for a theme-registered style for the Diagram class.
6. If the above steps do not produce value; the system returns a globally define default for the property.

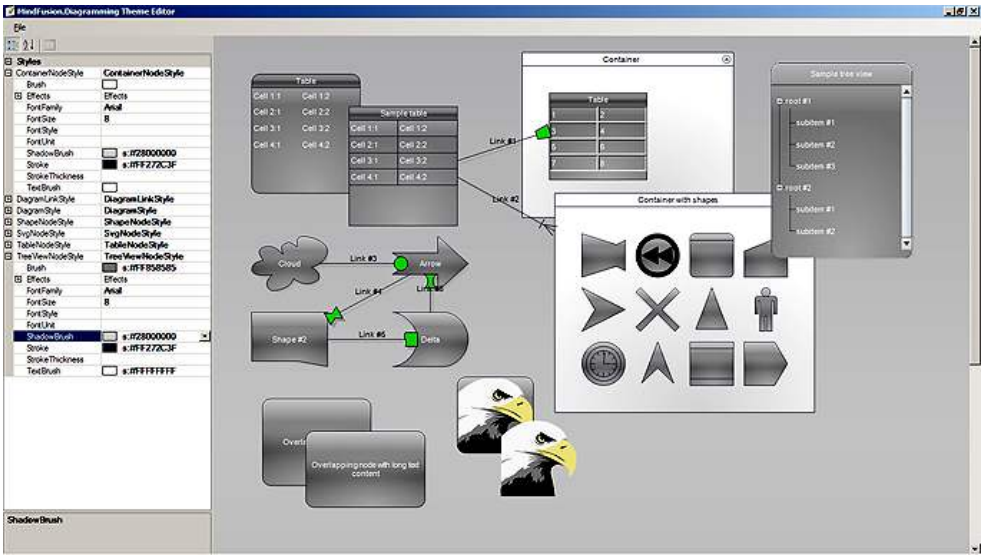
For example, if the effective value of the text brush property of a ShapeNode is requested (through the getEffectiveTextBrush method), the style system performs the following search, according to the above rules:

1. If the node's TextBrush property is not **null**, its value is returned.
2. If the node's Style is set and the DiagramItemStyle.TextBrush property in this style has value, this value is returned.
3. If the node is part of a diagram, the Diagram.Style is set, and the DiagramStyle.TextBrush property of this style has value, this value is returned.
4. If the node is part of a diagram and the Diagram.Theme is set, the theme is searched for a style registered for the **ShapeNode** type. If there is such style and its **DiagramItemStyle.TextBrush** property has value, this value is returned.
5. Similar search as the previous one is performed for a theme-registered style for the **Diagram** type.
6. Finally, the system returns a globally-defined default value for the **TextBrush** property (which is a solid Black brush).

Theme Editor

The Theme Editor provides simple visual environment for theme creation and modification. The editor displays a sample diagram with items of various types and exposes a list of all possible built-in diagram and item styles through a property grid to the left. Any modification of the style properties in the grid is immediately reflected on the diagram to give a preview on what effect the change would have if the theme is applied to a diagram. The theme can be saved at any time through the Save menu. Existing themes can be opened and modified.

The following image illustrates the Theme Editor in action:



Custom Styles

The following section describes how to enable styling for properties of custom item classes. To enable styling, create a custom style class by deriving from the closest existing type. For example, for a custom ShapeNode (say, MyNode), the custom style needs to inherit from ShapeNodeStyle:

Java

```
public class MyNodeStyle extends ShapeNodeStyle
{
}
```

For each property in MyNode that needs to be styled, define a property with the same name and type in the MyNodeStyle class by following the pattern below. For example, if MyNode contains a property MyBrush of type Brush, the following code defines its corresponding style property:

Java

```
class MyNodeStyle extends ShapeNodeStyle
{
    public MyNodeStyle()
    {
        myBrushProperty = registerProperty("MyBrush");
    }

    public Brush getMyBrush()
    {
        return (Brush)getValue(myBrushProperty);
    }

    public void setMyBrush(Brush value)
    {
        setValue(myBrushProperty, value);
    }

    private Object myBrushProperty;
}
```

Now, in the custom MyNode class, define a new method, getEffectiveMyBrush, which will return the actual value of MyBrush:

Java

```
public Brush getEffectiveMyBrush()
{
    // Checking for local value
    Brush localValue = getBrush();
    if (localValue != null)
        return localValue;
    // Querying the property value through the style system
    return (Brush)getValue("MyBrush");
}
```

Remember to register the style class for serialization, along with the custom node class:

Java

```
Diagram.registerClass(MyNode.class, "MyNode", 1);
Diagram.registerClass(MyNodeStyle.class, "MyNodeStyle", 1);
```

Now you can style and theme your custom nodes. Here is a theme, which affects the MyBrush property of all MyNode items in a diagram:

Java

```
Theme theme = new Theme();
MyNodeStyle myNodeStyle = new MyNodeStyle();
myNodeStyle.setMyBrush(new SolidBrush(Color.lightGray));
theme.registerStyle(MyNode.class, myNodeStyle);
diagram.setTheme(theme);
```

It is important to remember that there are no global default values for custom properties. Therefore you should be prepare to handle **null** values from getValue or ensure that at least one of the five steps in the precedence list above produces a value.

Brush and Pen Classes

Brush Classes

JDiagram defines classes that encapsulate the **Paint** and **Stroke** classes of Java. There are four brush classes that inherit the abstract Brush class, namely HatchBrush, GradientBrush, SolidBrush and TextureBrush.

HatchBrush allows filling the interiors of objects with a hatch pattern. Supported patterns are exposed as members of the HatchStyle class.

The GradientBrush class provides a gradient brush which paints the interior of objects starting with one color and gradually changing to another color by interpolating the RGB values of the two colors. His getColor1 method gets the first gradient color, and getColor2 gets second gradient color. The getAngle method gets the gradient orientation angle.

The SolidBrush class represents a brush for painting the interior of objects with a single color. His getColor method gets the color that fills the interior of objects.

The TextureBrush class defines a brush that fills the interior of objects with a texture pattern. The getTexture and setTexture methods allow specifying a texture pattern.

A brush is assigned to an item by calling the setBrush method. To set the diagram's background brush, perform the setBackBrush method. The setLinkBrush method assigns a default brush to new links.

The Pen Class

The Pen class allows specifying the pen for items, shapes, table nodes, links, and container frame lines. To get and/or set the pen color, use the getColor and/or setColor methods. The getWidth and setWidth methods enable indicating the width of the lines drawn with the pen.

To assign a pen to an item, call the setPen method. The setLinkPen method allows assigning the default pen to new links.

To set the default pen that should be assigned to new nodes, call the setShapePen method.

The setTablePen method allows specifying the pen for TableNode objects.

Use the setBoundsPen method to assign the pen for drawing the diagram bounds.

The Diagram.setContainerHighlightPen and ContainerNode.setHighlightPen methods set the Pen for drawing the container frame lines when an item is dragged over the container.

Node Effects

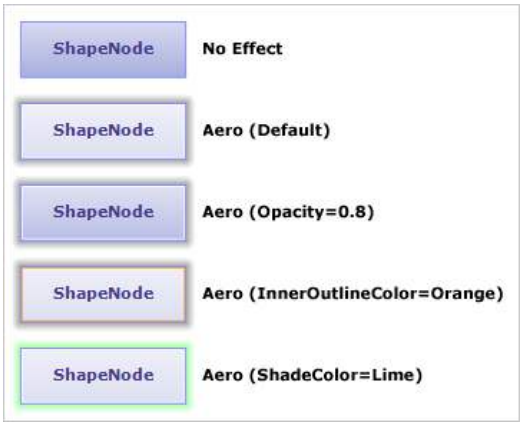
To apply an effect to the nodes in a diagram, create an instance of one of the effect classes and add this instance to the Diagram.NodeEffects collection. To apply the effect to individual nodes, add the instance to the node's Effects collection. To discard the diagram effects for a particular node, add a **null** reference at position 0 in the node's **Effects** collection. Effects can also be applied through styles by adding them to the DiagramStyle.NodeEffects and DiagramNodeStyle.Effects collections respectively.

It is possible to combine different effects by adding instances of their appropriate types to the effect collections. If is also admissible to apply more than one effect of the same type.

The currently supplied effect types are Aero and Glass. They are examined in more details in the sections below.

Aero Effect

The Aero effect is represented by the AeroEffect class. The effect is designed to roughly resemble the Aero theme of Windows. More specifically, the effect adds semi transparency to the nodes, a smooth shade at the outside and a thin inset stroke. The semi transparency is specified through the setOpacity method. Opacity varies from 0 to 1 inclusive, where 0 indicates full transparency and 1 indicates the original node color. The semi transparency is applied only on the node brush. The colors of the shade and the inner stroke are specified through the setShadeColor and setInnerOutlineColor methods respectively. The following image illustrates how these properties affect the output:



The following example applies the Aero effect on the nodes of an existing diagram:

Java

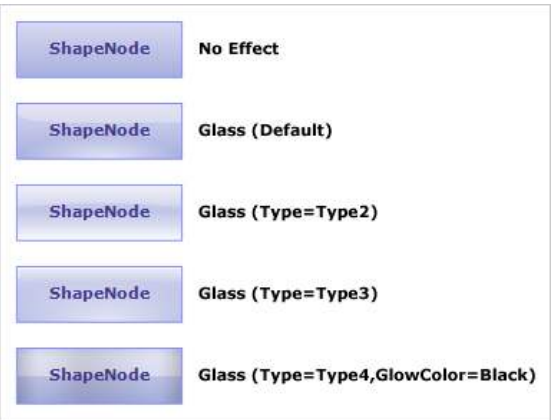
```
AeroEffect effect = new AeroEffect();
effect.setOpacity(0.5f);
effect.setInnerOutlineColor(new Color(255, 255, 255, 100));
diagram.getNodeEffects().add(effect);
```

Tips

- The Aero effect works very well in scenarios with overlapping nodes or in cases where the background is more complex than solid color, due to the effect of semi transparency.
- Aero combines well with the Glass effect. There are some examples at the end of this topic.
- The ShadeColor is usually black or another dark color. However, some nice glow effects can be achieved by setting bright **ShadeColor** on a diagram with dark background.
- The Aero effect can impact performance if there are many nodes visible in the diagram.

Glass Effect

The Glass effect is represented by the GlassEffect class. The Glass effect adds visuals on top of the nodes in order to give the impression of a reflective surface. There are several variations of this effect, which can be selected through the setType method. The color of the reflection and the ambient color can be specified through the setReflectionColor and setGlowColor methods respectively. When UsePenAsGlow is set to **true** the color of the node's pen is used as the ambient color. The following image illustrates the differences between the distinct effect types:



The following example applies a Glass effect with the default settings to the nodes of a diagram:

Java

```
diagram.getNodeEffects().add(new GlassEffect());
```

Tips

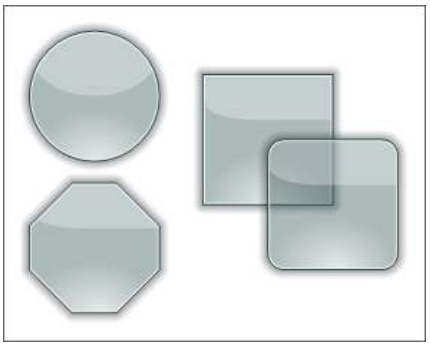
- The GlowColor is usually white. However, for Type4 glass effects it is often more suitable to use black glow.
- The Glass effect combines well with the Aero effect. There are some examples at the end of this topic.
- Several glass effects of different types can be applied simultaneously for emphasized effect.

Examples

The values of the effect properties are usually selected in accordance with the color scheme of the target diagram and the desired end result. In addition different types of effects can be applied simultaneously to achieve more interesting results. The examples below demonstrate possible effect combinations in various color contexts.

Aero & Glass (Dark on Light)

In this example the Aero and Glass effects are combined. The Aero effect is useful in scenarios when dark nodes are placed on light background or vice versa, in order to emphasize the contrast.



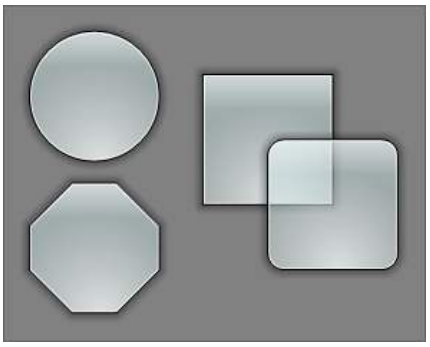
Here is the code that applies the above effects:

Java

```
diagram.getNodeEffects().add(new GlassEffect());
diagram.getNodeEffects().add(new AeroEffect());
```

Aero & Glass (Light on Dark)

This example is similar to the first one, only this time the nodes are painted in light colors and the background is dark.



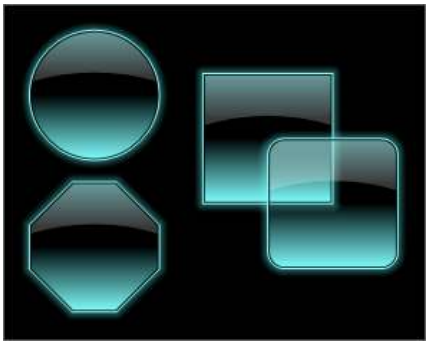
Here is the code that applies the above effect:

Java

```
GlassEffect glassEffect = new GlassEffect();
glassEffect.setType(GlassEffectType.Type3);
diagram.getNodeEffects().add(glassEffect);
diagram.getNodeEffects().add(new AeroEffect());
```

Glow Effect

This example uses bright colors on black background to create a glow effect. The example utilizes an Aero effect with ShadeColor set to the color of the nodes' pens.



Here is the code that applies the above effects:

Java

```
GlassEffect glassEffect = new GlassEffect();
glassEffect.setType(GlassEffectType.Type2);
glassEffect.setUsePenAsGlow(true);
diagram.getNodeEffects().add(glassEffect);
AeroEffect aeroEffect = new AeroEffect();
aeroEffect.setOpacity(0);
aeroEffect.setInnerOutlineColor(Color.black);
aeroEffect.setShadeColor(new Color(128, 255, 255));
diagram.getNodeEffects().add(aeroEffect);
```

For the rest of the settings for the above effect images, refer to the **Effects** sample project.

Customizing the Appearance of Items

Different visual styles and properties can be set individually for every JDiagram object as described in the following paragraphs.

Line Width and Style

The borders of nodes and the lines of links are drawn using a pen whose width and style can be customized. Using the Pen objects, provided by JDiagram, you can specify dash pattern, color and thickness for items' contours. To assign a pen to an item, use the setPen method of the Item class. Links use the

getHeadPen method to draw their heads. To change it, use the setHeadPen method of the DiagramLink class. When customizing items through styles and themes, the appearance of their border lines can be set via the setStroke and setStrokeThickness properties of DiagramItemStyle.

Color of Diagram Elements

JDiagram provides Brush objects for filling the interior of items. Brush is an abstract class. Depending to the type of interior filling you desire, you instantiate a brush object from one of the derived classes (GradientBrush, HatchBrush, SolidBrush or TextureBrush) and associate that object with the appropriate item, using its setBrush method. The Cell class provides a setBrush method, which enables setting separate brushes to individual cells.

Text

Diagram items can have attached text, displayed inside / over them.

Text of shape nodes is set using the setText method and the text alignment is specified using the setTextFormat method. The text can contain formatting specifiers, such as bold, italic and so on, which can be enabled by calling of setEnableStyledText. To make a shape node big enough to display its text without clipping, call resizeToFitText. You can add more text labels to a node by creating NodeLabel objects.

Links have their text drawn horizontally above their middle segment or rotated as specified through the setTextStyle method; the string to display can be set using the setText method. Links can display additional labels added via the addLabel method. Each label can be rendered using distinct font, color and alignment attributes as set via the LinkLabel methods.

Tables have caption text and alignment is specified by setCaption and setCaptionFormat; table cells expose setText and setTextFormat methods.

All chart items expose setFont method, specifying the name, style and size of the font of item's text.

The color of item's text is set through the corresponding setTextColor method: ShapeNode.setTextColor, DiagramLink.setTextColor, TableNode.setTextColor and Cell.setTextColor. Additionally, tables expose the setCaptionColor method for setting the color of their captions.

Images

ShapeNode can render a **java.awt.Image** bitmap assigned to its Image property. Call the resizeToFitImage method to set the node's dimensions to the intrinsic size of the bitmap. You can add more images to a node by creating NodeLabel objects, and treat them as clickable icons by handling nodeClicked event and checking its Label argument.

TableNode exposes Image property used to draw table's background. Each cell in the table can render its own Image as well. For example that might be used to display an icon for the key field of a database table.

Images can be positioned in different ways: they can be tiled, stretched or aligned to the containing objects' centers or sides. Use ShapeNode.setImageAlign and TableNode.setImageAlign to specify how images are placed within the corresponding nodes. An image shown inside a node is clipped in accordance with the shape of that node. The ImagePadding property specifies how much space to leave between image and node's borders.

Shadows

The shadow of each diagram item can be painted with a distinct brush, as specified by the item's setShadowBrush method. The brush can be set to null to hide an item's shadow. Shadow offsets from their items can be set individually by the setShadowOffsetX and setShadowOffsetY methods.

DiagramLink-specific Properties

The shape and orientation of link segments is specified by the setStyle method; the number of segments is specified by the setSegmentCount method. The form and size of the arrowhead shape is set using the setHeadShape and setHeadShapeSize methods. Shapes displayed at the beginning of links can be set via setBaseShape and setBaseShapeSize. Shapes can be displayed at middles of segments, helping to follow long links . They are defined by the setIntermediateShape and setIntermediateShapeSize methods. The lines of arrowhead shapes are painted using the Pen specified by the setHeadPen method.

Link crossings

Intersection points where links cross their paths can be rendered as arcs or breaks, as specified by setLinkCrossings. It depends on the z-order, which links jump over the others, or which links appear cut by the others. If LinkCrossings is set to Arcs, links with higher Z-index jump over those with lower Z-index. If set to Cut, links at lower Z position are cut by links at higher Z. Radius of arcs and breaks can be set through the setCrossingRadius method.

ShapeNode-specific properties

The shape of a node is defined using the setShape method. Shape templates can be applied to a shape node with an orientation of 0/90/180/270 degrees as specified through the setShapeOrientation method. The shape rotation can be modified through the setRotationAngle method. Your own drawing code may be invoked for a node, depending on the value specified in setCustomDraw. Shape nodes can be marked as transparent in the setTransparent method, having only their text or images rendered.

TableNode-specific properties

The outline of a table can be either a rectangle or rounded rectangle, as specified by the Shape property. Set CellFrameStyle to customize the borders of table cells. The table caption bar is painted according to CaptionFormat, CaptionBrush and CaptionBackBrush properties. You can run custom-drawing code for the whole table or its cells by setting CustomDraw or CellCustomDraw properties and handling drawNode or drawCell events.

User Defined Node Shapes and Custom Drawing

The appearance of JDiagram items can be customized in several additional ways, as described below.

Shape Templates

The Shape class provides the means for defining complex node shapes, made of straight lines, arcs and Bezier curves. A shape must always contain an outline to be used for hit testing, clipping and finding intersections with other objects. Optionally shapes can contain decoration elements and text region definitions. Decorations are visual elements that do not take part in hit testing and clipping. Text regions are the parts of shapes in which node's text is laid-out and rendered. JDiagram provides a set of over 100 predefined shape templates, which can be accessed by calling the getShapes method of the **Shape** class. Each predefined shape has a string identifier assigned to it. Use the fromId method to find a shape with the specified id. A shape template can be assigned to the Shape member of shape nodes through the setShape method.

Shape Libraries

The ShapeDesigner tool that comes with the JDiagram suite lets you draw custom shapes and store them in shape libraries. Note that the tool is not available yet as a Java application, and the JDiagram shape designer runs only under Microsoft Windows. A library file can be loaded into your application using the ShapeLibrary class. The definitions loaded from a shape library are automatically added to the shared shapes collection and can be accessed through the getShapes and fromId methods of the Shape class, just as the predefined shapes.

Custom Painting

Another way to customize a item's appearance is implemented by firing events each time an item is painted, giving you the option to attach your own drawing code to the JDiagram's rendering engine. Use the setCustomDraw method to enable that feature in your application. JDiagram gives you five options for custom drawing. If you choose Additional drawing style, your drawing code will be executed after the standard item drawing code is executed and the image is rendered, but before the text is rendered. Furthermore, the **Graphics** object you receive to draw on has a clipping region applied that corresponds to the node's shape. If using **Full** drawing mode, none of the standard JDiagram drawing code is executed - just yours. The **ShadowOnly** mode performs standard painting of items, but leaves the drawing of shadows

to your code. Place your own drawing code in a handler of the drawNode, drawLink and drawCell events. This events are fired for each item with custom-draw style that needs repainting.

Combining Custom Shapes with Custom Drawing

Finally, you could combine user-defined shapes with the Additional custom-painting style. Thus, you can get custom shapes enabled for a node and your custom painting code executing with the node shape used as clipping region. You might clear the clipping region, but be careful - if you draw outside node's bounding rectangle, the view may not update correctly.

Text Formatting

Text in Shape Nodes

A ShapeNode can display text within its outlines. Text layout and alignment depend on the value specified through setTextFormat. The text is painted with the color set in setTextBrush. Even more useful formatting attributes can be enabled by setEnableStyledText.

Layout Text in Arbitrary Shapes

ShapeNode instances can have various shapes, as specified through setShape and setShapeOrientation methods. JDiagram uses a formatting algorithm that fits exactly each line of the node's text within the width of a line inside a polygonal shape. If a shape node has curved outlines, the formatting algorithm approximates them the polylines.

Supplementary Node Labels

Apart from main text content, the NodeLabel class lets you display additional labels and pin them to node's edges or corners. Call the addLabel method to create such supplementary labels, and use **NodeLabel** (and base ItemLabel) properties and methods to customize their appearance and position.

Text in Tables

A TableNode can display text in its caption bar and inside each cell. The caption text is specified by setCaption and its color and alignment are specified through setCaptionBrush and setCaptionFormat. The text in individual cells is specified by a call to the setText method and its color and format are set through setTextColor and setTextFormat respectively. Calling the setEnableStyledText method can enable the use of formatting tags in the text.

Styled Text

The ShapeNode.setEnableStyledText method for shape nodes and TableNode.setEnableStyledText method of tables respectively enable or disable styled text rendering. Styled text can have various attributes applied to the characters it contains. The attributes are specified using HTML-like formatting tags embedded in the raw text.

The following table lists the currently supported style tags:

Tag	Description
<**i**> text </**i**>	Italic text
<**b**> text </**b**>	Bold text
<**u**> text </**u**>	Underlined text
<**sub**> text </**sub**>	Subscript
<**sup**> text </**sup**>	Superscript

<**color**=#**RRGGBB**> text </**color**>	Changes the color of the text. The red, green and blue color channels are specified as hexadecimal numbers.

Link Labels

The text of a DiagramLink is specified by setText. The setTextColor and setTextStyle methods can be used to specify the color and position of the text.

Apart from main text content, the LinkLabel class lets you display additional labels and pin them to link's points or segments. Call the addLabel method to create such supplementary labels, and use **LinkLabel** (and base ItemLabel) properties and methods to customize their appearance and position. Labels can automatically avoid overlapping nodes or other labels when their AutoArrange property is set.

Fonts

All items provide a setFont method that allows getting or setting the font used for rendering their text.

Modifying the Diagram Appearance

You can customize most of JDiagram visualization effects.

Background

JDiagram background area is filled using the brush specified by the setBackBrush method. Background theme can also be an image set by the setBackgroundImage method. The image can be any of the supported by Java file formats - JPG, PNG or GIF. Background image can be centered, aligned to a corner of the control or document, tiled or stretched to cover the drawing area - as specified by the setBackgroundImageAlign method.

Shadows

By default all diagram objects have shadows drawn under them. If the shadow style is set to OneLevel, the object shadows are drawn at the lowest Z-level under all objects, which makes them look as on single Z-level. If it is set to ZOrder, each shadow is drawn immediately under its corresponding object, possibly covering parts of other objects, which gives more 3D-like look to the diagram. If the style is set to None, no shadows are drawn. The shadows style can be set through the setShadowsStyle method. Shadows' offset from items is specified by the setShadowOffset, setShadowOffsetX and setShadowOffsetY methods. Shadows are painted using the brush specified via setShadowBrush.

Selection

Selection handles drawn around the active item can be customized through the style object returned by getActiveItemHandlesStyle. Items in multiple selection have their handles drawn using the style returned by getSelectedItemHandlesStyle. Disabled manipulation handles are painted using the style returned by getDisabledHandlesStyle when disabled handles are displayed (see setShowDisabledHandles). You can control the way multiple selection is displayed through the setHandlesStyle method of the Selection class.

Mouse Cursors

Different mouse cursor icons can be set to give context-sensitive feedback to users, prompting them if creation/modification of an object is possible. The following methods can be used to specify the cursor's appearance in different situations: setPointerCursor, setMoveCursor, setDisallowCursor, setDrawLinkCursor, setAllowLinkCursor, setDisallowLinkCursor, setHorizontalResizeCursor, setVerticalResizeCursor, setDiagonalResizeCursor, setCounterDiagonalResizeCursor.

Grid Settings

You can turn on/off the alignment grid by calling the setShowGrid method. The setGridColor method can be used to specify the color of grid points and lines.

Miscellaneous

Associate Custom Data with Items

You can associate custom values from any data type with diagram elements by setting their Tag and Id properties. If the associated data is of a value type or of type that is serializable, then it is saved and loaded together with the diagram items when diagrams are saved or loaded. The findNode, findLink, findNodeById and findLinkById methods let you find diagram elements associated with a specific value.

Inspecting Items Geometry

- The intersects method of DiagramLink lets you test if links intersect other links or nodes.The getLength method of the **DiagramLink** class returns the total length of a link.
- The hitTest and containsPoint methods let you check if an item contains specified point.

Fluent API

Builder classes in **com.mindfusion.diagramming.builders** package add support for fluent programming style. Static with and instance init methods in DiagramItem, DiagramItemStyle and Layout -derived classes return a builder instance that can be used to set-up respective new or existing objects:

Java

```
diagram.getNodes().add(
    ShapeNode.with()
        .brush(Color.LIGHT_GRAY)
        .font("Arial", 4)
        .enableStyledText(true)
        .text("Task <i>1</i>")
        .toolTip("This is the task")
        .create());

diagram.getFactory()
    .createShapeNode(20, 20, 20, 20).init()
        .brush(Color.LIGHT_GRAY)
        .font("Arial", 4)
        .enableStyledText(true)
        .text("Task <i>2</i>")
        .toolTip("This is the second task");

TreeLayout.with()
    .levelDistance(20)
    .nodeDistance(20)
    .linkStyle(TreeLayoutLinkType.Cascading3)
    .create()
    .arrange(diagram);
```

Tutorials

The tutorials in this section assume you have already added a Diagram object to your Java application as shown in the Getting Started topics.
Eclipse projects that contain the full source code from the tutorials are available in the Samples folder under the JDiagram installation folder.

Tutorial 1: Loading Graph Data

This tutorial shows how to load graph data from XML and create diagram objects corresponding to the graph nodes and edges.

1. Right-click the project in Package Explorer and choose New -> Other from the context menu. Create a new XML file called SampleGraph.xml and add to it content in the following form:

XML

```
<?xml version="1.0" encoding="utf-8" ?>
<Graph>
    <Nodes>
        <Node id="0" name="start" />
        <Node id="1" name="activity 1" />
        <Node id="2" name="task 1" />
        <Node id="3" name="task 2" />
        <Node id="4" name="activity 2" />
        <Node id="5" name="task 3" />
        <Node id="6" name="task 4" />
        <Node id="7" name="activity 3" />
        <Node id="8" name="task 5" />
        <Node id="9" name="task 6" />
        <Node id="10" name="end" />
    </Nodes>
    <Links>
        <Link origin="0" target="1" />
        <Link origin="1" target="2" />
        <Link origin="1" target="3" />
        <Link origin="2" target="4" />
        <Link origin="3" target="4" />
        <Link origin="4" target="5" />
        <Link origin="4" target="6" />
        <Link origin="5" target="10" />
        <Link origin="6" target="10" />
        <Link origin="0" target="7" />
        <Link origin="7" target="8" />
        <Link origin="8" target="9" />
        <Link origin="1" target="9" />
        <Link origin="9" target="10" />
    </Links>
</Graph>
```

2. Add a windowOpened event handler to the JFrame:

Java

```
this.addWindowListener(new WindowAdapter()
{
    @Override
    public void windowOpened(WindowEvent e)
    {
        loadGraph(diagram, "SampleGraph.xml");
    }
});
```

3. Create the loadGraph method and declare the following variables. "nodeMap" maps diagram nodes to their identifiers, and "bounds" contains the default node size.

Java

```
void loadGraph(Diagram diagram, String filepath)
{
  HashMap<String, DiagramNode> nodeMap = new HashMap<String, DiagramNode>();
  Rectangle2D.Float bounds = new Rectangle2D.Float(0, 0, 15, 8);
}
```

4. Load the XML document and its root element using the XML DOM API:

Java

```
// load the graph XML
Document document = loadXmlFile(filepath);
Element root = document.getDocumentElement();
```

5. Load the graph node elements and create their corresponding ShapeNode objects by calling the createShapeNode method of the Factory class. **createShapeNode** is just a shortcut to creating a **ShapeNode** instance using the "new" operator and adding it to the Nodes collection of the diagram. Additionally, this code maps the new node to the "id" attribute of the XML element, and sets the node's Text to the value of the "name" attribute.

Java

```
// load node data
NodeList nodes = root.getElementsByTagName("Node");
for (int i = 0; i < nodes.getLength(); ++i)
{
    Element node = (Element)nodes.item(i);
    ShapeNode diagramNode = diagram.getFactory().createShapeNode(bounds);
    nodeMap.put(node.getAttribute("id"), diagramNode);
    diagramNode.setText(node.getAttribute("name"));
}
```

6. Load the graph links and create corresponding DiagramLink objects. The Origin and Destination of the links are accessed by their ids through the "nodeMap" dictionary.

Java

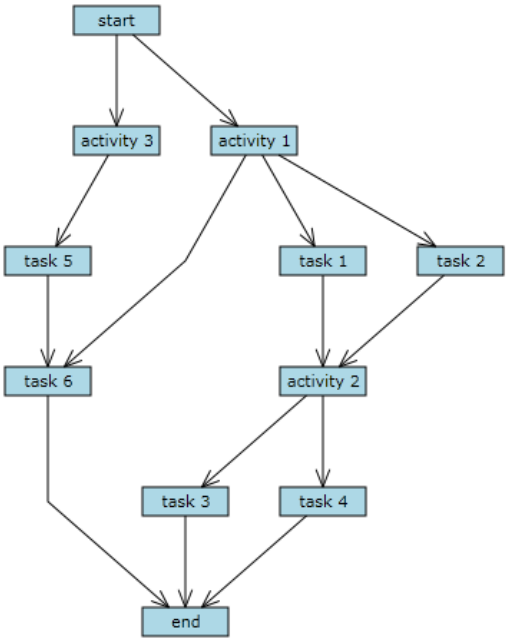
```
// load link data
NodeList links = root.getElementsByTagName("Link");
for (int i = 0; i < links.getLength(); ++i)
{
    Element link = (Element)links.item(i);
    DiagramNode origin = nodeMap.get(link.getAttribute("origin"));
    DiagramNode target = nodeMap.get(link.getAttribute("target"));
    diagram.getFactory().createDiagramLink(origin, target);
}
```

7. Arrange the diagram using the LayeredLayout class.

Java

```
// arrange the graph
LayeredLayout layout = new LayeredLayout();
layout.setLayerDistance(12);
layout.arrange(diagram);
```

8. Build and run the project. If everything is fine, you should see this representation of the graph:



Tutorial 2: Loading Hierarchical Data

This tutorial shows how to load hierarchical data recursively from XML and create diagram items corresponding to the hierarchy.

1. Right-click the project in Package Explorer and choose New -> Other from the context menu. Create a new XML file called SampleTree.xml and add to it content in the following form:

XML

```
<?xml version="1.0" encoding="utf-8" ?>
<Project>
    <Activity Name="Activity 1">
        <Activity  Name="sub-activity 1">
            <Activity  Name="sub-activity 1-1" />
            <Activity  Name="sub-activity 1-2" />
        </Activity>
        <Activity  Name="sub-activity 2">
            <Activity  Name="sub-activity 2-1" />
            <Activity  Name="sub-activity 2-2" />
            <Activity  Name="sub-activity 2-3" />
        </Activity>
        <Activity  Name="sub-activity 3">
            <Activity  Name="sub-activity 3-1" />
            <Activity  Name="sub-activity 3-2" />
        </Activity>
    </Activity>
    <Activity Name="Activity 2">
        <Activity  Name="sub-activity 1">
            <Activity  Name="sub-activity 1-1" />
            <Activity  Name="sub-activity 1-2" />
            <Activity  Name="sub-activity 1-3" />
        </Activity>
        <Activity  Name="sub-activity 2">
            <Activity  Name="sub-activity 2-1" />
            <Activity  Name="sub-activity 2-2" />
        </Activity>
    </Activity>
    <Activity Name="Activity 3">
        <Activity  Name="sub-activity 1">
            <Activity  Name="sub-activity 1-1" />
            <Activity  Name="sub-activity 1-2" />
```

```
            <Activity  Name="sub-activity 1-3" />
            <Activity  Name="sub-activity 1-4" />
        </Activity>
        <Activity  Name="sub-activity 2" />
        <Activity  Name="sub-activity 3">
            <Activity  Name="sub-activity 3-1" />
            <Activity  Name="sub-activity 3-2" />
        </Activity>
    </Activity>
</Project>
```

2. Add a windowOpened event handler to the JFrame:

Java

```
this.addWindowListener(new WindowAdapter()
{
    @Override
    public void windowOpened(WindowEvent e)
    {
        loadTree(diagram, "SampleTree.xml");
    }
});
```

3. Add the following member to the frame class to hold the default node size.

Java

```
final Rectangle2D.Float bounds = new Rectangle2D.Float(0,0,30,8);
```

4. In loadTree, create the tree root node, and call the createChildren method, which builds the tree recursively.

Java

```
void loadTree(Diagram diagram, String filepath)
{
    // load the tree XML
    Document document = loadXmlFile(filepath);
    Element rootElement = document.getDocumentElement();

    // create diagram elements recursively
    ShapeNode root = diagram.getFactory().createShapeNode(bounds);
    root.setText("Project");
    createChildren(diagram, root, rootElement);
}
```

5. Define createChildren as follows. It takes as parameters the parent DiagramNode and parent XML element, iterates the child XML elements to build the next level of the hierarchy, and creates corresponding diagram items by calling createShapeNode and createDiagramLink.

Java

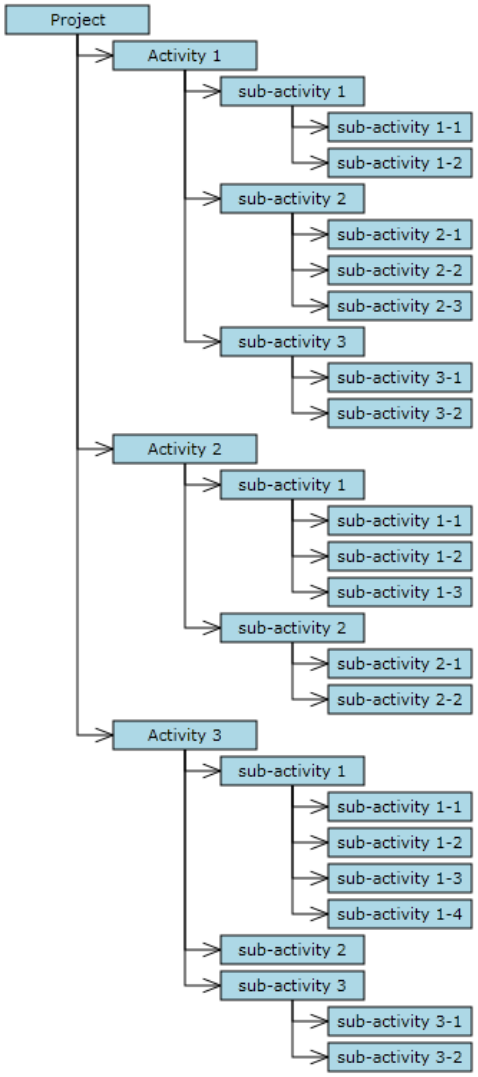
```
void createChildren(Diagram diagram, DiagramNode parentNode, Node parentElement)
{
    NodeList elements = parentElement.getChildNodes();
    for (int i = 0; i < elements.getLength(); i++)
    {
        Node element = elements.item(i);
        if (element.getNodeName().equals("Activity"))
        {
            ShapeNode node = diagram.getFactory().createShapeNode(bounds);
            node.setText(((Element)element).getAttribute("Name"));
            diagram.getFactory().createDiagramLink(parentNode, node);
            createChildren(diagram, node, element);
        }
    }
}
```

6. Use TreeLayout to arrange the diagram. Add the following code to the end of the loadTree method.

Java

```
// arrange using TreeLayout
TreeLayout layout = new TreeLayout();
layout.setType(TreeLayoutType.Cascading);
layout.setDirection(TreeLayoutDirection.LeftToRight);
layout.setLinkStyle(TreeLayoutLinkType.Cascading2);
layout.setNodeDistance(3);
layout.setLevelDistance(-8); // let horizontal positions overlap
layout.arrange(diagram);
```

7. Build and run the project. If everything is fine, you should see this representation of the hierarchy:



Tutorial 3: Create a Custom Node Type

This tutorial shows how to define a custom node class that inherits CompositeNode and adds several new properties. Its appearance is defined using an XML template.

1. Right-click the project in Package Explorer and choose New -> Other from the context menu. Create a new XML file called OrgChartNode.xml and add the following template code to it.

Xml

```
<SimplePanel>
    <Shape Name="Shape" Shape="Rectangle" />
```

```
    <Border Padding="2">
        <GridPanel>
            <GridPanel.Columns>
                <GridColumn Width="30" />
                <GridColumn />
            </GridPanel.Columns>
            <GridPanel.Rows>
                <GridRow />
            </GridPanel.Rows>

            <Image Name="Image" />

            <StackPanel Orientation="Vertical" GridColumn="1">
                <Text Name="Title" Font="Arial-6" TextAlignment="Near" />
                <Text Name="FullName" Font="Arial-4" TextColor="Blue" TextAlignment="Near" />
                <Text Name="Details" Font="Arial-4" TextAlignment="Near" />
            </StackPanel>
        </GridPanel>
    </Border>

</SimplePanel>
```

2. Add to the project a new class called OrgChartNode. Make it derive from **CompositeNode**.

Java

```
import java.awt.*;
import java.io.*;
import javax.xml.parsers.DocumentBuilder;
import javax.xml.parsers.DocumentBuilderFactory;
import org.w3c.dom.Document;
import com.mindfusion.diagramming.*;
import com.mindfusion.diagramming.components.*;
import com.mindfusion.diagramming.components.TextComponent;

public class OrgChartNode extends CompositeNode
{
    static Document xmlTemplate = loadXmlFile("OrgChartNode.xml");

    public OrgChartNode(Diagram diagram)
    {
        super(diagram);
    }

    private ShapeComponent shapeComponent;
    private ImageComponent imageComponent;
    private TextComponent titleComponent;
    private TextComponent fullNameComponent;
    private TextComponent detailsComponent;
}
```

3. In the constructor, load from the XML template using XmlLoader, and assign references to individual components using findComponent:

Java

```
// create components from XML template
getComponents().add(XmlLoader.load(xmlTemplate, null, null));

// find components by name
shapeComponent = (ShapeComponent) findComponent("Shape");
imageComponent = (ImageComponent) findComponent("Image");
titleComponent = (TextComponent) findComponent("Title");
fullNameComponent = (TextComponent) findComponent("FullName");
detailsComponent = (TextComponent) findComponent("Details");

// customize appearance
titleComponent.getTextFormat().setHorizontalAlign(Align.Near);
fullNameComponent.getTextFormat().setHorizontalAlign(Align.Near);
detailsComponent.getTextFormat().setHorizontalAlign(Align.Near);
shapeComponent.setIsOutline(true);
```

```
setFill(new SolidBrush(Color.WHITE));
setStroke(new Pen(Color.BLACK, 0.5));
```

4. Define custom properties that delegate their implementation to the components loaded from the template.

Java

```
public Pen getStroke()
{
    return shapeComponent.getPen();
}

public void setStroke(Pen value)
{
    shapeComponent.setPen(value);
    this.repaint();
}

public Brush getFill()
{
    return shapeComponent.getBrush();
}

public void setFill(Brush value)
{
    shapeComponent.setBrush(value);
    this.repaint();
}

public Image getImage()
{
    return imageComponent.getImage();
}

public void setImage(Image value)
{
    imageComponent.setImage(value);
    this.repaint();
}

public String getTitle()
{
    return titleComponent.getText();
}

public void setTitle(String value)
{
    titleComponent.setText(value);
    this.repaint();
}

public String getFullName()
{
    return fullNameComponent.getName();
}

public void setFullName(String value)
{
    fullNameComponent.setText(value);
    this.repaint();
}

public String getDetails()
{
    return detailsComponent.getText();
}

public void setDetails(String value)
{
    detailsComponent.setText(value);
```

```
    this.repaint();
}
```

5. Add a Diagram and DiagramView to the JFrame constructor.

Java

```
Diagram diag = new Diagram();
DiagramView view = new DiagramView();
view.setDiagram(diag);
JScrollPane scrollPane = new JScrollPane(view);
scrollPane.setVisible(true);
getContentPane().add(scrollPane);
```

6. Add a few instances of the OrgChartNode class.

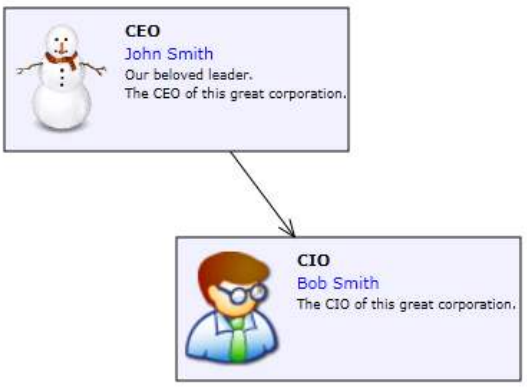
Java

```
// create first OrgChartNode
OrgChartNode node1 = new OrgChartNode(diag);
node1.setStroke(new Pen(0.5f, Color.RED));
node1.setBounds(20, 10, 80, 40);
node1.setTitle("CEO");
node1.setFullName("John Smith");
node1.setDetails("Our beloved leader.\n" +
    "The CEO of this great corporation.");
node1.setImage(loadImage("image1.png"));
diag.add(node1);

// create second OrgChartNode
OrgChartNode node2 = new OrgChartNode(diag);
node2.setBounds(60, 60, 80, 40);
node2.setTitle("CIO");
node2.setFullName("Bob Smith");
node2.setDetails("The CIO of this great corporation.");
node2.setImage(loadImage("image2.png"));
diag.add(node2);

// create connector
diag.getFactory().createDiagramLink(node1, node2);
```

7. Build and run the project. You should see the custom nodes rendered like this:



Tutorial 4: Custom Nodes Integration

This tutorial builds upon the OrgChartNode type from Tutorial 3. It shows how to fully integrate the custom type with other JDiagram features, such as serialization, undo support, creating nodes by drag-and-drop or drawing with the mouse on the canvas.

1. Add a NodeListView to the frame and add a few OrgChartNode objects as its children:

Java

```
// create a NodeListView
NodeListView nodeList = new NodeListView();
nodeList.setSize(110, 800);
nodeList.setDefaultNodeSize(new Dimension(80,40));
nodeList.setIconSize(new Dimension(60, 30));
nodeList.setIconMargin(new Dimension(5, 5));
getContentPane().add(nodeList, BorderLayout.WEST);

// add nodes to list view
OrgChartNode orgNode = new OrgChartNode(diagram);
orgNode.setTitle("CEO");
orgNode.setFullName("Type here");
orgNode.setDetails("Chief executive officer");
orgNode.setImage(loadImage("image1.png"));
nodeList.addNode(orgNode);

orgNode = new OrgChartNode(diagram);
orgNode.setTitle("CIO");
orgNode.setFullName("Type here");
orgNode.setDetails("Chief information officer");
orgNode.setImage(loadImage("image2.png"));
nodeList.addNode(orgNode);
```

2. Add a copy constructor to the OrgChartNode class. The control throws an exception if you try to create via drag-and-drop an instance of a class without copy constructor:

Java

```
public OrgChartNode(OrgChartNode prototype)
{
    super(prototype);
    findComponents();
}

void findComponents()
{
    // find components by name
    shapeComponent = (ShapeComponent) findComponent("Shape");
    imageComponent = (ImageComponent) findComponent("Image");
    titleComponent = (TextComponent) findComponent("Title");
    fullNameComponent = (TextComponent) findComponent("FullName");
    detailsComponent = (TextComponent) findComponent("Details");
}
```

3. In order to enable drawing OrgChartNodes with the mouse, inherit the LinkNodesBehavior and override its createNode method. You could also inherit BehaviorBase or any of its derived classes, and override either **createNode** or startDraw:

Java

```
public class OrgChartBehavior
    extends LinkNodesBehavior
{
    protected OrgChartBehavior(DiagramView diagramView)
    {
        super(diagramView);
    }

    @Override
    protected DiagramNode createNode()
    {
        return new OrgChartNode(getDiagram());
    }
}
```

4. Assign an instance of the behavior class to the CustomBehavior property of the DiagramView class:

Java

```
// enable drawing OrgChartNodes with the mouse
view.setCustomBehavior(new OrgChartBehavior(view));
```

5. To implement serialization support, add an empty constructor to the node class. Since all custom properties simply delegate to the components hosted in base CompositeNode class, you don't have to override serialization methods such as saveToXml and loadFromXml methods in this instance. However you will have to recreate the references to components loaded by the base class by overriding onLoad:

Java

```
// empty constructor required for deserialization
public OrgChartNode()
{
}

@Override
protected void onLoad(Diagram diagram)
{
    super.onLoad(diagram);
    findComponents();
}
```

6. Call the static registerItemClass method to assign an XML element name to the custom item type:

Java

```
Diagram.registerClass(OrgChartNode.class, "my:OrgChartNode", 1);
```

7. In order to enable undo / redo of changes done on OrgChartNode, create a DiagramItemProperties - derived class that contains member corresponding to the additional properties defined by OrgChartNode:

Java

```
public class OrgChartNodeProperties
    extends DiagramNodeProperties
{
    String Title;
    String FullName;
    String Details;
    Pen Stroke;
    Brush Fill;
    Image Image;
}
```

8. Override the createProperties, saveProperties and restoreProperties methods:

Java

```
@Override
protected DiagramItemProperties createProperties()
{
    return new OrgChartNodeProperties();
}

@Override
protected void saveProperties(DiagramItemProperties props)
{
    super.saveProperties(props);

    OrgChartNodeProperties state = (OrgChartNodeProperties)props;
    state.Title = getTitle();
    state.FullName = getFullName();
    state.Details = getDetails();
    state.Stroke = getStroke();
    state.Fill = getFill();
    state.Image = getImage();
}
```

```
@Override
protected void restoreProperties(DiagramItemProperties props)
{
    super.restoreProperties(props);

    OrgChartNodeProperties state = (OrgChartNodeProperties)props;
    setTitle(state.Title);
    setFullName(state.FullName);
    setDetails(state.Details);
    setStroke(state.Stroke);
    setFill(state.Fill);
    setImage(state.Image);
}
```

9. The full source code for this tutorial is available in the Samples/Tutorial4 subfolder under the JDiagram installation folder.

Reference

com.mindfusion.common Namespace

Accordion Class

A container control that displays a stack of collapsible panes.

Syntax

Java

```
public class Accordion extends JPanel
```

Remarks

The **Accordion** control organizes its child panels vertically and provides a flexible space-distribution model tailored for sidebars, toolbox panels, and palettes.

Pane Management

Panes can be added using the addPane method, which automatically instantiates and adds a new AccordionPane with a specified title, icon, and content component. Individual panes can be removed from the container by passing the pane instance to the remove method, and the entire stack can be cleared at once using removeAll.

Layout

Only expanded panes are allowed to stretch and share any extra vertical space provided by the parent container. Collapsed panes restrict their maximum height to display only their header buttons. All panes are aligned to the top of the container. If all panes are collapsed, they will stack tightly at the top of the viewport, leaving any remaining empty space at the bottom rather than stretching the collapsed headers to fill the area.

Expansion Management

The control can be configured to either allow multiple panes to be expanded concurrently (the default behavior) or to enforce a single-expand mode where opening one pane automatically collapses all

others. This is controlled via the AllowMultipleExpands property. The expansion state of an individual pane can be programmatically queried or updated using the isExpanded and setExpanded methods on the AccordionPane, which fires property change events to allow listeners to react to visibility changes.

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        javax.swing.JPanel
          com.mindfusion.common.Accordion

See Also

Accordion Members
com.mindfusion.common Namespace

Accordion Members

A container control that displays a stack of collapsible panes.

The following tables list the members exposed by the Accordion type.

Public Constructors

	Name	Description
	Accordion	Initializes a new instance of the Accordion class.

Public Methods

	Name	Description
	addPane	Adds a new collapsible pane to the accordion.
	getAllowMultipleExpands	Gets a value indicating whether more than one pane can be expanded at the same time.
	remove	
	removeAll	Removes all panes from the accordion.
	setAllowMultipleExpands	Sets a value indicating whether more than one pane can be expanded at the same time.

See Also

Accordion Class
com.mindfusion.common Namespace

Accordion Constructor

Initializes a new instance of the Accordion class.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public Accordion ()
```

See Also

Accordion Class
com.mindfusion.common Namespace

Accordion Methods

Accordion.addPane Method

Adds a new collapsible pane to the accordion.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public Accordion.AccordionPane addPane (
    String title,
    Icon icon,
    JComponent content
)
```

Parameters

title
The title to display in the pane's header.

icon
The icon to display in the pane's header.

content
The component to display as the pane's content.

Return Value

The newly created AccordionPane.

See Also

Accordion Members
Accordion Class
com.mindfusion.common Namespace

Accordion.getAllowMultipleExpands Method

Gets a value indicating whether more than one pane can be expanded at the same time.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public boolean getAllowMultipleExpands ()
```

Return Value

true to allow multiple panes to be expanded; otherwise, false.

See Also

Accordion Members
Accordion Class
com.mindfusion.common Namespace

Accordion.remove Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public void remove (
    Component comp
)
```

Parameters

comp

See Also

Accordion Members
Accordion Class
com.mindfusion.common Namespace

Accordion.removeAll Method

Removes all panes from the accordion.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public void removeAll ()
```

See Also

Accordion Members
Accordion Class
com.mindfusion.common Namespace

Accordion.setAllowMultipleExpands Method

Sets a value indicating whether more than one pane can be expanded at the same time.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void setAllowMultipleExpands (
    boolean value
)
```

Parameters

value
true to allow multiple panes to be expanded; otherwise, false.

See Also

Accordion Members
Accordion Class
com.mindfusion.common Namespace

AccordionPane Class

Represents a single collapsible pane within an Accordion control.

Syntax

Java

```
public class AccordionPane extends JPanel
```

Remarks

The **AccordionPane** represents a single collapsible section within an Accordion control. It consists of a clickable header button (which displays a title, an optional icon, and an expansion arrow) and a content area that can be shown or hidden.

Setting Content

The content of a pane can be any standard UI component (including containers such as a **JPanel** and **JScrollPane**). It is initially defined when the pane is created via the Accordion's addPane method. If the UI needs to be updated dynamically, the content can be replaced at runtime using the setContent method, and the current content component can be retrieved using getContent.

Properties

- Appearance: The visual identity of the pane's header is controlled via the Title and Icon properties.

- Expansion State: The Expanded property controls whether the content area is visible. Modifying the expansion state automatically updates the arrow indicator in the header and triggers a layout recalculation in the parent Accordion. When expanded, the pane is allowed to stretch vertically to consume available space; when collapsed, its height is strictly limited to the height of its header.

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        javax.swing.JPanel
          com.mindfusion.common.Accordion.AccordionPane

See Also

AccordionPane Members
com.mindfusion.common Namespace

AccordionPane Members

Represents a single collapsible pane within an Accordion control.

The following tables list the members exposed by the AccordionPane type.

Public Constructors

	Name	Description
	AccordionPane	Initializes a new instance of the AccordionPane class.

Public Methods

	Name	Description
	getContent	Gets the component displayed as the pane's content.
	getIcon	Gets the icon displayed in the pane's header.
	getMaximumSize	
	getTitle	Gets the title text of the pane's header.
	isExpanded	Gets a value indicating whether the pane is expanded.
	setContent	Sets the component to display as the pane's content.
	setExpanded	Sets a value indicating whether the pane is expanded.
	setIcon	Sets the icon displayed in the pane's header.
	setTitle	Sets the title text of the pane's header.

See Also

AccordionPane Class
com.mindfusion.common Namespace

AccordionPane Constructor

Initializes a new instance of the AccordionPane class.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public AccordionPane (
    String title,
    Icon icon,
    JComponent content
)
```

Parameters

title
The title to display in the pane's header.

icon
The icon to display in the pane's header.

content
The component to display as the pane's content.

See Also

AccordionPane Class
com.mindfusion.common Namespace

AccordionPane Methods

AccordionPane.getContent Method

Gets the component displayed as the pane's content.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JComponent getContent ()
```

Return Value

The content component.

See Also

AccordionPane Members
AccordionPane Class
com.mindfusion.common Namespace

AccordionPane.getIcon Method

Gets the icon displayed in the pane's header.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Icon getIcon ()
```

Return Value

The icon.

See Also

AccordionPane Members
AccordionPane Class
com.mindfusion.common Namespace

AccordionPane.getMaximumSize Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Dimension getMaximumSize ()
```

Return Value

See Also

AccordionPane Members
AccordionPane Class
com.mindfusion.common Namespace

AccordionPane.getTitle Method

Gets the title text of the pane's header.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String getTitle ()
```

Return Value

The title text.

See Also

AccordionPane Members
AccordionPane Class
com.mindfusion.common Namespace

AccordionPane.isExpanded Method

Gets a value indicating whether the pane is expanded.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean isExpanded ()
```

Return Value

true if the pane is expanded; otherwise, false.

See Also

AccordionPane Members
AccordionPane Class
com.mindfusion.common Namespace

AccordionPane.setContent Method

Sets the component to display as the pane's content.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void setContent (
    JComponent newContent
)
```

Parameters

newContent
The component to display.

See Also

AccordionPane Members
AccordionPane Class
com.mindfusion.common Namespace

AccordionPane.setExpanded Method

Sets a value indicating whether the pane is expanded.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void setExpanded (
    boolean expanded
)
```

Parameters

expanded
true to expand the pane; otherwise, false.

See Also

AccordionPane Members
AccordionPane Class
com.mindfusion.common Namespace

AccordionPane.setIcon Method

Sets the icon displayed in the pane's header.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void setIcon (
    Icon icon
)
```

Parameters

icon
The icon to display.

See Also

AccordionPane Members
AccordionPane Class
com.mindfusion.common Namespace

AccordionPane.setTitle Method

Sets the title text of the pane's header.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public void setTitle (`
`  String title`
`)`

Parameters

title
The title text.

See Also

AccordionPane Members
AccordionPane Class
com.mindfusion.common Namespace

AlignConverter Class

Syntax

Java
`public class AlignConverter implements CanConvert`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.AlignConverter

See Also

AlignConverter Members
com.mindfusion.common Namespace

AlignConverter Members

The following tables list the members exposed by the AlignConverter type.

Public Constructors

	Name	Description
	AlignConverter	

Public Methods

	Name	Description
	canConvert	

	convert	

See Also

AlignConverter Class
com.mindfusion.common Namespace

AlignConverter Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public AlignConverter ()
```

See Also

AlignConverter Class
com.mindfusion.common Namespace

AlignConverter Methods

AlignConverter.canConvert Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean canConvert (
    String value
)
```

Parameters

value

Return Value

See Also

AlignConverter Members
AlignConverter Class
com.mindfusion.common Namespace

AlignConverter.convert Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static int convert (
    String value
)
```

Parameters

value

Return Value

See Also

AlignConverter Members
AlignConverter Class
com.mindfusion.common Namespace

ArrayIterable<T> Class

Defines an Iterable on a two-dimensional array of type T.

Syntax

```
Java
public class ArrayIterable<T> implements Iterable<T>
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.ArrayIterable(T)

See Also

ArrayIterable(T) Members
com.mindfusion.common Namespace

ArrayIterable(T) Members

Defines an Iterable on a two-dimensional array of type T.

The following tables list the members exposed by the ArrayIterable(T) type.

Public Constructors

	Name	Description
	ArrayIterable	

Public Methods

	Name	Description
	iterator	Iterable.iterator implementation.

See Also

ArrayIterable<T> Class
com.mindfusion.common Namespace

ArrayIterable(T) Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public ArrayIterable (
    T[][] array
)
```

Parameters

array

See Also

ArrayIterable<T> Class
com.mindfusion.common Namespace

ArrayIterable(T) Methods

ArrayIterable(T).iterator Method

Iterable.iterator implementation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Iterator<T> iterator ()
```

Return Value

See Also

ArrayIterable(T) Members
ArrayIterable<T> Class

BaseList<E> Class

Represents a generic list with modification notifications.

Syntax

Java
`public abstract class BaseList<E> extends AbstractList<E> implements Externalizable`

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.common.BaseList(E)
        com.mindfusion.drawing.PointList

See Also

BaseList(E) Members
com.mindfusion.common Namespace

BaseList(E) Members

Represents a generic list with modification notifications.

The following tables list the members exposed by the BaseList(E) type.

Protected Constructors

	Name	Description
	BaseList	Overloaded.

Public Methods

	Name	Description
	add	Overloaded.
	addBaseListListener	Adds a BaseListListener to the list.
	clear	Removes all elements from the list.
	first	Gets the first element of this list.
	get	Returns the element at the specified position in the list.
	last	Gets the last element of this list.
	readExternal	
	remove	Overloaded.

	removeBaseListListener	Removes the specified **BaseListListener** from the list.
	set	Replaces the element at the specified position in this list with the specified element.
	size	Returns the number of elements in the list.
	writeExternal	

See Also

BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E) Constructor

Overload List

Name	Description
BaseList(E) ()	Initializes a new instance of the BaseList class.
BaseList(E) (Collection)	Initializes a new instance of the **BaseList** class.
BaseList(E) (int)	Initializes a new instance of the **BaseList** class.

See Also

BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E) Constructor ()

Initializes a new instance of the BaseList class.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`protected BaseList ()`

See Also

BaseList(E) Constructor Overload List
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E) Constructor (Collection<E>)

Initializes a new instance of the BaseList class.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
protected BaseList (
    Collection<E> c
)
```

Parameters

c

See Also

BaseList(E) Constructor Overload List
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E) Constructor (int)

Initializes a new instance of the BaseList class.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
protected BaseList (
    int capacity
)
```

Parameters

capacity

See Also

BaseList(E) Constructor Overload List
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E) Methods

BaseList(E).add Method

Overload List

Name	Description

BaseList(E).add (E)	Adds the specified element to the list.
BaseList(E).add (int, E)	Inserts the specified element at the specified position within the list.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E).add Method (E)

Adds the specified element to the list.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean add (
    E e
)
```

Parameters

e
An element to be added to the list.

Return Value

This method always returns true.

See Also

add Method Overload List
BaseList(E) Members
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E).add Method (int, E)

Inserts the specified element at the specified position within the list.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void add (
    int index,
    E e
)
```

Parameters

index
The zero-based index at which the element must be inserted.

e
An element to be added to the list.

See Also

add Method Overload List
BaseList(E) Members
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E).addBaseListListener Method

Adds a BaseListListener to the list.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void addBaseListListener (
    BaseListListener<E> listener
)
```

Parameters

listener
The BaseListListener to be added.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E).clear Method

Removes all elements from the list.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void clear ()
```

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E).first Method

Gets the first element of this list.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public E first ()
```

Return Value

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E).get Method

Returns the element at the specified position in the list.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public E get (
    int index
)
```

Parameters

index
The 0-based index of the element to get.

Return Value

The element at the specified index.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E).last Method

Gets the last element of this list.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public E last ()`

Return Value

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E).readExternal Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public void readExternal (`
`  ObjectInput in`
`)`

Parameters

in

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E).remove Method

Overload List

Name	Description
BaseList(E).remove (int)	Removes the first occurrence of the specified element from this list.
BaseList(E).remove (Object)	Removes the first occurrence of the specified element from this list.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E).remove Method (int)

Removes the first occurrence of the specified element from this list.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public E remove (
    int index
)
```

Parameters

index
An element which must be removed from the list.

Return Value

The removed element.

See Also

remove Method Overload List
BaseList(E) Members
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E).remove Method (Object)

Removes the first occurrence of the specified element from this list.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean remove (
    Object o
)
```

Parameters

o
An element which must be removed from the list.

Return Value

true if the specified element is removed from the list; false, if the element was not found in the list.

See Also

remove Method Overload List
BaseList(E) Members
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E).removeBaseListListener Method

Removes the specified BaseListListener from the list.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void removeBaseListListener (
    BaseListListener<E> listener
)
```

Parameters

listener
The listener to be removed.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E).set Method

Replaces the element at the specified position in this list with the specified element.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public E set (
    int index,
    E e
)
```

Parameters

index
The 0-based index of the element to set.

e
The new element at the specified position.

Return Value

Returns the element previously at the specified position.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E).size Method

Returns the number of elements in the list.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int size ()
```

Return Value

An integer value.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.common Namespace

BaseList(E).writeExternal Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.common Namespace

BaseListAdapter<E> Class

Provides empty implementations for the methods defined in the BaseListListener interface.

Syntax

Java
`public class BaseListAdapter<E> implements BaseListListener<E>`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.BaseListAdapter(E)

See Also

BaseListAdapter(E) Members
com.mindfusion.common Namespace

BaseListAdapter(E) Members

Provides empty implementations for the methods defined in the BaseListListener interface.

The following tables list the members exposed by the BaseListAdapter(E) type.

Public Constructors

	Name	Description
	BaseListAdapter	

Public Methods

	Name	Description
	itemAdded	BaseListListener.itemAdded implementation.
	listChanged	BaseListListener.listChanged implementation.

See Also

BaseListAdapter<E> Class
com.mindfusion.common Namespace

BaseListAdapter(E) Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public BaseListAdapter ()
```

See Also

BaseListAdapter<E> Class
com.mindfusion.common Namespace

BaseListAdapter(E) Methods

BaseListAdapter(E).itemAdded Method

BaseListListener.itemAdded implementation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void itemAdded (
    ListItemEvent<E> e
)
```

Parameters

e

See Also

BaseListAdapter(E) Members
BaseListAdapter<E> Class
com.mindfusion.common Namespace

BaseListAdapter(E).listChanged Method

BaseListListener.listChanged implementation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void listChanged (
    ListChangedEvent<E> e
)
```

Parameters

e

See Also

BaseListAdapter(E) Members
BaseListAdapter<E> Class
com.mindfusion.common Namespace

BaseListListener<E> Interface

Defines the events raised by the BaseList class.

Syntax

Java
`public interface BaseListListener<E> extends EventListener`

Inheritors

com.mindfusion.common.BaseListAdapter(E)

See Also

BaseListListener(E) Members
com.mindfusion.common Namespace

BaseListListener(E) Members

Defines the events raised by the BaseList class.

The following tables list the members exposed by the BaseListListener(E) type.

Public Methods

	Name	Description
	itemAdded	Invoked when an item is added to the list.
	listChanged	Invoked when the list is changed.

See Also

BaseListListener<E> Interface
com.mindfusion.common Namespace

BaseListListener(E) Methods

BaseListListener(E).itemAdded Method

Invoked when an item is added to the list.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
void itemAdded (
    ListItemEvent<E> e
)
```

Parameters

e

A ListItemEvent object.

See Also

BaseListListener(E) Members
BaseListListener<E> Interface
com.mindfusion.common Namespace

BaseListListener(E).listChanged Method

Invoked when the list is changed.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
void listChanged (
    ListChangedEvent<E> e
)
```

Parameters

e

A ListChangedEvent object.

See Also

BaseListListener(E) Members
BaseListListener<E> Interface
com.mindfusion.common Namespace

BitMask Interface

Syntax

Java

```
public interface BitMask
```

See Also

BitMask Members

The following tables list the members exposed by the BitMask type.

Public Methods

	Name	Description
	get	Method returns a EnumSet from given BitMask value.
	set	Method returns int representing the BitMask value from given EnumSet

See Also

BitMask Interface
com.mindfusion.common Namespace

BitMask Methods

BitMask.get<T> Method

Method returns a EnumSet from given BitMask value.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
<T> EnumSet<T> get (
    int id,
    Class<T> instance
)
```

Parameters

id
represents bit value

instance
a Class to detect concrete type of Enum.

Return Value

EnumSet of Enum or Empty set if BitMask value & Power of 2 equals Zero.

See Also

BitMask Members
BitMask Interface
com.mindfusion.common Namespace

BitMask.set<T> Method

Method returns int representing the BitMask value from given EnumSet

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
<T> int set (
    EnumSet<T> values,
    Class<T> instance
)
```

Parameters

values
A EnumSet that is converted to BitMask value

instance
a Class to detect concrete type of Enum.

Return Value

BitMask value.

See Also

BitMask Members
BitMask Interface
com.mindfusion.common Namespace

ByRef<T> Class

Allows using "by reference" value type parameters.

Syntax

Java

```
public class ByRef<T>
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.ByRef(T)

See Also

ByRef(T) Members

Allows using "by reference" value type parameters.

The following tables list the members exposed by the ByRef(T) type.

Public Constructors

	Name	Description
	ByRef	Overloaded.

Public Methods

	Name	Description
	get	Gets the parameter value.
	set	Sets the parameter value.

See Also

ByRef<T> Class
com.mindfusion.common Namespace

ByRef(T) Constructor

Overload List

Name	Description
ByRef(T) ()	Initializes a new ByRef instance.
ByRef(T) (T)	Initializes a new **ByRef** instance.

See Also

ByRef<T> Class
com.mindfusion.common Namespace

ByRef(T) Constructor ()

Initializes a new ByRef instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public ByRef ()
```

See Also

ByRef(T) Constructor Overload List
ByRef<T> Class
com.mindfusion.common Namespace

ByRef(T) Constructor (T)

Initializes a new ByRef instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public ByRef (
    T value
)
```

Parameters

value
The initial parameter value.

See Also

ByRef(T) Constructor Overload List
ByRef<T> Class
com.mindfusion.common Namespace

ByRef(T) Methods

ByRef(T).get Method

Gets the parameter value.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public T get ()
```

Return Value

The value returned through this parameter.

See Also

ByRef(T) Members
ByRef<T> Class
com.mindfusion.common Namespace

ByRef(T).set Method

Sets the parameter value.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public T set (
    T value
)
```

Parameters

value
The new parameter value.

Return Value

See Also

ByRef(T) Members
ByRef<T> Class
com.mindfusion.common Namespace

CanConvert Interface

Syntax

Java

```
public interface CanConvert
```

Inheritors

com.mindfusion.common.AlignConverter
com.mindfusion.common.ColorConverter
com.mindfusion.common.OrientationConverter

See Also

CanConvert Members
com.mindfusion.common Namespace

CanConvert Members

The following tables list the members exposed by the CanConvert type.

Public Methods

	Name	Description
	canConvert	

See Also

CanConvert Interface
com.mindfusion.common Namespace

CanConvert Methods

CanConvert.canConvert Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
boolean canConvert (
    String value
)
```

Parameters

value

Return Value

See Also

CanConvert Members
CanConvert Interface
com.mindfusion.common Namespace

Category Interface

Specifies the name of a category in which to group annotated property when displayed in a property grid.

Syntax

Java

```
public interface Category extends Annotation
```

See Also

Category Members
com.mindfusion.common Namespace

Category Members

Specifies the name of a category in which to group annotated property when displayed in a property grid.

The following tables list the members exposed by the Category type.

See Also

Category Interface
com.mindfusion.common Namespace

ChangeListener Interface

Defines the events raised when an object is changed.

Syntax

Java
`public interface ChangeListener extends EventListener`

See Also

ChangeListener Members
com.mindfusion.common Namespace

ChangeListener Members

Defines the events raised when an object is changed.

The following tables list the members exposed by the ChangeListener type.

Public Methods

	Name	Description
	changed	Invoked when the object is changed.

See Also

ChangeListener Interface
com.mindfusion.common Namespace

ChangeListener Methods

ChangeListener.changed Method

Invoked when the object is changed.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
void changed (
    EventObject e
)
```

Parameters

e
An EventObject object.

See Also

ChangeListener Members
ChangeListener Interface
com.mindfusion.common Namespace

Collections Class

Provides utility methods for processing collections.

Syntax

```
Java
public class Collections
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.common.Collections

See Also

Collections Members
com.mindfusion.common Namespace

Collections Members

Provides utility methods for processing collections.

The following tables list the members exposed by the Collections type.

Public Constructors

	Name	Description
	Collections	

Public Methods

	Name	Description
	reverse	Reverses the specified ArrayList.

See Also

Collections Class
com.mindfusion.common Namespace

Collections Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public Collections ()
```

See Also

Collections Class
com.mindfusion.common Namespace

Collections Methods

Collections.reverse<E> Method

Reverses the specified ArrayList.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static <E> void reverse (
    ArrayList<E> c,
    int index,
    int count
)
```

Parameters

c

index

count

See Also

ColorConverter Class

Syntax

Java
`public class ColorConverter implements CanConvert`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.ColorConverter

See Also

ColorConverter Members
com.mindfusion.common Namespace

ColorConverter Members

The following tables list the members exposed by the ColorConverter type.

Public Constructors

	Name	Description
	ColorConverter	

Public Methods

	Name	Description
	canConvert	
S	convert	
S	convertFrom	
S	getColorFromName	

See Also

ColorConverter Class
com.mindfusion.common Namespace

ColorConverter Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public ColorConverter ()
```

See Also

ColorConverter Class
com.mindfusion.common Namespace

ColorConverter Methods

ColorConverter.canConvert Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public boolean canConvert (
    String value
)
```

Parameters

value

Return Value

See Also

ColorConverter Members
ColorConverter Class
com.mindfusion.common Namespace

ColorConverter.convert Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static Color convert (
    String name
)
```

Parameters

name

Return Value

See Also

ColorConverter Members
ColorConverter Class
com.mindfusion.common Namespace

ColorConverter.convertFrom Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Color convertFrom (
    Object value
)
```

Parameters

value

Return Value

See Also

ColorConverter Members
ColorConverter Class
com.mindfusion.common Namespace

ColorConverter.getColorFromName Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Color getColorFromName (
    String name
)
```

Parameters

name

Return Value

See Also

ColorConverter Members
ColorConverter Class
com.mindfusion.common Namespace

CommonUtils Class

Syntax

Java
`public class CommonUtils`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.CommonUtils

See Also

CommonUtils Members
com.mindfusion.common Namespace

CommonUtils Members

The following tables list the members exposed by the CommonUtils type.

Public Constructors

	Name	Description
	CommonUtils	

Public Methods

	Name	Description
	add	Overloaded.
	addAll	
	addDirectoryToZip	
	areClose	
	arrayMultiplication	
	as	Down-casts the object to specified type.
	cartesianToPolar	
	checkIntersect	Checks if the specified rectangle and circle intersect.

	clone	Overloaded.
	colorFromHtml	
	concat	Joins array elements using the specified delimiter.
	convertRect	
	deviceToDoc	
	distance	
	distToLineSegment	Calculates distance from the specified point to the specified line segment.
	distToRectPoint	Returns the nearest to pt point that lies on the outline of rectangle.
	docToDevice	
	filter	Overloaded.
	findValidateRoot	Returns the ancestor component that acts as validate root
	fromLTRB	Overloaded.
	getInvariantLocale	
	getIterableSize	
	getLength	Overloaded.
	getLocation	
	getMidColor	
	getScreenResolution	Returns the screen resolution in dots-per-inch. Checks up the availability of the Headless mode.
	getSize	
	imageFromFile	Loads an image from the specified file.
	imageFromStream	Loads an image from the specified stream.
	indexOf	Overloaded.
	isFalse	
	isTrue	
	lineIntersect	Calculates the intersection point of endless lines (pA, pB) and (pC, pD)
	lineIntersectHorizontal	Finds the x coordinate of the intersection point of the horizontal line at y and the line defined by points pA and pB. If the lines do not intersect, result is undefined.
	lineIntersectVertical	Finds the y coordinate of the intersection point of the vertical line at x and the line defined by points pA and pB. If the lines do not intersect, result is undefined.
	minDistToRect	Calculates the minimum distance between a given point and a given rectangle.

	nc	Performs a null-coalescing of the specified arguments.
	newPoint2D	Overloaded.
	newPointDouble	Overloaded.
	newPointFloat	Overloaded.
	newRectangle2D	
	newRectangleDouble	Overloaded.
	newRectangleFloat	Overloaded.
	normalizeRect	
	parse	Parses space separated numbers into Point2D
	polarToCartesian	
	rad	
	readFileAsString	
	resize	
	revalidateSynced	Performs synchronized revalidation to ensure that layout is up to date after this method returns.
	set	Overloaded.
	setHeight	
	setLocation	
	setWidth	
	setX	Overloaded.
	setY	Overloaded.
	subtract	Subtract the coordinates of one point from the coordinates of another
	toTitleCase	
	translate	
	translateX	Overloaded.
	translateY	Overloaded.
	unzip	
	withOpacity	
	writeStringToFile	
	zipDirectory	

See Also

CommonUtils Class
com.mindfusion.common Namespace

CommonUtils Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public CommonUtils ()`

See Also

CommonUtils Class
com.mindfusion.common Namespace

CommonUtils Methods

CommonUtils.add Method

Overload List

Name	Description
CommonUtils.add (T, double, double)	
CommonUtils.add (T, Point2D)	Add (translate) the coordinates of one point with the coordinates of another

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.add<T> Method (T, double, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public static <T> T add (`
`  T changed,`
`  double addX,`
`  double addY`
`)`

Parameters

changed

addX

addY

Return Value

See Also

add Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.add<T> Method (T, Point2D)

Add (translate) the coordinates of one point with the coordinates of another

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T add (
    T changed,
    Point2D changeVector
)
```

Parameters

changed

changeVector

Return Value

the first parameter which holds the result

See Also

add Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.addAll<T> Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> void addAll (
    Collection<T> target,
    Iterable<T> items
)
```

Parameters

target

items

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.addDirectoryToZip Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static void addDirectoryToZip (
    String source,
    ZipOutputStream out,
    String parent
)
```

Parameters

source

out

parent

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.areClose Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean areClose (
    float a,
```

```
    float b
)
```

Parameters

a

b

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.arrayMultiplication Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static float[] arrayMultiplication (
    float[] array,
    float value
)
```

Parameters

array

value

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.as<T> Method

Down-casts the object to specified type.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T as (
    Class<T> type,
```

```
    Object object
)
```

Parameters

type
A Class instance specifying the target type.

object
The object to down-cast.

Return Value

The object cast to specified type, or null if it's of a different type.

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.cartesianToPolar Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static void cartesianToPolar (
    Point2D coordCenter,
    Point2D point,
    Point2D result
)
```

Parameters

coordCenter

point

result

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.checkIntersect Method

Checks if the specified rectangle and circle intersect.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public static boolean checkIntersect (`
`  Point2D pt,`
`  Rectangle2D rc,`
`  float rad`
`)`

Parameters

pt

rc

rad

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.clone Method

Overload List

Name	Description
CommonUtils.clone (T)	
CommonUtils.clone (T)	

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.clone<T> Method (T)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public static <T> T clone (`
`  T point`
`)`

Parameters

point

Return Value

See Also

clone Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.clone<T> Method (T)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static <T> T clone (
    T point
)
```

Parameters

point

Return Value

See Also

clone Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.colorFromHtml Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static Color colorFromHtml (
    String htmlColor
)
```

Parameters

htmlColor

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.concat Method

Joins array elements using the specified delimiter.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String concat (
    String delimiter,
    Object[] objs
)
```

Parameters

delimiter
A character inserted between the array elements.

objs
The objects to be joined.

Return Value

A string containing the concatenated string representations of the objects.

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.convertRect<T> Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T convertRect (
    Rectangle2D rc,
    T dest
)
```

Parameters

rc

dest

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.deviceToDoc Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Rectangle2D deviceToDoc (
    Graphics2D g,
    Rectangle r
)
```

Parameters

g

r

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.distance Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static double distance (
    Point2D pt1,
    Point2D pt2
)
```

Parameters

pt1

pt2

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.distToLineSegment Method

Calculates distance from the specified point to the specified line segment.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static float distToLineSegment (
    Point2D pt,
    Point2D p1,
    Point2D p2
)
```

Parameters

pt

p1

p2

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.distToRectPoint Method

Returns the nearest to pt point that lies on the outline of rectangle.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Point2D distToRectPoint (
    Point2D pt,
    Rectangle2D r
)
```

Parameters

pt

r

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.docToDevice Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Rectangle docToDevice (
    Graphics2D g,
    Rectangle2D r
)
```

Parameters

g

r

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.filter Method

Overload List

Name	Description
CommonUtils.filter (Iterable, Class)	Creates Iterable that iterates only over the subset of the given Iterable that consist of elements of desired type.
CommonUtils.filter (Iterator, Class)	Creates Iterator that iterates only over the subset of the given Iterator that consist of elements of desired type.

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.filter<T, D> Method (Iterable<T>, Class<D>)

Creates Iterable that iterates only over the subset of the given Iterable that consist of elements of desired type.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T, D> Iterable<D> filter (
    Iterable<T> unfiltered,
    Class<D> desiredType
)
```

Parameters

unfiltered
the collection of items that can be of different type.

desiredType
the class of the items in the collection to be returned.

Return Value

An iterator over the collection items of the desired type.

See Also

filter Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.filter<T, D> Method (Iterator<T>, Class<D>)

Creates Iterator that iterates only over the subset of the given Iterator that consist of elements of desired type.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T, D> Iterator<D> filter (
    Iterator<T> unfiltered,
    Class<D> desiredType
)
```

Parameters

unfiltered
the collection of items that can be of different type.

desiredType
the class of the items in the collection to be returned.

Return Value

An iterator over the collection items of the desired type.

See Also

filter Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.findValidateRoot Method

Returns the ancestor component that acts as validate root

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Component findValidateRoot (
    JComponent c
)
```

Parameters

c
A JComponent whose validation root should be returned.

Return Value

A Component that is the validation root of c.

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.fromLTRB Method

Overload List

Name	Description
CommonUtils.fromLTRB (double, double, double, double)	
CommonUtils.fromLTRB (int, int, int, int)	

See Also

CommonUtils Members
CommonUtils Class

CommonUtils.fromLTRB Method (double, double, double, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Rectangle2D fromLTRB (
    double l,
    double t,
    double r,
    double b
)
```

Parameters

l

t

r

b

Return Value

See Also

fromLTRB Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.fromLTRB Method (int, int, int, int)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Rectangle fromLTRB (
    int l,
    int t,
    int r,
    int b
)
```

Parameters

l

t

r

b

Return Value

See Also

fromLTRB Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.getInvariantLocale Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Locale getInvariantLocale ()
```

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.getIterableSize Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static int getIterableSize (
    Iterable<?> item
)
```

Parameters

item

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.getLength Method

Overload List

Name	Description
CommonUtils.getLength (double[][], int)	Returns the specified dimension of the specified two-dimensional array.
CommonUtils.getLength (short[][], int)	Returns the specified dimension of the specified two-dimensional array.
CommonUtils.getLength (int[][], int)	Returns the specified dimension of the specified two-dimensional array.
CommonUtils.getLength (float[][], int)	Returns the specified dimension of the specified two-dimensional array.
CommonUtils.getLength (T[][], int)	

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.getLength Method (double[][], int)

Returns the specified dimension of the specified two-dimensional array.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static int getLength (
    double[][] array,
    int dimension
)
```

Parameters

array

dimension

Return Value

See Also

getLength Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.getLength Method (short[][], int)

Returns the specified dimension of the specified two-dimensional array.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static int getLength (
    short[][] array,
    int dimension
)
```

Parameters

array

dimension

Return Value

See Also

getLength Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.getLength Method (int[][], int)

Returns the specified dimension of the specified two-dimensional array.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static int getLength (
    int[][] array,
    int dimension
)
```

Parameters

array

dimension

Return Value

See Also

getLength Method Overload List
CommonUtils Members

CommonUtils.getLength Method (float[][], int)

Returns the specified dimension of the specified two-dimensional array.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static int getLength (
    float[][] array,
    int dimension
)
```

Parameters

array

dimension

Return Value

See Also

getLength Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.getLength<T> Method (T[][], int)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> int getLength (
    T[][] array,
    int dimension
)
```

Parameters

array

dimension

Return Value

See Also

getLength Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.getLocation Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Point2D getLocation (
    Rectangle2D rect
)
```

Parameters

rect

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.getMidColor Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Color getMidColor (
    Color[] colors
)
```

Parameters

colors

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.getScreenResolution Method

Returns the screen resolution in dots-per-inch. Checks up the availability of the Headless mode.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static int getScreenResolution ()
```

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.getSize Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Dimension2D getSize (
    Rectangle2D rect
)
```

Parameters

rect

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.imageFromFile Method

Loads an image from the specified file.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Image imageFromFile (
    String filePath
)
```

Parameters

filePath
A string containing file path.

Return Value

A **java.awt.Image** instance representing the loaded bitmap, or **null** if I/O error occurred.

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.imageFromStream Method

Loads an image from the specified stream.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Image imageFromStream (
    InputStream stream
)
```

Parameters

stream
A **java.io.InputStream** instance.

Return Value

A **java.awt.Image** instance representing the loaded bitmap, or **null** if I/O error occurred.

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.indexOf Method

Overload List

Name	Description

CommonUtils.indexOf (String, String, Locale, boolean)	
CommonUtils.indexOf (T[], T)	

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.indexOf Method (String, String, Locale, boolean)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static int indexOf (
    String source,
    String value,
    Locale locale,
    boolean ignoreCase
)
```

Parameters

source

value

locale

ignoreCase

Return Value

See Also

indexOf Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.indexOf<T> Method (T[], T)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> int indexOf (
    T[] array,
```

```
    T element
)
```

Parameters

array

element

Return Value

See Also

indexOf Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.isFalse Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean isFalse (
    Boolean value
)
```

Parameters

value

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.isTrue Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean isTrue (
    Boolean value
)
```

Parameters

value

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.lineIntersect<T> Method

Calculates the intersection point of endless lines (pA, pB) and (pC, pD)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> boolean lineIntersect (
    Point2D pA,
    Point2D pB,
    Point2D pC,
    Point2D pD,
    Point2D result
)
```

Parameters

pA

pB

pC

pD

result
the point that will receive the result if the lines intersect

Return Value

true if the lines intersect

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.lineIntersectHorizontal Method

Finds the x coordinate of the intersection point of the horizontal line at y and the line defined by points pA and pB. If the lines do not intersect, result is undefined.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static double lineIntersectHorizontal (
    double y,
    Point2D pA,
    Point2D pB
)
```

Parameters

y

pA

pB

Return Value

The intersection point x coordinate.

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.lineIntersectVertical Method

Finds the y coordinate of the intersection point of the vertical line at x and the line defined by points pA and pB. If the lines do not intersect, result is undefined.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static double lineIntersectVertical (
    double x,
    Point2D pA,
    Point2D pB
)
```

Parameters

x

pA

pB

Return Value

The intersection point y coordinate.

See Also

CommonUtils Members
CommonUtils Class

CommonUtils.minDistToRect Method

Calculates the minimum distance between a given point and a given rectangle.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static double minDistToRect (
    Point2D pt,
    Rectangle2D rc
)
```

Parameters

pt

rc

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.nc<T, S1, S2> Method

Performs a null-coalescing of the specified arguments.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T, S1, S2> T nc (
    S1 s1,
    S2 s2
)
```

Parameters

s1

s2

Return Value

See Also

CommonUtils.newPoint2D Method

Overload List

Name	Description
CommonUtils.newPoint2D (double, double)	
CommonUtils.newPoint2D (Point2D)	

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.newPoint2D Method (double, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Point2D newPoint2D (
    double x,
    double y
)
```

Parameters

x

y

Return Value

See Also

newPoint2D Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.newPoint2D Method (Point2D)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public static Point2D newPoint2D (`
`  Point2D point`
`)`

Parameters

point

Return Value

See Also

newPoint2D Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.newPointDouble Method

Overload List

Name	Description
CommonUtils.newPointDouble (double, double)	
CommonUtils.newPointDouble (Point2D)	

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.newPointDouble Method (double, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public static Point2D.Double newPointDouble (`
`  double x,`
`  double y`
`)`

Parameters

x

y

Return Value

See Also

newPointDouble Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.newPointDouble Method (Point2D)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public static Point2D.Double newPointDouble (`
`  Point2D point`
`)`

Parameters

point

Return Value

See Also

newPointDouble Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.newPointFloat Method

Overload List

Name	Description
CommonUtils.newPointFloat ()	
CommonUtils.newPointFloat (double, double)	
CommonUtils.newPointFloat (Point2D)	

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.newPointFloat Method ()

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Point2D.Float newPointFloat ()
```

Return Value

See Also

newPointFloat Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.newPointFloat Method (double, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Point2D.Float newPointFloat (
    double x,
    double y
)
```

Parameters

x

y

Return Value

See Also

newPointFloat Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.newPointFloat Method (Point2D)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static Point2D.Float newPointFloat (
    Point2D point
)
```

Parameters

point

Return Value

See Also

newPointFloat Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.newRectangle2D Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static Rectangle2D newRectangle2D (
    double x,
    double y,
    double width,
    double height
)
```

Parameters

x

y

width

height

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.newRectangleDouble Method

Overload List

Name	Description
CommonUtils.newRectangleDouble (double, double, double, double)	
CommonUtils.newRectangleDouble (Rectangle2D)	

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.newRectangleDouble Method (double, double, double, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Rectangle2D.Double newRectangleDouble (
    double x,
    double y,
    double width,
    double height
)
```

Parameters

x

y

width

height

Return Value

See Also

newRectangleDouble Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.newRectangleDouble Method (Rectangle2D)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public static Rectangle2D.Double newRectangleDouble (`
`  Rectangle2D rc`
`)`

Parameters

rc

Return Value

See Also

newRectangleDouble Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.newRectangleFloat Method

Overload List

Name	Description
CommonUtils.newRectangleFloat (double, double, double, double)	
CommonUtils.newRectangleFloat (Rectangle2D)	

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.newRectangleFloat Method (double, double, double, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public static Rectangle2D.Float newRectangleFloat (`
`  double x,`
`  double y,`
`  double width,`

```
    double height
)
```

Parameters

x

y

width

height

Return Value

See Also

newRectangleFloat Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.newRectangleFloat Method (Rectangle2D)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Rectangle2D.Float newRectangleFloat (
    Rectangle2D rc
)
```

Parameters

rc

Return Value

See Also

newRectangleFloat Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.normalizeRect Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Rectangle2D normalizeRect (
    Rectangle2D rc
)
```

Parameters

rc

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.parse Method

Parses space separated numbers into Point2D

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean parse (
    String pair,
    Point2D dest
)
```

Parameters

pair
A string representation of the point coordinates.

dest
A Point2D object to which the parsed values are assigned.

Return Value

true if the string has been parsed successfully, otherwise false.

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.polarToCartesian Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static void polarToCartesian (
    Point2D coordCenter,
    double a,
    double r,
    Point2D point
)
```

Parameters

coordCenter

a

r

point

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.rad Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static double rad (
    double degree
)
```

Parameters

degree

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.readFileAsString Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String readFileAsString (
    String filePath
)
```

Parameters

filePath

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.resize<T> Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T resize (
    T changed,
    double width,
    double height
)
```

Parameters

changed

width

height

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.revalidateSynced Method

Performs synchronized revalidation to ensure that layout is up to date after this method returns.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static void revalidateSynced (
    JComponent comp
)
```

Parameters

comp

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.set Method

Overload List

Name	Description
CommonUtils.set (T, double, double)	
CommonUtils.set (T, double, double)	
CommonUtils.set (T, double, double, double, double)	
CommonUtils.set (T, Rectangle2D)	

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.set<T> Method (T, double, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T set (
    T changed,
    double x,
    double y
)
```

Parameters

changed

x

y

Return Value

See Also

set Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.set<T> Method (T, double, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T set (
    T changed,
    double x,
    double y
)
```

Parameters

changed

x

y

Return Value

See Also

set Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.set<T> Method (T, double, double, double, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T set (
    T changed,
    double x,
    double y,
```

```
    double width,
    double height
)
```

Parameters

changed

x

y

width

height

Return Value

See Also

set Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.set<T> Method (T, Rectangle2D)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T set (
    T changed,
    Rectangle2D src
)
```

Parameters

changed

src

Return Value

See Also

set Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.setHeight<T> Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T setHeight (
    T changed,
    double height
)
```

Parameters

changed

height

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.setLocation<T> Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T setLocation (
    T changed,
    Rectangle2D src
)
```

Parameters

changed

src

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.setWidth<T> Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public static <T> T setWidth (`
`  T changed,`
`  double width`
`)`

Parameters

changed

width

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.setX Method

Overload List

Name	Description
CommonUtils.setX (T, double)	
CommonUtils.setX (T, double)	

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.setX<T> Method (T, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public static <T> T setX (`
`  T changed,`
`  double x`
`)`

Parameters

changed

x

Return Value

See Also

setX Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.setX<T> Method (T, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T setX (
    T changed,
    double x
)
```

Parameters

changed

x

Return Value

See Also

setX Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.setY Method

Overload List

Name	Description
CommonUtils.setY (T, double)	
CommonUtils.setY (T, double)	

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.setY<T> Method (T, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T setY (
    T changed,
    double y
)
```

Parameters

changed

y

Return Value

See Also

setY Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.setY<T> Method (T, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T setY (
    T changed,
    double y
)
```

Parameters

changed

y

Return Value

See Also

setY Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.subtract Method

Subtract the coordinates of one point from the coordinates of another

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Point subtract (
    Point changed,
    Point changeVector
)
```

Parameters

changed

changeVector

Return Value

the first parameter which holds the result

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.toTitleCase Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String toTitleCase (
    Locale locale,
    String source
)
```

Parameters

locale

source

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.translate<T> Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T translate (
    T changed,
    double addX,
    double addY
)
```

Parameters

changed

addX

addY

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.translateX Method

Overload List

Name	Description
CommonUtils.translateX (T, double)	
CommonUtils.translateX (T, double)	

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.translateX<T> Method (T, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T translateX (
    T changed,
    double addX
)
```

Parameters

changed

addX

Return Value

See Also

translateX Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.translateX<T> Method (T, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T translateX (
    T changed,
    double addX
)
```

Parameters

changed

addX

Return Value

See Also

translateX Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.translateY Method

Overload List

Name	Description
CommonUtils.translateY (T, double)	

CommonUtils.translateY (T, double)	

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.translateY<T> Method (T, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T translateY (
    T changed,
    double addY
)
```

Parameters

changed

addY

Return Value

See Also

translateY Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.translateY<T> Method (T, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <T> T translateY (
    T changed,
    double addY
)
```

Parameters

changed

addY

Return Value

See Also

translateY Method Overload List
CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.unzip Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static byte[] unzip (
    byte[] bytes
)
```

Parameters

bytes

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.withOpacity Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Color withOpacity (
    Color color,
    int alpha
)
```

Parameters

color

alpha

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.writeStringToFile Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String writeStringToFile (
    String str,
    String filePath
)
```

Parameters

str

filePath

Return Value

See Also

CommonUtils Members
CommonUtils Class
com.mindfusion.common Namespace

CommonUtils.zipDirectory Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static void zipDirectory (
    String filePath,
    String directory
)
```

Parameters

filePath

directory

See Also

Comparison<T> Interface

Syntax

Java
`public interface Comparison<T>`

Inheritors

com.mindfusion.common.DefaultComparison(T)
com.mindfusion.common.IntegerComparison

See Also

Comparison(T) Members
com.mindfusion.common Namespace

Comparison(T) Members

The following tables list the members exposed by the Comparison(T) type.

Public Methods

	Name	Description
	invoke	

See Also

Comparison<T> Interface
com.mindfusion.common Namespace

Comparison(T) Methods

Comparison(T).invoke Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`int invoke (` `  T x,`

```
    T y
)
```

Parameters

x

y

Return Value

See Also

Comparison(T) Members
Comparison<T> Interface
com.mindfusion.common Namespace

Convert Class

Converts various types to and from string in a locale-independent way.

Syntax

Java
`public class Convert`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.Convert

See Also

Convert Members
com.mindfusion.common Namespace

Convert Members

Converts various types to and from string in a locale-independent way.

The following tables list the members exposed by the Convert type.

Public Methods

	Name	Description
	fromBase64String	Converts the specified encoded string to plain text
	fromBoolean	Converts the specified bool value to string.
	fromColor	Overloaded.
	fromDouble	Converts the specified double to string.
	fromImage	Converts the specified image to string.

	fromInt16	Converts the specified short to string.
	fromInt32	Converts the specified int to string.
	fromInt64	Converts the specified long to string.
	fromPointString	Converts the specified comma separated string to a list of PointF objects.
	fromSingle	Converts the specified float to string.
	toBase64String	Converts the specified plainText string to Base64String
	toBoolean	Converts the specified string value to bool.
	toColor	Converts the specified string to Color. The string should be in the format #AARRGGBB.
	toColor1	Converts the specified string to Color. The string should be in the format #AARRGGBB or rgba(0,0,0,0) default value Black
	toDouble	Converts the specified string to double.
	toImage	Converts the specified string value to image.
	toInt16	Converts the specified string to short.
	toInt32	Converts the specified string to int.
	toInt64	Converts the specified string to long.
	toPointString	Converts the list of PointF objects to a comma separated string.
	toSingle	Converts the specified string to float.

See Also

Convert Class
com.mindfusion.common Namespace

Convert Methods

Convert.fromBase64String Method

Converts the specified encoded string to plain text

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromBase64String (
    String base64EncodedData
)
```

Parameters

base64EncodedData
encoded string

Return Value

decoded string

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.fromBoolean Method

Converts the specified bool value to string.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromBoolean (
    boolean val
)
```

Parameters

val
The value to convert.

Return Value

A string representing the specified value.

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.fromColor Method

Overload List

Name	Description
Convert.fromColor (Color)	Converts the specified Color to string. The resulting string is in the format #AARRGGBB.
Convert.fromColor (Color, boolean)	Converts the specified Color to string. boolean hex param is a param to indicate whether color has to be converted to Hex value. The Default resulting string is in the format rgba(0,0,0,0).

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.fromColor Method (Color)

Converts the specified Color to string. The resulting string is in the format #AARRGGBB.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromColor (
    Color val
)
```

Parameters

val

Return Value

See Also

fromColor Method Overload List
Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.fromColor Method (Color, boolean)

Converts the specified Color to string. boolean hex param is a param to indicate whether color has to be converted to Hex value. The Default resulting string is in the format rgba(0,0,0,0).

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromColor (
    Color val,
    boolean hex
)
```

Parameters

val

hex

Return Value

See Also

fromColor Method Overload List
Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.fromDouble Method

Converts the specified double to string.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromDouble (
    double val
)
```

Parameters

val

Return Value

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.fromImage Method

Converts the specified image to string.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromImage (
    Image val
)
```

Parameters

val
The image object to convert.

Return Value

A string representing the specified value.

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.fromInt16 Method

Converts the specified short to string.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromInt16 (
    short val
)
```

Parameters

val

Return Value

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.fromInt32 Method

Converts the specified int to string.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromInt32 (
    int val
)
```

Parameters

val

Return Value

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.fromInt64 Method

Converts the specified long to string.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromInt64 (
    long val
)
```

Parameters

val

Return Value

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.fromPointString Method

Converts the specified comma separated string to a list of PointF objects.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static List<Point2D.Float> fromPointString (
    String s
)
```

Parameters

s
The comma separated string.

Return Value

A list of PointF objects.

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.fromSingle Method

Converts the specified float to string.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromSingle (
    float val
)
```

Parameters

val

Return Value

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.toBase64String Method

Converts the specified plainText string to Base64String

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String toBase64String (
    String plainText
)
```

Parameters

plainText
string

Return Value

string

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.toBoolean Method

Converts the specified string value to bool.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean toBoolean (
    String s
)
```

Parameters

s
The string value to convert from.

Return Value

A boolean value that is deserialized from the specified string.

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.toColor Method

Converts the specified string to Color. The string should be in the format #AARRGGBB.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Color toColor (
    String s
)
```

Parameters

s

Return Value

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.toColor1 Method

Converts the specified string to Color. The string should be in the format #AARRGGBB or rgba(0,0,0,0) default value Black

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Color toColor1 (
    String s
)
```

Parameters

s

Return Value

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.toDouble Method

Converts the specified string to double.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static double toDouble (
    String s
)
```

Parameters

s

Return Value

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.toImage Method

Converts the specified string value to image.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Image toImage (
    String s
)
```

Parameters

s

Return Value

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.toInt16 Method

Converts the specified string to short.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static short toInt16 (
    String s
)
```

Parameters

s

Return Value

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.toInt32 Method

Converts the specified string to int.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static int toInt32 (
    String s
)
```

Parameters

s

Return Value

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.toInt64 Method

Converts the specified string to long.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static long toInt64 (
    String s
)
```

Parameters

s

Return Value

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.toPointString Method

Converts the list of PointF objects to a comma separated string.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static String toPointString (
    List<Point2D.Float> points
)
```

Parameters

points
The list of PointF objects to convert.

Return Value

A comma separated string.

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convert.toSingle Method

Converts the specified string to float.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static float toSingle (
    String s
)
```

Parameters

s

Return Value

See Also

Convert Members
Convert Class
com.mindfusion.common Namespace

Convertible Interface

Syntax

Java
`public interface Convertible`

See Also

Convertible Members
com.mindfusion.common Namespace

Convertible Members

The following tables list the members exposed by the Convertible type.

Public Methods

	Name	Description
	toBoolean	Converts the value of this instance to an equivalent boolean value using the specified culture-specific formatting information.
	toByte	Converts the value of this instance to an equivalent byte value using the specified culture-specific formatting information.
	toChar	Converts the value of this instance to an equivalent char value using the specified culture-specific formatting information.
	toDateTime	Converts the value of this instance to an equivalent DateTime value using the specified culture-specific formatting information.
	toDecimal	Converts the value of this instance to an equivalent big integer value using the specified culture-specific formatting information.
	toDouble	Converts the value of this instance to an equivalent double value using the specified culture-specific formatting information.
	toInt	Converts the value of this instance to an equivalent integer value using the specified culture-specific formatting information.
	toLong	Converts the value of this instance to an equivalent long value using the specified culture-specific formatting information.
	toShort	Converts the value of this instance to an equivalent short value using the specified culture-specific formatting information.
	toSingle	Converts the value of this instance to an equivalent float value using the specified culture-specific formatting information.

	toString	Converts the value of this instance to an equivalent string value using the specified culture-specific formatting information.
	toType	Converts the value of this instance to an equivalent value of the specified type using the specified culture-specific formatting information.

See Also

Convertible Interface
com.mindfusion.common Namespace

Convertible Methods

Convertible.toBoolean Method

Converts the value of this instance to an equivalent boolean value using the specified culture-specific formatting information.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
boolean toBoolean (
    Locale locale
)
```

Parameters

locale
An object that supplies culture-specific formatting information.

Return Value

A boolean value equivalent to the value of this instance.

See Also

Convertible Members
Convertible Interface
com.mindfusion.common Namespace

Convertible.toByte Method

Converts the value of this instance to an equivalent byte value using the specified culture-specific formatting information.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
byte toByte (
    Locale locale
)
```

Parameters

locale
An object that supplies culture-specific formatting information.

Return Value

A byte value equivalent to the value of this instance.

See Also

Convertible Members
Convertible Interface
com.mindfusion.common Namespace

Convertible.toChar Method

Converts the value of this instance to an equivalent char value using the specified culture-specific formatting information.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
Character toChar (
    Locale locale
)
```

Parameters

locale
An object that supplies culture-specific formatting information.

Return Value

A char value equivalent to the value of this instance.

See Also

Convertible Members
Convertible Interface
com.mindfusion.common Namespace

Convertible.toDateTime Method

Converts the value of this instance to an equivalent DateTime value using the specified culture-specific formatting information.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
DateTime toDateTime (
    Locale locale
)
```

Parameters

locale
An object that supplies culture-specific formatting information.

Return Value

A DateTime value equivalent to the value of this instance.

See Also

Convertible Members
Convertible Interface
com.mindfusion.common Namespace

Convertible.toDecimal Method

Converts the value of this instance to an equivalent big integer value using the specified culture-specific formatting information.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
BigDecimal toDecimal (
    Locale locale
)
```

Parameters

locale
An object that supplies culture-specific formatting information.

Return Value

A big integer value equivalent to the value of this instance.

See Also

Convertible Members
Convertible Interface
com.mindfusion.common Namespace

Convertible.toDouble Method

Converts the value of this instance to an equivalent double value using the specified culture-specific formatting information.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
double toDouble (
    Locale locale
)
```

Parameters

locale
An object that supplies culture-specific formatting information.

Return Value

A double value equivalent to the value of this instance.

See Also

Convertible Members
Convertible Interface
com.mindfusion.common Namespace

Convertible.toInt Method

Converts the value of this instance to an equivalent integer value using the specified culture-specific formatting information.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
int toInt (
    Locale locale
)
```

Parameters

locale
An object that supplies culture-specific formatting information.

Return Value

An integer value equivalent to the value of this instance.

See Also

Convertible Members
Convertible Interface
com.mindfusion.common Namespace

Convertible.toLong Method

Converts the value of this instance to an equivalent long value using the specified culture-specific formatting information.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
long toLong (
    Locale locale
)
```

Parameters

locale
An object that supplies culture-specific formatting information.

Return Value

A long value equivalent to the value of this instance.

See Also

Convertible Members
Convertible Interface
com.mindfusion.common Namespace

Convertible.toShort Method

Converts the value of this instance to an equivalent short value using the specified culture-specific formatting information.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
short toShort (
    Locale locale
)
```

Parameters

locale
An object that supplies culture-specific formatting information.

Return Value

A short value equivalent to the value of this instance.

See Also

Convertible Members
Convertible Interface
com.mindfusion.common Namespace

Convertible.toSingle Method

Converts the value of this instance to an equivalent float value using the specified culture-specific formatting information.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
float toSingle (
    Locale locale
)
```

Parameters

locale
An object that supplies culture-specific formatting information.

Return Value

A float value equivalent to the value of this instance.

See Also

Convertible Members
Convertible Interface
com.mindfusion.common Namespace

Convertible.toString Method

Converts the value of this instance to an equivalent string value using the specified culture-specific formatting information.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
String toString (
    Locale locale
)
```

Parameters

locale

An object that supplies culture-specific formatting information.

Return Value

A string value equivalent to the value of this instance.

See Also

Convertible Members
Convertible Interface
com.mindfusion.common Namespace

Convertible.toType<T> Method

Converts the value of this instance to an equivalent value of the specified type using the specified culture-specific formatting information.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
<T> Object toType (
    Class<T> conversionType,
    Locale locale
)
```

Parameters

conversionType

locale
An object that supplies culture-specific formatting information.

Return Value

A string value equivalent to the value of this instance.

See Also

Convertible Members
Convertible Interface
com.mindfusion.common Namespace

DateTime Class

Immutable representation of date and time.

Syntax

Java

```
public class DateTime implements Comparable<T>
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.common.DateTime

See Also

DateTime Members
com.mindfusion.common Namespace

DateTime Members

Immutable representation of date and time.

The following tables list the members exposed by the DateTime type.

Public Constructors

	Name	Description
	DateTime	Overloaded.

Public Fields

	Name	Description
	MaxValue	Represents the largest possible value of **DateTime**.
	MinValue	Represents the smallest possible value of **DateTime**.

Public Methods

	Name	Description
	add	Returns a new **DateTime** that adds the value of the specified Duration to the value of this instance.
	addDays	Overloaded. Returns a new **DateTime** that adds the specified number of days to this instance.
	addHours	Overloaded. Returns a new **DateTime** that adds the specified number of hours to this instance.
	addMilliseconds	Overloaded. Returns a new **DateTime** that adds the specified number of milliseconds to this instance.
	addMinutes	Overloaded. Returns a new **DateTime** that adds the specified number of minutes to this instance.
	addMonths	Overloaded. Returns a new **DateTime** that adds the specified number of months to this instance.
	addSeconds	Overloaded. Returns a new **DateTime** that adds the specified number of seconds to this instance.
	addTicks	Returns a new **DateTime** that adds the specified number of ticks to this instance.
	addYears	Returns a new **DateTime** that adds the specified number of years to this instance.

	clone	Cloneable.clone implementation.
	compareTo	Comparable.compareTo implementation.
S	daysInMonth	Returns the number of days in the specified month and year.
	equals	Object.equals override.
	getDate	Gets the date component of this instance.
	getDay	Gets the day of month component of the date (1-31).
	getDayOfWeek	Gets the day of the week represented by this instance.
	getDayOfYear	Gets the day of the year represented by this instance.
	getHour	Gets the hour component of the date (0-23).
	getMillisecond	Gets the millisecond component of the date (0-999).
	getMinute	Gets the minute component of the date (0-59).
	getMonth	Gets the month component of the date (1-12).
	getSecond	Gets the second component of the date (0-59).
	getTicks	Gets the total number of ticks in this instance.
	getTimeOfDay	Gets the time of the day of this instance.
	getWeekOfYear	Gets the week of the year for the current date.
	getYear	Gets the year component of the date.
	hashCode	Object.hashCode override.
S	isLeapYear	Returns a value indicating whether the specified year is a leap year.
	isLessThan	Determines whether the current **DateTime** is less than the specified **DateTime**.
	isLessThanOrEqual	Determines whether the current **DateTime** is less than or equal to the specified **DateTime**.
	isLocalTime	Gets a value indicating whether the time represented by this instance is a local time.
	isUtcTime	Gets a value indicating whether the time represented by this instance is a UTC time.
	isWeekend	
S	now	Gets a **DateTime** object that is set to the current date and time in the default time zone and locale.
S	op_Addition	Adds a specified time interval to a specified date and time, yielding a new date and time.
S	op_Equality	Determines whether two specified instances of **DateTime** are equal.
S	op_GreaterThan	Determines whether one specified **DateTime** is greater than another specified **DateTime**.

	op_GreaterThanOrEqual	Determines whether one specified **DateTime** is greater than or equal to another specified **DateTime**.
	op_Inequality	Determines whether two specified instances of **DateTime** are not equal.
	op_LessThan	Determines whether one specified **DateTime** is less than another specified **DateTime**.
	op_LessThanOrEqual	Determines whether one specified **DateTime** is less than or equal to another specified **DateTime**.
	op_Subtraction	Overloaded.
	subtract	Overloaded.
	today	Gets a **DateTime** object that represents the current date in the default time one and locale.
	toJavaCalendar	Converts the stored date and time to a **Calendar** object.
	toJavaDateTime	Returns the stored **LocalDateTime** value.
	toLocalTime	Converts the value of the current **DateTime** object to local time.
	toLongDateString	Overloaded.
	toLongTimeString	Overloaded.
	toShortDateString	Overloaded.
	toShortTimeString	Overloaded.
	toString	Overloaded. Converts the value of the current **DateTime** object to its equivalent string representation.
	toUniversalTime	Converts the value of the current **DateTime** object to Coordinated Universal Time (UTC).
	utcNow	Gets a **DateTime** object that is set to the current date and time on this computer, expressed as the Coordinated Universal Time (UTC).

See Also

DateTime Class
com.mindfusion.common Namespace

DateTime Fields

DateTime.MaxValue Field

Represents the largest possible value of DateTime.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public static final DateTime MaxValue`

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.MinValue Field

Represents the smallest possible value of DateTime.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public static final DateTime MinValue`

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime Constructor

Overload List

Name	Description
DateTime (Date)	Initializes a new instance of the DateTime class, representing specified **Date**.
DateTime (int, int, int)	Initializes a new instance of the **DateTime** class with the specified values.
DateTime (int, int, int, int, int, int)	Initializes a new instance of the **DateTime** class with the specified values.
DateTime (int, int, int, int, int, int, int)	Initializes a new instance of the **DateTime** class with the specified values.
DateTime (long)	Initializes a new instance of the **DateTime** class with the specified number of ticks.
DateTime (LocalDateTime)	Initializes a new instance of the **DateTime** class, storing specified **LocalDateTime**.

See Also

DateTime Class
com.mindfusion.common Namespace

DateTime Constructor (Date)

Initializes a new instance of the DateTime class, representing specified **Date**.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime (
    Date date
)
```

Parameters

date
A **java.util.Date** instance.

See Also

DateTime Constructor Overload List
DateTime Class
com.mindfusion.common Namespace

DateTime Constructor (int, int, int)

Initializes a new instance of the DateTime class with the specified values.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime (
    int year,
    int month,
    int day
)
```

Parameters

year
The year component of the new date.

month
The month component of the new date.

day
The day component of the new date.

See Also

DateTime Constructor Overload List
DateTime Class
com.mindfusion.common Namespace

DateTime Constructor (int, int, int, int, int, int)

Initializes a new instance of the DateTime class with the specified values.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime (
    int year,
    int month,
    int day,
    int hour,
    int minute,
    int second
)
```

Parameters

year
The year component of the new date.

month
The month component of the new date.

day
The day component of the new date.

hour
The hour component of the new date.

minute
The minute component of the new date.

second
The second component of the new date.

See Also

DateTime Constructor Overload List
DateTime Class
com.mindfusion.common Namespace

DateTime Constructor (int, int, int, int, int, int, int)

Initializes a new instance of the DateTime class with the specified values.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime (
    int year,
    int month,
    int day,
    int hour,
    int minute,
    int second,
    int millisecond
)
```

Parameters

year
The year component of the new date.

month
The month component of the new date.

day
The day component of the new date.

hour
The hour component of the new date.

minute
The minute component of the new date.

second
The second component of the new date.

millisecond
The millisecond component of the new date.

See Also

DateTime Constructor Overload List
DateTime Class
com.mindfusion.common Namespace

DateTime Constructor (long)

Initializes a new instance of the DateTime class with the specified number of ticks.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime (
    long ticks
)
```

Parameters

ticks
A date and time expressed in number of 100-nanosecond intervals.

See Also

DateTime Constructor Overload List
DateTime Class
com.mindfusion.common Namespace

DateTime Constructor (LocalDateTime)

Initializes a new instance of the DateTime class, storing specified **LocalDateTime**.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime (
    LocalDateTime dateTime
)
```

Parameters

dateTime
A **java.time.LocalDateTime** instance specifying date and time.

See Also

DateTime Constructor Overload List
DateTime Class
com.mindfusion.common Namespace

DateTime Methods

DateTime.add Method

Returns a new DateTime that adds the value of the specified Duration to the value of this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime add (
    Duration value
)
```

Parameters

value
A Duration object that represents a positive or negative time interval.

Return Value

Returns a new DateTime that adds the value of the **Duration** to the value of this instance.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addDays Method

Returns a new DateTime that adds the specified number of days to this instance.

Overload List

Name	Description
DateTime.addDays (double)	Returns a new **DateTime** that adds the specified number of days to this instance.
DateTime.addDays (long)	Returns a new **DateTime** that adds the specified number of days to this instance.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addDays Method (double)

Returns a new DateTime that adds the specified number of days to this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime addDays (
    double value
)
```

Parameters

value
A number of days. The value parameter can be negative or positive.

Return Value

A DateTime whose value is the sum of the date and time represented by this instance and the number of days represented by value.

See Also

addDays Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addDays Method (long)

Returns a new DateTime that adds the specified number of days to this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime addDays (
    long value
)
```

Parameters

value
The number of days to add. The value parameter can be negative or positive.

Return Value

A DateTime whose value is the sum of the date and time represented by this instance and the number of days represented by value.

See Also

addDays Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addHours Method

Returns a new DateTime that adds the specified number of hours to this instance.

Overload List

Name	Description
DateTime.addHours (double)	Returns a new **DateTime** that adds the specified number of hours to this instance.
DateTime.addHours (long)	Returns a new **DateTime** that adds the specified number of hours to this instance.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addHours Method (double)

Returns a new DateTime that adds the specified number of hours to this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public DateTime addHours (
    double value
)
```

Parameters

value
A number of whole and fractional hours. The value parameter can be negative or positive.

Return Value

A DateTime whose value is the sum of the date and time represented by this instance and the number of hours represented by value.

See Also

addHours Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addHours Method (long)

Returns a new DateTime that adds the specified number of hours to this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public DateTime addHours (
    long value
)
```

Parameters

value
The number of hours to add. The value parameter can be negative or positive.

Return Value

A DateTime whose value is the sum of the date and time represented by this instance and the number of hours represented by value.

See Also

addHours Method Overload List
DateTime Members

DateTime.addMilliseconds Method

Returns a new DateTime that adds the specified number of milliseconds to this instance.

Overload List

Name	Description
DateTime.addMilliseconds (double)	Returns a new **DateTime** that adds the specified number of milliseconds to this instance.
DateTime.addMilliseconds (long)	Returns a new **DateTime** that adds the specified number of milliseconds to this instance.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addMilliseconds Method (double)

Returns a new DateTime that adds the specified number of milliseconds to this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime addMilliseconds (
    double value
)
```

Parameters

value
A number of whole and fractional milliseconds. The value parameter can be negative or positive. Note that this value is rounded to the nearest integer.

Return Value

A DateTime whose value is the sum of the date and time represented by this instance and the number of milliseconds represented by value.

See Also

addMilliseconds Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addMilliseconds Method (long)

Returns a new DateTime that adds the specified number of milliseconds to this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime addMilliseconds (
    long value
)
```

Parameters

value
The number of milliseconds to add. The value parameter can be negative or positive.

Return Value

A DateTime whose value is the sum of the date and time represented by this instance and the number of milliseconds represented by value.

See Also

addMilliseconds Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addMinutes Method

Returns a new DateTime that adds the specified number of minutes to this instance.

Overload List

Name	Description
DateTime.addMinutes (double)	Returns a new **DateTime** that adds the specified number of minutes to this instance.
DateTime.addMinutes (long)	Returns a new **DateTime** that adds the specified number of minutes to this instance.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addMinutes Method (double)

Returns a new DateTime that adds the specified number of minutes to this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public DateTime addMinutes (
    double value
)
```

Parameters

value
A number of whole and fractional minutes. The value parameter can be negative or positive.

Return Value

A DateTime whose value is the sum of the date and time represented by this instance and the number of minutes represented by value.

See Also

addMinutes Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addMinutes Method (long)

Returns a new DateTime that adds the specified number of minutes to this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public DateTime addMinutes (
    long value
)
```

Parameters

value
The number of minutes to add. The value parameter can be negative or positive.

Return Value

A DateTime whose value is the sum of the date and time represented by this instance and the number of minutes represented by value.

See Also

addMinutes Method Overload List
DateTime Members

DateTime.addMonths Method

Returns a new DateTime that adds the specified number of months to this instance.

Overload List

Name	Description
DateTime.addMonths (int)	Returns a new **DateTime** that adds the specified number of months to this instance.
DateTime.addMonths (long)	Returns a new **DateTime** that adds the specified number of months to this instance.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addMonths Method (int)

Returns a new DateTime that adds the specified number of months to this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime addMonths (
    int value
)
```

Parameters

value
A number of months. The months parameter can be negative or positive.

Return Value

A DateTime whose value is the sum of the date and time represented by this instance and months.

See Also

addMonths Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addMonths Method (long)

Returns a new DateTime that adds the specified number of months to this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime addMonths (
    long value
)
```

Parameters

value
A number of months. The months parameter can be negative or positive.

Return Value

A DateTime whose value is the sum of the date and time represented by this instance and months.

See Also

addMonths Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addSeconds Method

Returns a new DateTime that adds the specified number of seconds to this instance.

Overload List

Name	Description
DateTime.addSeconds (double)	Returns a new **DateTime** that adds the specified number of seconds to this instance.
DateTime.addSeconds (long)	Returns a new **DateTime** that adds the specified number of seconds to this instance.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addSeconds Method (double)

Returns a new DateTime that adds the specified number of seconds to this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public DateTime addSeconds (
    double value
)
```

Parameters

value
A number of whole and fractional seconds. The value parameter can be negative or positive.

Return Value

A DateTime whose value is the sum of the date and time represented by this instance and the number of seconds represented by value.

See Also

addSeconds Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addSeconds Method (long)

Returns a new DateTime that adds the specified number of seconds to this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public DateTime addSeconds (
    long value
)
```

Parameters

value
The number of seconds to add. The value parameter can be negative or positive.

Return Value

A DateTime whose value is the sum of the date and time represented by this instance and the number of seconds represented by value.

See Also

addSeconds Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addTicks Method

Returns a new DateTime that adds the specified number of ticks to this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime addTicks (
    long value
)
```

Parameters

value
A number ticks. The value parameter can be positive or negative.

Return Value

A DateTime whose value is the sum of the date and time represented by this instance and the time represented by value.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.addYears Method

Returns a new DateTime that adds the specified number of years to this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime addYears (
    int value
)
```

Parameters

value
A number of years. The value parameter can be negative or positive.

Return Value

A DateTime whose value is the sum of the date and time represented by this instance and the number of years represented by value.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.clone Method

Cloneable.clone implementation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime clone ()
```

Return Value

A DateTime object.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.compareTo Method

Comparable.compareTo implementation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int compareTo (
    DateTime o
)
```

Parameters

o
The DateTime object to compare to.

Return Value

A negative integer, zero, or a positive integer as this object is less than, equal to, or greater than the specified object.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.daysInMonth Method

Returns the number of days in the specified month and year.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static int daysInMonth (
    int year,
    int month
)
```

Parameters

year
The year.

month
The month (a number ranging from 1 to 12).

Return Value

The number of days in month for the specified year. For example, if month equals 2 for February, the return value is 28 or 29 depending upon whether year is a leap year.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.equals Method

Object.equals override.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean equals (
    Object value
)
```

Parameters

value
The object to compare to this instance.

Return Value

true if the value parameter equals the value of this instance; otherwise, false.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.getDate Method

Gets the date component of this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime getDate ()
```

Return Value

A new DateTime with the same date as this instance, and the time value set to 12:00:00 midnight (00:00:00).

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.getDay Method

Gets the day of month component of the date (1-31).

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int getDay ()
```

Return Value

The day component, expressed as a value between 1 and 31.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.getDayOfWeek Method

Gets the day of the week represented by this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DayOfWeek getDayOfWeek ()
```

Return Value

One of the DayOfWeek constants.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.getDayOfYear Method

Gets the day of the year represented by this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int getDayOfYear ()
```

Return Value

The day of the year, expressed as a value between 1 and 366.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.getHour Method

Gets the hour component of the date (0-23).

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int getHour ()
```

Return Value

The hour component, expressed as a value between 0 and 23.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.getMillisecond Method

Gets the millisecond component of the date (0-999).

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int getMillisecond ()
```

Return Value

The millisecond component, expressed as a value between 0 and 59.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.getMinute Method

Gets the minute component of the date (0-59).

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int getMinute ()
```

Return Value

The minute component, expressed as a value between 0 and 59.

See Also

DateTime Members
DateTime Class

DateTime.getMonth Method

Gets the month component of the date (1-12).

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public int getMonth ()
```

Return Value

The month component, expressed as a value between 1 and 12.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.getSecond Method

Gets the second component of the date (0-59).

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public int getSecond ()
```

Return Value

The second component, expressed as a value between 0 and 59.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.getTicks Method

Gets the total number of ticks in this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public long getTicks ()
```

Return Value

The number of ticks that represent the date and time of this instance. The value is between MinValue and MaxValue.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.getTimeOfDay Method

Gets the time of the day of this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Duration getTimeOfDay ()
```

Return Value

A Duration that represents the fraction of the day that has elapsed since midnight.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.getWeekOfYear Method

Gets the week of the year for the current date.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int getWeekOfYear ()
```

Return Value

The week number of the specified date.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.getYear Method

Gets the year component of the date.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public int getYear ()
```

Return Value

The year, between 1 and 9999.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.hashCode Method

Object.hashCode override.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public int hashCode ()
```

Return Value

A 32-bit signed integer hash code.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.isLeapYear Method

Returns a value indicating whether the specified year is a leap year.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean isLeapYear (
    int year
)
```

Parameters

year
A 4-digit year.

Return Value

true if *year* is a leap year; otherwise, false.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.isLessThan Method

Determines whether the current DateTime is less than the specified **DateTime**.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean isLessThan (
    DateTime d
)
```

Parameters

d
A DateTime.

Return Value

true if the current date is less than *d*; otherwise, false.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.isLessThanOrEqual Method

Determines whether the current DateTime is less than or equal to the specified **DateTime**.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public boolean isLessThanOrEqual (
    DateTime d
)
```

Parameters

d
A DateTime.

Return Value

true if the current date is less than or equal to *d*; otherwise, false.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.isLocalTime Method

Gets a value indicating whether the time represented by this instance is a local time.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public boolean isLocalTime ()
```

Return Value

true if the current time represents a local time; otherwise, false.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.isUtcTime Method

Gets a value indicating whether the time represented by this instance is a UTC time.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public boolean isUtcTime ()
```

Return Value

true if the current time represents a UTC time; otherwise, false.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.isWeekend Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public boolean isWeekend ()
```

Return Value

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.now Method

Gets a DateTime object that is set to the current date and time in the default time zone and locale.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static DateTime now ()
```

Return Value

A DateTime whose value is the current local date and time.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.op_Addition Method

Adds a specified time interval to a specified date and time, yielding a new date and time.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static DateTime op_Addition (
    DateTime d,
    Duration t
)
```

Parameters

d
A DateTime.

t
A Duration.

Return Value

A **DateTime** that is the sum of the values of *d* and *t*.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.op_Equality Method

Determines whether two specified instances of DateTime are equal.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean op_Equality (
    DateTime d1,
    DateTime d2
)
```

Parameters

d1
A DateTime.

d2
A **DateTime**.

Return Value

true if *d1* and *d2* represent the same date and time or are both null; otherwise, false.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.op_GreaterThan Method

Determines whether one specified DateTime is greater than another specified **DateTime**.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean op_GreaterThan (
    DateTime d1,
    DateTime d2
)
```

Parameters

d1
A DateTime.

d2
A **DateTime**.

Return Value

true if *d1* is greater than *d2*; otherwise, false.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.op_GreaterThanOrEqual Method

Determines whether one specified DateTime is greater than or equal to another specified **DateTime**.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean op_GreaterThanOrEqual (
    DateTime d1,
    DateTime d2
)
```

Parameters

d1
A DateTime.

d2
A **DateTime**.

Return Value

true if *d1* is greater than or equal to *d2*; otherwise, false.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.op_Inequality Method

Determines whether two specified instances of DateTime are not equal.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean op_Inequality (
    DateTime d1,
    DateTime d2
)
```

Parameters

d1
A DateTime.

d2
A **DateTime**.

Return Value

true if *d1* and *d2* do not represent the same date and time or are both null; otherwise, false.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.op_LessThan Method

Determines whether one specified DateTime is less than another specified **DateTime**.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean op_LessThan (
    DateTime d1,
    DateTime d2
)
```

Parameters

d1
A DateTime.

d2
A **DateTime**.

Return Value

true if *d1* is less than *d2*; otherwise, false.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.op_LessThanOrEqual Method

Determines whether one specified DateTime is less than or equal to another specified **DateTime**.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean op_LessThanOrEqual (
    DateTime d1,
    DateTime d2
)
```

Parameters

d1
A DateTime.

d2
A **DateTime**.

Return Value

true if *d1* is less than or equal to *d2*; otherwise, false.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.op_Subtraction Method

Overload List

Name	Description
DateTime.op_Subtraction (DateTime, DateTime)	Subtracts a specified date and time from another specified date and time and returns a time interval.
DateTime.op_Subtraction (DateTime, Duration)	Subtracts a specified time interval from a specified date and time and returns a new date and time.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.op_Subtraction Method (DateTime, DateTime)

Subtracts a specified date and time from another specified date and time and returns a time interval.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Duration op_Subtraction (
    DateTime d1,
    DateTime d2
)
```

Parameters

d1
A DateTime (the minuend).

d2
A **DateTime** (the subtrahend).

Return Value

A Duration that is the time interval between *d1* and *d2*; that is, *d1* minus *d2*.

See Also

op_Subtraction Method Overload List
DateTime Members

DateTime.op_Subtraction Method (DateTime, Duration)

Subtracts a specified time interval from a specified date and time and returns a new date and time.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static DateTime op_Subtraction (
    DateTime d,
    Duration t
)
```

Parameters

d
A DateTime.

t
A Duration.

Return Value

A **DateTime** whose value is the value of *d* minus the value of *t*.

See Also

op_Subtraction Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.subtract Method

Overload List

Name	Description
DateTime.subtract (DateTime)	Subtracts the specified date and time from this instance.
DateTime.subtract (Duration)	Subtracts the specified duration from this instance.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.subtract Method (DateTime)

Subtracts the specified date and time from this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Duration subtract (
    DateTime date
)
```

Parameters

date
A DateTime instance.

Return Value

A Duration interval equal to the date and time represented by this instance minus the date and time represented by value.

See Also

subtract Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.subtract Method (Duration)

Subtracts the specified duration from this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime subtract (
    Duration duration
)
```

Parameters

duration
A Duration instance.

Return Value

A DateTime equal to the date and time represented by this instance minus the time interval represented by value.

See Also

subtract Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.today Method

Gets a DateTime object that represents the current date in the default time one and locale.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static DateTime today ()
```

Return Value

A DateTime set to today's date, with the time component set to 00:00:00.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toJavaCalendar Method

Converts the stored date and time to a **Calendar** object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public Calendar toJavaCalendar ()
```

Return Value

A **java.util.Calendar** instance.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toJavaDateTime Method

Returns the stored **LocalDateTime** value.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public LocalDateTime toJavaDateTime ()`

Return Value

A **java.time.LocalDateTime** instance.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toLocalTime Method

Converts the value of the current DateTime object to local time.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public DateTime toLocalTime ()`

Return Value

A DateTime object representing the local time equivalent of the current date and time.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toLongDateString Method

Overload List

Name	Description
DateTime.toLongDateString ()	Converts the value of the current DateTime object to its equivalent long date string representation.
DateTime.toLongDateString (Locale)	Converts the value of the current **DateTime** object to its equivalent long date string representation.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toLongDateString Method ()

Converts the value of the current DateTime object to its equivalent long date string representation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String toLongDateString ()
```

Return Value

A string that contains the long date string representation of the current DateTime object.

See Also

toLongDateString Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toLongDateString Method (Locale)

Converts the value of the current DateTime object to its equivalent long date string representation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String toLongDateString (
    Locale locale
)
```

Parameters

locale
The locale that supplies culture-specific formatting information.

Return Value

A string that contains the long date string representation of the current DateTime object.

See Also

toLongDateString Method Overload List
DateTime Members

DateTime.toLongTimeString Method

Overload List

Name	Description
DateTime.toLongTimeString ()	Converts the value of the current DateTime object to its equivalent long time string representation.
DateTime.toLongTimeString (Locale)	Converts the value of the current **DateTime** object to its equivalent long time string representation.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toLongTimeString Method ()

Converts the value of the current DateTime object to its equivalent long time string representation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public String toLongTimeString ()`

Return Value

A string that contains the long time string representation of the current DateTime object.

See Also

toLongTimeString Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toLongTimeString Method (Locale)

Converts the value of the current DateTime object to its equivalent long time string representation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String toLongTimeString (
    Locale locale
)
```

Parameters

locale
The locale that supplies culture-specific formatting information.

Return Value

A string that contains the long time string representation of the current DateTime object.

See Also

toLongTimeString Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toShortDateString Method

Overload List

Name	Description
DateTime.toShortDateString ()	Converts the value of the current DateTime object to its equivalent short date string representation.
DateTime.toShortDateString (Locale)	Converts the value of the current **DateTime** object to its equivalent short date string representation.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toShortDateString Method ()

Converts the value of the current DateTime object to its equivalent short date string representation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String toShortDateString ()
```

Return Value

A string that contains the short date string representation of the current DateTime object.

See Also

toShortDateString Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toShortDateString Method (Locale)

Converts the value of the current DateTime object to its equivalent short date string representation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String toShortDateString (
    Locale locale
)
```

Parameters

locale
The locale that supplies culture-specific formatting information.

Return Value

A string that contains the short date string representation of the current DateTime object.

See Also

toShortDateString Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toShortTimeString Method

Overload List

Name	Description
DateTime.toShortTimeString ()	Converts the value of the current DateTime object to its equivalent short time string representation.
DateTime.toShortTimeString (Locale)	Converts the value of the current **DateTime** object to its equivalent short time string representation.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toShortTimeString Method ()

Converts the value of the current DateTime object to its equivalent short time string representation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String toShortTimeString ()
```

Return Value

A string that contains the short time string representation of the current DateTime object.

See Also

toShortTimeString Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toShortTimeString Method (Locale)

Converts the value of the current DateTime object to its equivalent short time string representation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String toShortTimeString (
    Locale locale
)
```

Parameters

locale
The locale that supplies culture-specific formatting information.

Return Value

A string that contains the short time string representation of the current DateTime object.

See Also

toShortTimeString Method Overload List
DateTime Members

DateTime.toString Method

Converts the value of the current DateTime object to its equivalent string representation.

Overload List

Name	Description
DateTime.toString ()	Converts the value of the current **DateTime** object to its equivalent string representation.
DateTime.toString (String)	Converts the value of the current **DateTime** object to its equivalent string representation using the specified format.
DateTime.toString (String, Locale)	Converts the value of the current **DateTime** object to its equivalent string representation using the specified format and locale.
DateTime.toString (String, Locale, boolean)	Converts the value of the current **DateTime** object to its equivalent string representation using the specified format and locale.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toString Method ()

Converts the value of the current DateTime object to its equivalent string representation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String toString ()
```

Return Value

A string representation of the value of the current DateTime object.

See Also

toString Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toString Method (String)

Converts the value of the current DateTime object to its equivalent string representation using the specified format.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String toString (
    String format
)
```

Parameters

format
A standard or custom date and time format string.

Return Value

A string representation of value of the current DateTime object as specified by *format*.

See Also

toString Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toString Method (String, Locale)

Converts the value of the current DateTime object to its equivalent string representation using the specified format and locale.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String toString (
    String format,
    Locale locale
)
```

Parameters

format
A standard or custom date and time format string.

locale
The locale that supplies culture-specific formatting information.

Return Value

A string representation of value of the current DateTime object as specified by *format*.

See Also

toString Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toString Method (String, Locale, boolean)

Converts the value of the current DateTime object to its equivalent string representation using the specified format and locale.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String toString (
    String format,
    Locale locale,
    boolean excelFormat
)
```

Parameters

format
A standard or custom date and time format string.

locale
The locale that supplies culture-specific formatting information.

excelFormat
true to accept Excel-compatible format strings, or **false** otherwise.

Return Value

A string representation of value of the current DateTime object as specified by *format*.

See Also

toString Method Overload List
DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.toUniversalTime Method

Converts the value of the current DateTime object to Coordinated Universal Time (UTC).

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DateTime toUniversalTime ()
```

Return Value

A DateTime object representing the UTC equivalent of the current date and time.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DateTime.utcNow Method

Gets a DateTime object that is set to the current date and time on this computer, expressed as the Coordinated Universal Time (UTC).

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public static DateTime utcNow ()`

Return Value

A DateTime whose value is the current UTC date and time.

See Also

DateTime Members
DateTime Class
com.mindfusion.common Namespace

DayOfWeek Enumeration

Specifies the day of the week.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public enum DayOfWeek`

Members

	Member name	Description
	Friday	Indicates Friday.

	Monday	Indicates Monday.
	Saturday	Indicates Saturday.
	Sunday	Indicates Sunday.
	Thursday	Indicates Thursday.
	Tuesday	Indicates Tuesday.
	Wednesday	Indicates Wednesday.

See Also

com.mindfusion.common Namespace

DefaultComparison<T> Class

Syntax

Java
`public class DefaultComparison<T> implements Comparison<T>`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.DefaultComparison(T)

See Also

DefaultComparison(T) Members
com.mindfusion.common Namespace

DefaultComparison(T) Members

The following tables list the members exposed by the DefaultComparison(T) type.

Public Constructors

	Name	Description
	DefaultComparison	

Public Methods

	Name	Description
	invoke	

See Also

DefaultComparison<T> Class
com.mindfusion.common Namespace

DefaultComparison(T) Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public DefaultComparison ()
```

See Also

DefaultComparison<T> Class
com.mindfusion.common Namespace

DefaultComparison(T) Methods

DefaultComparison(T).invoke Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int invoke (
    T x,
    T y
)
```

Parameters

x

y

Return Value

See Also

DefaultComparison(T) Members
DefaultComparison<T> Class
com.mindfusion.common Namespace

Double Class

Syntax

Java
`public class Double extends Dimension2D implements Externalizable`

Inheritance Hierarchy

java.lang.Object
  java.awt.geom.Dimension2D
    com.mindfusion.common.XDimension2D.Double

See Also

Double Members
com.mindfusion.common Namespace

Double Members

The following tables list the members exposed by the Double type.

Public Constructors

	Name	Description
	Double	Overloaded.

Public Fields

	Name	Description
	height	
	width	

Public Methods

	Name	Description
	clone	
	getHeight	
	getWidth	
	readExternal	
	setSize	
	writeExternal	

See Also

Double Class
com.mindfusion.common Namespace

Double Fields

Double.height Field

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public double height`

See Also

Double Members
Double Class
com.mindfusion.common Namespace

Double.width Field

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public double width`

See Also

Double Members
Double Class
com.mindfusion.common Namespace

Double Constructor

Overload List

Name	Description
Double ()	
Double (double, double)	

See Also

Double Class
com.mindfusion.common Namespace

Double Constructor ()

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Double ()
```

See Also

Double Constructor Overload List
Double Class
com.mindfusion.common Namespace

Double Constructor (double, double)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Double (
    double width,
    double height
)
```

Parameters

width

height

See Also

Double Constructor Overload List
Double Class
com.mindfusion.common Namespace

Double Methods

Double.clone Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Object clone ()
```

Return Value

See Also

Double Members
Double Class
com.mindfusion.common Namespace

Double.getHeight Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public double getHeight ()
```

Return Value

See Also

Double Members
Double Class
com.mindfusion.common Namespace

Double.getWidth Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public double getWidth ()
```

Return Value

See Also

Double Members
Double Class
com.mindfusion.common Namespace

Double.readExternal Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

Double Members
Double Class
com.mindfusion.common Namespace

Double.setSize Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public void setSize (
    double width,
    double height
)
```

Parameters

width

height

See Also

Double Members
Double Class
com.mindfusion.common Namespace

Double.writeExternal Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

Double Members
Double Class
com.mindfusion.common Namespace

Duration Class

Represents an immutable time interval.

Syntax

Java
`public class Duration implements Comparable<T>, Cloneable`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.common.Duration

See Also

Duration Members
com.mindfusion.common Namespace

Duration Members

Represents an immutable time interval.

The following tables list the members exposed by the Duration type.

Public Constructors

	Name	Description
	Duration	Overloaded.

Public Fields

	Name	Description
	MaxValue	Represents the largest possible value of **Duration**.
	MinValue	Represents the smallest possible value of **Duration**.
	TicksPerDay	Represents the number of ticks in 1 day.
	TicksPerHour	Represents the number of ticks in 1 hour.
	TicksPerMillisecond	Represents the number of ticks in 1 millisecond.

	TicksPerMinute	Represents the number of ticks in 1 minute.
	TicksPerSecond	Represents the number of ticks in 1 second.
	Zero	Represents zero duration.

Public Methods

	Name	Description
	add	Returns a new **Duration** object whose value is the sum of the specified **Duration** object and this instance.
	clone	Cloneable.clone implementation.
	compareTo	Comparable.compareTo implementation.
	equals	Object.equals override.
	fromDays	Overloaded.
	fromHours	Overloaded.
	fromMilliseconds	Overloaded.
	fromMinutes	Overloaded.
	fromSeconds	Overloaded.
	fromTicks	Returns a **Duration** that represents a specified time, where the specification is in units of ticks.
	getDays	Gets the days component of the time interval represented by the current **Duration** object.
	getHours	Gets the hours component of the time interval represented by the current **Duration** object.
	getMilliseconds	Gets the milliseconds component of the time interval represented by the current **Duration** object.
	getMinutes	Gets the minutes component of the time interval represented by the current **Duration** object.
	getSeconds	Gets the seconds component of the time interval represented by the current **Duration** object.
	getTicks	Gets the number of ticks that represent the value of the current **Duration** object.
	getTotalDays	Gets the value of the current **Duration** object expressed in whole days.
	getTotalHours	Gets the value of the current **Duration** expressed in whole and fractional hours.
	getTotalMilliseconds	Gets the total number of milliseconds in this instance.
	getTotalMinutes	Gets the value of the current **Duration** expressed in whole and fractional minutes.
	getTotalSeconds	Gets the value of the current **Duration** object expressed in whole and fractional seconds.

	hashCode	Object.hashCode override.
	negate	Returns a **Duration** whose value is the negated value of the specified instance.
S	op_Addition	Adds two specified **Duration** instances.
S	op_Equality	Indicates whether two **Duration** instances are equal.
S	op_GreaterThan	Indicates whether a specified **Duration** is greater than another specified **Duration**.
S	op_GreaterThanOrEqual	Indicates whether a specified **Duration** is greater than or equal to another specified **Duration**.
S	op_Inequality	Indicates whether two **Duration** instances are not equal.
S	op_LessThan	Indicates whether a specified **Duration** is less than another specified **Duration**.
S	op_LessThanOrEqual	Indicates whether a specified **Duration** is less than or equal to another specified **Duration**.
S	op_Subtraction	Subtracts a specified **Duration** from another specified **Duration**.
S	op_UnaryNegation	Returns a **Duration** whose value is the negated value of the specified instance.
	subtract	Returns a new **Duration** object whose value is the difference between the specified **Duration** object and this instance.
	toJavaDuration	Returns the stored **java.time.Duration**.
	toString	Returns the string representation of the value of this instance.

See Also

Duration Class
com.mindfusion.common Namespace

Duration Fields

Duration.MaxValue Field

Represents the largest possible value of Duration.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static final Duration MaxValue
```

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.MinValue Field

Represents the smallest possible value of Duration.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static final Duration MinValue
```

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.TicksPerDay Field

Represents the number of ticks in 1 day.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static final long TicksPerDay
```

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.TicksPerHour Field

Represents the number of ticks in 1 hour.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static final long TicksPerHour
```

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.TicksPerMillisecond Field

Represents the number of ticks in 1 millisecond.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static final long TicksPerMillisecond
```

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.TicksPerMinute Field

Represents the number of ticks in 1 minute.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static final long TicksPerMinute
```

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.TicksPerSecond Field

Represents the number of ticks in 1 second.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static final long TicksPerSecond
```

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.Zero Field

Represents zero duration.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public static final Duration Zero`

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration Constructor

Overload List

Name	Description
Duration ()	Initializes a new instance of the Duration class with zero length.
Duration (Duration)	Initializes a new instance of the **Duration** class, storing specified **java.time.Duration**.
Duration (int, int, int)	Initializes a new instance of the **Duration** class with the specified duration.
Duration (int, int, int, int)	Initializes a new instance of the **Duration** class with the specified values.
Duration (int, int, int, int, int)	Initializes a new instance of the **Duration** class with the specified value.
Duration (long)	Initializes a new instance of the **Duration** class with the specified length.

See Also

Duration Constructor ()

Initializes a new instance of the Duration class with zero length.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public Duration ()
```

See Also

Duration Constructor Overload List
Duration Class
com.mindfusion.common Namespace

Duration Constructor (Duration)

Initializes a new instance of the Duration class, storing specified **java.time.Duration**.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public Duration (
    Duration duration
)
```

Parameters

duration
A **java.time.Duration** instance specifying duration.

See Also

Duration Constructor Overload List
Duration Class
com.mindfusion.common Namespace

Duration Constructor (int, int, int)

Initializes a new instance of the Duration class with the specified duration.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Duration (
    int hours,
    int minutes,
    int seconds
)
```

Parameters

hours
The hours component of the new duration.

minutes
The minutes component of the new duration.

seconds
The seconds component of the new duration.

See Also

Duration Constructor Overload List
Duration Class
com.mindfusion.common Namespace

Duration Constructor (int, int, int, int)

Initializes a new instance of the Duration class with the specified values.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Duration (
    int days,
    int hours,
    int minutes,
    int seconds
)
```

Parameters

days
The hours component of the new duration.

hours
The hours component of the new duration.

minutes
The minutes component of the new duration.

seconds
The seconds component of the new duration.

See Also

Duration Constructor Overload List
Duration Class
com.mindfusion.common Namespace

Duration Constructor (int, int, int, int, int)

Initializes a new instance of the Duration class with the specified value.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Duration (
    int days,
    int hours,
    int minutes,
    int seconds,
    int milliseconds
)
```

Parameters

days
The hours component of the new duration.

hours
The hours component of the new duration.

minutes
The minutes component of the new duration.

seconds
The seconds component of the new duration.

milliseconds
The milliseconds component of the new duration.

See Also

Duration Constructor Overload List
Duration Class
com.mindfusion.common Namespace

Duration Constructor (long)

Initializes a new instance of the Duration class with the specified length.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Duration (
    long ticks
)
```

Parameters

ticks
A duration expressed in number of 100-nanosecond intervals.

See Also

Duration Constructor Overload List
Duration Class
com.mindfusion.common Namespace

Duration Methods

Duration.add Method

Returns a new Duration object whose value is the sum of the specified **Duration** object and this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Duration add (
    Duration duration
)
```

Parameters

duration
A Duration.

Return Value

A new object that represents the value of this instance plus the value of *duration*.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.clone Method

Cloneable.clone implementation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Duration clone ()
```

Return Value

A Duration object.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.compareTo Method

Comparable.compareTo implementation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int compareTo (
    Duration o
)
```

Parameters

o
The Duration object to compare to.

Return Value

A negative integer, zero, or a positive integer as this object is less than, equal to, or greater than the specified object.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.equals Method

Object.equals override.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean equals (
    Object value
)
```

Parameters

value
The object to compare to this instance.

Return Value

true if the value parameter equals the value of this instance; otherwise, false.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.fromDays Method

Overload List

Name	Description
Duration.fromDays (double)	Returns a Duration that represents a specified number of days, where the specification is accurate to the nearest millisecond.
Duration.fromDays (long)	Returns a **Duration** that represents a specified number of days, where the specification is accurate to the nearest millisecond.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.fromDays Method (double)

Returns a Duration that represents a specified number of days, where the specification is accurate to the nearest millisecond.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Duration fromDays (
    double value
)
```

Parameters

value
A number of days, accurate to the nearest millisecond.

Return Value

A Duration that represents *value*.

See Also

fromDays Method Overload List
Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.fromDays Method (long)

Returns a Duration that represents a specified number of days, where the specification is accurate to the nearest millisecond.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Duration fromDays (
    long value
)
```

Parameters

value
A number of days, accurate to the nearest millisecond.

Return Value

A Duration that represents *value*.

See Also

fromDays Method Overload List
Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.fromHours Method

Overload List

Name	Description
Duration.fromHours (double)	Returns a Duration that represents a specified number of hours, where the specification is accurate to the nearest millisecond.
Duration.fromHours (long)	Returns a **Duration** that represents a specified number of hours, where the specification is accurate to the nearest millisecond.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.fromHours Method (double)

Returns a Duration that represents a specified number of hours, where the specification is accurate to the nearest millisecond.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static Duration fromHours (
    double value
)
```

Parameters

value
A number of hours accurate to the nearest millisecond.

Return Value

A Duration that represents *value*.

See Also

fromHours Method Overload List
Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.fromHours Method (long)

Returns a Duration that represents a specified number of hours, where the specification is accurate to the nearest millisecond.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static Duration fromHours (
    long value
)
```

Parameters

value
A number of hours accurate to the nearest millisecond.

Return Value

A Duration that represents *value*.

See Also

fromHours Method Overload List
Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.fromMilliseconds Method

Overload List

Name	Description
Duration.fromMilliseconds (double)	Returns a Duration that represents a specified number of milliseconds.
Duration.fromMilliseconds (long)	Returns a **Duration** that represents a specified number of milliseconds.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.fromMilliseconds Method (double)

Returns a Duration that represents a specified number of milliseconds.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Duration fromMilliseconds (
    double value
)
```

Parameters

value
A number of milliseconds.

Return Value

A Duration that represents *value*.

See Also

fromMilliseconds Method Overload List
Duration Members

Duration.fromMilliseconds Method (long)

Returns a Duration that represents a specified number of milliseconds.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Duration fromMilliseconds (
    long value
)
```

Parameters

value
A number of milliseconds.

Return Value

A Duration that represents *value*.

See Also

fromMilliseconds Method Overload List
Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.fromMinutes Method

Overload List

Name	Description
Duration.fromMinutes (double)	Returns a Duration that represents a specified number of minutes, where the specification is accurate to the nearest millisecond.
Duration.fromMinutes (long)	Returns a **Duration** that represents a specified number of minutes, where the specification is accurate to the nearest millisecond.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.fromMinutes Method (double)

Returns a Duration that represents a specified number of minutes, where the specification is accurate to the nearest millisecond.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Duration fromMinutes (
    double value
)
```

Parameters

value
A number of minutes, accurate to the nearest millisecond.

Return Value

A Duration that represents *value*.

See Also

fromMinutes Method Overload List
Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.fromMinutes Method (long)

Returns a Duration that represents a specified number of minutes, where the specification is accurate to the nearest millisecond.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Duration fromMinutes (
    long value
)
```

Parameters

value
A number of minutes, accurate to the nearest millisecond.

Return Value

A Duration that represents *value*.

See Also

fromMinutes Method Overload List
Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.fromSeconds Method

Overload List

Name	Description
Duration.fromSeconds (double)	Returns a Duration that represents a specified number of seconds, where the specification is accurate to the nearest millisecond.
Duration.fromSeconds (long)	Returns a **Duration** that represents a specified number of seconds, where the specification is accurate to the nearest millisecond.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.fromSeconds Method (double)

Returns a Duration that represents a specified number of seconds, where the specification is accurate to the nearest millisecond.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Duration fromSeconds (
    double value
)
```

Parameters

value
A number of seconds, accurate to the nearest millisecond.

Return Value

A Duration that represents *value*.

See Also

fromSeconds Method Overload List
Duration Members

Duration.fromSeconds Method (long)

Returns a Duration that represents a specified number of seconds, where the specification is accurate to the nearest millisecond.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Duration fromSeconds (
    long value
)
```

Parameters

value
A number of seconds, accurate to the nearest millisecond.

Return Value

A Duration that represents *value*.

See Also

fromSeconds Method Overload List
Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.fromTicks Method

Returns a Duration that represents a specified time, where the specification is in units of ticks.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Duration fromTicks (
    long value
)
```

Parameters

value
A number of ticks that represent a time.

Return Value

A Duration with a value of *value*.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.getDays Method

Gets the days component of the time interval represented by the current Duration object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public int getDays ()
```

Return Value

The day component of this instance. The return value can be positive or negative.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.getHours Method

Gets the hours component of the time interval represented by the current Duration object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public int getHours ()
```

Return Value

The hour component of the current Duration object. The return value ranges from -23 through 23.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.getMilliseconds Method

Gets the milliseconds component of the time interval represented by the current Duration object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public int getMilliseconds ()
```

Return Value

The millisecond component of the current Duration object. The return value ranges from -999 through 999.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.getMinutes Method

Gets the minutes component of the time interval represented by the current Duration object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public int getMinutes ()
```

Return Value

The minute component of the current Duration object. The return value ranges from -59 through 59.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.getSeconds Method

Gets the seconds component of the time interval represented by the current Duration object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public int getSeconds ()
```

Return Value

The second component of the current Duration object. The return value ranges from -59 through 59.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.getTicks Method

Gets the number of ticks that represent the value of the current Duration object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public long getTicks ()
```

Return Value

The number of ticks contained in this instance.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.getTotalDays Method

Gets the value of the current Duration object expressed in whole days.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public double getTotalDays ()
```

Return Value

The total number of days represented by this instance.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.getTotalHours Method

Gets the value of the current Duration expressed in whole and fractional hours.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public double getTotalHours ()
```

Return Value

The total number of hours represented by this instance.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.getTotalMilliseconds Method

Gets the total number of milliseconds in this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public long getTotalMilliseconds ()
```

Return Value

The total number of milliseconds.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.getTotalMinutes Method

Gets the value of the current Duration expressed in whole and fractional minutes.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public double getTotalMinutes ()
```

Return Value

The total number of minutes represented by this instance.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.getTotalSeconds Method

Gets the value of the current Duration object expressed in whole and fractional seconds.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public double getTotalSeconds ()
```

Return Value

The total number of seconds represented by this instance.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.hashCode Method

Object.hashCode override.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int hashCode ()
```

Return Value

A 32-bit signed integer hash code.

See Also

Duration Members
Duration Class

Duration.negate Method

Returns a Duration whose value is the negated value of the specified instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Duration negate ()
```

Return Value

A Duration with the same numeric value as this instance, but the opposite sign.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.op_Addition Method

Adds two specified Duration instances.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Duration op_Addition (
    Duration d1,
    Duration d2
)
```

Parameters

d1
A Duration.

d2
A **Duration**.

Return Value

A **Duration** whose value is the sum of the values of *d1* and *d2*.

See Also

Duration.op_Equality Method

Indicates whether two Duration instances are equal.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean op_Equality (
    Duration d1,
    Duration d2
)
```

Parameters

d1
A Duration.

d2
A **Duration**.

Return Value

true if the values of *d1* and *d2* are equal or both are null; otherwise, false.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.op_GreaterThan Method

Indicates whether a specified Duration is greater than another specified **Duration**.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean op_GreaterThan (
    Duration d1,
    Duration d2
)
```

Parameters

d1
A Duration.

d2
A **Duration**.

Return Value

true if the value of *d1* is greater than the value of *d2*; otherwise, false.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.op_GreaterThanOrEqual Method

Indicates whether a specified Duration is greater than or equal to another specified **Duration**.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean op_GreaterThanOrEqual (
    Duration d1,
    Duration d2
)
```

Parameters

d1
A Duration.

d2
A **Duration**.

Return Value

true if the value of *d1* is greater than or equal to the value of *d2*; otherwise, false.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.op_Inequality Method

Indicates whether two Duration instances are not equal.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean op_Inequality (
    Duration d1,
    Duration d2
)
```

Parameters

d1

A Duration.

d2

A **Duration**.

Return Value

true if the values of *d1* and *d2* are not equal; otherwise, false.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.op_LessThan Method

Indicates whether a specified Duration is less than another specified **Duration**.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean op_LessThan (
    Duration d1,
    Duration d2
)
```

Parameters

d1

A Duration.

d2

A **Duration**.

Return Value

true if the value of *d1* is less than the value of *d2*; otherwise, false.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.op_LessThanOrEqual Method

Indicates whether a specified Duration is less than or equal to another specified **Duration**.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean op_LessThanOrEqual (
    Duration d1,
    Duration d2
)
```

Parameters

d1
A Duration.

d2
A **Duration**.

Return Value

true if the value of *d1* is less than or equal to the value of *d2*; otherwise, false.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.op_Subtraction Method

Subtracts a specified Duration from another specified **Duration**.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Duration op_Subtraction (
    Duration d1,
    Duration d2
)
```

Parameters

d1
A Duration.

d2
A **Duration**.

Return Value

A **Duration** whose value is the result of the value of *d1* minus the value of *d2*.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.op_UnaryNegation Method

Returns a Duration whose value is the negated value of the specified instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Duration op_UnaryNegation (
    Duration d1
)
```

Parameters

d1
A Duration.

Return Value

A **Duration** with the same numeric value as this instance, but the opposite sign.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.subtract Method

Returns a new Duration object whose value is the difference between the specified **Duration** object and this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Duration subtract (
    Duration duration
)
```

Parameters

duration
A Duration.

Return Value

A new time interval whose value is the result of the value of this instance minus the value of *duration*.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.toJavaDuration Method

Returns the stored **java.time.Duration**.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Duration toJavaDuration ()
```

Return Value

A **java.time.Duration** instance.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

Duration.toString Method

Returns the string representation of the value of this instance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String toString ()
```

Return Value

A string representation of the value of the current Duration object.

See Also

Duration Members
Duration Class
com.mindfusion.common Namespace

EqualityComparer<T> Interface

Syntax

Java
`public interface EqualityComparer<T>`

See Also

EqualityComparer(T) Members
com.mindfusion.common Namespace

EqualityComparer(T) Members

The following tables list the members exposed by the EqualityComparer(T) type.

Public Methods

	Name	Description
	equals	Determines whether the specified objects are equal.
	hashCode	Returns a hash code for the specified object.

See Also

EqualityComparer<T> Interface
com.mindfusion.common Namespace

EqualityComparer(T) Methods

EqualityComparer(T).equals Method

Determines whether the specified objects are equal.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
boolean equals (
    T x,
    T y
)
```

Parameters

x
The first object of type T to compare.

y

The second object of type T to compare.

Return Value

true if the specified objects are equal; otherwise, false.

See Also

EqualityComparer(T) Members
EqualityComparer<T> Interface
com.mindfusion.common Namespace

EqualityComparer(T).hashCode Method

Returns a hash code for the specified object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
int hashCode (
    T obj
)
```

Parameters

obj
The **Object** for which a hash code is to be returned.

Return Value

A hash code for the specified object.

See Also

EqualityComparer(T) Members
EqualityComparer<T> Interface
com.mindfusion.common Namespace

Equatable<T> Interface

Syntax

Java

```
public interface Equatable<T>
```

See Also

Equatable(T) Members
com.mindfusion.common Namespace

Equatable(T) Members

The following tables list the members exposed by the Equatable(T) type.

Public Methods

	Name	Description
	isEqualTo	

See Also

Equatable<T> Interface
com.mindfusion.common Namespace

Equatable(T) Methods

Equatable(T).isEqualTo Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
boolean isEqualTo (
    T t
)
```

Parameters

t

Return Value

See Also

Equatable(T) Members
Equatable<T> Interface
com.mindfusion.common Namespace

ExtendedArrayList<T> Class

Represents an ArrayList which is capable to sort and reverse itself.

Syntax

Java

```
public class ExtendedArrayList<T> extends ArrayList<E>
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      java.util.ArrayList(E)
        com.mindfusion.common.ExtendedArrayList(T)

See Also

ExtendedArrayList(T) Members
com.mindfusion.common Namespace

ExtendedArrayList(T) Members

Represents an ArrayList which is capable to sort and reverse itself.

The following tables list the members exposed by the ExtendedArrayList(T) type.

Public Constructors

	Name	Description
	ExtendedArrayList	Overloaded.

Public Methods

	Name	Description
	getRange	
	last	
	reverse	
	sort	
	toArray	

See Also

ExtendedArrayList<T> Class
com.mindfusion.common Namespace

ExtendedArrayList(T) Constructor

Overload List

Name	Description
ExtendedArrayList(T) ()	
ExtendedArrayList(T) (Collection)	
ExtendedArrayList(T) (int)	

ExtendedArrayList(T) (Iterable)	

See Also

ExtendedArrayList<T> Class
com.mindfusion.common Namespace

ExtendedArrayList(T) Constructor ()

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public ExtendedArrayList ()
```

See Also

ExtendedArrayList(T) Constructor Overload List
ExtendedArrayList<T> Class
com.mindfusion.common Namespace

ExtendedArrayList(T) Constructor (Collection<? extends T>)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public ExtendedArrayList (
    Collection<? extends T> c
)
```

Parameters

c

See Also

ExtendedArrayList(T) Constructor Overload List
ExtendedArrayList<T> Class
com.mindfusion.common Namespace

ExtendedArrayList(T) Constructor (int)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public ExtendedArrayList (
    int initialCapacity
)
```

Parameters

initialCapacity

See Also

ExtendedArrayList(T) Constructor Overload List
ExtendedArrayList<T> Class
com.mindfusion.common Namespace

ExtendedArrayList(T) Constructor (Iterable<? extends T>)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public ExtendedArrayList (
    Iterable<? extends T> c
)
```

Parameters

c

See Also

ExtendedArrayList(T) Constructor Overload List
ExtendedArrayList<T> Class
com.mindfusion.common Namespace

ExtendedArrayList(T) Methods

ExtendedArrayList(T).getRange Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public ExtendedArrayList<T> getRange (
    int index,
```

```
    int count
)
```

Parameters

index

count

Return Value

See Also

ExtendedArrayList(T) Members
ExtendedArrayList<T> Class
com.mindfusion.common Namespace

ExtendedArrayList(T).last Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public T last ()
```

Return Value

See Also

ExtendedArrayList(T) Members
ExtendedArrayList<T> Class
com.mindfusion.common Namespace

ExtendedArrayList(T).reverse Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void reverse ()
```

See Also

ExtendedArrayList(T) Members
ExtendedArrayList<T> Class
com.mindfusion.common Namespace

ExtendedArrayList(T).sort Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void sort (
    Comparison<T> comparison
)
```

Parameters

comparison

See Also

ExtendedArrayList(T) Members
ExtendedArrayList<T> Class
com.mindfusion.common Namespace

ExtendedArrayList(T).toArray<_T> Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public <_T> _T[] toArray (
    Class<? extends T> c
)
```

Parameters

c

Return Value

See Also

ExtendedArrayList(T) Members
ExtendedArrayList<T> Class
com.mindfusion.common Namespace

ExtendedHashMap<K, V> Class

Represents a HashMap which provides a tryGetValue method.

Syntax

Java
`public class ExtendedHashMap<K, V> extends HashMap<K, V> implements Iterable<T>`

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractMap(K, V)
    java.util.HashMap(K, V)
      com.mindfusion.common.ExtendedHashMap(K, V)

See Also

ExtendedHashMap(K, V) Members
com.mindfusion.common Namespace

ExtendedHashMap(K, V) Members

Represents a HashMap which provides a tryGetValue method.

The following tables list the members exposed by the ExtendedHashMap(K, V) type.

Public Constructors

	Name	Description
	ExtendedHashMap	Overloaded.

Public Methods

	Name	Description
	iterator	
	tryGetValue	

See Also

ExtendedHashMap<K, V> Class
com.mindfusion.common Namespace

ExtendedHashMap(K, V) Constructor

Overload List

Name	Description
ExtendedHashMap(K, V) ()	
ExtendedHashMap(K, V) (int)	
ExtendedHashMap(K, V) (int, float)	

See Also

ExtendedHashMap(K, V) Constructor ()

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public ExtendedHashMap ()
```

See Also

ExtendedHashMap(K, V) Constructor Overload List
ExtendedHashMap<K, V> Class
com.mindfusion.common Namespace

ExtendedHashMap(K, V) Constructor (int)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public ExtendedHashMap (
    int initialCapacity
)
```

Parameters

initialCapacity

See Also

ExtendedHashMap(K, V) Constructor Overload List
ExtendedHashMap<K, V> Class
com.mindfusion.common Namespace

ExtendedHashMap(K, V) Constructor (int, float)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public ExtendedHashMap (
    int initialCapacity,
    float loadFactor
)
```

Parameters

initialCapacity

loadFactor

See Also

ExtendedHashMap(K, V) Constructor Overload List
ExtendedHashMap<K, V> Class
com.mindfusion.common Namespace

ExtendedHashMap(K, V) Methods

ExtendedHashMap(K, V).iterator Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Iterator<Map.Entry<K, V>> iterator ()
```

Return Value

See Also

ExtendedHashMap(K, V) Members
ExtendedHashMap<K, V> Class
com.mindfusion.common Namespace

ExtendedHashMap(K, V).tryGetValue Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean tryGetValue (
    Object key,
    ByRef<V> value
)
```

Parameters

key

value

Return Value

See Also

ExtendedHashMap(K, V) Members
ExtendedHashMap<K, V> Class
com.mindfusion.common Namespace

Formattable Interface

Syntax

Java
`public interface Formattable`

See Also

Formattable Members
com.mindfusion.common Namespace

Formattable Members

The following tables list the members exposed by the Formattable type.

Public Methods

	Name	Description
	toString	

See Also

Formattable Interface
com.mindfusion.common Namespace

Formattable Methods

Formattable.toString Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
String toString (
    String format,
    Locale locale
)
```

Parameters

format

locale

Return Value

See Also

Formattable Members
Formattable Interface
com.mindfusion.common Namespace

Helper Class

Provides utility methods when translating from C# to Java.

Syntax

Java
`public class Helper`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.Helper

See Also

Helper Members
com.mindfusion.common Namespace

Helper Members

Provides utility methods when translating from C# to Java.

The following tables list the members exposed by the Helper type.

Public Constructors

	Name	Description
	Helper	

Public Methods

	Name	Description

	as	Performs a try cast of o to class c.
	getLength	Overloaded.
	nc	Performs a null-coalescing of the specified arguments.

See Also

Helper Class
com.mindfusion.common Namespace

Helper Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Helper ()
```

See Also

Helper Class
com.mindfusion.common Namespace

Helper Methods

Helper.as<_T, _S> Method

Performs a try cast of o to class c.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <_T, _S> _T as (
    _S o,
    Class<?> c
)
```

Parameters

o

c

Return Value

See Also

Helper.getLength Method

Overload List

Name	Description
Helper.getLength (double[][], int)	Returns the specified dimension of the specified two-dimensional array.
Helper.getLength (short[][], int)	Returns the specified dimension of the specified two-dimensional array.
Helper.getLength (int[][], int)	Returns the specified dimension of the specified two-dimensional array.
Helper.getLength (float[][], int)	Returns the specified dimension of the specified two-dimensional array.
Helper.getLength<_T> (_T[][], int)	

See Also

Helper Members
Helper Class
com.mindfusion.common Namespace

Helper.getLength Method (double[][], int)

Returns the specified dimension of the specified two-dimensional array.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static int getLength (
    double[][] array,
    int dimension
)
```

Parameters

array

dimension

Return Value

See Also

getLength Method Overload List
Helper Members
Helper Class
com.mindfusion.common Namespace

Helper.getLength Method (short[][], int)

Returns the specified dimension of the specified two-dimensional array.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static int getLength (
    short[][] array,
    int dimension
)
```

Parameters

array

dimension

Return Value

See Also

getLength Method Overload List
Helper Members
Helper Class
com.mindfusion.common Namespace

Helper.getLength Method (int[][], int)

Returns the specified dimension of the specified two-dimensional array.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static int getLength (
    int[][] array,
    int dimension
)
```

Parameters

array

dimension

Return Value

See Also

getLength Method Overload List
Helper Members
Helper Class
com.mindfusion.common Namespace

Helper.getLength Method (float[][], int)

Returns the specified dimension of the specified two-dimensional array.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static int getLength (
    float[][] array,
    int dimension
)
```

Parameters

array

dimension

Return Value

See Also

getLength Method Overload List
Helper Members
Helper Class
com.mindfusion.common Namespace

Helper.getLength<_T> Method (_T[][], int)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <_T> int getLength (
    _T[][] array,
    int dimension
)
```

Parameters

array

dimension

Return Value

See Also

getLength Method Overload List
Helper Members
Helper Class
com.mindfusion.common Namespace

Helper.nc<_T, _S1, _S2> Method

Performs a null-coalescing of the specified arguments.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static <_T, _S1, _S2> _T nc (
    _S1 s1,
    _S2 s2
)
```

Parameters

s1

s2

Return Value

See Also

Helper Members
Helper Class
com.mindfusion.common Namespace

HorizontalAlignment Class

Specifies how an object or text is horizontally aligned relative to an element.

Syntax

Java

```
public class HorizontalAlignment
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.HorizontalAlignment

See Also

HorizontalAlignment Members

Specifies how an object or text is horizontally aligned relative to an element.

The following tables list the members exposed by the HorizontalAlignment type.

Public Fields

	Name	Description
	Center	The object or text is aligned in the center of the control element.
	Left	The object or text is aligned on the left of the control element.
	Right	The object or text is aligned on the right of the control element.

See Also

HorizontalAlignment Class
com.mindfusion.common Namespace

HorizontalAlignment Fields

HorizontalAlignment.Center Field

The object or text is aligned in the center of the control element.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public static final int Center`

See Also

HorizontalAlignment Members
HorizontalAlignment Class
com.mindfusion.common Namespace

HorizontalAlignment.Left Field

The object or text is aligned on the left of the control element.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public static final int Left`

See Also

HorizontalAlignment Members
HorizontalAlignment Class
com.mindfusion.common Namespace

HorizontalAlignment.Right Field

The object or text is aligned on the right of the control element.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public static final int Right`

See Also

HorizontalAlignment Members
HorizontalAlignment Class
com.mindfusion.common Namespace

HorizontalAlignment Enumeration

Specifies how an object or text is horizontally aligned relative to an element.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public enum HorizontalAlignment`

Members

	Member name	Description
	Center	The object or text is aligned in the center of the control element.
	Left	The object or text is aligned on the left of the control element.

	Right	The object or text is aligned on the right of the control element.

See Also

com.mindfusion.common Namespace

IntegerComparison Class

Syntax

Java
`public class IntegerComparison implements Comparison<T>`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.IntegerComparison

See Also

IntegerComparison Members
com.mindfusion.common Namespace

IntegerComparison Members

The following tables list the members exposed by the IntegerComparison type.

Public Constructors

	Name	Description
	IntegerComparison	

Public Methods

	Name	Description
	invoke	

See Also

IntegerComparison Class
com.mindfusion.common Namespace

IntegerComparison Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public IntegerComparison ()
```

See Also

IntegerComparison Class
com.mindfusion.common Namespace

IntegerComparison Methods

IntegerComparison.invoke Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public int invoke (
    Integer x,
    Integer y
)
```

Parameters

x

y

Return Value

See Also

IntegerComparison Members
IntegerComparison Class
com.mindfusion.common Namespace

InvalidFormatException Class

Thrown during deserialization if the supplied source is not in the appropriate format.

Syntax

```
Java
public class InvalidFormatException extends RuntimeException
```

Inheritance Hierarchy

java.lang.Object
  java.lang.Throwable
    java.lang.Exception
      java.lang.RuntimeException
        com.mindfusion.common.InvalidFormatException

See Also

InvalidFormatException Members
com.mindfusion.common Namespace

InvalidFormatException Members

Thrown during deserialization if the supplied source is not in the appropriate format.

The following tables list the members exposed by the InvalidFormatException type.

Public Constructors

	Name	Description
	InvalidFormatException	Overloaded.

See Also

InvalidFormatException Class
com.mindfusion.common Namespace

InvalidFormatException Constructor

Overload List

Name	Description
InvalidFormatException ()	Initializes a new instance of the InvalidFormatException class.
InvalidFormatException (String)	Initializes a new instance of the **InvalidFormatException** class.

See Also

InvalidFormatException Class
com.mindfusion.common Namespace

InvalidFormatException Constructor ()

Initializes a new instance of the InvalidFormatException class.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public InvalidFormatException ()
```

See Also

InvalidFormatException Constructor Overload List
InvalidFormatException Class
com.mindfusion.common Namespace

InvalidFormatException Constructor (String)

Initializes a new instance of the InvalidFormatException class.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public InvalidFormatException (
    String message
)
```

Parameters

message

See Also

InvalidFormatException Constructor Overload List
InvalidFormatException Class
com.mindfusion.common Namespace

InvalidOperationException Class

Thrown when performing an operation that is considered illegal in the current context.

Syntax

```
Java
public class InvalidOperationException extends RuntimeException
```

Inheritance Hierarchy

java.lang.Object
  java.lang.Throwable
    java.lang.Exception
      java.lang.RuntimeException
        com.mindfusion.common.InvalidOperationException

See Also

InvalidOperationException Members
com.mindfusion.common Namespace

InvalidOperationException Members

Thrown when performing an operation that is considered illegal in the current context.

The following tables list the members exposed by the InvalidOperationException type.

Public Constructors

	Name	Description
	InvalidOperationException	Overloaded.

See Also

InvalidOperationException Class
com.mindfusion.common Namespace

InvalidOperationException Constructor

Overload List

Name	Description
InvalidOperationException ()	Initializes a new instance of the InvalidOperationException class.
InvalidOperationException (String)	Initializes a new instance of the **InvalidOperationException** class.

See Also

InvalidOperationException Class
com.mindfusion.common Namespace

InvalidOperationException Constructor ()

Initializes a new instance of the InvalidOperationException class.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public InvalidOperationException ()`

See Also

InvalidOperationException Constructor Overload List
InvalidOperationException Class
com.mindfusion.common Namespace

InvalidOperationException Constructor (String)

Initializes a new instance of the InvalidOperationException class.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public InvalidOperationException (
    String message
)
```

Parameters

message

See Also

InvalidOperationException Constructor Overload List
InvalidOperationException Class
com.mindfusion.common Namespace

ISupportInitialize Interface

Syntax

Java

```
public interface ISupportInitialize
```

See Also

ISupportInitialize Members
com.mindfusion.common Namespace

ISupportInitialize Members

The following tables list the members exposed by the ISupportInitialize type.

Public Methods

	Name	Description
	beginInit	
	endInit	

See Also

ISupportInitialize Interface
com.mindfusion.common Namespace

ISupportInitialize Methods

ISupportInitialize.beginInit Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`void beginInit ()`

See Also

ISupportInitialize Members
ISupportInitialize Interface
com.mindfusion.common Namespace

ISupportInitialize.endInit Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`void endInit ()`

See Also

ISupportInitialize Members
ISupportInitialize Interface
com.mindfusion.common Namespace

JsonContext Class

Syntax

Java
`public class JsonContext`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.JsonContext
    com.mindfusion.diagramming.JsonPersistContext

See Also

JsonContext Members
com.mindfusion.common Namespace

JsonContext Members

The following tables list the members exposed by the JsonContext type.

Public Constructors

	Name	Description
	JsonContext	

Protected Fields

	Name	Description
	brushes	
	inplaceImages	
	inplaceResources	

Public Methods

	Name	Description
	parse	Deserializes the specified JSON formatted string to a JsonObject.
	readBrush	Overloaded.
	readBrushColor	Reads a Brush object with the specified color.
	readBrushes	Reads all brushes.
	readColor	Overloaded.
	readEnum	Reads an enum value.
S	readFile	Reads json file
	readFont	Overloaded.
	readImage	Reads an Image object.
	readImages	Reads all images.
	readObject	

	readPen	Overloaded.
	readPointF	Reads a **Point2D.Float** object.
	readPointString	Reads a list of points.
	readRectangleF	Reads a Rectangle2D.Float object.
	readSizeF	read the SizeF object
	readStringFormat	Reads a StringFormat object.
	serialize	Serializes the specified JsonObject to a JSON formatted string.
	writeBrush	Writes a MindFusion.Drawing.Brush object.
	writeBrushColor	Writes the color of the specified brush.
	writeBrushes	Writes all currently accumulated brushes.
	writeColor	Writes a Color object.
	writeEnum	Writes an enum value.
S	writeFile	Writes serialized json to file.
	writeFont	Writes a Font object.
	writeImage	Writes an Image object.
	writeImages	Writes all currently accumulated images.
	writeObject	
	writePen	Writes a MindFusion.Drawing.Pen object.
	writePointF	Writes a PointF object.
	writePointString	Writes a Point string.
	writeRectangleF	Writes a RectangleF object.
	writeSizeF	Writes a sizeF object
	writeStringFormat	Writes a StringFormat object.

Protected Methods

	Name	Description
S	Base64Decode	
S	base64Encode	
S	toCamelCase	
S	toPascalCase	

See Also

JsonContext Class
com.mindfusion.common Namespace

JsonContext Fields

JsonContext.brushes Field

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
protected List<Brush> brushes
```

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.inplaceImages Field

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
protected boolean inplaceImages
```

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.inplaceResources Field

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
protected boolean inplaceResources
```

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JsonContext ()
```

See Also

JsonContext Class
com.mindfusion.common Namespace

JsonContext Methods

JsonContext.Base64Decode Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
protected static String Base64Decode (
    String base64EncodedData
)
```

Parameters

base64EncodedData

Return Value

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.base64Encode Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
protected static String base64Encode (
    String plainText
)
```

Parameters

plainText

Return Value

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.parse Method

Deserializes the specified JSON formatted string to a JsonObject.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public JsonObject parse (
    String json
)
```

Parameters

json
The JSON string.

Return Value

The deserialized JsonObject.

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readBrush Method

Overload List

Name	Description

JsonContext.readBrush (JsonValue)	Reads a MindFusion.Drawing.Brush object.
JsonContext.readBrush (JsonValue, Brush)	Reads a MindFusion.Drawing.Brush object.

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readBrush Method (JsonValue)

Reads a MindFusion.Drawing.Brush object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Brush readBrush (
    JsonValue value
)
```

Parameters

value
A JsonValue

Return Value

Brush Object

See Also

readBrush Method Overload List
JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readBrush Method (JsonValue, Brush)

Reads a MindFusion.Drawing.Brush object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Brush readBrush (
    JsonValue value,
    Brush defaultValue
)
```

Parameters

value
A JsonValue

defaultValue
A Brush to return in case JsonValue == null

Return Value

A Brush Object

See Also

readBrush Method Overload List
JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readBrushColor Method

Reads a Brush object with the specified color.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Brush readBrushColor (
    JsonValue value
)
```

Parameters

value
A JsonValue

Return Value

A Brush Object

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readBrushes Method

Reads all brushes.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public void readBrushes (`
`  JsonValue value`
`)`

Parameters

value
List of Brushes

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readColor Method

Overload List

Name	Description
JsonContext.readColor (JsonValue)	
JsonContext.readColor (JsonValue, Color)	Reads a color.

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readColor Method (JsonValue)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public Color readColor (`
`  JsonValue value`
`)`

Parameters

value
A JsonValue

Return Value

A Color

See Also

readColor Method Overload List
JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readColor Method (JsonValue, Color)

Reads a color.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Color readColor (
    JsonValue value,
    Color defaultValue
)
```

Parameters

value
A JsonValue

defaultValue
A default Color to return in case value or value.getValue() == null

Return Value

A **Color** Object

See Also

readColor Method Overload List
JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readEnum Method

Reads an enum value.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int readEnum (
    JsonValue value
)
```

Parameters

value
A JsonValue

Return Value

-1 if value is null or int value of given Enum.

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readFile Method

Reads json file

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String readFile (
    String fileName
)
```

Parameters

fileName
a Name from where Json is read

Return Value

a String.

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readFont Method

Overload List

Name	Description
JsonContext.readFont (JsonObject)	Reads a Font object.
JsonContext.readFont (JsonObject, Font)	Reads a Font object.

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readFont Method (JsonObject)

Reads a Font object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Font readFont (
    JsonObject obj
)
```

Parameters

obj
A JsonObject containing Font Details

Return Value

A Font Object

See Also

readFont Method Overload List
JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readFont Method (JsonObject, Font)

Reads a Font object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Font readFont (
    JsonObject obj,
    Font defaultFont
)
```

Parameters

obj
A JsonObject containing Font Details

defaultFont
A default Font Object to return in case JsonObject == null

Return Value

A Font Object

See Also

readFont Method Overload List
JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readImage Method

Reads an Image object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Image readImage (
    JsonValue value
)
```

Parameters

value
A JsonValue containing image index

Return Value

A Image Object

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readImages Method

Reads all images.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void readImages (
    JsonValue value
)
```

Parameters

value
A JsonValue containing ArrayList

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readObject Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Object readObject (
    JsonValue value
)
```

Parameters

value
A JsonValue Object

Return Value

A value wrapped in JsonVaue Object or null

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readPen Method

Overload List

Name	Description
JsonContext.readPen (JsonValue)	Reads a MindFusion.Drawing.Pen object.
JsonContext.readPen (JsonValue, Pen)	Reads a MindFusion.Drawing.Pen object.

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readPen Method (JsonValue)

Reads a MindFusion.Drawing.Pen object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Pen readPen (
    JsonValue value
)
```

Parameters

value
A JsonValue

Return Value

Pen Object

See Also

readPen Method Overload List
JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readPen Method (JsonValue, Pen)

Reads a MindFusion.Drawing.Pen object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Pen readPen (
    JsonValue value,
    Pen defaultPen
)
```

Parameters

value
A JsonValue

defaultPen
A Default Pen Object to return in case if value or value.getValue() == null

Return Value

Pen Object

See Also

readPen Method Overload List
JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readPointF Method

Reads a **Point2D.Float** object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Point2D.Float readPointF (
    JsonValue value
)
```

Parameters

value
JsonValue

Return Value

Point2D.Float

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readPointString Method

Reads a list of points.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public List<Point2D.Float> readPointString (
    JsonValue value
)
```

Parameters

value
JsonValue

Return Value

List<Point2D.Float>

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readRectangleF Method

Reads a Rectangle2D.Float object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Rectangle2D.Float readRectangleF (
    JsonValue value
)
```

Parameters

value
A JsonValue object

Return Value

Rectangle2D.Float wrapped in JsonValue Object

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readSizeF Method

read the SizeF object

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public XDimension2D.Double readSizeF (
    JsonValue value
)
```

Parameters

value
JsonValue

Return Value

Dimension

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.readStringFormat Method

Reads a StringFormat object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public TextFormat readStringFormat (
    JsonValue value
)
```

Parameters

value
JsonValue

Return Value

TextLayoutOptions

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.serialize Method

Serializes the specified JsonObject to a JSON formatted string.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String serialize (
    JsonObject obj
)
```

Parameters

obj
The JsonObject to serialize.

Return Value

The serialized string.

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.toCamelCase Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
protected static String toCamelCase (
    String text
)
```

Parameters

text

Return Value

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.toPascalCase Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
protected static String toPascalCase (
    String text
)
```

Parameters

text

Return Value

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.writeBrush Method

Writes a MindFusion.Drawing.Brush object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public JsonValue writeBrush (
    Brush brush
)
```

Parameters

brush
a Brush that has to be written

Return Value

JsonValue

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.writeBrushColor Method

Writes the color of the specified brush.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public JsonValue writeBrushColor (
    Brush brush
)
```

Parameters

brush

Return Value

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.writeBrushes Method

Writes all currently accumulated brushes.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JsonValue writeBrushes ()
```

Return Value

JsonValue

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.writeColor Method

Writes a Color object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JsonValue writeColor (
    Color color
)
```

Parameters

color
a **Color** to be written

Return Value

JsonValue

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.writeEnum Method

Writes an enum value.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JsonValue writeEnum (
    Object enumValue
)
```

Parameters

enumValue
a value to be written

Return Value

JsonValue

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.writeFile Method

Writes serialized json to file.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static void writeFile (
    String fileName,
    String fileContent
)
```

Parameters

fileName
A file path.

fileContent
serialized JSON content.

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.writeFont Method

Writes a Font object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JsonObject writeFont (
    Font font
)
```

Parameters

font

Return Value

JsonValue

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.writeImage Method

Writes an Image object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JsonValue writeImage (
    Image image
)
```

Parameters

image
a **Image** to be written

Return Value

JsonValue

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.writeImages Method

Writes all currently accumulated images.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JsonValue writeImages ()
```

Return Value

JsonValue

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.writeObject Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JsonValue writeObject (
    Object o
)
```

Parameters

o
A Object to wrap in JsonValue

Return Value

A JsonValue Object

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.writePen Method

Writes a MindFusion.Drawing.Pen object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JsonValue writePen (
    Pen pen
)
```

Parameters

pen
a Pen to be written

Return Value

JsonValue

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.writePointF Method

Writes a PointF object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JsonObject writePointF (
    Point2D.Float point
)
```

Parameters

point
Point2D.Float

Return Value

JsonObject

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.writePointString Method

Writes a Point string.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public JsonValue writePointString (
    List<Point2D.Float> points
)
```

Parameters

points
List<Point2D.Float>

Return Value

JsonValue

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.writeRectangleF Method

Writes a RectangleF object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public JsonObject writeRectangleF (
    Rectangle2D rectangle
)
```

Parameters

rectangle
Rectangle2D.Float

Return Value

JsonObject

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.writeSizeF Method

Writes a sizeF object

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JsonObject writeSizeF (
    Dimension2D size
)
```

Parameters

size
Dimension

Return Value

JsonObject

See Also

JsonContext Members
JsonContext Class
com.mindfusion.common Namespace

JsonContext.writeStringFormat Method

Writes a StringFormat object.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JsonValue writeStringFormat (
    TextFormat stringFormat
)
```

Parameters

stringFormat
The StringFormat to write.

Return Value

JsonValue

See Also

JsonConverter Class

Syntax

Java
`public class JsonConverter`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.common.JsonConverter

See Also

JsonConverter Members
com.mindfusion.common Namespace

JsonConverter Members

The following tables list the members exposed by the JsonConverter type.

Public Methods

	Name	Description
	fromBase64String	Converts the specified encoded string to plain text
	fromBoolean	
	fromColor	Converts the specified Color to string. boolean hex param is a param to indicate whether color has to be converted to Hex value. The Default resulting string is in the format rgba(0,0,0,0).
	fromDouble	
	fromImage	Converts the specified image to string.
	fromInt16	
	fromInt32	
	fromInt64	
	fromPointString	Converts the specified comma separated string to a list of PointF objects.
	fromSingle	
	toBase64String	Converts the specified plainText string to Base64String

	toBoolean	
	toColor	
	toDouble	
	toImage	Converts the specified string value to image.
	toInt16	
	toInt32	
	toInt64	
	toPointString	Converts the list of PointF objects to a comma separated string.
	toSingle	

See Also

JsonConverter Class
com.mindfusion.common Namespace

JsonConverter Methods

JsonConverter.fromBase64String Method

Converts the specified encoded string to plain text

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromBase64String (
    String base64EncodedData
)
```

Parameters

base64EncodedData
encoded string

Return Value

decoded string

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.fromBoolean Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromBoolean (
    boolean val
)
```

Parameters

val

Return Value

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.fromColor Method

Converts the specified Color to string. boolean hex param is a param to indicate whether color has to be converted to Hex value. The Default resulting string is in the format rgba(0,0,0,0).

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromColor (
    Color val,
    boolean hex
)
```

Parameters

val

hex

Return Value

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.fromDouble Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromDouble (
    double val
)
```

Parameters

val

Return Value

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.fromImage Method

Converts the specified image to string.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromImage (
    Image val
)
```

Parameters

val
The image object to convert.

Return Value

A string representing the specified value.

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.fromInt16 Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static String fromInt16 (
    short val
)
```

Parameters

val

Return Value

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.fromInt32 Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static String fromInt32 (
    int val
)
```

Parameters

val

Return Value

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.fromInt64 Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromInt64 (
    long val
)
```

Parameters

val

Return Value

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.fromPointString Method

Converts the specified comma separated string to a list of PointF objects.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static List<Point2D.Float> fromPointString (
    String s
)
```

Parameters

s
The comma separated string.

Return Value

A list of PointF objects.

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.fromSingle Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String fromSingle (
    float val
)
```

Parameters

val

Return Value

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.toBase64String Method

Converts the specified plainText string to Base64String

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String toBase64String (
    String plainText
)
```

Parameters

plainText
string

Return Value

string

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.toBoolean Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean toBoolean (
    String s
```

```
)
```

Parameters

s

Return Value

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.toColor Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Color toColor (
    String s
)
```

Parameters

s

Return Value

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.toDouble Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static double toDouble (
    String s
)
```

Parameters

s

Return Value

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.toImage Method

Converts the specified string value to image.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Image toImage (
    String s
)
```

Parameters

s

Return Value

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.toInt16 Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static short toInt16 (
    String s
)
```

Parameters

s

Return Value

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.toInt32 Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static int toInt32 (
    String s
)
```

Parameters

s

Return Value

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.toInt64 Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static long toInt64 (
    String s
)
```

Parameters

s

Return Value

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.toPointString Method

Converts the list of PointF objects to a comma separated string.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String toPointString (
    List<Point2D.Float> points
)
```

Parameters

points
The list of PointF objects to convert.

Return Value

A comma separated string.

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonConverter.toSingle Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static float toSingle (
    String s
)
```

Parameters

s

Return Value

See Also

JsonConverter Members
JsonConverter Class
com.mindfusion.common Namespace

JsonObject Class

Represents a dictionary of property names and values.

Syntax

Java
`public class JsonObject extends LinkedHashMap<K, V>`

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractMap(K, V)
    java.util.HashMap(K, V)
      java.util.LinkedHashMap(K, V)
        com.mindfusion.common.JsonObject

See Also

JsonObject Members
com.mindfusion.common Namespace

JsonObject Members

Represents a dictionary of property names and values.

The following tables list the members exposed by the JsonObject type.

Public Constructors

	Name	Description
	JsonObject	Initializes a new instance of the JsonObject class.

Public Methods

	Name	Description
	fromDictionary	Converts a generic dictionary to a JsonObject.
	getValue	Overloaded.

See Also

JsonObject Class
com.mindfusion.common Namespace

JsonObject Constructor

Initializes a new instance of the JsonObject class.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public JsonObject ()
```

See Also

JsonObject Class
com.mindfusion.common Namespace

JsonObject Methods

JsonObject.fromDictionary Method

Converts a generic dictionary to a JsonObject.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static JsonObject fromDictionary (
    Map<?, ?> map
)
```

Parameters

map
Object that has to be converted to JsonObject

Return Value

A JsonObject

See Also

JsonObject Members
JsonObject Class
com.mindfusion.common Namespace

JsonObject.getValue Method

Overload List

Name	Description
JsonObject.getValue (String)	return the value associated with key or default value
JsonObject.getValue (String, JsonValue)	return the value associated with key or default value

See Also

JsonObject Members
JsonObject Class
com.mindfusion.common Namespace

JsonObject.getValue Method (String)

return the value associated with key or default value

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JsonValue getValue (
    String key
)
```

Parameters

key
String

Return Value

JsonValue

See Also

getValue Method Overload List
JsonObject Members
JsonObject Class
com.mindfusion.common Namespace

JsonObject.getValue Method (String, JsonValue)

return the value associated with key or default value

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JsonValue getValue (
    String key,
    JsonValue defaultValue
)
```

Parameters

key
string

defaultValue
JsonValue

Return Value

JsonValue object

See Also

getValue Method Overload List
JsonObject Members
JsonObject Class
com.mindfusion.common Namespace

JsonValue Class

Syntax

Java
`public class JsonValue`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.common.JsonValue

See Also

JsonValue Members
com.mindfusion.common Namespace

JsonValue Members

The following tables list the members exposed by the JsonValue type.

Public Constructors

	Name	Description
	JsonValue	Initializes a new instance of the JsonValue class.

Public Methods

	Name	Description
	equals	
S	fromBoolean	Converts a boolean to JsonValue.
S	fromDateTime	Converts a DateTime to JsonValue.
S	fromDouble	Converts a double to JsonValue.
S	fromFloat	Converts a float to JsonValue.

	fromInt	Converts an int to JsonValue.
	fromJsonObject	Converts a JsonObject to JsonValue.
	fromLong	Converts a long to JsonValue.
	getValue	
	hashCode	
	toArrayList	Converts the value to ArrayList.
	toBoolean	Converts the value to boolean value
	toDateTime	Converts the value to DateTime.
	toDouble	Converts the value to double.
	toFloat	Converts the value to float.
	toInt	Converts the value to int.
	toJsonObject	Converts the value to JsonObject.
	toJsonValue	Converts a string to JsonValue.
	toLong	Converts the value to long.
	toString	Overloaded.

See Also

JsonValue Class
com.mindfusion.common Namespace

JsonValue Constructor

Initializes a new instance of the JsonValue class.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JsonValue (
    Object value
)
```

Parameters

value
a json value

See Also

JsonValue Class
com.mindfusion.common Namespace

JsonValue Methods

JsonValue.equals Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean equals (
    Object o
)
```

Parameters

o

Return Value

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.fromBoolean Method

Converts a boolean to JsonValue.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static JsonValue fromBoolean (
    boolean value
)
```

Parameters

value
Boolean

Return Value

Json representation of Boolean value.

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.fromDateTime Method

Converts a DateTime to JsonValue.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static JsonValue fromDateTime (
    DateTime value
)
```

Parameters

value
A DateTime

Return Value

A JsonValue

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.fromDouble Method

Converts a double to JsonValue.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static JsonValue fromDouble (
    double value
)
```

Parameters

value
A double value

Return Value

A JsonValue

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.fromFloat Method

Converts a float to JsonValue.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static JsonValue fromFloat (
    float value
)
```

Parameters

value
A Float

Return Value

A JsonValue

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.fromInt Method

Converts an int to JsonValue.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static JsonValue fromInt (
    int value
)
```

Parameters

value
int valie

Return Value

A JsonValue

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.fromJsonObject Method

Converts a JsonObject to JsonValue.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static JsonValue fromJsonObject (
    JsonObject value
)
```

Parameters

value
A JsonObject

Return Value

A JsonValue

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.fromLong Method

Converts a long to JsonValue.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static JsonValue fromLong (
    long value
)
```

Parameters

value
Long value

Return Value

JsonValue

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.getValue Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Object getValue ()
```

Return Value

this.value

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.hashCode Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int hashCode ()
```

Return Value

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.toArrayList Method

Converts the value to ArrayList.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public ArrayList toArrayList ()
```

Return Value

A **ArrayList**

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.toBoolean Method

Converts the value to boolean value

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static boolean toBoolean (
    JsonValue value
)
```

Parameters

value
A JsonValue Object

Return Value

Boolean representation of JSON value

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.toDateTime Method

Converts the value to DateTime.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
```

```
public static DateTime toDateTime (
    JsonValue value
)
```

Parameters

value
A JsonValue

Return Value

A DateTime

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.toDouble Method

Converts the value to double.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static double toDouble (
    JsonValue value
)
```

Parameters

value
A JsonValue

Return Value

A Double value

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.toFloat Method

Converts the value to float.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static float toFloat (
    JsonValue value
)
```

Parameters

value
JsonValue Object

Return Value

A Float valie

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.toInt Method

Converts the value to int.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static int toInt (
    JsonValue value
)
```

Parameters

value
A JsonValue

Return Value

int value

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.toJsonObject Method

Converts the value to JsonObject.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static JsonObject toJsonObject (
    JsonValue value
)
```

Parameters

value
A JsonValue

Return Value

A JsonObject

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.toJsonValue Method

Converts a string to JsonValue.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static JsonValue toJsonValue (
    String value
)
```

Parameters

value
A String

Return Value

JsonValue object

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.toLong Method

Converts the value to long.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public static long toLong (`
`  JsonValue value`
`)`

Parameters

value
A JsonValue

Return Value

Long value

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.toString Method

Overload List

Name	Description
JsonValue.toString ()	
JsonValue.toString (JsonValue)	Converts the value to string.

See Also

JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.toString Method ()

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public String toString ()`

Return Value

See Also

toString Method Overload List
JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

JsonValue.toString Method (JsonValue)

Converts the value to string.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static String toString (
    JsonValue value
)
```

Parameters

value
A JsonValie

Return Value

A String value

See Also

toString Method Overload List
JsonValue Members
JsonValue Class
com.mindfusion.common Namespace

KeyValuePair<K, V> Class

Syntax

Java

```
public class KeyValuePair<K, V> implements Map.Entry<K, V>, Cloneable
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.KeyValuePair(K, V)

See Also

KeyValuePair(K, V) Members

The following tables list the members exposed by the KeyValuePair(K, V) type.

Public Constructors

	Name	Description
	KeyValuePair	

Public Methods

	Name	Description
	clone	
	getKey	
	getValue	
	setValue	

See Also

KeyValuePair<K, V> Class
com.mindfusion.common Namespace

KeyValuePair(K, V) Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public KeyValuePair (
    K key,
    V value
)
```

Parameters

key

value

See Also

KeyValuePair<K, V> Class
com.mindfusion.common Namespace

KeyValuePair(K, V) Methods

KeyValuePair(K, V).clone Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public Object clone ()`

Return Value

See Also

KeyValuePair(K, V) Members
KeyValuePair<K, V> Class
com.mindfusion.common Namespace

KeyValuePair(K, V).getKey Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public K getKey ()`

Return Value

See Also

KeyValuePair(K, V) Members
KeyValuePair<K, V> Class
com.mindfusion.common Namespace

KeyValuePair(K, V).getValue Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public V getValue ()`

Return Value

See Also

KeyValuePair(K, V) Members
KeyValuePair<K, V> Class
com.mindfusion.common Namespace

KeyValuePair(K, V).setValue Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public V setValue (
    V value
)
```

Parameters

value

Return Value

See Also

KeyValuePair(K, V) Members
KeyValuePair<K, V> Class
com.mindfusion.common Namespace

License Class

Syntax

Java

```
public class License
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.License

See Also

License Members
com.mindfusion.common Namespace

License Members

The following tables list the members exposed by the License type.

Public Methods

	Name	Description
	getExpiration	
	getNumberOfUsers	
	getProduct	
S	licenseFromKey	
S	licenseFromKeyFallback	

See Also

License Class
com.mindfusion.common Namespace

License Methods

License.getExpiration Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public Calendar getExpiration ()`

Return Value

See Also

License Members
License Class
com.mindfusion.common Namespace

License.getNumberOfUsers Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public int getNumberOfUsers ()`

Return Value

See Also

License Members
License Class
com.mindfusion.common Namespace

License.getProduct Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String getProduct ()
```

Return Value

See Also

License Members
License Class
com.mindfusion.common Namespace

License.licenseFromKey Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static License licenseFromKey (
    String key
)
```

Parameters

key

Return Value

See Also

License Members
License Class
com.mindfusion.common Namespace

License.licenseFromKeyFallback Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static License licenseFromKeyFallback (
    String key
)
```

Parameters

key

Return Value

See Also

License Members
License Class
com.mindfusion.common Namespace

LicenseManager Class

Syntax

```
Java
public class LicenseManager
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.LicenseManager

See Also

LicenseManager Members
com.mindfusion.common Namespace

LicenseManager Members

The following tables list the members exposed by the LicenseManager type.

Public Constructors

	Name	Description
	LicenseManager	

Public Methods

	Name	Description
	addLicense	
	checkLicense	

See Also

LicenseManager Class
com.mindfusion.common Namespace

LicenseManager Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public LicenseManager ()
```

See Also

LicenseManager Class
com.mindfusion.common Namespace

LicenseManager Methods

LicenseManager.addLicense Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static void addLicense (
    String licenseKey
)
```

Parameters

licenseKey

See Also

LicenseManager Members
LicenseManager Class
com.mindfusion.common Namespace

LicenseManager.checkLicense Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static int checkLicense (
    String packageName,
    String[] productNames
)
```

Parameters

packageName

productNames

Return Value

See Also

LicenseManager Members
LicenseManager Class
com.mindfusion.common Namespace

ListChangedAction Class

Describes the action that caused a BaseListListener.listChanged event.

Syntax

Java

```
public class ListChangedAction
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.ListChangedAction

See Also

ListChangedAction Members
com.mindfusion.common Namespace

ListChangedAction Members

Describes the action that caused a BaseListListener.listChanged event.

The following tables list the members exposed by the ListChangedAction type.

Public Fields

	Name	Description
	Add	One or more items were added to the list.
	Remove	One or more items were removed from the list.
	Replace	One or more items were replaced in the list.
	Reset	The content of the list changed dramatically.

See Also

ListChangedAction Class
com.mindfusion.common Namespace

ListChangedAction Fields

ListChangedAction.Add Field

One or more items were added to the list.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public static final int Add`

See Also

ListChangedAction Members
ListChangedAction Class
com.mindfusion.common Namespace

ListChangedAction.Remove Field

One or more items were removed from the list.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public static final int Remove`

See Also

ListChangedAction Members
ListChangedAction Class
com.mindfusion.common Namespace

ListChangedAction.Replace Field

One or more items were replaced in the list.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static final int Replace
```

See Also

ListChangedAction Members
ListChangedAction Class
com.mindfusion.common Namespace

ListChangedAction.Reset Field

The content of the list changed dramatically.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static final int Reset
```

See Also

ListChangedAction Members
ListChangedAction Class
com.mindfusion.common Namespace

ListChangedEvent<E> Class

Provides data for the BaseListListener.listChanged event.

Syntax

Java

```
public class ListChangedEvent<E> extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.common.ListChangedEvent(E)

See Also

ListChangedEvent(E) Members

Provides data for the BaseListListener.listChanged event.

The following tables list the members exposed by the ListChangedEvent(E) type.

Public Methods

	Name	Description
	getAction	Gets the action that caused the event.
	getNewItems	Gets the list of new items involved in the change.
	getOldItems	Gets the list of items affected by a Replace, Remove, or Reset action.

See Also

ListChangedEvent<E> Class
com.mindfusion.common Namespace

ListChangedEvent(E) Methods

ListChangedEvent(E).getAction Method

Gets the action that caused the event.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public int getAction ()`

Return Value

One of the ListChangedAction constants.

See Also

ListChangedEvent(E) Members
ListChangedEvent<E> Class
com.mindfusion.common Namespace

ListChangedEvent(E).getNewItems Method

Gets the list of new items involved in the change.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public List<E> getNewItems ()
```

Return Value

A list with the new items.

See Also

ListChangedEvent(E) Members
ListChangedEvent<E> Class
com.mindfusion.common Namespace

ListChangedEvent(E).getOldItems Method

Gets the list of items affected by a Replace, Remove, or Reset action.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public List<E> getOldItems ()
```

Return Value

A list with the removed items.

See Also

ListChangedEvent(E) Members
ListChangedEvent<E> Class
com.mindfusion.common Namespace

ListItemEvent<E> Class

Provides data for the BaseListListener.itemAdded event.

Syntax

```
Java
public class ListItemEvent<E> extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.common.ListItemEvent(E)

See Also

ListItemEvent(E) Members
com.mindfusion.common Namespace

ListItemEvent(E) Members

Provides data for the BaseListListener.itemAdded event.

The following tables list the members exposed by the ListItemEvent(E) type.

Public Methods

	Name	Description
	getItem	Gets the item related to the event.

See Also

ListItemEvent<E> Class
com.mindfusion.common Namespace

ListItemEvent(E) Methods

ListItemEvent(E).getItem Method

Gets the item related to the event.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public E getItem ()`

Return Value

The item related to the event.

See Also

ListItemEvent(E) Members
ListItemEvent<E> Class
com.mindfusion.common Namespace

MyCheckBoxIcon Class

Syntax

Java
`public class MyCheckBoxIcon implements Icon, UIResource, Serializable`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.TriStateCheckBox.MyCheckBoxIcon

See Also

MyCheckBoxIcon Members
com.mindfusion.common Namespace

MyCheckBoxIcon Members

The following tables list the members exposed by the MyCheckBoxIcon type.

Public Constructors

	Name	Description
	MyCheckBoxIcon	

Public Methods

	Name	Description
	getIconHeight	
	getIconWidth	
	paintIcon	

Protected Methods

	Name	Description
	getControlSize	

See Also

MyCheckBoxIcon Class
com.mindfusion.common Namespace

MyCheckBoxIcon Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public MyCheckBoxIcon ()
```

See Also

MyCheckBoxIcon Class
com.mindfusion.common Namespace

MyCheckBoxIcon Methods

MyCheckBoxIcon.getControlSize Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
protected int getControlSize ()
```

Return Value

See Also

MyCheckBoxIcon Members
MyCheckBoxIcon Class
com.mindfusion.common Namespace

MyCheckBoxIcon.getIconHeight Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int getIconHeight ()
```

Return Value

See Also

MyCheckBoxIcon Members
MyCheckBoxIcon Class
com.mindfusion.common Namespace

MyCheckBoxIcon.getIconWidth Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public int getIconWidth ()
```

Return Value

See Also

MyCheckBoxIcon Members
MyCheckBoxIcon Class
com.mindfusion.common Namespace

MyCheckBoxIcon.paintIcon Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public void paintIcon (
    Component c,
    Graphics g,
    int x,
    int y
)
```

Parameters

c

g

x

y

See Also

MyCheckBoxIcon Members
MyCheckBoxIcon Class
com.mindfusion.common Namespace

ObservableList<E> Class

Syntax

```
Java
```

```
public class ObservableList<E>
    extends AbstractList<E>
    implements Externalizable
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.common.ObservableList(E)

See Also

ObservableList(E) Members
com.mindfusion.common Namespace

ObservableList(E) Members

The following tables list the members exposed by the ObservableList(E) type.

Public Constructors

	Name	Description
	ObservableList	Overloaded.

Protected Fields

	Name	Description
	list	

Public Methods

	Name	Description
	add	
	addListListener	
	contains	
	get	
	readExternal	
	remove	Overloaded.
	removeListListener	
	set	
	size	
	writeExternal	

Protected Methods

	Name	Description
	fireAdded	
	fireRemoved	
	fireReplaced	

See Also

ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E) Fields

ObservableList(E).list Field

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`protected ArrayList<E> list`

See Also

ObservableList(E) Members
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E) Constructor

Overload List

Name	Description
ObservableList(E) ()	
ObservableList(E) (Collection)	
ObservableList(E) (int)	

See Also

ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E) Constructor ()

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public ObservableList ()
```

See Also

ObservableList(E) Constructor Overload List
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E) Constructor (Collection<E>)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public ObservableList (
    Collection<E> c
)
```

Parameters

c

See Also

ObservableList(E) Constructor Overload List
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E) Constructor (int)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public ObservableList (
    int capacity
)
```

Parameters

capacity

See Also

ObservableList(E) Constructor Overload List
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E) Methods

ObservableList(E).add Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void add (
    int index,
    E element
)
```

Parameters

index

element

See Also

ObservableList(E) Members
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E).addListListener Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void addListListener (
    ObservableListListener<E> listener
)
```

Parameters

listener

See Also

ObservableList(E) Members
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E).contains Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java

public boolean contains (
    Object element
)
```

Parameters

element

Return Value

See Also

ObservableList(E) Members
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E).fireAdded Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java

protected void fireAdded (
    E newElement
)
```

Parameters

newElement

See Also

ObservableList(E) Members
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E).fireRemoved Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
protected void fireRemoved (
    E oldElement
)
```

Parameters

oldElement

See Also

ObservableList(E) Members
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E).fireReplaced Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
protected void fireReplaced (
    E oldElement,
    E newElement
)
```

Parameters

oldElement

newElement

See Also

ObservableList(E) Members
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E).get Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public E get (
    int index
)
```

Parameters

index

Return Value

See Also

ObservableList(E) Members
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E).readExternal Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

ObservableList(E) Members
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E).remove Method

Overload List

Name	Description
ObservableList(E).remove (int)	
ObservableList(E).remove (Object)	

See Also

ObservableList(E) Members
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E).remove Method (int)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public E remove (
    int index
)
```

Parameters

index

Return Value

See Also

remove Method Overload List
ObservableList(E) Members
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E).remove Method (Object)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean remove (
    Object element
)
```

Parameters

element

Return Value

See Also

remove Method Overload List
ObservableList(E) Members
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E).removeListListener Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void removeListListener (
    ObservableListListener<E> listener
)
```

Parameters

listener

See Also

ObservableList(E) Members
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E).set Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public E set (
    int index,
    E element
)
```

Parameters

index

element

Return Value

See Also

ObservableList(E) Members
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E).size Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public int size ()`

Return Value

See Also

ObservableList(E) Members
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableList(E).writeExternal Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public void writeExternal (`
`  ObjectOutput out`
`)`

Parameters

out

See Also

ObservableList(E) Members
ObservableList<E> Class
com.mindfusion.common Namespace

ObservableListListener<E> Interface

Syntax

Java
`public interface ObservableListListener<E> extends EventListener`

See Also

ObservableListListener(E) Members
com.mindfusion.common Namespace

ObservableListListener(E) Members

The following tables list the members exposed by the ObservableListListener(E) type.

Public Methods

	Name	Description
	elementAdded	
	elementRemoved	

See Also

ObservableListListener<E> Interface
com.mindfusion.common Namespace

ObservableListListener(E) Methods

ObservableListListener(E).elementAdded Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
void elementAdded (
    E newElement
)
```

Parameters

newElement

See Also

ObservableListListener(E) Members
ObservableListListener<E> Interface
com.mindfusion.common Namespace

ObservableListListener(E).elementRemoved Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
void elementRemoved (
    E oldElement
)
```

Parameters

oldElement

See Also

ObservableListListener(E) Members
ObservableListListener<E> Interface
com.mindfusion.common Namespace

Orientation Enumeration

Specifies orientation.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public enum Orientation`

Members

	Member name	Description
	Horizontal	Horizontal orientation.
	Vertical	Vertical orientation.

See Also

com.mindfusion.common Namespace

OrientationConverter Class

Syntax

Java
`public class OrientationConverter implements CanConvert`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.common.OrientationConverter

See Also

OrientationConverter Members
com.mindfusion.common Namespace

OrientationConverter Members

The following tables list the members exposed by the OrientationConverter type.

Public Constructors

	Name	Description
	OrientationConverter	

Public Methods

	Name	Description
	canConvert	
	convert	

See Also

OrientationConverter Class
com.mindfusion.common Namespace

OrientationConverter Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public OrientationConverter ()`

See Also

OrientationConverter Class
com.mindfusion.common Namespace

OrientationConverter Methods

OrientationConverter.canConvert Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean canConvert (
    String value
)
```

Parameters

value

Return Value

See Also

OrientationConverter Members
OrientationConverter Class
com.mindfusion.common Namespace

OrientationConverter.convert Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Orientation convert (
    String orientation
)
```

Parameters

orientation

Return Value

See Also

OrientationConverter Members
OrientationConverter Class
com.mindfusion.common Namespace

OverflowException Class

Thrown when an operation results in an overflow.

Syntax

Java

```
public class OverflowException extends RuntimeException
```

Inheritance Hierarchy

java.lang.Object
  java.lang.Throwable

java.lang.Exception
java.lang.RuntimeException
com.mindfusion.common.OverflowException

See Also

OverflowException Members
com.mindfusion.common Namespace

OverflowException Members

Thrown when an operation results in an overflow.

The following tables list the members exposed by the OverflowException type.

See Also

OverflowException Class
com.mindfusion.common Namespace

Pair<TFirst, TSecond> Class

Defines a class used to store two related objects.

Syntax

Java
`public class Pair<TFirst, TSecond>`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.common.Pair(TFirst, TSecond)

See Also

Pair(TFirst, TSecond) Members
com.mindfusion.common Namespace

Pair(TFirst, TSecond) Members

Defines a class used to store two related objects.

The following tables list the members exposed by the Pair(TFirst, TSecond) type.

Public Constructors

	Name	Description
	Pair	Overloaded.

Public Methods

	Name	Description
	equals	
	getFirst	Gets the first object in the pair.
	getSecond	Gets the second object in the pair.
	hashCode	
	setFirst	Gets the first object in the pair.
	setSecond	Sets the second object in the pair.
	toString	

See Also

Pair<TFirst, TSecond> Class
com.mindfusion.common Namespace

Pair(TFirst, TSecond) Constructor

Overload List

Name	Description
Pair(TFirst, TSecond) ()	Initializes a new instance of the Pair class.
Pair(TFirst, TSecond) (TFirst, TSecond)	Initializes a new instance of the **Pair** class.

See Also

Pair<TFirst, TSecond> Class
com.mindfusion.common Namespace

Pair(TFirst, TSecond) Constructor ()

Initializes a new instance of the Pair class.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public Pair ()`

See Also

Pair(TFirst, TSecond) Constructor Overload List
Pair<TFirst, TSecond> Class
com.mindfusion.common Namespace

Pair(TFirst, TSecond) Constructor (TFirst, TSecond)

Initializes a new instance of the Pair class.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Pair (
    TFirst x,
    TSecond y
)
```

Parameters

x
The first value.

y
The second value.

See Also

Pair(TFirst, TSecond) Constructor Overload List
Pair<TFirst, TSecond> Class
com.mindfusion.common Namespace

Pair(TFirst, TSecond) Methods

Pair(TFirst, TSecond).equals Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean equals (
    Object obj
)
```

Parameters

obj

Return Value

See Also

Pair(TFirst, TSecond) Members
Pair<TFirst, TSecond> Class
com.mindfusion.common Namespace

Pair(TFirst, TSecond).getFirst Method

Gets the first object in the pair.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public TFirst getFirst ()
```

Return Value

See Also

Pair(TFirst, TSecond) Members
Pair<TFirst, TSecond> Class
com.mindfusion.common Namespace

Pair(TFirst, TSecond).getSecond Method

Gets the second object in the pair.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public TSecond getSecond ()
```

Return Value

See Also

Pair(TFirst, TSecond) Members
Pair<TFirst, TSecond> Class
com.mindfusion.common Namespace

Pair(TFirst, TSecond).hashCode Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int hashCode ()
```

Return Value

See Also

Pair(TFirst, TSecond) Members
Pair<TFirst, TSecond> Class
com.mindfusion.common Namespace

Pair(TFirst, TSecond).setFirst Method

Gets the first object in the pair.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void setFirst (
    TFirst value
)
```

Parameters

value

See Also

Pair(TFirst, TSecond) Members
Pair<TFirst, TSecond> Class
com.mindfusion.common Namespace

Pair(TFirst, TSecond).setSecond Method

Sets the second object in the pair.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void setSecond (
    TSecond value
)
```

Parameters

value

See Also

Pair(TFirst, TSecond) Members
Pair<TFirst, TSecond> Class
com.mindfusion.common Namespace

Pair(TFirst, TSecond).toString Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public String toString ()`

Return Value

See Also

Pair(TFirst, TSecond) Members
Pair<TFirst, TSecond> Class
com.mindfusion.common Namespace

Parser Class

Syntax

Java
`public class Parser`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.Parser

See Also

Parser Members
com.mindfusion.common Namespace

Parser Members

The following tables list the members exposed by the Parser type.

Public Constructors

	Name	Description
	Parser	

Public Methods

	Name	Description

	readJsonObject	Deserializes a JsonObject from the specified JSON-formatted string.

See Also

Parser Class
com.mindfusion.common Namespace

Parser Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Parser ()
```

See Also

Parser Class
com.mindfusion.common Namespace

Parser Methods

Parser.readJsonObject Method

Deserializes a JsonObject from the specified JSON-formatted string.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public JsonObject readJsonObject (
    String json,
    JsonContext context
)
```

Parameters

json
The JSON-formatted string.

context
An JsonContext object providing contextual information about the serialization process and some helper serialization methods.

Return Value

JsonObject

See Also

Parser Members
Parser Class
com.mindfusion.common Namespace

Queryable<T> Class

Extends **Iterable** objects with additional functionality.

Syntax

Java
`public class Queryable<T> implements Iterable<T>`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.Queryable(T)

See Also

Queryable(T) Members
com.mindfusion.common Namespace

Queryable(T) Members

Extends **Iterable** objects with additional functionality.

The following tables list the members exposed by the Queryable(T) type.

Public Constructors

	Name	Description
	Queryable	Overloaded.

Public Methods

	Name	Description
	aggregate	
	concat	
	contains	Overloaded.
	count	Overloaded.
	defaultIfEmpty	
	distinct	
	elementAt	

	first	
	firstOrDefault	
	intersect	
	iterator	
	last	
	lastOrDefault	
	max	Overloaded.
	min	Overloaded.
	ofType	
	orderBy	
	orderByDescending	
	reverse	
	select	
	selectMany	
	single	
	singleOrDefault	
	sum	
	toArray	
	toIterable	
	toList	
	union	
	where	

See Also

Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T) Constructor

Overload List

Name	Description
Queryable(T) (Iterable)	
Queryable(T) (Object[])	
Queryable(T) (Object[][])	

See Also

Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T) Constructor (Iterable<T>)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Queryable (
    Iterable<T> iterable
)
```

Parameters

iterable

See Also

Queryable(T) Constructor Overload List
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T) Constructor (Object[])

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Queryable (
    Object[] source
)
```

Parameters

source

See Also

Queryable(T) Constructor Overload List
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T) Constructor (Object[][])

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Queryable (
    Object[][] source
)
```

Parameters

source

See Also

Queryable(T) Constructor Overload List
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T) Methods

Queryable(T).aggregate Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public T aggregate (
    BiFunction<T, T, T> func
)
```

Parameters

func

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).concat Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public Queryable<T> concat (`
`  Iterable<T> source`
`)`

Parameters

source

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).contains Method

Overload List

Name	Description
Queryable(T).contains (T)	
Queryable(T).contains (T, EqualityComparer)	

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).contains Method (T)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public boolean contains (`
`  T value`
`)`

Parameters

value

Return Value

See Also

contains Method Overload List
Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).contains Method (T, EqualityComparer<T>)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean contains (
    T value,
    EqualityComparer<T> comparer
)
```

Parameters

value

comparer

Return Value

See Also

contains Method Overload List
Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).count Method

Overload List

Name	Description
Queryable(T).count ()	
Queryable(T).count (Predicate)	

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).count Method ()

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public int count ()
```

Return Value

See Also

count Method Overload List
Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).count Method (Predicate<T>)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public int count (
    Predicate<T> predicate
)
```

Parameters

predicate

Return Value

See Also

count Method Overload List
Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).defaultIfEmpty Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public Queryable<T> defaultIfEmpty ()
```

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).distinct Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Queryable<T> distinct ()
```

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).elementAt Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public T elementAt (
    int index
)
```

Parameters

index

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).first Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public T first ()
```

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).firstOrDefault Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public T firstOrDefault ()
```

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).intersect Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Queryable<T> intersect (
    Iterable<T> source,
    EqualityComparer<T> comparer
)
```

Parameters

source

comparer

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).iterator Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public Iterator<T> iterator ()`

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).last Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public T last ()`

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).lastOrDefault Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public T lastOrDefault ()`

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).max Method

Overload List

Name	Description
Queryable(T).max ()	
Queryable(T).max (Function)	

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).max Method ()

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public Integer max ()`

Return Value

See Also

max Method Overload List
Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).max Method (Function<T, Integer>)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

`public Integer max (`
`  Function<T, Integer> selector`
`)`

Parameters

selector

Return Value

See Also

max Method Overload List
Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).min Method

Overload List

Name	Description
Queryable(T).min ()	
Queryable(T).min (Function)	

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).min Method ()

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public Integer min ()`

Return Value

See Also

min Method Overload List
Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).min Method (Function<T, Integer>)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Integer min (
    Function<T, Integer> selector
)
```

Parameters

selector

Return Value

See Also

min Method Overload List
Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).ofType<R> Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public <R> Queryable<R> ofType (
    Class<R> type
)
```

Parameters

type

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).orderBy<K> Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public <K> Queryable<T> orderBy (
    Function<T, K> keySelector
)
```

Parameters

keySelector

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).orderByDescending<K> Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public <K> Queryable<T> orderByDescending (
    Function<T, K> keySelector
)
```

Parameters

keySelector

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).reverse Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Queryable<T> reverse ()
```

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).select<R> Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public <R> Queryable<R> select (
    Function<T, R> func
)
```

Parameters

func

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).selectMany<R> Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public <R> Queryable<R> selectMany (
    Function<T, Iterable<R>> func
```

```
)
```

Parameters

func

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).single Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public T single ()`

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).singleOrDefault Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public T singleOrDefault ()`

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).sum Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public double sum (
    Function<T, Double> valueSelector
)
```

Parameters

valueSelector

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).toArray Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Object[] toArray ()
```

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).toIterable Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Iterable<T> toIterable ()
```

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).toList Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public List<T> toList ()
```

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).union Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Queryable<T> union (
    Iterable<T> source
)
```

Parameters

source

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

Queryable(T).where Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Queryable<T> where (
    Predicate<T> predicate
)
```

Parameters

predicate

Return Value

See Also

Queryable(T) Members
Queryable<T> Class
com.mindfusion.common Namespace

ReleaseDate Interface

Syntax

Java

```
public interface ReleaseDate extends Annotation
```

See Also

ReleaseDate Members
com.mindfusion.common Namespace

ReleaseDate Members

The following tables list the members exposed by the ReleaseDate type.

See Also

ReleaseDate Interface
com.mindfusion.common Namespace

ScrollEvent Class

Provides data for the scroll events.

Syntax

Java
`public class ScrollEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.common.ScrollEvent

See Also

ScrollEvent Members
com.mindfusion.common Namespace

ScrollEvent Members

Provides data for the scroll events.

The following tables list the members exposed by the ScrollEvent type.

Public Methods

	Name	Description
	getNewValue	Gets the new value of the scroll bar.
	getOldValue	Gets the old value of the scroll bar.
	getType	Gets the type of scroll event that occurred.

See Also

ScrollEvent Class
com.mindfusion.common Namespace

ScrollEvent Methods

ScrollEvent.getNewValue Method

Gets the new value of the scroll bar.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public int getNewValue ()`

Return Value

An integer value.

See Also

ScrollEvent Members
ScrollEvent Class
com.mindfusion.common Namespace

ScrollEvent.getOldValue Method

Gets the old value of the scroll bar.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int getOldValue ()
```

Return Value

An integer value.

See Also

ScrollEvent Members
ScrollEvent Class
com.mindfusion.common Namespace

ScrollEvent.getType Method

Gets the type of scroll event that occurred.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int getType ()
```

Return Value

One of the ScrollEventType constants.

See Also

ScrollEvent Members
ScrollEvent Class
com.mindfusion.common Namespace

ScrollEventType Class

Specifies the type of action used to raise a scroll event.

Syntax

Java
`public class ScrollEventType`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.ScrollEventType

See Also

ScrollEventType Members
com.mindfusion.common Namespace

ScrollEventType Members

Specifies the type of action used to raise a scroll event.

The following tables list the members exposed by the ScrollEventType type.

Public Fields

	Name	Description
	EndScroll	The scroll box has stopped moving.
	First	The scroll box was moved to the minimum position.
	LargeDecrement	The scroll box moved a large distance. The user clicked the scroll bar to the left(horizontal) or above(vertical) the scroll box, or pressed the PAGE UP key.
	LargeIncrement	The scroll box moved a large distance. The user clicked the scroll bar to the right(horizontal) or below(vertical) the scroll box, or pressed the PAGE DOWN key.
	Last	The scroll box was moved to the maximum position.
	SmallDecrement	The scroll box was moved a small distance.
	SmallIncrement	The scroll box was moved a small distance.
	ThumbPosition	The scroll box was moved.
	ThumbTrack	The scroll box is currently being moved.

See Also

ScrollEventType Class
com.mindfusion.common Namespace

ScrollEventType Fields

ScrollEventType.EndScroll Field

The scroll box has stopped moving.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static final int EndScroll
```

See Also

ScrollEventType Members
ScrollEventType Class
com.mindfusion.common Namespace

ScrollEventType.First Field

The scroll box was moved to the minimum position.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static final int First
```

See Also

ScrollEventType Members
ScrollEventType Class
com.mindfusion.common Namespace

ScrollEventType.LargeDecrement Field

The scroll box moved a large distance. The user clicked the scroll bar to the left(horizontal) or above(vertical) the scroll box, or pressed the PAGE UP key.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static final int LargeDecrement
```

See Also

ScrollEventType Members
ScrollEventType Class
com.mindfusion.common Namespace

ScrollEventType.LargeIncrement Field

The scroll box moved a large distance. The user clicked the scroll bar to the right(horizontal) or below(vertical) the scroll box, or pressed the PAGE DOWN key.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static final int LargeIncrement
```

See Also

ScrollEventType Members
ScrollEventType Class
com.mindfusion.common Namespace

ScrollEventType.Last Field

The scroll box was moved to the maximum position.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static final int Last
```

See Also

ScrollEventType Members
ScrollEventType Class
com.mindfusion.common Namespace

ScrollEventType.SmallDecrement Field

The scroll box was moved a small distance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static final int SmallDecrement
```

See Also

ScrollEventType Members
ScrollEventType Class
com.mindfusion.common Namespace

ScrollEventType.SmallIncrement Field

The scroll box was moved a small distance.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static final int SmallIncrement
```

See Also

ScrollEventType Members
ScrollEventType Class
com.mindfusion.common Namespace

ScrollEventType.ThumbPosition Field

The scroll box was moved.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static final int ThumbPosition
```

See Also

ScrollEventType Members
ScrollEventType Class
com.mindfusion.common Namespace

ScrollEventType.ThumbTrack Field

The scroll box is currently being moved.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static final int ThumbTrack
```

See Also

ScrollEventType Members
ScrollEventType Class
com.mindfusion.common Namespace

Serialization Class

Syntax

Java
`public class Serialization`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.Serialization

See Also

Serialization Members
com.mindfusion.common Namespace

Serialization Members

The following tables list the members exposed by the Serialization type.

Public Constructors

	Name	Description
	Serialization	

Public Fields

	Name	Description
S	DiagramFormatHint	

Public Methods

	Name	Description
S	readPoint	
S	readRect	
S	readTag	

	writePoint	
	writeRect	
	writeTag	

See Also

Serialization Class
com.mindfusion.common Namespace

Serialization Fields

Serialization.DiagramFormatHint Field

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static int DiagramFormatHint
```

See Also

Serialization Members
Serialization Class
com.mindfusion.common Namespace

Serialization Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public Serialization ()
```

See Also

Serialization Class
com.mindfusion.common Namespace

Serialization Methods

Serialization.readPoint Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static Point2D.Float readPoint (
    ObjectInput in
)
```

Parameters

in

Return Value

See Also

Serialization Members
Serialization Class
com.mindfusion.common Namespace

Serialization.readRect Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static Rectangle2D.Float readRect (
    ObjectInput in
)
```

Parameters

in

Return Value

See Also

Serialization Members
Serialization Class
com.mindfusion.common Namespace

Serialization.readTag Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Object readTag (
    ObjectInput in
)
```

Parameters

in

Return Value

See Also

Serialization Members
Serialization Class
com.mindfusion.common Namespace

Serialization.writePoint Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static void writePoint (
    ObjectOutput out,
    Point2D point
)
```

Parameters

out

point

See Also

Serialization Members
Serialization Class
com.mindfusion.common Namespace

Serialization.writeRect Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static void writeRect (
    ObjectOutput out,
    Rectangle2D rect
)
```

Parameters

out

rect

See Also

Serialization Members
Serialization Class
com.mindfusion.common Namespace

Serialization.writeTag Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static void writeTag (
    ObjectOutput out,
    Object tag
)
```

Parameters

out

tag

See Also

Serialization Members
Serialization Class
com.mindfusion.common Namespace

Serializer Class

Syntax

Java

```
public class Serializer
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.common.Serializer

See Also

Serializer Members
com.mindfusion.common Namespace

Serializer Members

The following tables list the members exposed by the Serializer type.

Public Constructors

	Name	Description
	Serializer	

Public Methods

	Name	Description
	prettyfy	
	serialize	

See Also

Serializer Class
com.mindfusion.common Namespace

Serializer Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public Serializer ()`

See Also

Serializer Class
com.mindfusion.common Namespace

Serializer Methods

Serializer.prettyfy Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String prettyfy (
    String value
)
```

Parameters

value
A serialized String value representing JSON.

Return Value

pretty printed String representing JSON.

See Also

Serializer Members
Serializer Class
com.mindfusion.common Namespace

Serializer.serialize Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String serialize (
    JsonObject object,
    JsonContext context
)
```

Parameters

object

context

Return Value

See Also

Serializer Members
Serializer Class
com.mindfusion.common Namespace

SwingFuture<T> Class

Wraps a java.util.concurrent.Future to run completion on Swing UI thread. @param <T> The result type.

Syntax

Java

```
public class SwingFuture<T>
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.SwingFuture(T)

See Also

SwingFuture(T) Members
com.mindfusion.common Namespace

SwingFuture(T) Members

Wraps a java.util.concurrent.Future to run completion on Swing UI thread. @param <T> The result type.

The following tables list the members exposed by the SwingFuture(T) type.

Public Constructors

	Name	Description
	SwingFuture	

Public Methods

	Name	Description
	cancel	Cancels the wrapped java.util.concurrent.Future.
	fulfilled	Report success.
	rejected	Report error.
	setWrapped	Sets wrapped java.util.concurrent.Future.
	then	Overloaded.

See Also

SwingFuture<T> Class
com.mindfusion.common Namespace

SwingFuture(T) Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public SwingFuture ()`

See Also

SwingFuture<T> Class
com.mindfusion.common Namespace

SwingFuture(T) Methods

SwingFuture(T).cancel Method

Cancels the wrapped java.util.concurrent.Future.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void cancel ()
```

See Also

SwingFuture(T) Members
SwingFuture<T> Class
com.mindfusion.common Namespace

SwingFuture(T).fulfilled Method

Report success.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void fulfilled (
    T result
)
```

Parameters

result
The result value.

See Also

SwingFuture(T) Members
SwingFuture<T> Class
com.mindfusion.common Namespace

SwingFuture(T).rejected Method

Report error.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void rejected (
    Exception error
)
```

Parameters

error

See Also

SwingFuture(T) Members
SwingFuture<T> Class
com.mindfusion.common Namespace

SwingFuture(T).setWrapped Method

Sets wrapped java.util.concurrent.Future.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void setWrapped (
    Future<T> wrapped
)
```

Parameters

wrapped
The wrapped java Future.

See Also

SwingFuture(T) Members
SwingFuture<T> Class
com.mindfusion.common Namespace

SwingFuture(T).then Method

Overload List

Name	Description
SwingFuture(T).then (Consumer)	Register success handler.
SwingFuture(T).then (Consumer, Consumer)	Register success and error handlers.

See Also

SwingFuture(T) Members
SwingFuture<T> Class
com.mindfusion.common Namespace

SwingFuture(T).then Method (Consumer<T>)

Register success handler.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void then (
    Consumer<T> handleFulfilled
)
```

Parameters

handleFulfilled
A java.util.function.Consumer.

See Also

then Method Overload List
SwingFuture(T) Members
SwingFuture<T> Class
com.mindfusion.common Namespace

SwingFuture(T).then Method (Consumer<T>, Consumer<Exception>)

Register success and error handlers.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void then (
    Consumer<T> handleFulfilled,
    Consumer<Exception> handleRejected
)
```

Parameters

handleFulfilled
A java.util.function.Consumer.

handleRejected
A java.util.function.Consumer.

See Also

then Method Overload List
SwingFuture(T) Members
SwingFuture<T> Class
com.mindfusion.common Namespace

TristateButtonModel Class

Syntax

Java
`public class TristateButtonModel extends JToggleButton.ToggleButtonModel`

Inheritance Hierarchy

java.lang.Object
  javax.swing.DefaultButtonModel
    javax.swing.JToggleButton.ToggleButtonModel
      com.mindfusion.common.TriStateCheckBox.TristateButtonModel

See Also

TristateButtonModel Members
com.mindfusion.common Namespace

TristateButtonModel Members

The following tables list the members exposed by the TristateButtonModel type.

Public Constructors

	Name	Description
	TristateButtonModel	Overloaded.

Public Methods

	Name	Description
	getState	
	isIndeterminate	
	setArmed	

	setEnabled	
	setIndeterminate	
	setPressed	
	setSelected	

See Also

TristateButtonModel Class
com.mindfusion.common Namespace

TristateButtonModel Constructor

Overload List

Name	Description
TristateButtonModel ()	
TristateButtonModel (Boolean)	

See Also

TristateButtonModel Class
com.mindfusion.common Namespace

TristateButtonModel Constructor ()

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public TristateButtonModel ()`

See Also

TristateButtonModel Constructor Overload List
TristateButtonModel Class
com.mindfusion.common Namespace

TristateButtonModel Constructor (Boolean)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public TristateButtonModel (
    Boolean state
)
```

Parameters

state

See Also

TristateButtonModel Constructor Overload List
TristateButtonModel Class
com.mindfusion.common Namespace

TristateButtonModel Methods

TristateButtonModel.getState Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Boolean getState ()
```

Return Value

See Also

TristateButtonModel Members
TristateButtonModel Class
com.mindfusion.common Namespace

TristateButtonModel.isIndeterminate Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean isIndeterminate ()
```

Return Value

See Also

TristateButtonModel Members
TristateButtonModel Class

TristateButtonModel.setArmed Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void setArmed (
    boolean b
)
```

Parameters

b

See Also

TristateButtonModel Members
TristateButtonModel Class
com.mindfusion.common Namespace

TristateButtonModel.setEnabled Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void setEnabled (
    boolean enabled
)
```

Parameters

enabled

See Also

TristateButtonModel Members
TristateButtonModel Class
com.mindfusion.common Namespace

TristateButtonModel.setIndeterminate Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public void setIndeterminate ()
```

See Also

TristateButtonModel Members
TristateButtonModel Class
com.mindfusion.common Namespace

TristateButtonModel.setPressed Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public void setPressed (
    boolean b
)
```

Parameters

b

See Also

TristateButtonModel Members
TristateButtonModel Class
com.mindfusion.common Namespace

TristateButtonModel.setSelected Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public void setSelected (
    Boolean selected
)
```

Parameters

selected

See Also

TristateButtonModel Members
TristateButtonModel Class
com.mindfusion.common Namespace

TriStateCheckBox Class

Syntax

Java
`public class TriStateCheckBox extends JCheckBox`

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        javax.swing.AbstractButton
          javax.swing.JToggleButton
            javax.swing.JCheckBox
              com.mindfusion.common.TriStateCheckBox

See Also

TriStateCheckBox Members
com.mindfusion.common Namespace

TriStateCheckBox Members

The following tables list the members exposed by the TriStateCheckBox type.

Public Constructors

	Name	Description
	TriStateCheckBox	Overloaded.

Public Methods

	Name	Description
	addMouseListener	
	getState	
	getTristateModel	
	isIndeterminate	
	setIndeterminate	
	setModel	

	setState	

See Also

TriStateCheckBox Class
com.mindfusion.common Namespace

TriStateCheckBox Constructor

Overload List

Name	Description
TriStateCheckBox (String)	
TriStateCheckBox (String, Icon, Boolean)	

See Also

TriStateCheckBox Class
com.mindfusion.common Namespace

TriStateCheckBox Constructor (String)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public TriStateCheckBox (
    String text
)
```

Parameters

text

See Also

TriStateCheckBox Constructor Overload List
TriStateCheckBox Class
com.mindfusion.common Namespace

TriStateCheckBox Constructor (String, Icon, Boolean)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public TriStateCheckBox (
    String text,
    Icon icon,
    Boolean initial
)
```

Parameters

text

icon

initial

See Also

TriStateCheckBox Constructor Overload List
TriStateCheckBox Class
com.mindfusion.common Namespace

TriStateCheckBox Methods

TriStateCheckBox.addMouseListener Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void addMouseListener (
    MouseListener l
)
```

Parameters

l

See Also

TriStateCheckBox Members
TriStateCheckBox Class
com.mindfusion.common Namespace

TriStateCheckBox.getState Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Boolean getState ()
```

Return Value

See Also

TriStateCheckBox Members
TriStateCheckBox Class
com.mindfusion.common Namespace

TriStateCheckBox.getTristateModel Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public TriStateCheckBox.TristateButtonModel getTristateModel ()
```

Return Value

See Also

TriStateCheckBox Members
TriStateCheckBox Class
com.mindfusion.common Namespace

TriStateCheckBox.isIndeterminate Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean isIndeterminate ()
```

Return Value

See Also

TriStateCheckBox Members
TriStateCheckBox Class
com.mindfusion.common Namespace

TriStateCheckBox.setIndeterminate Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public void setIndeterminate ()
```

See Also

TriStateCheckBox Members
TriStateCheckBox Class
com.mindfusion.common Namespace

TriStateCheckBox.setModel Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public void setModel (
    ButtonModel newModel
)
```

Parameters

newModel

See Also

TriStateCheckBox Members
TriStateCheckBox Class
com.mindfusion.common Namespace

TriStateCheckBox.setState Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public void setState (
    Boolean state
)
```

Parameters

state

See Also

TriStateCheckBox Members
TriStateCheckBox Class
com.mindfusion.common Namespace

TypeConverter Interface

Syntax

Java

```
public interface TypeConverter extends Annotation
```

See Also

TypeConverter Members
com.mindfusion.common Namespace

TypeConverter Members

The following tables list the members exposed by the TypeConverter type.

See Also

TypeConverter Interface
com.mindfusion.common Namespace

ValueType Interface

An annotation used to mark types which once were value types.

Syntax

Java

```
public interface ValueType extends Annotation
```

See Also

ValueType Members
com.mindfusion.common Namespace

ValueType Members

An annotation used to mark types which once were value types.

The following tables list the members exposed by the ValueType type.

See Also

ValueType Interface
com.mindfusion.common Namespace

Vector Class

Represents a two-dimensional vector.

Syntax

Java
`public class Vector`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.Vector

See Also

Vector Members
com.mindfusion.common Namespace

Vector Members

Represents a two-dimensional vector.

The following tables list the members exposed by the Vector type.

Public Constructors

	Name	Description
	Vector	Overloaded.

Public Methods

	Name	Description
S	add	Overloaded.
S	angleBetween	
	clone	
S	crossProduct	
S	determinant	
S	divide	
	equals	Overloaded.
	getX	
	getY	

	hashCode	
S	left	
	length	
	lengthSquared	
S	multiply	Overloaded.
S	negate	
S	normalize	
S	right	
	setX	
	setY	
S	subtract	
S	toPointF	
S	toSizeF	
	toString	Overloaded.

See Also

Vector Class
com.mindfusion.common Namespace

Vector Constructor

Overload List

Name	Description
Vector (Point2D, Point2D)	
Vector (float, float)	

See Also

Vector Class
com.mindfusion.common Namespace

Vector Constructor (Point2D, Point2D)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Vector (
    Point2D p1,
    Point2D p2
)
```

Parameters

p1

p2

See Also

Vector Constructor Overload List
Vector Class
com.mindfusion.common Namespace

Vector Constructor (float, float)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Vector (
    float x,
    float y
)
```

Parameters

x

y

See Also

Vector Constructor Overload List
Vector Class
com.mindfusion.common Namespace

Vector Methods

Vector.add Method

Overload List

Name	Description
Vector.add (Vector, Point2D)	
Vector.add (Vector, Vector)	

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.add Method (Vector, Point2D)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Point2D.Float add (
    Vector vector,
    Point2D point
)
```

Parameters

vector

point

Return Value

See Also

add Method Overload List
Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.add Method (Vector, Vector)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Vector add (
    Vector vector1,
    Vector vector2
)
```

Parameters

vector1

vector2

Return Value

See Also

add Method Overload List
Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.angleBetween Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static float angleBetween (
    Vector vector1,
    Vector vector2
)
```

Parameters

vector1

vector2

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.clone Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public Object clone ()
```

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.crossProduct Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static float crossProduct (
    Vector vector1,
    Vector vector2
)
```

Parameters

vector1

vector2

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.determinant Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static float determinant (
    Vector vector1,
    Vector vector2
)
```

Parameters

vector1

vector2

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.divide Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Vector divide (
    Vector vector,
    float scalar
)
```

Parameters

vector

scalar

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.equals Method

Overload List

Name	Description
Vector.equals (Object)	
Vector.equals (Vector)	
Vector.equals (Vector, Vector)	

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.equals Method (Object)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean equals (
    Object o
)
```

Parameters

o

Return Value

See Also

equals Method Overload List
Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.equals Method (Vector)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public boolean equals (
    Vector value
)
```

Parameters

value

Return Value

See Also

equals Method Overload List
Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.equals Method (Vector, Vector)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static boolean equals (
    Vector vector1,
    Vector vector2
)
```

Parameters

vector1

vector2

Return Value

See Also

equals Method Overload List
Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.getX Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public float getX ()
```

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.getY Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public float getY ()
```

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.hashCode Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public int hashCode ()
```

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.left Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Vector left (
    Vector v
)
```

Parameters

v

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.length Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public float length ()`

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.lengthSquared Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public float lengthSquared ()`

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.multiply Method

Overload List

Name	Description
Vector.multiply (Vector, float)	
Vector.multiply (Vector, Vector)	

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.multiply Method (Vector, float)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static Vector multiply (
    Vector vector,
    float scalar
)
```

Parameters

vector

scalar

Return Value

See Also

multiply Method Overload List
Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.multiply Method (Vector, Vector)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java
public static float multiply (
    Vector vector1,
    Vector vector2
)
```

Parameters

vector1

vector2

Return Value

See Also

multiply Method Overload List
Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.negate Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java

public static Vector negate (
    Vector vector
)
```

Parameters

vector

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.normalize Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

```
Java

public static Vector normalize (
    Vector vector
)
```

Parameters

vector

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.right Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Vector right (
    Vector v
)
```

Parameters

v

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.setX Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void setX (
    float value
)
```

Parameters

value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.setY Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public void setY (
    float value
)
```

Parameters

value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.subtract Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Vector subtract (
    Vector vector1,
    Vector vector2
)
```

Parameters

vector1

vector2

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.toPointF Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Point2D.Float toPointF (
    Vector vector
)
```

Parameters

vector

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.toSizeF Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Dimension toSizeF (
    Vector vector
)
```

Parameters

vector

Return Value

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.toString Method

Overload List

Name	Description
Vector.toString ()	
Vector.toString (Locale)	

See Also

Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.toString Method ()

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String toString ()
```

Return Value

See Also

toString Method Overload List
Vector Members
Vector Class
com.mindfusion.common Namespace

Vector.toString Method (Locale)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public String toString (
    Locale provider
)
```

Parameters

provider

Return Value

See Also

toString Method Overload List
Vector Members
Vector Class
com.mindfusion.common Namespace

VerticalAlignment Enumeration

Specifies how an object or text is vertically aligned relative to an element.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public enum VerticalAlignment
```

Members

	Member name	Description

	Bottom	The object or text is aligned to the bottom of the control element.
	Center	The object or text is aligned to the center of the control element.
	Top	The object or text is aligned to the top of the control element.

See Also

com.mindfusion.common Namespace

XDimension2D Class

Syntax

Java
`public class XDimension2D`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.XDimension2D

See Also

XDimension2D Members
com.mindfusion.common Namespace

XDimension2D Members

The following tables list the members exposed by the XDimension2D type.

Public Constructors

	Name	Description
	XDimension2D	

Public Methods

	Name	Description
	fromRect	

See Also

XDimension2D Class
com.mindfusion.common Namespace

XDimension2D Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public XDimension2D ()
```

See Also

XDimension2D Class
com.mindfusion.common Namespace

XDimension2D Methods

XDimension2D.fromRect Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static XDimension2D.Double fromRect (
    Rectangle2D rect
)
```

Parameters

rect

Return Value

See Also

XDimension2D Members
XDimension2D Class
com.mindfusion.common Namespace

XmlException Class

Represents XML serialization error.

Syntax

Java

```
public class XmlException extends Exception
```

Inheritance Hierarchy

java.lang.Object
  java.lang.Throwable
    java.lang.Exception
      com.mindfusion.common.XmlException

See Also

XmlException Members
com.mindfusion.common Namespace

XmlException Members

Represents XML serialization error.

The following tables list the members exposed by the XmlException type.

Public Constructors

	Name	Description
	XmlException	Overloaded.

See Also

XmlException Class
com.mindfusion.common Namespace

XmlException Constructor

Overload List

Name	Description
XmlException (String)	Initializes a new instance of the XmlException class.
XmlException (Throwable)	Initializes a new instance of the XmlException class.

See Also

XmlException Class
com.mindfusion.common Namespace

XmlException Constructor (String)

Initializes a new instance of the XmlException class.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public XmlException (
    String message
)
```

Parameters

message

See Also

XmlException Constructor Overload List
XmlException Class
com.mindfusion.common Namespace

XmlException Constructor (Throwable)

Initializes a new instance of the XmlException class.

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public XmlException (
    Throwable cause
)
```

Parameters

cause

See Also

XmlException Constructor Overload List
XmlException Class
com.mindfusion.common Namespace

XmlFunctions Class

Syntax

Java

```
public class XmlFunctions
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.common.XmlFunctions

See Also

XmlFunctions Members
com.mindfusion.common Namespace

XmlFunctions Members

The following tables list the members exposed by the XmlFunctions type.

Public Constructors

	Name	Description
	XmlFunctions	

Public Methods

	Name	Description
	selectNodes	Overloaded.
	selectSingleNode	Overloaded.
	setNamespaceMap	

See Also

XmlFunctions Class
com.mindfusion.common Namespace

XmlFunctions Constructor

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java
`public XmlFunctions ()`

See Also

XmlFunctions Class
com.mindfusion.common Namespace

XmlFunctions Methods

XmlFunctions.selectNodes Method

Overload List

Name	Description
XmlFunctions.selectNodes (String, Document)	
XmlFunctions.selectNodes (String, Element)	

See Also

XmlFunctions Members
XmlFunctions Class
com.mindfusion.common Namespace

XmlFunctions.selectNodes Method (String, Document)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static NodeList selectNodes (
    String expression,
    Document doc
)
```

Parameters

expression

doc

Return Value

See Also

selectNodes Method Overload List
XmlFunctions Members
XmlFunctions Class
com.mindfusion.common Namespace

XmlFunctions.selectNodes Method (String, Element)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static NodeList selectNodes (
    String expression,
    Element el
)
```

Parameters

expression

el

Return Value

See Also

selectNodes Method Overload List
XmlFunctions Members
XmlFunctions Class
com.mindfusion.common Namespace

XmlFunctions.selectSingleNode Method

Overload List

Name	Description
XmlFunctions.selectSingleNode (String, Document)	
XmlFunctions.selectSingleNode (String, Element)	

See Also

XmlFunctions Members
XmlFunctions Class
com.mindfusion.common Namespace

XmlFunctions.selectSingleNode Method (String, Document)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Node selectSingleNode (
    String expression,
    Document doc
)
```

Parameters

expression

doc

Return Value

See Also

selectSingleNode Method Overload List
XmlFunctions Members
XmlFunctions Class
com.mindfusion.common Namespace

XmlFunctions.selectSingleNode Method (String, Element)

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static Node selectSingleNode (
    String expression,
    Element element
)
```

Parameters

expression

element

Return Value

See Also

selectSingleNode Method Overload List
XmlFunctions Members
XmlFunctions Class
com.mindfusion.common Namespace

XmlFunctions.setNamespaceMap Method

Namespace: com.mindfusion.common
Package: com.mindfusion.common

Syntax

Java

```
public static void setNamespaceMap (
    HashMap<String, String> value
)
```

Parameters

value

See Also

XmlFunctions Members
XmlFunctions Class
com.mindfusion.common Namespace

com.mindfusion.diagramming Namespace

AbstractLayout Class

The base class for all layout classes.

Syntax

Java
`public abstract class AbstractLayout`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.AbstractLayout
com.mindfusion.diagramming.CascadeLayout
com.mindfusion.diagramming.CircularLayout
com.mindfusion.diagramming.DecisionLayout
com.mindfusion.diagramming.FlowchartLayout
com.mindfusion.diagramming.FractalLayout
com.mindfusion.diagramming.HierarchicalLayout
com.mindfusion.diagramming.LayeredLayout
com.mindfusion.diagramming.OneWayLayout
com.mindfusion.diagramming.OrthogonalLayout
com.mindfusion.diagramming.OrthogonalRouter
com.mindfusion.diagramming.SwimlaneLayout
com.mindfusion.diagramming.TopologicalLayout
com.mindfusion.diagramming.TreeMapLayout
com.mindfusion.diagramming.TriangularLayout

See Also

AbstractLayout Members
com.mindfusion.diagramming Namespace

AbstractLayout Members

The base class for all layout classes.

The following tables list the members exposed by the AbstractLayout type.

Protected Constructors

	Name	Description
	AbstractLayout	Initialzes a new instance of the **AbstractLayout** class.

Public Methods

	Name	Description
	arrange	Overloaded.
	getAnchoring	Gets how to align links to the anchor points of nodes.
	getGrowToFit	Gets a value indicating whether the diagram boundaries should grow to fit the arranged content.
	getKeepGroupLayout	Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph.
	getLayoutLink	Gets an object, which is notified when the position of a link is changed by the layout.
	getLayoutNode	Gets an object, which is notified when the position of a node is changed by the layout.
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds.
	getMultipleGraphsPlacement	Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other.
	getProgress	Gets the progress callback delegate.
S	removeMidleSegmentPoint	
	setAnchoring	Sets how to align links to the anchor points of nodes.
	setGrowToFit	Sets a value indicating whether the diagram boundaries should grow to fit the arranged content.
	setKeepGroupLayout	Sets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph.
	setLayoutLink	Sets an object, which is notified when the position of a link is changed by the layout.
	setLayoutNode	Sets an object, which is notified when the position of a node is changed by the layout.
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds.
	setMultipleGraphsPlacement	Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other.
	setProgress	Sets the progress callback delegate.

See Also

AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout Constructor

Initialzes a new instance of the AbstractLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`protected AbstractLayout ()`

See Also

AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout Methods

AbstractLayout.arrange Method

Overload List

Name	Description
AbstractLayout.arrange (Diagram)	Applies the layout to the specified Diagram instance.
AbstractLayout.arrange (Diagram, DiagramItemList)	Applies the layout on the specified subset of items from the specified **Diagram** instance.

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.arrange Method (Diagram)

Applies the layout to the specified Diagram instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public boolean arrange (`
`  Diagram diagram`
`)`

Parameters

diagram
The Diagram that is arranged.

Return Value

true if the diagram has been arranged successfully; otherwise, **false**.

See Also

arrange Method Overload List
AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.arrange Method (Diagram, DiagramItemList)

Applies the layout on the specified subset of items from the specified Diagram instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public abstract boolean arrange (
    Diagram diagram,
    DiagramItemList items
)
```

Parameters

diagram
The Diagram that is arranged.

items
A collection of nodes and links from diagram that define the subgraph to arrange.

Return Value

true if the diagram has been arranged successfully; otherwise, **false**.

See Also

arrange Method Overload List
AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.getAnchoring Method

Gets how to align links to the anchor points of nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Anchoring getAnchoring ()
```

Return Value

A member of the Anchoring enumeration.

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.getGrowToFit Method

Gets a value indicating whether the diagram boundaries should grow to fit the arranged content.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getGrowToFit ()
```

Return Value

true to grow diagram's Bounds if the arranged items would not fit, or **false** otherwise. The default value is **true**.

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.getKeepGroupLayout Method

Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getKeepGroupLayout ()
```

Return Value

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.getLayoutLink Method

Gets an object, which is notified when the position of a link is changed by the layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public LayoutLink getLayoutLink ()
```

Return Value

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.getLayoutNode Method

Gets an object, which is notified when the position of a node is changed by the layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public LayoutNode getLayoutNode ()
```

Return Value

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.getMargins Method

Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public XDimension2D.Double getMargins ()
```

Return Value

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.getMultipleGraphsPlacement Method

Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public MultipleGraphsPlacement getMultipleGraphsPlacement ()
```

Return Value

A member of the MultipleGraphsPlacement enumeration.

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.getProgress Method

Gets the progress callback delegate.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LayoutProgress getProgress ()
```

Return Value

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.removeMidleSegmentPoint Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static void removeMidleSegmentPoint (
    Link link,
    boolean uniq
)
```

Parameters

link

uniq

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.setAnchoring Method

Sets how to align links to the anchor points of nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAnchoring (
    Anchoring value
)
```

Parameters

value
A member of the Anchoring enumeration. The default value is **Ignore**.

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.setGrowToFit Method

Sets a value indicating whether the diagram boundaries should grow to fit the arranged content.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setGrowToFit (
    boolean value
)
```

Parameters

value

true to grow diagram's Bounds if the arranged items would not fit, or **false** otherwise.

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.setKeepGroupLayout Method

Sets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setKeepGroupLayout (
    boolean value
)
```

Parameters

value

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.setLayoutLink Method

Sets an object, which is notified when the position of a link is changed by the layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLayoutLink (
    LayoutLink value
)
```

Parameters

value

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.setLayoutNode Method

Sets an object, which is notified when the position of a node is changed by the layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLayoutNode (
    LayoutNode value
)
```

Parameters

value

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.setMargins Method

Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMargins (
    XDimension2D.Double value
)
```

Parameters

value

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.setMultipleGraphsPlacement Method

Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMultipleGraphsPlacement (
    MultipleGraphsPlacement value
)
```

Parameters

value
A member of the MultipleGraphsPlacement enumeration. The default value is **Horizontal**.

Remarks

If the diagram contains several unconnected subgraphs, each of them is processed by the algorithm independently from the others. This property specifies how such subgraphs should be placed one relatively to another. The possible options are to arrange them in a row, in a column, or in such a way that the diagram covers a minimal area.

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

AbstractLayout.setProgress Method

Sets the progress callback delegate.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setProgress (
    LayoutProgress value
)
```

Parameters

value

See Also

AbstractLayout Members
AbstractLayout Class
com.mindfusion.diagramming Namespace

Action Enumeration

The members of this enumeration identify the current operation carried out interactively on an item. Usually you would pass one of these constants to the constructor of an InteractionState instance when implementing custom BehaviorBase classes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum Action`

Members

	Member name	Description
	Create	Specifies that a new item is currently being drawn by a user.
	Modify	Specifies that an existing item is being modified.
	None	Specifies that there isn't any action being performed on an item.
	Split	Specifies that a segment of a link is being split.

See Also

com.mindfusion.diagramming Namespace

AddGroupCmd Class

Implements creation of new groups.

Syntax

Java
`public class AddGroupCmd extends Command`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.AddGroupCmd

See Also

AddGroupCmd Members
com.mindfusion.diagramming Namespace

AddGroupCmd Members

Implements creation of new groups.

The following tables list the members exposed by the AddGroupCmd type.

Public Constructors

	Name	Description
	AddGroupCmd	Overloaded.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	This method is called internally by JDiagram when creating groups via the Factory.createGroup of DiagramNode.attachTo methods.
	getGroup	Gets the group added to the flowchart by this command.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	This method is called by the UndoManager when redoing actions.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	This method is called by the **UndoManager** when undoing actions.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

AddGroupCmd Constructor

Overload List

Name	Description
AddGroupCmd (Group, DiagramItem)	Initializes a new instance of the AddGroupCmd class.
AddGroupCmd (Group, DiagramItem, boolean)	Initializes a new instance of the **AddGroupCmd** class.

See Also

AddGroupCmd Class
com.mindfusion.diagramming Namespace

AddGroupCmd Constructor (Group, DiagramItem)

Initializes a new instance of the AddGroupCmd class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AddGroupCmd (
    Group group,
    DiagramItem item
)
```

Parameters

group
The group that is added to the diagram by this command.

item
The master item of the group.

See Also

AddGroupCmd Constructor Overload List
AddGroupCmd Class
com.mindfusion.diagramming Namespace

AddGroupCmd Constructor (Group, DiagramItem, boolean)

Initializes a new instance of the AddGroupCmd class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public AddGroupCmd (
    Group group,
    DiagramItem item,
    boolean saveAttachments
)
```

Parameters

group
The group that is added to the diagram by this command.

item
The master item of the group.

saveAttachments
Specifies whether to save the attachment information for later redo.

See Also

AddGroupCmd Constructor Overload List
AddGroupCmd Class
com.mindfusion.diagramming Namespace

AddGroupCmd Methods

AddGroupCmd.execute Method

This method is called internally by JDiagram when creating groups via the Factory.createGroup of DiagramNode.attachTo methods.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled
true if the undo manager is enabled at this time, otherwise **false**.

See Also

AddGroupCmd Members
AddGroupCmd Class
com.mindfusion.diagramming Namespace

AddGroupCmd.getGroup Method

Gets the group added to the flowchart by this command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Group getGroup ()
```

Return Value

A Group instance.

See Also

AddGroupCmd Members
AddGroupCmd Class
com.mindfusion.diagramming Namespace

AddGroupCmd.redo Method

This method is called by the UndoManager when redoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void redo ()
```

See Also

AddGroupCmd Members
AddGroupCmd Class
com.mindfusion.diagramming Namespace

AddGroupCmd.undo Method

This method is called by the UndoManager when undoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void undo ()
```

See Also

AddGroupCmd Members
AddGroupCmd Class
com.mindfusion.diagramming Namespace

AddItemCmd Class

Implements creation of new diagram items.

Syntax

Java
`public class AddItemCmd extends Command`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.AddItemCmd

See Also

AddItemCmd Members
com.mindfusion.diagramming Namespace

AddItemCmd Members

Implements creation of new diagram items.

The following tables list the members exposed by the AddItemCmd type.

Public Constructors

	Name	Description
	AddItemCmd	Initializes a new **AddItemCmd** instance.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	This method is called internally when creating new items interactively or programmatically.
	getItem	Gets the item added to the flowchart by this command.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	This method is called by the UndoManager when redoing actions.

	setTitle	Sets the command title. (Inherited from Command.)
	undo	This method is called by the **UndoManager** when undoing actions.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

AddItemCmd Class
com.mindfusion.diagramming Namespace

AddItemCmd Constructor

Initializes a new AddItemCmd instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AddItemCmd (
    DiagramItem item
)
```

Parameters

item
The item that is added to the diagram by this command.

See Also

AddItemCmd Class
com.mindfusion.diagramming Namespace

AddItemCmd Methods

AddItemCmd.execute Method

This method is called internally when creating new items interactively or programmatically.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled
true if the undo manager is enabled at this time, otherwise **false**.

See Also

AddItemCmd Members
AddItemCmd Class
com.mindfusion.diagramming Namespace

AddItemCmd.getItem Method

Gets the item added to the flowchart by this command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramItem getItem ()
```

Return Value

An instance of an DiagramItem -derived class.

See Also

AddItemCmd Members
AddItemCmd Class
com.mindfusion.diagramming Namespace

AddItemCmd.redo Method

This method is called by the UndoManager when redoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void redo ()
```

See Also

AddItemCmd Members
AddItemCmd Class
com.mindfusion.diagramming Namespace

AddItemCmd.undo Method

This method is called by the UndoManager when undoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void undo ()
```

See Also

AddItemCmd Members
AddItemCmd Class
com.mindfusion.diagramming Namespace

AddToContainerCmd Class

Undoable command that implements an addition of a node to a container.

Syntax

Java

```
public class AddToContainerCmd extends Command
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.AddToContainerCmd

See Also

AddToContainerCmd Members
com.mindfusion.diagramming Namespace

AddToContainerCmd Members

Undoable command that implements an addition of a node to a container.

The following tables list the members exposed by the AddToContainerCmd type.

Protected Constructors

	Name	Description

	AddToContainerCmd	Intializes a new instance of the **AddToContainerCmd** class.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	Carries out the command action.
	getContainer	Gets the container node associated with the command.
	getNodes	Gets the item associated with the command.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	Redoes the command.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	Undoes the command.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related.
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative.

See Also

AddToContainerCmd Class
com.mindfusion.diagramming Namespace

AddToContainerCmd Constructor

Intializes a new instance of the AddToContainerCmd class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected AddToContainerCmd (
    ContainerNode container,
    DiagramNodeList nodes,
    boolean interactive
)
```

Parameters

container

nodes
The nodes added to the container by this command.

interactive

See Also

AddToContainerCmd Class
com.mindfusion.diagramming Namespace

AddToContainerCmd Methods

AddToContainerCmd.adopt Method

Merges adjacent commands in the history queue if they are related.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean adopt (
    Command command
)
```

Parameters

command
The Command that might be adopted by this command.

Return Value

true if the specified command has been adopted; otherwise, **false**.

See Also

AddToContainerCmd Members
AddToContainerCmd Class
com.mindfusion.diagramming Namespace

AddToContainerCmd.execute Method

Carries out the command action.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled

See Also

AddToContainerCmd Members
AddToContainerCmd Class
com.mindfusion.diagramming Namespace

AddToContainerCmd.getContainer Method

Gets the container node associated with the command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ContainerNode getContainer ()
```

Return Value

See Also

AddToContainerCmd Members
AddToContainerCmd Class
com.mindfusion.diagramming Namespace

AddToContainerCmd.getNodes Method

Gets the item associated with the command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNodeList getNodes ()
```

Return Value

See Also

AddToContainerCmd Members
AddToContainerCmd Class
com.mindfusion.diagramming Namespace

AddToContainerCmd.isContainerOf Method

Determines whether a command has been initiated by this command and should be treated as a derivative.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean isContainerOf (
    Command command
)
```

Parameters

command
The Command for which to determine whether it is a derivative.

Return Value

true if the specified command should be considered a derivative; otherwise, **false**.

See Also

AddToContainerCmd Members
AddToContainerCmd Class
com.mindfusion.diagramming Namespace

AddToContainerCmd.redo Method

Redoes the command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void redo ()
```

See Also

AddToContainerCmd Members
AddToContainerCmd Class
com.mindfusion.diagramming Namespace

AddToContainerCmd.undo Method

Undoes the command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void undo ()`

See Also

AddToContainerCmd Members
AddToContainerCmd Class
com.mindfusion.diagramming Namespace

AdjustmentHandle Class

Represents an adjustment handle used to move or modify diagram items.

Syntax

Java
`public class AdjustmentHandle`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AdjustmentHandle
    com.mindfusion.diagramming.FreeFormHandle
    com.mindfusion.diagramming.LinkAdjustmentHandle
    com.mindfusion.diagramming.NodeAdjustmentHandle

See Also

AdjustmentHandle Members
com.mindfusion.diagramming Namespace

AdjustmentHandle Members

Represents an adjustment handle used to move or modify diagram items.

The following tables list the members exposed by the AdjustmentHandle type.

Public Constructors

	Name	Description
	AdjustmentHandle	Initializes a new instance of the **AdjustmentHandle** class.

See Also

AdjustmentHandle Class
com.mindfusion.diagramming Namespace

AdjustmentHandle Constructor

Initializes a new instance of the AdjustmentHandle class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public AdjustmentHandle ()
```

See Also

AdjustmentHandle Class
com.mindfusion.diagramming Namespace

AdjustmentHandles Class

Provides predefined sets of NodeHandleType elements that can be used as parameters of the setEnabledHandles method of the DiagramNode class.

Syntax

```
Java
public class AdjustmentHandles
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AdjustmentHandles

See Also

AdjustmentHandles Members
com.mindfusion.diagramming Namespace

AdjustmentHandles Members

Provides predefined sets of NodeHandleType elements that can be used as parameters of the setEnabledHandles method of the DiagramNode class.

The following tables list the members exposed by the AdjustmentHandles type.

Public Constructors

	Name	Description
	AdjustmentHandles	Initializes a new instance of the **AdjustmentHandles** class.

Public Fields

	Name	Description
	All	All handles are enabled.

	BottomHandles	The bottom-left, bottom-center and bottom-right handles are enabled.
	DisableRotation	All handles except rotation one are enabled.
	LeftHandles	The top-left, middle-left and bottom-left handles are enabled.
	Move	The movement handle is enabled.
	None	Specifies that all selection handles of an item are disabled.
	ResizeBottomCenter	The bottom center selection handle is enabled.
	ResizeBottomLeft	The bottom left selection handle is enabled.
	ResizeBottomRight	The bottom right selection handle is enabled.
	ResizeMiddleLeft	The middle left selection handle is enabled.
	ResizeMiddleRight	The middle right selection handle is enabled.
	ResizeTopCenter	The top center selection handle is enabled.
	ResizeTopLeft	The top left selection handle is enabled.
	ResizeTopRight	The top right selection handle is enabled.
	RightHandles	The top-right, bottom-right and middle-right handles are enabled.
	Rotate	The rotation handle is enabled.
	TopHandles	The top-left, top-center and top-right handles are enabled.

Public Methods

	Name	Description
	fromInt	
	toInt	

See Also

AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles Fields

AdjustmentHandles.All Field

All handles are enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static final EnumSet<NodeHandleType> All
```

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.BottomHandles Field

The bottom-left, bottom-center and bottom-right handles are enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static final EnumSet<NodeHandleType> BottomHandles
```

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.DisableRotation Field

All handles except rotation one are enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static final EnumSet<NodeHandleType> DisableRotation
```

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.LeftHandles Field

The top-left, middle-left and bottom-left handles are enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static final EnumSet<NodeHandleType> LeftHandles`

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.Move Field

The movement handle is enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static final EnumSet<NodeHandleType> Move`

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.None Field

Specifies that all selection handles of an item are disabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static final EnumSet<NodeHandleType> None`

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.ResizeBottomCenter Field

The bottom center selection handle is enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static final EnumSet<NodeHandleType> ResizeBottomCenter
```

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.ResizeBottomLeft Field

The bottom left selection handle is enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static final EnumSet<NodeHandleType> ResizeBottomLeft
```

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.ResizeBottomRight Field

The bottom right selection handle is enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static final EnumSet<NodeHandleType> ResizeBottomRight
```

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.ResizeMiddleLeft Field

The middle left selection handle is enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static final EnumSet<NodeHandleType> ResizeMiddleLeft
```

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.ResizeMiddleRight Field

The middle right selection handle is enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static final EnumSet<NodeHandleType> ResizeMiddleRight
```

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.ResizeTopCenter Field

The top center selection handle is enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static final EnumSet<NodeHandleType> ResizeTopCenter
```

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.ResizeTopLeft Field

The top left selection handle is enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static final EnumSet<NodeHandleType> ResizeTopLeft
```

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.ResizeTopRight Field

The top right selection handle is enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static final EnumSet<NodeHandleType> ResizeTopRight
```

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.RightHandles Field

The top-right, bottom-right and middle-right handles are enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static final EnumSet<NodeHandleType> RightHandles
```

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.Rotate Field

The rotation handle is enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static final EnumSet<NodeHandleType> Rotate
```

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.TopHandles Field

The top-left, top-center and top-right handles are enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static final EnumSet<NodeHandleType> TopHandles
```

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles Constructor

Initializes a new instance of the AdjustmentHandles class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AdjustmentHandles ()
```

See Also

AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles Methods

AdjustmentHandles.fromInt Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static EnumSet<NodeHandleType> fromInt (
    long value
)
```

Parameters

value

Return Value

See Also

AdjustmentHandles Members
AdjustmentHandles Class
com.mindfusion.diagramming Namespace

AdjustmentHandles.toInt Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static long toInt (
    EnumSet<NodeHandleType> set
)
```

Parameters

set

Return Value

See Also

AeroEffect Class

Represents an effect that adds semitransparency to the node and emphasizes its outline by adding a shade and an inner stroke. This effect can be applied to the nodes in a Diagram by adding an instance of this class to the Diagram.getNodeEffects collection.

Syntax

Java
`public class AeroEffect extends NodeEffect`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.NodeEffect
    com.mindfusion.diagramming.AeroEffect

See Also

AeroEffect Members
com.mindfusion.diagramming Namespace

AeroEffect Members

Represents an effect that adds semitransparency to the node and emphasizes its outline by adding a shade and an inner stroke. This effect can be applied to the nodes in a Diagram by adding an instance of this class to the Diagram.getNodeEffects collection.

The following tables list the members exposed by the AeroEffect type.

Public Constructors

	Name	Description
	AeroEffect	Initializes a new instance of the **AeroEffect** class.

Public Methods

	Name	Description
	addPropertyChangeListener	(Inherited from NodeEffect.)
	clone	NodeEffect.clone override.
	getInnerOutlineColor	Gets the color of the inner outline.
	getOpacity	Gets the opacity to apply to the node's background. Opacity varies in the range [0..1] where 0 indicates full transparency and 1 indicates the original transparency. Opacity has no effect on image backgrounds.

	getShadeColor	Gets the color of the shade.
	readExternal	NodeEffect.readExternal override.
	removePropertyChangeListener	(Inherited from NodeEffect.)
	setInnerOutlineColor	Sets the color of the inner outline.
	setOpacity	Sets the opacity to apply to the node's background. Opacity varies in the range [0..1] where 0 indicates full transparency and 1 indicates the original transparency. Opacity has no effect on image backgrounds.
	setShadeColor	Sets the color of the shade.
	writeExternal	NodeEffect.writeExternal override.

See Also

AeroEffect Class
com.mindfusion.diagramming Namespace

AeroEffect Constructor

Initializes a new instance of the AeroEffect class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AeroEffect ()
```

See Also

AeroEffect Class
com.mindfusion.diagramming Namespace

AeroEffect Methods

AeroEffect.clone Method

NodeEffect.clone override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object clone ()
```

Return Value

An AeroEffect instance.

See Also

AeroEffect Members
AeroEffect Class
com.mindfusion.diagramming Namespace

AeroEffect.getInnerOutlineColor Method

Gets the color of the inner outline.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getInnerOutlineColor ()
```

Return Value

A **Color** instance.

See Also

AeroEffect Members
AeroEffect Class
com.mindfusion.diagramming Namespace

AeroEffect.getOpacity Method

Gets the opacity to apply to the node's background. Opacity varies in the range [0..1] where 0 indicates full transparency and 1 indicates the original transparency. Opacity has no effect on image backgrounds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getOpacity ()
```

Return Value

A **float** value specifying opacity.

See Also

AeroEffect Members
AeroEffect Class
com.mindfusion.diagramming Namespace

AeroEffect.getShadeColor Method

Gets the color of the shade.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getShadeColor ()
```

Return Value

A **Color** instance.

See Also

AeroEffect Members
AeroEffect Class
com.mindfusion.diagramming Namespace

AeroEffect.readExternal Method

NodeEffect.readExternal override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

AeroEffect Members
AeroEffect Class
com.mindfusion.diagramming Namespace

AeroEffect.setInnerOutlineColor Method

Sets the color of the inner outline.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setInnerOutlineColor (
    Color value
)
```

Parameters

value
A **Color** instance.

See Also

AeroEffect Members
AeroEffect Class
com.mindfusion.diagramming Namespace

AeroEffect.setOpacity Method

Sets the opacity to apply to the node's background. Opacity varies in the range [0..1] where 0 indicates full transparency and 1 indicates the original transparency. Opacity has no effect on image backgrounds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOpacity (
    float value
)
```

Parameters

value

See Also

AeroEffect Members
AeroEffect Class
com.mindfusion.diagramming Namespace

AeroEffect.setShadeColor Method

Sets the color of the shade.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShadeColor (
    Color value
)
```

Parameters

value

See Also

AeroEffect Members
AeroEffect Class
com.mindfusion.diagramming Namespace

AeroEffect.writeExternal Method

NodeEffect.writeExternal override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

AeroEffect Members
AeroEffect Class
com.mindfusion.diagramming Namespace

Anchoring Enumeration

The members of this enumeration specify whether the automatic layout algorithms and the link routing algorithm should align link ends to the anchor points of nodes. Use these constants as parameters of the RoutingOptions.setAnchoring method of the RoutingOptions class and the layout classes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public enum Anchoring
```

Members

	Member name	Description
	Ignore	Specifies that anchor points should be ignored.

	Keep	Specifies that links' original anchor points should be preserved.
	Reassign	Lets the layout algorithms align links to different anchor points.

See Also

com.mindfusion.diagramming Namespace

AnchorPattern Class

Represents a set of AnchorPoint objects, which can be assigned to a node through the setAnchorPattern method.

Syntax

Java
`public class AnchorPattern implements Cloneable, Externalizable`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AnchorPattern

See Also

AnchorPattern Members
com.mindfusion.diagramming Namespace

AnchorPattern Members

Represents a set of AnchorPoint objects, which can be assigned to a node through the setAnchorPattern method.

The following tables list the members exposed by the AnchorPattern type.

Public Constructors

	Name	Description
	AnchorPattern	Overloaded.

Public Methods

	Name	Description
	clone	Creates a clone of the anchor pattern.
S	fromId	Returns the **AnchorPattern** object that has the specified identifier.
	getId	Gets the identifier of this **AnchorPattern**.

	getPoints	Gets a list of the points in this **AnchorPattern**.
	readExternal	
	writeExternal	

See Also

AnchorPattern Class
com.mindfusion.diagramming Namespace

AnchorPattern Constructor

Overload List

Name	Description
AnchorPattern (AnchorPoint[], String)	Creates an AnchorPattern for the specified points with the specified identifier.
AnchorPattern (AnchorPointList, String)	Creates an **AnchorPattern** for the specified points with the specified identifier.
AnchorPattern (String)	Creates a new empty **AnchorPattern** with the specified identifier.

See Also

AnchorPattern Class
com.mindfusion.diagramming Namespace

AnchorPattern Constructor (AnchorPoint[], String)

Creates an AnchorPattern for the specified points with the specified identifier.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPattern (
    AnchorPoint[] points,
    String id
)
```

Parameters

points
An array of AnchorPoint objects representing the anchor points.

id
A string used to identify this AnchorPattern.

See Also

AnchorPattern Constructor Overload List
AnchorPattern Class
com.mindfusion.diagramming Namespace

AnchorPattern Constructor (AnchorPointList, String)

Creates an AnchorPattern for the specified points with the specified identifier.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPattern (
    AnchorPointList points,
    String id
)
```

Parameters

points

An AnchorPointList containing the anchor points.

id

A string used to identify this AnchorPattern.

See Also

AnchorPattern Constructor Overload List
AnchorPattern Class
com.mindfusion.diagramming Namespace

AnchorPattern Constructor (String)

Creates a new empty AnchorPattern with the specified identifier.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPattern (
    String id
)
```

Parameters

id

A string used to identify this AnchorPattern.

See Also

AnchorPattern Constructor Overload List
AnchorPattern Class

AnchorPattern Methods

AnchorPattern.clone Method

Creates a clone of the anchor pattern.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object clone ()
```

Return Value

An AnchorPattern instance.

See Also

AnchorPattern Members
AnchorPattern Class
com.mindfusion.diagramming Namespace

AnchorPattern.fromId Method

Returns the AnchorPattern object that has the specified identifier.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static AnchorPattern fromId (
    String id
)
```

Parameters

id
An identifier of the looked-for AnchorPattern.

Return Value

An **AnchorPattern** identified by the specified string.

See Also

AnchorPattern Members
AnchorPattern Class
com.mindfusion.diagramming Namespace

AnchorPattern.getId Method

Gets the identifier of this AnchorPattern.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getId ()
```

Return Value

A String identifier.

See Also

AnchorPattern Members
AnchorPattern Class
com.mindfusion.diagramming Namespace

AnchorPattern.getPoints Method

Gets a list of the points in this AnchorPattern.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPointList getPoints ()
```

Return Value

An AnchorPointList instance.

See Also

AnchorPattern Members
AnchorPattern Class
com.mindfusion.diagramming Namespace

AnchorPattern.readExternal Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

AnchorPattern Members
AnchorPattern Class
com.mindfusion.diagramming Namespace

AnchorPattern.writeExternal Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

AnchorPattern Members
AnchorPattern Class
com.mindfusion.diagramming Namespace

AnchorPoint Class

Represent a point where a link can connect to a node. A set of anchor points is represented by the AnchorPattern class. Such a set can be assigned to a node by calling the setAnchorPattern method.

Syntax

Java

```
public class AnchorPoint implements Cloneable, Externalizable
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AnchorPoint

See Also

AnchorPoint Members

Represent a point where a link can connect to a node. A set of anchor points is represented by the AnchorPattern class. Such a set can be assigned to a node by calling the setAnchorPattern method.

The following tables list the members exposed by the AnchorPoint type.

Public Constructors

	Name	Description
	AnchorPoint	Overloaded.

Public Methods

	Name	Description
	clone	Creates a clone of the anchor point.
	getAllowIncoming	Gets a value indicating whether this anchor point accepts incoming links.
	getAllowOutgoing	Gets a value indicating whether this anchor point accepts outgoing links.
	getColor	Gets the color used to draw this anchor point.
	getColumn	Gets the column to which this anchor point is related.
	getLinkOrientation	Gets the desired orientation of link segments that connect to this point.
	getMarkStyle	Gets a value indicating what mark is drawn at the position of this anchor point.
	getTag	Gets a custom data object assigned to this anchor point.
	getX	Gets the X position of the anchor point.
	getXUnit	Gets whether the point's X position is specified as percentage of node's size or fixed offset from the node's left side.
	getY	Gets the Y position of the anchor point.
	getYUnit	Gets whether the point's Y position is specified as percentage of node's size or fixed offset from the node's top side.
	readExternal	
	setAllowIncoming	Sets a value indicating whether this anchor point accepts incoming links.
	setAllowOutgoing	Sets a value indicating whether this anchor point accepts outgoing links.
	setColor	Sets the color used to draw this anchor point.

	setColumn	Sets the column to which this anchor point is related.
	setLinkOrientation	Sets the desired orientation of link segments that connect to this point.
	setMarkStyle	Sets a value indicating what mark is drawn at the position of this anchor point.
	setTag	Assigns a custom data object to this anchor point.
	setX	Sets the X position of the anchor point.
	setXUnit	Sets whether the point's **X** position is specified as percentage of node's size or fixed offset from the node's left side.
	setY	Sets the Y position of the anchor point.
	setYUnit	Sets whether the point's **Y** position is specified as percentage of node's size or fixed offset from the node's top side.
	writeExternal	

See Also

AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint Constructor

Overload List

Name	Description
AnchorPoint (AnchorPoint)	Initializes a new AnchorPoint instance using the specified **AnchorPoint** as a prototype.
AnchorPoint (float, float)	Initializes a new **AnchorPoint** instance by setting its relative position in nodes. The point will allow both outgoing and incoming links.
AnchorPoint (float, float, boolean, boolean)	Initializes a new **AnchorPoint** instance by setting its relative position in nodes and specifying whether it will allow outgoing or incoming links.
AnchorPoint (float, float, boolean, boolean, Color, short)	Initializes a new **AnchorPoint** instance by setting its relative position in nodes and specifying whether it will allow outgoing or incoming links. The table column to which the anchor point is related is specified too.
AnchorPoint (float, float, boolean, boolean, Color, short, Object)	Initializes a new **AnchorPoint** instance by setting its relative position in nodes and specifying whether it will allow outgoing or incoming links. The table column to which the anchor point is related is specified too.

AnchorPoint (float, float, boolean, boolean, MarkStyle)	Initializes a new **AnchorPoint** instance by setting its relative position in nodes and specifying whether it will allow outgoing or incoming links. The shape of the anchor point mark is specified too.
AnchorPoint (float, float, boolean, boolean, MarkStyle, Color)	Initializes a new **AnchorPoint** instance by setting its relative position in nodes and specifying whether it will allow outgoing or incoming links. The shape and color of the anchor point mark are specified too.

See Also

AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint Constructor (AnchorPoint)

Initializes a new AnchorPoint instance using the specified **AnchorPoint** as a prototype.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPoint (
    AnchorPoint prototype
)
```

Parameters

prototype
The AnchorPoint to use as a prototype.

Remarks

The properties of the new point are initialized from the property values of the prototype AnchorPoint.

See Also

AnchorPoint Constructor Overload List
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint Constructor (float, float)

Initializes a new AnchorPoint instance by setting its relative position in nodes. The point will allow both outgoing and incoming links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPoint (
    float x,
    float y
)
```

Parameters

x
The horizontal position of the anchor point specified as percents of the node width.

y
The vertical position of the anchor point specified as percents of the node height.

See Also

AnchorPoint Constructor Overload List
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint Constructor (float, float, boolean, boolean)

Initializes a new AnchorPoint instance by setting its relative position in nodes and specifying whether it will allow outgoing or incoming links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPoint (
    float x,
    float y,
    boolean allowIncoming,
    boolean allowOutgoing
)
```

Parameters

x
The horizontal position of the anchor point specified aspercents of the node width.

y
The vertical position of the anchor point specified aspercents of the node height.

allowIncoming
true if this point should accept incoming links, otherwise **false**.

allowOutgoing
true if this point should accept outgoing links, otherwise **false**.

See Also

AnchorPoint Constructor Overload List
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint Constructor (float, float, boolean, boolean, Color, short)

Initializes a new AnchorPoint instance by setting its relative position in nodes and specifying whether it will allow outgoing or incoming links. The table column to which the anchor point is related is specified too.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPoint (
    float x,
    float y,
    boolean allowIncoming,
    boolean allowOutgoing,
    Color color,
    short column
)
```

Parameters

x
The horizontal position of the anchor point specified as percents of the node width.

y
The vertical position of the anchor point specified as percents of the node height.

allowIncoming
true if this point accepts incoming links, otherwise **false**.

allowOutgoing
true if this point accepts outgoing links, otherwise **false**.

color
A **Color** object representing the color of the anchor point mark.

column
An index of a table column relatively to which the anchor point x position will be calculated.

See Also

AnchorPoint Constructor Overload List
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint Constructor (float, float, boolean, boolean, Color, short, Object)

Initializes a new AnchorPoint instance by setting its relative position in nodes and specifying whether it will allow outgoing or incoming links. The table column to which the anchor point is related is specified too.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPoint (
    float x,
```

```
    float y,
    boolean allowIncoming,
    boolean allowOutgoing,
    Color color,
    short column,
    Object tag
)
```

Parameters

x
The horizontal position of the anchor point specified as percents of the node width.

y
The vertical position of the anchor point specified as percents of the node height.

allowIncoming
true if this point should accept incoming links, otherwise **false**.

allowOutgoing
true if this point should accept outgoing links, otherwise **false**.

color
A Color object representing the color of the anchor point mark.

column
An index of a table column relatively to which the anchor point x position should be calculated.

tag
A custom data object associated with the anchor point.

See Also

AnchorPoint Constructor Overload List
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint Constructor (float, float, boolean, boolean, MarkStyle)

Initializes a new AnchorPoint instance by setting its relative position in nodes and specifying whether it will allow outgoing or incoming links. The shape of the anchor point mark is specified too.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPoint (
    float x,
    float y,
    boolean allowIncoming,
    boolean allowOutgoing,
    MarkStyle markStyle
)
```

Parameters

x
The horizontal position of the anchor point specified aspercents of the node width.

y

The vertical position of the anchor point specified aspercents of the node height.

allowIncoming
true if this point should acceptincoming links, otherwise false.

allowOutgoing
true if this point should acceptoutgoing links, otherwise false.

markStyle
A member of the MarkStyle enumeration.

See Also

AnchorPoint Constructor Overload List
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint Constructor (float, float, boolean, boolean, MarkStyle, Color)

Initializes a new AnchorPoint instance by setting its relative position in nodes and specifying whether it will allow outgoing or incoming links. The shape and color of the anchor point mark are specified too.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPoint (
    float x,
    float y,
    boolean allowIncoming,
    boolean allowOutgoing,
    MarkStyle markStyle,
    Color color
)
```

Parameters

x
The horizontal position of the anchor point specified aspercents of the node width.

y
The vertical position of the anchor point specified aspercents of the node height.

allowIncoming
true if this point should acceptincoming links, otherwise false.

allowOutgoing
true if this point should acceptoutgoing links, otherwise false.

markStyle
A member of the MarkStyle enumeration.

color
A Color object representingthe color of the anchor point mark.

See Also

AnchorPoint Constructor Overload List
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint Methods

AnchorPoint.clone Method

Creates a clone of the anchor point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Object clone ()
```

Return Value

An AnchorPoint instance.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.getAllowIncoming Method

Gets a value indicating whether this anchor point accepts incoming links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getAllowIncoming ()
```

Return Value

true if incoming links can connect to this point, otherwise **false**.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.getAllowOutgoing Method

Gets a value indicating whether this anchor point accepts outgoing links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getAllowOutgoing ()
```

Return Value

true if outgoing links can connect to this point, otherwise **false**.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.getColor Method

Gets the color used to draw this anchor point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Color getColor ()
```

Return Value

A Color object representing the anchor point color.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.getColumn Method

Gets the column to which this anchor point is related.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public short getColumn ()
```

Return Value

An integer value specifying the column index.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.getLinkOrientation Method

Gets the desired orientation of link segments that connect to this point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Orientation getLinkOrientation ()
```

Return Value

A member of the Orientation enumeration. The default value is **Auto**.

Remarks

Currently, the value of this property is considered only by GridRouter.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.getMarkStyle Method

Gets a value indicating what mark is drawn at the position of this anchor point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public MarkStyle getMarkStyle ()
```

Return Value

A member of the MarkStyle enumeration.

See Also

AnchorPoint Members
AnchorPoint Class

AnchorPoint.getTag Method

Gets a custom data object assigned to this anchor point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Object getTag ()
```

Return Value

An Object containing custom data.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.getX Method

Gets the X position of the anchor point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getX ()
```

Return Value

A float value specifying the point position as percent by the node width.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.getXUnit Method

Gets whether the point's X position is specified as percentage of node's size or fixed offset from the node's left side.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public UnitType getXUnit ()
```

Return Value

A member of the UnitType enumeration. The default value is **Percentage**.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.getY Method

Gets the Y position of the anchor point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getY ()
```

Return Value

A float value specifying the point position as percent by the node height.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.getYUnit Method

Gets whether the point's Y position is specified as percentage of node's size or fixed offset from the node's top side.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public UnitType getYUnit ()
```

Return Value

A member of the UnitType enumeration. The default value is **Percentage**.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.readExternal Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.setAllowIncoming Method

Sets a value indicating whether this anchor point accepts incoming links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowIncoming (
    boolean value
)
```

Parameters

value
true if incoming links can connect to this point, or otherwise **false**.

Remarks

true if incoming links can connect to this point, or otherwise **false**.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.setAllowOutgoing Method

Sets a value indicating whether this anchor point accepts outgoing links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowOutgoing (
    boolean value
)
```

Parameters

value
true if outgoing links can connect to this point, or otherwise **false**.

Remarks

true if outgoing links can connect to this point, or otherwise **false**.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.setColor Method

Sets the color used to draw this anchor point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setColor (
    Color value
)
```

Parameters

value
A Color object representing the anchor point color.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.setColumn Method

Sets the column to which this anchor point is related.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setColumn (
    short value
)
```

Parameters

value
An integer value specifying the column index.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.setLinkOrientation Method

Sets the desired orientation of link segments that connect to this point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkOrientation (
    Orientation value
)
```

Parameters

value
A member of the Orientation enumeration.

Remarks

Currently, the value of this property is considered only by GridRouter.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.setMarkStyle Method

Sets a value indicating what mark is drawn at the position of this anchor point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMarkStyle (
    MarkStyle value
)
```

Parameters

value
A member of the MarkStyle enumeration. The default is **MarkStyle.X**.

Remarks

Specifies how anchor points are marked visually on the display. Custom code can be used to draw the marks by setting the property value to Custom and handling the drawAnchorPoint event.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.setTag Method

Assigns a custom data object to this anchor point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTag (
    Object tag
)
```

Parameters

tag
An Object containing custom data.

Remarks

If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the serializeTag event.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.setX Method

Sets the X position of the anchor point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setX (
    float value
)
```

Parameters

value
A float value specifying the point position as percent by the node width.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.setXUnit Method

Sets whether the point's X position is specified as percentage of node's size or fixed offset from the node's left side.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setXUnit (
    UnitType value
)
```

Parameters

value
A member of the UnitType enumeration.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.setY Method

Sets the Y position of the anchor point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setY (
    float value
)
```

Parameters

value
A float value specifying the point position as percent by the node height.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.setYUnit Method

Sets whether the point's Y position is specified as percentage of node's size or fixed offset from the node's top side.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setYUnit (
    UnitType value
)
```

Parameters

value
A member of the UnitType enumeration.

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPoint.writeExternal Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

AnchorPoint Members
AnchorPoint Class
com.mindfusion.diagramming Namespace

AnchorPointEvent Class

Contains the arguments passed to anchor point -related events.

Syntax

Java

```
public class AnchorPointEvent extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.AnchorPointEvent

See Also

AnchorPointEvent Members
com.mindfusion.diagramming Namespace

AnchorPointEvent Members

Contains the arguments passed to anchor point -related events.

The following tables list the members exposed by the AnchorPointEvent type.

Public Constructors

	Name	Description

	AnchorPointEvent	

Public Methods

	Name	Description
	getLink	
	getNewAnchorIndex	
	getOldAnchorIndex	

See Also

AnchorPointEvent Class
com.mindfusion.diagramming Namespace

AnchorPointEvent Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPointEvent (
    Object source,
    DiagramLink link,
    int oldAnchorIndex,
    int newAnchorIndex
)
```

Parameters

source

link

oldAnchorIndex

newAnchorIndex

See Also

AnchorPointEvent Class
com.mindfusion.diagramming Namespace

AnchorPointEvent Methods

AnchorPointEvent.getLink Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramLink getLink ()
```

Return Value

See Also

AnchorPointEvent Members
AnchorPointEvent Class
com.mindfusion.diagramming Namespace

AnchorPointEvent.getNewAnchorIndex Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getNewAnchorIndex ()
```

Return Value

See Also

AnchorPointEvent Members
AnchorPointEvent Class
com.mindfusion.diagramming Namespace

AnchorPointEvent.getOldAnchorIndex Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getOldAnchorIndex ()
```

Return Value

See Also

AnchorPointEvent Members
AnchorPointEvent Class
com.mindfusion.diagramming Namespace

AnchorPointList Class

A strongly typed list of AnchorPoint objects.

Syntax

Java
`public class AnchorPointList extends BaseList`

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.BaseList(E)
        com.mindfusion.diagramming.AnchorPointList

See Also

AnchorPointList Members
com.mindfusion.diagramming Namespace

AnchorPointList Members

A strongly typed list of AnchorPoint objects.

The following tables list the members exposed by the AnchorPointList type.

Public Constructors

	Name	Description
	AnchorPointList	Overloaded.

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)
	listEvent	(Inherited from BaseList.)
	notifyParent	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	Adds a new element to the list. (Inherited from BaseList.)
	clear	Removes all elements from the list. (Inherited from BaseList.)
	contains	Determines if this list contains the specified element. (Inherited from BaseList.)

	first	Gets the first element of this list. (Inherited from BaseList.)
	get	Gets the element at the specified position in this list. (Inherited from BaseList.)
	last	Gets the last element of this list. (Inherited from BaseList.)
	readExternal	Loads the list's contents. (Inherited from BaseList.)
	remove	Overloaded. (Inherited from BaseList.)
	removeRange	Removes a range of elements from this list. (Inherited from BaseList.)
	set	Sets the element at the specified position in this list. (Inherited from BaseList.)
	size	Gets the number of elements in this list. (Inherited from BaseList.)
	writeExternal	Saves the list's contents. (Inherited from BaseList.)

Protected Methods

	Name	Description
	raiseAdding	Raises the adding event. (Inherited from BaseList.)
	raiseClearing	Raises the clearing event. (Inherited from BaseList.)
	raiseRemoving	Raises the removing event. (Inherited from BaseList.)

See Also

AnchorPointList Class
com.mindfusion.diagramming Namespace

AnchorPointList Constructor

Overload List

Name	Description
AnchorPointList ()	
AnchorPointList (AnchorPoint[])	
AnchorPointList (AnchorPointList)	

See Also

AnchorPointList Class
com.mindfusion.diagramming Namespace

AnchorPointList Constructor ()

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPointList ()
```

See Also

AnchorPointList Constructor Overload List
AnchorPointList Class
com.mindfusion.diagramming Namespace

AnchorPointList Constructor (AnchorPoint[])

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPointList (
    AnchorPoint[] array
)
```

Parameters

array

See Also

AnchorPointList Constructor Overload List
AnchorPointList Class
com.mindfusion.diagramming Namespace

AnchorPointList Constructor (AnchorPointList)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPointList (
    AnchorPointList array
)
```

Parameters

array

See Also

AnchorPointList Constructor Overload List
AnchorPointList Class
com.mindfusion.diagramming Namespace

AnnealLayout Class

Implements a simulated annealing graph layout algorithm.

Syntax

Java
`public class AnnealLayout implements Layout`

Remarks

Simulated Annealing is a general-purpose optimization method used to solve large-scale combinatorial problems by simulating the process of heating and cooling of metal to achieve freedom from defects. Finding a nice arrangement of a graph is a combinatorial problem that can be reduced to assigning costs to graph configurations and finding the minimum cost configuration. In that case, a cost is assigned to a graph configuration by evaluating different aesthetic criteria such as distance between nodes, length of links and the number of link crossings.

The **AnnealLayout** class implements a Simulated Annealing graph layout algorithm that can be used to arrange JDiagram diagrams. To arrange a diagram, create an **AnnealLayout** instance, set its properties and call the arrange method.

The algorithm starts the simulation with the temperature set via setInitialTemperature, and runs several cooling stages, as set via setStages. At each stage the algorithm evaluates several graph configurations for each node, as set by calling setIterationsPerStage. At the end of each stage, the algorithm selects the configuration that has a minimum cost and decreases the temperature by multiplying it by getTemperatureScale. The relative weight of an aesthetic criterion relative to the other criteria is set via the setDistributionFactor, setLinkLengthFactor, setBoundaryFactor and setCrossingLinksCost methods.

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.AnnealLayout

See Also

AnnealLayout Members
com.mindfusion.diagramming Namespace

AnnealLayout Members

Implements a simulated annealing graph layout algorithm.

The following tables list the members exposed by the AnnealLayout type.

Public Constructors

	Name	Description

	AnnealLayout	Initializes a new instance of the **AnnealLayout** class.

Public Methods

	Name	Description
	arrange	Applies the layout to the specified Diagram.
	getAnchoring	Gets a value specifying how links will be aligned to the anchor points of nodes.
	getBoundaryFactor	Gets a value indicating how important the distance from nodes to the layout area boundaries is relatively to the other criteria considered by the algorithm.
	getCrossingLinksCost	Gets a value specifying how important the low number of link crossings is relatively to the other criteria considered by the algorithm.
	getDistributionFactor	Gets a value indicating the importance of node distribution relatively to the other criteria considered by the algorithm.
	getInitialTemperature	Gets the initial temperature of the simulated annealing process.
	getIterationsPerStage	Gets how many node shift iterations to perform at each stage of the algorithm.
	getKeepGroupLayout	Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph.
	getLayoutArea	Gets the size of the layout area.
	getLinkLengthFactor	Gets a value specifying how important the short length of links is relatively to the other criteria considered by the algorithm.
	getMultipleGraphsOrientation	Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other.
	getNodeLinkCrossingCost	Gets a value specifying how important the low number of crossings of links with edges is relatively to the other criteria considered by the algorithm.
	getNodeLinkDistFactor	Gets a value specifying the importance of the distance between nodes and links relative to the other criteria considered by the algorithm.
	getPrecision	Gets the cost calculations precision.
	getRandomize	Gets a value indicating whether the nodes should be placed at random positions when the layout routine starts.
	getRoot	Gets the diagram node that specifies which connected graph in the diagram should be arranged.
	getSplitGraph	Whether unconnected sub-graphs should be laid out independently from each other.
	getStages	Gets how many cooling stages the algorithm should simulate.

	getTemperatureScale	Gets how much the simulated temperature is decreased at each stage of the algorithm.
	getWidthHeightRatio	Gets what width / height ratio the layout area should have.
	init	Returns an AnnealLayoutBuilder object used to configure this AnnealLayout instance.
	setAnchoring	Sets a value specifying how links will be aligned to the anchor points of nodes.
	setBoundaryFactor	Sets a value indicating how important the distance from nodes to the layout area boundaries is relatively to the other criteria considered by the algorithm.
	setCrossingLinksCost	Sets a value specifying how important the low number of link crossings is relatively to the other criteria considered by the algorithm.
	setDistributionFactor	Sets a value indicating the importance of node distribution relatively to the other criteria considered by the algorithm.
	setInitialTemperature	Sets the initial temperature of the simulated annealing process.
	setIterationsPerStage	Sets how many node shift iterations to perform at each stage of the algorithm.
	setKeepGroupLayout	Sets a value indicating whether to treat each **Group** of nodes as a single vertex in the arranged graph.
	setLayoutArea	Sets the size of the layout area.
	setLinkLengthFactor	Sets a value specifying how important the short length of links is relatively to the other criteria considered by the algorithm.
	setMultipleGraphsOrientation	Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other.
	setNodeLinkCrossingCost	Sets a value specifying how important the low number of crossings of links with edges is relatively to the other criteria considered by the algorithm.
	setNodeLinkDistFactor	Sets a value specifying the importance of the distance between nodes and links relative to the other criteria considered by the algorithm.
	setPrecision	Sets the cost calculations precision. 1 specifies highest precision. Accepted values are between 0.9 and 1. The algorithm completes faster when running with a lower precision, but produces slightly worse results.
	setRandomize	Sets a value indicating whether the nodes should be placed at random positions when the layout routine starts.
	setRoot	Sets the diagram node that specifies which connected graph in the diagram should be arranged.
	setSplitGraph	Whether unconnected sub-graphs should be laid out independently from each other.
	setStages	Sets how many cooling stages the algorithm should simulate.

	setTemperatureScale	Sets how much the simulated temperature is decreased at each stage of the algorithm.
	setWidthHeightRatio	Sets what width / height ratio the layout area should have.
S	with	Returns an AnnealLayoutBuilder object used to configure and create new AnnealLayout instances.

See Also

AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout Constructor

Initializes a new instance of the AnnealLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnnealLayout ()
```

See Also

AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout Methods

AnnealLayout.arrange Method

Applies the layout to the specified Diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram chart
)
```

Parameters

chart
A Diagram instance that should be laid out.

Return Value

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getAnchoring Method

Gets a value specifying how links will be aligned to the anchor points of nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Anchoring getAnchoring ()
```

Return Value

A member of the Anchoring enumeration.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getBoundaryFactor Method

Gets a value indicating how important the distance from nodes to the layout area boundaries is relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public double getBoundaryFactor ()
```

Return Value

A multiplier applied to the node-to-boundary distance cost when evaluating the total cost of a graph configuration.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getCrossingLinksCost Method

Gets a value specifying how important the low number of link crossings is relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public double getCrossingLinksCost ()
```

Return Value

A value added to the total cost of a graph configuration for each pair of crossing links.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getDistributionFactor Method

Gets a value indicating the importance of node distribution relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public double getDistributionFactor ()
```

Return Value

A multiplier applied to the node distribution cost when evaluating the total cost of a graph configuration.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getInitialTemperature Method

Gets the initial temperature of the simulated annealing process.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public double getInitialTemperature ()
```

Return Value

A double value specifying the initial temperature of the simulated process.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getIterationsPerStage Method

Gets how many node shift iterations to perform at each stage of the algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getIterationsPerStage ()
```

Return Value

An integer value specifying the number of iterations.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getKeepGroupLayout Method

Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getKeepGroupLayout ()
```

Return Value

true if groups will be treated as single graph vertices, otherwise **false.**

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getLayoutArea Method

Gets the size of the layout area.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Rectangle2D.Float getLayoutArea ()
```

Return Value

The layout area coordinates.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getLinkLengthFactor Method

Gets a value specifying how important the short length of links is relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public double getLinkLengthFactor ()
```

Return Value

A multiplier applied to the link length cost when evaluating the total cost of a graph configuration.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getMultipleGraphsOrientation Method

Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public MultipleGraphsPlacement getMultipleGraphsOrientation ()
```

Return Value

A member of the MultipleGraphsPlacement enumeration.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getNodeLinkCrossingCost Method

Gets a value specifying how important the low number of crossings of links with edges is relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public double getNodeLinkCrossingCost ()
```

Return Value

A value added to the total cost of a graph configuration for each crossing of link and node.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getNodeLinkDistFactor Method

Gets a value specifying the importance of the distance between nodes and links relative to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public double getNodeLinkDistFactor ()
```

Return Value

A multiplier applied to the node-to-link distance cost when evaluating the total cost of a graph configuration.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getPrecision Method

Gets the cost calculations precision.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public double getPrecision ()
```

Return Value

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getRandomize Method

Gets a value indicating whether the nodes should be placed at random positions when the layout routine starts.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getRandomize ()
```

Return Value

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getRoot Method

Gets the diagram node that specifies which connected graph in the diagram should be arranged.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public DiagramNode getRoot ()
```

Return Value

A DiagramNode object whose containing graph will be arranged.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getSplitGraph Method

Whether unconnected sub-graphs should be laid out independently from each other.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public boolean getSplitGraph ()
```

Return Value

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getStages Method

Gets how many cooling stages the algorithm should simulate.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public int getStages ()
```

Return Value

The number of cooling stages.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getTemperatureScale Method

Gets how much the simulated temperature is decreased at each stage of the algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public double getTemperatureScale ()
```

Return Value

A multiplier applied to the current temperature at the end of each cooling stage.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.getWidthHeightRatio Method

Gets what width / height ratio the layout area should have.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getWidthHeightRatio ()
```

Return Value

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.init Method

Returns an AnnealLayoutBuilder object used to configure this AnnealLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnnealLayoutBuilder init ()
```

Return Value

An **AnnealLayoutBuilder** instance.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setAnchoring Method

Sets a value specifying how links will be aligned to the anchor points of nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAnchoring (
    Anchoring value
)
```

Parameters

value
A member of the Anchoring enumeration. The default value is **Ignore**.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setBoundaryFactor Method

Sets a value indicating how important the distance from nodes to the layout area boundaries is relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setBoundaryFactor (
    double value
)
```

Parameters

value
A multiplier applied to the node-to-boundary distance cost when evaluating the total cost of a graph configuration. The default is 3000.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setCrossingLinksCost Method

Sets a value specifying how important the low number of link crossings is relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setCrossingLinksCost (
    double value
)
```

Parameters

value
A value added to the total cost of a graph configuration for each pair of crossing links. The default is 100000.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setDistributionFactor Method

Sets a value indicating the importance of node distribution relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDistributionFactor (
    double value
)
```

Parameters

value
A multiplier applied to the node distribution cost when evaluating the total cost of a graph configuration. The default is 40000.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setInitialTemperature Method

Sets the initial temperature of the simulated annealing process.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setInitialTemperature (
    double value
)
```

Parameters

value
A double value specifying the initial temperature of the simulated process.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setIterationsPerStage Method

Sets how many node shift iterations to perform at each stage of the algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIterationsPerStage (
    int value
)
```

Parameters

value
An integer value specifying the number of iterations. The default is 50.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setKeepGroupLayout Method

Sets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setKeepGroupLayout (
    boolean value
)
```

Parameters

value
true if groups must be treated as single graph vertices, otherwise **false**.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setLayoutArea Method

Sets the size of the layout area.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLayoutArea (
    Rectangle2D.Float value
)
```

Parameters

value
The layout area coordinates.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setLinkLengthFactor Method

Sets a value specifying how important the short length of links is relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkLengthFactor (
    double value
)
```

Parameters

value
A multiplier applied to the link length cost when evaluating the total cost of a graph configuration. The default is 0.25.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setMultipleGraphsOrientation Method

Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMultipleGraphsOrientation (
    MultipleGraphsPlacement value
)
```

Parameters

value
A member of the MultipleGraphsPlacement enumeration. The default value is **Horizontal**.

Remarks

If the diagram contains several unconnected subgraphs, each of them is processed by the algorithm independently from the others. This property specifies how such subgraphs should be placed one relatively to another. The possible options are to arrange them in a row, in a column, or in such a way that the diagram covers a minimal area.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setNodeLinkCrossingCost Method

Sets a value specifying how important the low number of crossings of links with edges is relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setNodeLinkCrossingCost (
    double nodeLinkCrossingCost
)
```

Parameters

nodeLinkCrossingCost
A value added to the total cost of a graph configuration for each crossing of link and node. The default is 100000.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setNodeLinkDistFactor Method

Sets a value specifying the importance of the distance between nodes and links relative to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setNodeLinkDistFactor (
    double value
)
```

Parameters

value
A multiplier applied to the node-to-link distance cost when evaluating the total cost of a graph configuration. The default is 20000.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setPrecision Method

Sets the cost calculations precision. 1 specifies highest precision. Accepted values are between 0.9 and 1. The algorithm completes faster when running with a lower precision, but produces slightly worse results.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPrecision (
    double precision
)
```

Parameters

precision

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setRandomize Method

Sets a value indicating whether the nodes should be placed at random positions when the layout routine starts.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRandomize (
    boolean value
)
```

Parameters

value

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setRoot Method

Sets the diagram node that specifies which connected graph in the diagram should be arranged.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRoot (
    DiagramNode value
)
```

Parameters

value
A DiagramNode object whose containing graph will be arranged.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setSplitGraph Method

Whether unconnected sub-graphs should be laid out independently from each other.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSplitGraph (
    boolean value
)
```

Parameters

value

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setStages Method

Sets how many cooling stages the algorithm should simulate.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setStages (
    int value
)
```

Parameters

value
The number of cooling stages.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setTemperatureScale Method

Sets how much the simulated temperature is decreased at each stage of the algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTemperatureScale (
    double value
)
```

Parameters

value
A multiplier applied to the current temperature at the end of each cooling stage. The default value is 0.75

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.setWidthHeightRatio Method

Sets what width / height ratio the layout area should have.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setWidthHeightRatio (
    float value
)
```

Parameters

value

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

AnnealLayout.with Method

Returns an AnnealLayoutBuilder object used to configure and create new AnnealLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static AnnealLayoutBuilder with ()
```

Return Value

An **AnnealLayoutBuilder** instance.

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming Namespace

ArcTemplate Class

Represents an arc segment in a Shape definition.

Syntax

```
Java
public class ArcTemplate extends ElementTemplate
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.ElementTemplate
com.mindfusion.diagramming.ArcTemplate

See Also

ArcTemplate Members
com.mindfusion.diagramming Namespace

ArcTemplate Members

Represents an arc segment in a Shape definition.

The following tables list the members exposed by the ArcTemplate type.

Public Constructors

	Name	Description
	ArcTemplate	Overloaded.

Public Methods

	Name	Description
	getColor	Gets the color of this element. (Inherited from ElementTemplate.)
	getDashStyle	(Inherited from ElementTemplate.)
	getWidth	(Inherited from ElementTemplate.)
	setColor	(Inherited from ElementTemplate.)
	setDashStyle	(Inherited from ElementTemplate.)
	setWidth	(Inherited from ElementTemplate.)
	toDOM	

Protected Methods

	Name	Description
	getElementPen	Gets a pen used to render the element. If no pen properties are explicitly specified for this element, returns the pen passed as an argument. (Inherited from ElementTemplate.)

See Also

ArcTemplate Class
com.mindfusion.diagramming Namespace

ArcTemplate Constructor

Overload List

Name	Description
ArcTemplate (float, float, float, float, float, float)	Initializes a new ArcTemplate instance with the specified bounding rectangle coordinates and start and sweep angles.
ArcTemplate (float, float, float, float, float, float, Color, DashStyle, float)	Initializes a new **ArcTemplate** instance with the specified bounding rectangle coordinates and start and sweep angles.

See Also

ArcTemplate Class
com.mindfusion.diagramming Namespace

ArcTemplate Constructor (float, float, float, float, float, float)

Initializes a new ArcTemplate instance with the specified bounding rectangle coordinates and start and sweep angles.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ArcTemplate (
    float x,
    float y,
    float w,
    float h,
    float a,
    float s
)
```

Parameters

x
The horizontal position of arc's containing ellipse,specified as percent by box width.

y
The vertical position of arc's containing ellipse,specified as percent by box height.

w
The width of the arc's containing ellipse,specified as percent by box width.

h
The height of the arc's containing ellipse,specified as percent by box height.

a
The start angle of the arc.

s
The sweep angle of the arc.

See Also

ArcTemplate Constructor Overload List
ArcTemplate Class
com.mindfusion.diagramming Namespace

ArcTemplate Constructor (float, float, float, float, float, float, Color, DashStyle, float)

Initializes a new ArcTemplate instance with the specified bounding rectangle coordinates and start and sweep angles.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ArcTemplate (
    float x,
    float y,
    float w,
    float h,
    float a,
    float s,
    Color color,
    DashStyle dashStyle,
    float width
)
```

Parameters

x
The horizontal position of arc's containing ellipse,specified as percents of box width.

y
The vertical position of arc's containing ellipse,specified as percents of box height.

w
The width of the arc's containing ellipse,specified as percents of box width.

h
The height of the arc's containing ellipse,specified as percents of box height.

a
The start angle of the arc.

s
The sweep angle of the arc.

color
The color of this segment.

dashStyle
The dash style of this segment.

width
The width of this segment.

See Also

ArcTemplate Constructor Overload List
ArcTemplate Class
com.mindfusion.diagramming Namespace

ArcTemplate Methods

ArcTemplate.toDOM Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element toDOM (
    Document doc
)
```

Parameters

doc

Return Value

See Also

ArcTemplate Members
ArcTemplate Class
com.mindfusion.diagramming Namespace

ArrowHeads Class

Contains predefined arrowhead shapes.

Syntax

Java

```
public class ArrowHeads
```

Remarks

Shape objects exposed as properties of this class can be assigned to the HeadShape, BaseShape and IntermediateShape properties of links.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ArrowHeads

See Also

ArrowHeads Members
com.mindfusion.diagramming Namespace

ArrowHeads Members

Contains predefined arrowhead shapes.

The following tables list the members exposed by the ArrowHeads type.

Public Constructors

	Name	Description
	ArrowHeads	

Public Fields

	Name	Description
	Arrow	Display an arrow-like shape.
	BackSlash	Display a back slash.
	BowArrow	Display a bow arrow.
	Circle	Display a circle.
	DefaultFlow	"Default flow" in BPMN diagrams.
	DoubleArrow	Display a double arrow.
	None	Do not display an arrowhead shape.
	Pentagon	Display a pentagon.
	PointerArrow	Display a pointer arrow.
	Quill	Display a quill.
	Reversed	Reversed arrowhead.
	RevTriangle	Display a reversed triangle.
	RevWithCirc	Reversed arrowhead with a circle.
	RevWithLine	Reversed arrowhead with intersecting line.
	Rhombus	Display a rhombus.
	Slash	Display a slash.
	Tetragon	Display a tetragon.
	Triangle	Display a triangle.

See Also

ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads Fields

ArrowHeads.Arrow Field

Display an arrow-like shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape Arrow
```

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.BackSlash Field

Display a back slash.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape BackSlash
```

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.BowArrow Field

Display a bow arrow.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape BowArrow
```

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.Circle Field

Display a circle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape Circle
```

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.DefaultFlow Field

"Default flow" in BPMN diagrams.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape DefaultFlow
```

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.DoubleArrow Field

Display a double arrow.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape DoubleArrow
```

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.None Field

Do not display an arrowhead shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape None
```

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.Pentagon Field

Display a pentagon.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape Pentagon
```

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.PointerArrow Field

Display a pointer arrow.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape PointerArrow
```

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.Quill Field

Display a quill.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape Quill
```

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.Reversed Field

Reversed arrowhead.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape Reversed
```

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.RevTriangle Field

Display a reversed triangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape RevTriangle
```

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.RevWithCirc Field

Reversed arrowhead with a circle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape RevWithCirc
```

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.RevWithLine Field

Reversed arrowhead with intersecting line.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape RevWithLine
```

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.Rhombus Field

Display a rhombus.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static Shape Rhombus`

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.Slash Field

Display a slash.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static Shape Slash`

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.Tetragon Field

Display a tetragon.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static Shape Tetragon`

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads.Triangle Field

Display a triangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static Shape Triangle
```

See Also

ArrowHeads Members
ArrowHeads Class
com.mindfusion.diagramming Namespace

ArrowHeads Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ArrowHeads ()
```

See Also

ArrowHeads Class
com.mindfusion.diagramming Namespace

AttachToLink Enumeration

The members of this enumeration specify how a node is attached to a link. These constants can be used as parameters of the DiagramNode.attachTo method of the DiagramNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public enum AttachToLink
```

Members

	Member name	Description
	LongestHSegment	The node is attached to and follows the longest horizontal segment of the link.
	Point	The node is attached to and follows the specified control point of the link.

	Segment	The node is attached to and follows the specified segment of the link.

See Also

com.mindfusion.diagramming Namespace

AttachToNode Enumeration

The members of this enumeration specify how a node is attached to another node. These constants can be used as parameters of the DiagramNode.attachTo method of the DiagramNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum AttachToNode`

Members

	Member name	Description
	BottomCenter	The attached node follows the bottom-center point of the master node.
	BottomLeft	The attached node follows the bottom-left point of the master node.
	BottomRight	The attached node follows the bottom-right point of the master node.
	MiddleLeft	The attached node follows the middle-left point of the master node.
	MiddleRight	The attached node follows the middle-right point of the master node.
	TopCenter	The attached node follows the top-center point of the master node.
	TopLeft	The attached node follows the top-left point of the master node.
	TopRight	The attached node follows the top-right point of the master node.

See Also

com.mindfusion.diagramming Namespace

AutoJson Interface

Syntax

Java
`public interface AutoJson extends Annotation`

See Also

AutoJson Members
com.mindfusion.diagramming Namespace

AutoJson Members

The following tables list the members exposed by the AutoJson type.

See Also

AutoJson Interface
com.mindfusion.diagramming Namespace

AutoResize Enumeration

The members of this enumeration specify whether the size of the document area should be automatically enlarged if needed, and to what direction it should be enlarged. These constants can be used as parameters of the setAutoResize method of the Diagram class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum AutoResize`

Members

	Member name	Description
	AllDirections	Enlarge the document size to all directions.
	None	Do not enlarge the document size automatically.
	RightAndDown	Enlarge the document size only to the right and downwards.

See Also

com.mindfusion.diagramming Namespace

BaseList<E> Class

Implements common functionality of JDiagram List classes.

Syntax

Java
`public class BaseList<E> extends AbstractList<E> implements Externalizable`

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.BaseList(E)
        com.mindfusion.diagramming.AnchorPointList
        com.mindfusion.diagramming.CellList
        com.mindfusion.diagramming.ColumnList
        com.mindfusion.diagramming.CommandList
        com.mindfusion.diagramming.DiagramItemList
        com.mindfusion.diagramming.DiagramLinkList
        com.mindfusion.diagramming.DiagramNodeList
        com.mindfusion.diagramming.GroupList
        com.mindfusion.diagramming.PathList
        com.mindfusion.diagramming.RowList
        com.mindfusion.diagramming.ShapeList
        com.mindfusion.diagramming.ShapeNodeList
        com.mindfusion.diagramming.TreeItemList
        com.mindfusion.diagramming.lanes.HeaderList

See Also

BaseList(E) Members
com.mindfusion.diagramming Namespace

BaseList(E) Members

Implements common functionality of JDiagram List classes.

The following tables list the members exposed by the BaseList(E) type.

Protected Constructors

	Name	Description
	BaseList	Overloaded.

Protected Fields

	Name	Description
	list	
	listEvent	
	notifyParent	

Public Methods

	Name	Description
	add	Adds a new element to the list.
	clear	Removes all elements from the list.
	contains	Determines if this list contains the specified element.
	first	Gets the first element of this list.
	get	Gets the element at the specified position in this list.
	last	Gets the last element of this list.
	readExternal	Loads the list's contents.
	remove	Overloaded.
	removeRange	Removes a range of elements from this list.
	set	Sets the element at the specified position in this list.
	size	Gets the number of elements in this list.
	writeExternal	Saves the list's contents.

Protected Methods

	Name	Description
	raiseAdding	Raises the adding event.
	raiseClearing	Raises the clearing event.
	raiseRemoving	Raises the removing event.

See Also

BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E) Fields

BaseList(E).list Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`protected ArrayList<E> list`

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).listEvent Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`protected ListEvent<E> listEvent`

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).notifyParent Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`protected boolean notifyParent`

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E) Constructor

Overload List

Name	Description
BaseList(E) ()	Initializes a new instance of the BaseList class.
BaseList(E) (boolean)	Initializes a new instance of the BaseList class.
BaseList(E) (Collection)	Initializes a new instance of the BaseList class.
BaseList(E) (int)	Initializes a new instance of the BaseList class.

See Also

BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E) Constructor ()

Initializes a new instance of the BaseList class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected BaseList ()
```

See Also

BaseList(E) Constructor Overload List
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E) Constructor (boolean)

Initializes a new instance of the BaseList class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected BaseList (
    boolean notifyParent
)
```

Parameters

notifyParent
true to raise list change events, or false otherwise.

See Also

BaseList(E) Constructor Overload List
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E) Constructor (Collection<E>)

Initializes a new instance of the BaseList class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected BaseList (
    Collection<E> c
)
```

Parameters

c
The collection whose elements to copy.

See Also

BaseList(E) Constructor Overload List
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E) Constructor (int)

Initializes a new instance of the BaseList class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected BaseList (
    int capacity
)
```

Parameters

capacity
The initial capacity of the list.

See Also

BaseList(E) Constructor Overload List
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E) Methods

BaseList(E).add Method

Adds a new element to the list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void add (
    int index,
    E element
)
```

Parameters

index
Index at which the specified element is to be inserted.

element
Element to be inserted.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).clear Method

Removes all elements from the list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void clear ()
```

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).contains Method

Determines if this list contains the specified element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean contains (
    Object element
)
```

Parameters

element

Element to search the list for.

Return Value

true if this list contains the specified element, or false otherwise.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).first Method

Gets the first element of this list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public E first ()
```

Return Value

The first element in this list.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).get Method

Gets the element at the specified position in this list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public E get (
    int index
)
```

Parameters

index
Index of the element to return.

Return Value

The element at the specified position in this list.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).last Method

Gets the last element of this list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public E last ()
```

Return Value

The last element in this list.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).raiseAdding Method

Raises the adding event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void raiseAdding (
    E item,
    int index
)
```

Parameters

item
The element that should be added.

index
The element's index.

See Also

BaseList(E) Members
BaseList<E> Class

BaseList(E).raiseClearing Method

Raises the clearing event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void raiseClearing ()
```

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).raiseRemoving Method

Raises the removing event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void raiseRemoving (
    E item
)
```

Parameters

item
The element that should be removed.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).readExternal Method

Loads the list's contents.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in
The stream to read the list from.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).remove Method

Overload List

Name	Description
BaseList(E).remove (int)	Removes the element at the specified position in this list.
BaseList(E).remove (Object)	Removes the specified element from this list.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).remove Method (int)

Removes the element at the specified position in this list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public E remove (
    int index
)
```

Parameters

index
The index of the element to be removed.

Return Value

The element that was removed from the list.

See Also

remove Method Overload List
BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).remove Method (Object)

Removes the specified element from this list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean remove (
    Object element
)
```

Parameters

element
The element to remove.

Return Value

true if element was removed, or false otherwise.

See Also

remove Method Overload List
BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).removeRange Method

Removes a range of elements from this list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeRange (
    int fromIndex,
    int toIndex
)
```

Parameters

fromIndex
Index of first element to be removed.

toIndex
Index of last element to be removed.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).set Method

Sets the element at the specified position in this list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public E set (
    int index,
    E element
)
```

Parameters

index
Index of the element to replace.

element
Element to be stored at the specified position.

Return Value

The element previously at the specified position.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).size Method

Gets the number of elements in this list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int size ()
```

Return Value

An integer value specifying the number of elements.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

BaseList(E).writeExternal Method

Saves the list's contents.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out
The stream to write the list to.

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming Namespace

Behavior Enumeration

The members of this enumeration specify how the component should respond to users actions. These constants can be used as arguments of the setBehavior method of the Diagram class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public enum Behavior
```

Members

	Member name	Description
	Custom	Specifies that user input will be handled by the BehaviorBase-derived object assigned to DiagramView.setCustomBehavior.

DoNothing	The control ignores users actions with the mouse, but raises the appropriate mouse events. This mode allows applications to implement their own mouse-drawing behavior, disabling the default JDiagram response to users actions.
DrawContainers	Drawing with the mouse creates ContainerNode instances.
DrawControls	Drawing with the mouse creates ControlNode instances.
DrawFreeForms	Drawing with the mouse creates FreeFormNode instances.
DrawFreeShapes	Points from user input are shown using a FreeFormNode instance. Once the user finishes drawing, the FreeFormNode is replaced by a ShapeNode with a matching shape from Diagram.FreeFormTargets list.
DrawLasso	Dragging with the mouse draws a selection lasso, raising the lassoDrawn event upon completion without selecting diagram items automatically.
DrawLinks	Drawing started over a node creates a DiagramLink. Otherwise a lasso rectangle is displayed allowing the selection of items.
DrawShapes	Drawing with the mouse creates ShapeNode instances.
DrawTables	Drawing with the mouse creates TableNode instances.
DrawTreeViews	Drawing with the mouse creates TreeViewNode instances.
LinkContainers	Drawing over empty document area creates a ContainerNode instance. Drawing started over a node creates a DiagramLink. </summary>
LinkControls	Drawing over an empty document region creates a **ControlNode** instance. Drawing started over a node creates a **DiagramLink**.
LinkFreeForms	Drawing over empty document area creates a FreeFormNode instance. Drawing started over a node creates a DiagramLink.
LinkFreeShapes	Points from user input are shown using a FreeFormNode instance. Once the user finishes drawing, the FreeFormNode is replaced by a ShapeNode with a matching shape from Diagram.FreeFormTargets list. Drawing started over a node creates a DiagramLink.
LinkShapes	A mode that is suitable for creating flowcharts and process diagrams. Drawing started over an empty document region creates a **ShapeNode** instance. Drawing started over a node creates a **DiagramLink**.
LinkTables	A mode that is suitable for creating entity-relationship diagrams. Drawing started over an empty document region creates a **TableNode** instance. Drawing started over a node creates a **DiagramLink**.
LinkTreeViews	Drawing over empty document area creates a TreeViewNode instance. Drawing started over a node creates a DiagramLink.

	Magnify	Dragging the mouse magnifies the view. Interactive creation or modification of items is disabled.
	Modify	Objects can be selected and modified. New objects cannot be created.
	MoveLabels	Dragging with the mouse moves the label under mouse pointer.
	MoveNodes	Dragging with the mouse moves the node under mouse pointer.
	Pan	Dragging the mouse pans the view. Interactive creation or modification of items is disabled.
	PanAndModify	Items can be selected and modified. New items cannot be created, and dragging without grabbing an adjustment handle pans the view.
	SelectOnly	Allow only selection of existing items. Modifying them or drawing new ones is disabled.
	Zoom	Dragging with the mouse draws a lasso tool that zooms the diagram view to selected rectangular area.

See Also

com.mindfusion.diagramming Namespace

BehaviorBase Class

An abstract base class for types that define how the control reacts to users' actions with a mouse or other pointing devices.

Syntax

Java

```
public abstract class BehaviorBase extends Interaction
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.DrawLinksBehavior
      com.mindfusion.diagramming.DrawNodesBehavior
      com.mindfusion.diagramming.LassoBehavior
      com.mindfusion.diagramming.LinkNodesBehavior
      com.mindfusion.diagramming.ModifyBehavior
      com.mindfusion.diagramming.MoveNodesBehavior
      com.mindfusion.diagramming.PanBehavior
      com.mindfusion.diagramming.SelectOnlyBehavior

See Also

BehaviorBase Members

An abstract base class for types that define how the control reacts to users' actions with a mouse or other pointing devices.

The following tables list the members exposed by the BehaviorBase type.

Protected Constructors

	Name	Description
	BehaviorBase	Initializes a new instance of the **BehaviorBase** class.

Protected Fields

	Name	Description
	currentCursor	
	diagramView	

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events.
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves.
	pointerOver	Invoked when the mouse moves.
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events.

Protected Methods

	Name	Description
	createLink	
	getDiagram	
	getDiagramView	
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state.
	setMouseCursor	Invoked while the mouse is moved to let your application set the mouse cursor.

	startDraw	Invoked when the user begins drawing inside the diagram canvas.
	startDrawCommon	

See Also

BehaviorBase Class
com.mindfusion.diagramming Namespace

BehaviorBase Fields

BehaviorBase.currentCursor Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected CursorHint currentCursor
```

See Also

BehaviorBase Members
BehaviorBase Class
com.mindfusion.diagramming Namespace

BehaviorBase.diagramView Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramView diagramView
```

See Also

BehaviorBase Members
BehaviorBase Class
com.mindfusion.diagramming Namespace

BehaviorBase Constructor

Initializes a new instance of the BehaviorBase class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected BehaviorBase (
    DiagramView flowChart
)
```

Parameters

diagramView
A DiagramView instance.

See Also

BehaviorBase Class
com.mindfusion.diagramming Namespace

BehaviorBase Methods

BehaviorBase.createLink Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected DiagramLink createLink ()
```

Return Value

See Also

BehaviorBase Members
BehaviorBase Class
com.mindfusion.diagramming Namespace

BehaviorBase.getDiagram Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected Diagram getDiagram ()
```

Return Value

See Also

BehaviorBase Members
BehaviorBase Class
com.mindfusion.diagramming Namespace

BehaviorBase.getDiagramView Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramView getDiagramView ()
```

Return Value

See Also

BehaviorBase Members
BehaviorBase Class
com.mindfusion.diagramming Namespace

BehaviorBase.pointerDown Method

Interaction.pointerDown override. Invoked in response to system pointer down events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void pointerDown (
    Point pointerPosition,
    MouseEvent e
)
```

Parameters

mousePosition
A Point instance that specifies the mouse pointer position.

e
The corresponding system **MouseEvent** object.

See Also

BehaviorBase Members
BehaviorBase Class
com.mindfusion.diagramming Namespace

BehaviorBase.pointerMove Method

Interaction.pointerMove override. Invoked when the pointer moves.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void pointerMove (
    Point pointerPosition,
    MouseEvent e
)
```

Parameters

mousePosition
A Point instance that specifies the mouse pointer position.

e
The corresponding system **MouseEvent** object.

See Also

BehaviorBase Members
BehaviorBase Class
com.mindfusion.diagramming Namespace

BehaviorBase.pointerOver Method

Invoked when the mouse moves.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void pointerOver (
    Point pointerPosition,
    MouseEvent e
)
```

Parameters

mousePosition
A Point instance that specifies the mouse pointer position.

e

See Also

BehaviorBase Members
BehaviorBase Class
com.mindfusion.diagramming Namespace

BehaviorBase.pointerUp Method

Interaction.pointerUp override. Invoked in response to system pointer up events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void pointerUp (
    Point pointerPosition,
    MouseEvent e
)
```

Parameters

mousePosition
A Point instance that specifies the mouse pointer position.

e
The corresponding system **MouseEvent** object.

See Also

BehaviorBase Members
BehaviorBase Class
com.mindfusion.diagramming Namespace

BehaviorBase.setModfCursor Method

Updates the current cursor according to the specified cursor position and diagram state.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected CursorHint setModfCursor (
    Point2D point,
    AdjustmentHandle handle,
    boolean active,
    boolean autoh
)
```

Parameters

point
A Point2D instance that specifies the current mouse position.

handle
The adjustment handle located at mouse position.

active
Specifies whether the mouse is over the ActiveItem.

autoh
true when the mouse is over a DiagramItem and the ModificationStart property of the DiagramView is set to AutoHandles.

Return Value

A member of the CursorHint enumeration.

See Also

BehaviorBase Members
BehaviorBase Class
com.mindfusion.diagramming Namespace

BehaviorBase.setMouseCursor Method

Invoked while the mouse is moved to let your application set the mouse cursor.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected abstract CursorHint setMouseCursor (
    Point2D point,
    ByRef<Boolean> startInteraction
)
```

Parameters

point
A Point2D instance that specifies the position of the mouse cursor.

startInteraction
true if the user is going to create, delete, modify or select a DiagramItem; **false** if mouse behavior is not considered; in this case the mouse pointer is set to a default cursor according to the background LaneGrid.

Return Value

A member of the CursorHint enumeration.

See Also

BehaviorBase Members
BehaviorBase Class
com.mindfusion.diagramming Namespace

BehaviorBase.startDraw Method

Invoked when the user begins drawing inside the diagram canvas.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected abstract InteractionState startDraw (
    Point2D point,
```

```
    MouseEvent e
)
```

Parameters

point
The pointer position specified in the current MeasureUnit.

e
The original **MouseEvent** provided by the Java Swing framework.

Return Value

An instance of the InteractionState class, which specifies whether the user interaction should create or modify an item.

Remarks

To start creating an item, pass a new instance of a DiagramItem -derived class to the InteractionState constructor and set the constructor's action argument to Action.Create. Do not add the new item to the diagram's Items list nor call factory methods such as createShapeNode to add the new item to the diagram; the item will be added automatically when the user completes drawing it. If creating a link, use the DiagramLink constructor that takes a single DiagramNode argument, specifying the origin node.

To start modifying an item, provide a reference to an existing item as argument of the InteractionState constructor and set the action argument to Action.Modify.

See Also

BehaviorBase Members
BehaviorBase Class
com.mindfusion.diagramming Namespace

BehaviorBase.startDrawCommon Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected InteractionState startDrawCommon (
    Point2D point,
    MouseEvent e
)
```

Parameters

point

e

Return Value

See Also

BehaviorBase Members
BehaviorBase Class

BezierTemplate Class

Represents a Bezier curve in a Shape definition.

Syntax

Java
`public class BezierTemplate extends ElementTemplate`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ElementTemplate
    com.mindfusion.diagramming.BezierTemplate

See Also

BezierTemplate Members
com.mindfusion.diagramming Namespace

BezierTemplate Members

Represents a Bezier curve in a Shape definition.

The following tables list the members exposed by the BezierTemplate type.

Public Constructors

	Name	Description
	BezierTemplate	Overloaded.

Public Methods

	Name	Description
	getColor	Gets the color of this element. (Inherited from ElementTemplate.)
	getDashStyle	(Inherited from ElementTemplate.)
	getWidth	(Inherited from ElementTemplate.)
	setColor	(Inherited from ElementTemplate.)
	setDashStyle	(Inherited from ElementTemplate.)
	setWidth	(Inherited from ElementTemplate.)
	toDOM	

Protected Methods

	Name	Description
	getElementPen	Gets a pen used to render the element. If no pen properties are explicitly specified for this element, returns the pen passed as an argument. (Inherited from ElementTemplate.)

See Also

BezierTemplate Class
com.mindfusion.diagramming Namespace

BezierTemplate Constructor

Overload List

Name	Description
BezierTemplate (float, float, float, float, float, float, float, float)	Initializes a new BezierTemplate instance with the specified coordinates of the segment control points.
BezierTemplate (float, float, float, float, float, float, float, float, Color, DashStyle, float)	Initializes a new **BezierTemplate** instance with the specified coordinates of the segment control points.

See Also

BezierTemplate Class
com.mindfusion.diagramming Namespace

BezierTemplate Constructor (float, float, float, float, float, float, float, float)

Initializes a new BezierTemplate instance with the specified coordinates of the segment control points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public BezierTemplate (
    float x1,
    float y1,
    float x2,
    float y2,
    float x3,
    float y3,
    float x4,
    float y4
)
```

Parameters

x1
X coordinate of the first control point specified as percent by the box width.

y1

Y coordinate of the first control point specified as percent of the box height.

x2
X coordinate of the second control point specified as percent of the box width.

y2
Y coordinate of the second control point specified as percent of the box height.

x3
X coordinate of the third control point specified as percent of the box width.

y3
Y coordinate of the third control point specified as percent of the box height.

x4
X coordinate of the fourth control point specified as percent of the box width.

y4
Y coordinate of the fourth control point specified as percent of the box height.

See Also

BezierTemplate Constructor Overload List
BezierTemplate Class
com.mindfusion.diagramming Namespace

BezierTemplate Constructor (float, float, float, float, float, float, float, float, Color, DashStyle, float)

Initializes a new BezierTemplate instance with the specified coordinates of the segment control points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public BezierTemplate (
    float x1,
    float y1,
    float x2,
    float y2,
    float x3,
    float y3,
    float x4,
    float y4,
    Color color,
    DashStyle dash,
    float width
)
```

Parameters

x1
X coordinate of the first control point specified aspercents of the box width.

y1
Y coordinate of the first control point specified aspercents of the box height.

x2
X coordinate of the second control point specified aspercents of the box width.

y2

Y coordinate of the second control point specified aspercents of the box height.

x3
X coordinate of the third control point specified aspercents of the box width.

y3
Y coordinate of the third control point specified aspercents of the box height.

x4
X coordinate of the fourth control point specified aspercents of the box width.

y4
Y coordinate of the fourth control point specified aspercents of the box height.

color
The color of this segment.

dash
The dash style of this segment.

width
The width of this segment.

See Also

BezierTemplate Constructor Overload List
BezierTemplate Class
com.mindfusion.diagramming Namespace

BezierTemplate Methods

BezierTemplate.toDOM Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element toDOM (
    Document doc
)
```

Parameters

doc

Return Value

See Also

BezierTemplate Members
BezierTemplate Class
com.mindfusion.diagramming Namespace

BranchIndicator Enumeration

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum BranchIndicator`

Members

	Member name	Description
	Arrow	
	Circle	
	None	

See Also

com.mindfusion.diagramming Namespace

ByteArrayTransferable Class

Implements clipboard support for diagram items.

Syntax

Java
`public class ByteArrayTransferable implements Transferable`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ByteArrayTransferable

See Also

ByteArrayTransferable Members
com.mindfusion.diagramming Namespace

ByteArrayTransferable Members

Implements clipboard support for diagram items.

The following tables list the members exposed by the ByteArrayTransferable type.

Public Methods

	Name	Description
	getBytes	

	getTransferData	
	getTransferDataFlavors	
	isDataFlavorSupported	

See Also

ByteArrayTransferable Class
com.mindfusion.diagramming Namespace

ByteArrayTransferable Methods

ByteArrayTransferable.getBytes Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public byte[] getBytes ()
```

Return Value

See Also

ByteArrayTransferable Members
ByteArrayTransferable Class
com.mindfusion.diagramming Namespace

ByteArrayTransferable.getTransferData Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object getTransferData (
    DataFlavor f
)
```

Parameters

f

Return Value

See Also

ByteArrayTransferable Members
ByteArrayTransferable Class
com.mindfusion.diagramming Namespace

ByteArrayTransferable.getTransferDataFlavors Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DataFlavor[] getTransferDataFlavors ()
```

Return Value

See Also

ByteArrayTransferable Members
ByteArrayTransferable Class
com.mindfusion.diagramming Namespace

ByteArrayTransferable.isDataFlavorSupported Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean isDataFlavorSupported (
    DataFlavor f
)
```

Parameters

f

Return Value

See Also

ByteArrayTransferable Members
ByteArrayTransferable Class
com.mindfusion.diagramming Namespace

CascadeLayout Class

Performs cascading layout on simple, connected graphs.

Syntax

Java
`public class CascadeLayout extends AbstractLayout`

Remarks

CascadeLayout places nodes on a virtual grid and arranges links orthogonally, such that if the source graph is planar all links are guaranteed to have no more than two bends and will not intersect. By default the layout method arranges nodes in rows and link segments in columns; this can be changed by setting the Orientation property.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AbstractLayout
    com.mindfusion.diagramming.CascadeLayout

See Also

CascadeLayout Members
com.mindfusion.diagramming Namespace

CascadeLayout Members

Performs cascading layout on simple, connected graphs.

The following tables list the members exposed by the CascadeLayout type.

Public Constructors

	Name	Description
	CascadeLayout	Initializes a new instance of the **CascadeLayout** class.

Public Methods

	Name	Description
	arrange	Applies the layout on the specified subset of items from the specified Diagram instance.
	getAnchoring	Gets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	getGrowToFit	Gets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	getKeepGroupLayout	Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	getLayoutLink	Gets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	getLayoutNode	Gets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)

	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	getMultipleGraphsPlacement	Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	getOrientation	Gets the orientation of the arranged graph.
	getPadding	Gets the spacing between nodes in adjacent layers.
	getProgress	Gets the progress callback delegate. (Inherited from AbstractLayout.)
	init	Returns a CascadeLayoutBuilder object used to configure this CascadeLayout instance.
S	removeMidleSegmentPoint	(Inherited from AbstractLayout.)
	setAnchoring	Sets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	setGrowToFit	Sets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	setKeepGroupLayout	Sets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	setLayoutLink	Sets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	setLayoutNode	Sets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	setMultipleGraphsPlacement	Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	setOrientation	Sets the orientation of the arranged graph.
	setPadding	Sets the spacing between nodes in adjacent layers.
	setProgress	Sets the progress callback delegate. (Inherited from AbstractLayout.)
S	with	Returns a CascadeLayoutBuilder object used to configure and create new CascadeLayout instances.

See Also

CascadeLayout Class
com.mindfusion.diagramming Namespace

CascadeLayout Constructor

Initializes a new instance of the CascadeLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CascadeLayout ()
```

See Also

CascadeLayout Class
com.mindfusion.diagramming Namespace

CascadeLayout Methods

CascadeLayout.arrange Method

Applies the layout on the specified subset of items from the specified Diagram instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram diagram,
    DiagramItemList items
)
```

Parameters

diagram
The Diagram that should be arranged.

items
A collection of nodes and links from diagram that define the subgraph to arrange.

Return Value

This method always returns true.

See Also

CascadeLayout Members
CascadeLayout Class
com.mindfusion.diagramming Namespace

CascadeLayout.getOrientation Method

Gets the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Orientation getOrientation ()
```

Return Value

A member of the Orientation enumeration.

See Also

CascadeLayout Members
CascadeLayout Class
com.mindfusion.diagramming Namespace

CascadeLayout.getPadding Method

Gets the spacing between nodes in adjacent layers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getPadding ()
```

Return Value

See Also

CascadeLayout Members
CascadeLayout Class
com.mindfusion.diagramming Namespace

CascadeLayout.init Method

Returns a CascadeLayoutBuilder object used to configure this CascadeLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public CascadeLayoutBuilder init ()
```

Return Value

A **CascadeLayoutBuilder** instance.

See Also

CascadeLayout Members
CascadeLayout Class
com.mindfusion.diagramming Namespace

CascadeLayout.setOrientation Method

Sets the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value
A member of the Orientation enumeration. The default value is Vertical.

See Also

CascadeLayout Members
CascadeLayout Class
com.mindfusion.diagramming Namespace

CascadeLayout.setPadding Method

Sets the spacing between nodes in adjacent layers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPadding (
    float value
)
```

Parameters

value

See Also

CascadeLayout Members
CascadeLayout Class
com.mindfusion.diagramming Namespace

CascadeLayout.with Method

Returns a CascadeLayoutBuilder object used to configure and create new CascadeLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static CascadeLayoutBuilder with ()
```

Return Value

A **CascadeLayoutBuilder** instance.

See Also

CascadeLayout Members
CascadeLayout Class
com.mindfusion.diagramming Namespace

Cell Class

Represents a cell in a table. Cells are arranged in a grid of rows and columns, and can span more than one rows or columns if needed. Each cell can display an image and a text label.

Syntax

Java

```
public class Cell implements Cloneable, Externalizable, RenderTextCallback, InplaceEditable
```

Remarks

Cells are the building blocks of tables. They get their height and width indirectly, from the width of table columns and the height of table rows as set through the setWidth and setHeight methods. Cells can be made to span several rows and columns by calling their setRowSpan and setColumnSpan methods.

A cell can display a text label, as set by the setText method. The text alignment is set by calling setTextFormat. Color of the text in the cells is set by the setTextColor method.

The appearance of a cell can be customized further by the setBrush, setImage and setImageAlign methods.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Cell

See Also

Cell Members
com.mindfusion.diagramming Namespace

Cell Members

Represents a cell in a table. Cells are arranged in a grid of rows and columns, and can span more than one rows or columns if needed. Each cell can display an image and a text label.

The following tables list the members exposed by the Cell type.

Public Constructors

	Name	Description
	Cell	Overloaded. Initializes a new instance of the **Cell** class.

Public Methods

	Name	Description
	clone	Creates a copy of the cell.
	getBrush	Gets the Brush used to fill the cell's interior.
	getColumnSpan	Gets the number of columns spanned by this cell.
	getEditRect	Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).
	getFont	Gets the font used to draw the text of this cell.
	getHyperLink	Gets the hyperlink associated with the cell.
	getImage	Gets the image that is displayed inside the cell.
	getImageAlign	Gets a value indicating how the image displayed inside the cell is aligned relatively to the cell bounds.
	getImagePadding	Gets the padding distance between cell's borders and **Image**.
	getImageUrl	Gets a URL used to load an image into this cell.
	getPlainText	Gets the plain text extracted from the formatted text by removing the formatting tags.
	getRowSpan	Gets the number of rows spanned by this cell.
	getTable	Gets the TableNode containing the cell.
	getTag	Gets user-defined data assigned to this cell.
	getText	Gets the text that is displayed inside the cell.
	getTextColor	Gets the color used to draw the text of this cell.
	getTextFormat	Gets a TextFormat object specifying how to format and align the text of this cell.
	getTextPadding	Gets the spacing between the cell's boundaries and its text.
	getTextSize	Gets the size of the text displayed in this cell.

	getTextToEdit	Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when this cell is edited in-place.
	getToolTip	Gets the tooltip text that is displayed when the pointer rests for a while over this cell.
	readExternal	Implements Externalizable.
	renderText	Styled text rendering callback.
	setBrush	Sets the Brush used to fill the cell's interior.
	setColumnSpan	Sets the number of columns spanned by this cell.
	setEditedText	Implements InplaceEditable.setEditedText. Assigns the edited text to the cell after in-place edit operation completes successfully
	setFont	Sets the font used to draw the text of this cell.
	setHyperLink	Sets the hyperlink associated with the cell.
	setImage	Sets the image that should be displayed inside the cell.
	setImageAlign	Sets a value indicating how the image displayed inside the cell should be aligned relatively to the cell bounds.
	setImagePadding	Sets the padding distance between cell's borders and **Image**.
	setImageUrl	Sets a URL used to load an image into this cell.
	setRowSpan	Sets the number of rows spanned by this cell.
	setTag	Assigns user-defined data to a cell.
	setText	Sets the text that should be displayed inside the cell.
	setTextColor	Sets the color used to draw the text of this cell.
	setTextFormat	Sets a TextFormat object specifying how to format and align the text of this cell.
	setTextPadding	Sets the spacing between the cell's boundaries and its text.
	setToolTip	Sets the tooltip text that should be displayed when the pointer rests for a while over this cell.
	writeExternal	Implements Externalizable.

Protected Methods

	Name	Description
	loadFromJson	Loads the cell from a JSON object.
	loadFromXml	
	saveToJson	Saves the cell as a JSON object.
	saveToXml	

See Also

Cell Class
com.mindfusion.diagramming Namespace

Cell Constructor

Initializes a new instance of the Cell class.

Overload List

Name	Description
Cell ()	Used internally to implement serialization functionality.
Cell (TableNode)	Initializes a new **Cell** instance and assigns the specified table as its parent.

See Also

Cell Class
com.mindfusion.diagramming Namespace

Cell Constructor ()

Used internally to implement serialization functionality.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Cell ()`

See Also

Cell Constructor Overload List
Cell Class
com.mindfusion.diagramming Namespace

Cell Constructor (TableNode)

Initializes a new Cell instance and assigns the specified table as its parent.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Cell (` `    TableNode table`

```
)
```

Parameters

table
The TableNode that contains this cell.

See Also

Cell Constructor Overload List
Cell Class
com.mindfusion.diagramming Namespace

Cell Methods

Cell.clone Method

Creates a copy of the cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object clone ()
```

Return Value

A Cell instance.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getBrush Method

Gets the Brush used to fill the cell's interior.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getBrush ()
```

Return Value

A Brush object.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getColumnSpan Method

Gets the number of columns spanned by this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getColumnSpan ()
```

Return Value

An integer value specifying the number of spanned columns.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getEditRect Method

Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getEditRect (
    DiagramItem item,
    Point2D mousePosition
)
```

Parameters

item
The TableNode whose cell's text will be edited.

mousePosition
A **Point2D** instance specifying the current pointer position.

Return Value

A **Rectangle2D** specifying where the edit box should be placed.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getFont Method

Gets the font used to draw the text of this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Font getFont ()
```

Return Value

A Font object representing the font used to draw this cell's text.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getHyperLink Method

Gets the hyperlink associated with the cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getHyperLink ()
```

Return Value

A String containing the cell's hyperlink.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getImage Method

Gets the image that is displayed inside the cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Image getImage ()
```

Return Value

An instance of the **java.awt.Image** class.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getImageAlign Method

Gets a value indicating how the image displayed inside the cell is aligned relatively to the cell bounds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ImageAlign getImageAlign ()
```

Return Value

A member of the ImageAlign enumeration.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getImagePadding Method

Gets the padding distance between cell's borders and Image.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Thickness getImagePadding ()
```

Return Value

A Thickness value specifying padding distance. The default value is **null**.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getImageUrl Method

Gets a URL used to load an image into this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getImageUrl ()
```

Return Value

a String containing the URL.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getPlainText Method

Gets the plain text extracted from the formatted text by removing the formatting tags.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getPlainText ()
```

Return Value

A String containing the cell's text stripped fromformatting tags.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getRowSpan Method

Gets the number of rows spanned by this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getRowSpan ()
```

Return Value

An integer value specifying the number of spanned rows.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getTable Method

Gets the TableNode containing the cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public TableNode getTable ()
```

Return Value

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getTag Method

Gets user-defined data assigned to this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Object getTag ()
```

Return Value

A custom data Object.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getText Method

Gets the text that is displayed inside the cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getText ()
```

Return Value

A String containing the cell's text.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getTextColor Method

Gets the color used to draw the text of this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getTextColor ()
```

Return Value

A Color object representing the text color.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getTextFormat Method

Gets a TextFormat object specifying how to format and align the text of this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public TextFormat getTextFormat ()
```

Return Value

A TextFormat object specifying the text format and alignment.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace
getTextPadding Method

Cell.getTextPadding Method

Gets the spacing between the cell's boundaries and its text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Thickness getTextPadding ()
```

Return Value

A Thickness instance specifying the size of the padding space left around the text.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace
setTextPadding Method
getText Method
getTextFormat Method

Cell.getTextSize Method

Gets the size of the text displayed in this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public Dimension2D getTextSize ()
```

Return Value

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getTextToEdit Method

Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when this cell is edited in-place.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getTextToEdit ()
```

Return Value

A **String** that represents the initial contents of the in-place edit box.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.getToolTip Method

Gets the tooltip text that is displayed when the pointer rests for a while over this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getToolTip ()
```

Return Value

A String containing the cell's tooltip.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.loadFromJson Method

Loads the cell from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the Cell data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.loadFromXml Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.renderText Method

Styled text rendering callback.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void renderText (
    String text,
    Rectangle2D dest,
    DrawTextHint hint
)
```

Parameters

text

dest

hint

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.saveToJson Method

Saves the cell as a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject instance to contain the serialized data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.saveToXml Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.setBrush Method

Sets the Brush used to fill the cell's interior.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBrush (
    Brush value
)
```

Parameters

value
A Brush object.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.setColumnSpan Method

Sets the number of columns spanned by this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setColumnSpan (
    int value
)
```

Parameters

value
An integer value specifying the number of spanned columns.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.setEditedText Method

Implements InplaceEditable.setEditedText. Assigns the edited text to the cell after in-place edit operation completes successfully

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEditedText (
    String newText
)
```

Parameters

newText
The new text of this cell.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.setFont Method

Sets the font used to draw the text of this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFont (
    Font font
)
```

Parameters

font
A Font object representing the font used to draw this cell's text.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.setHyperLink Method

Sets the hyperlink associated with the cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setHyperLink (
    String value
)
```

Parameters

value
A String containing the cell's hyperlink.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.setImage Method

Sets the image that should be displayed inside the cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setImage (
    Image value
)
```

Parameters

value
An instance of the **java.awt.Image** class.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace
setImageAlign Method
setImagePadding Method

Cell.setImageAlign Method

Sets a value indicating how the image displayed inside the cell should be aligned relatively to the cell bounds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setImageAlign (
    ImageAlign value
)
```

Parameters

value
A member of the ImageAlign enumeration. The default value is **Fit**.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace
setImagePadding Method

Cell.setImagePadding Method

Sets the padding distance between cell's borders and Image.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setImagePadding (
    Thickness value
)
```

Parameters

value
A Thickness value specifying padding distance.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace
setImageAlign Method

Cell.setImageUrl Method

Sets a URL used to load an image into this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImageUrl (
    String value
)
```

Parameters

value
A String containing the URL

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.setRowSpan Method

Sets the number of rows spanned by this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRowSpan (
    int value
)
```

Parameters

value
An integer value specifying the number of spanned rows.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.setTag Method

Assigns user-defined data to a cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTag (
    Object value
)
```

Parameters

value
An Object containing custom data.

Remarks

If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.setText Method

Sets the text that should be displayed inside the cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setText (
    String value
)
```

Parameters

value
A String containing the cell's text.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.setTextColor Method

Sets the color used to draw the text of this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextColor (
    Color value
)
```

Parameters

value
A Color object representing the text color.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.setTextFormat Method

Sets a TextFormat object specifying how to format and align the text of this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextFormat (
    TextFormat value
)
```

Parameters

value
A TextFormat object specifying the text format and alignment.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace
setTextPadding Method

Cell.setTextPadding Method

Sets the spacing between the cell's boundaries and its text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextPadding (
    Thickness value
)
```

Parameters

value
A Thickness instance specifying the size of the padding space left around the text.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace
getTextPadding Method
setText Method
setTextFormat Method

Cell.setToolTip Method

Sets the tooltip text that should be displayed when the pointer rests for a while over this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setToolTip (
    String value
)
```

Parameters

value
A String containing the cell's tooltip.

See Also

Cell Members
Cell Class
com.mindfusion.diagramming Namespace

Cell.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

CellEvent Class

Contains information passed to the cellClicked event defined in DiagramListener.

Syntax

Java
`public class CellEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.CellEvent
      com.mindfusion.diagramming.CellValidationEvent

See Also

CellEvent Members
com.mindfusion.diagramming Namespace

CellEvent Members

Contains information passed to the cellClicked event defined in DiagramListener.

The following tables list the members exposed by the CellEvent type.

Public Constructors

	Name	Description
	CellEvent	Initializes a new **CellEvent** instance.

Public Methods

	Name	Description
	getCell	Gets a reference to the cell related to the event.
	getColumn	Gets the index of the cell column.
	getMouseButton	Gets the mouse button related to the event.
	getPointerPosition	Gets the pointer position.
	getRow	Gets the index of the cell row.
	getTable	Gets a reference to the table related to this event.

See Also

CellEvent Constructor

Initializes a new CellEvent instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CellEvent (
    Object source,
    Cell cell,
    int column,
    int row,
    Point2D position,
    int button
)
```

Parameters

source
The sender of this event.

cell
The Cell related to this event.

column
The cell column.

row
The cell row.

position
The position of the pointer at the time the event was raised.

button
A **MouseEvent** button constant.

See Also

CellEvent Class
com.mindfusion.diagramming Namespace

CellEvent Methods

CellEvent.getCell Method

Gets a reference to the cell related to the event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Cell getCell ()
```

Return Value

A reference to a Cell object.

See Also

CellEvent Members
CellEvent Class
com.mindfusion.diagramming Namespace

CellEvent.getColumn Method

Gets the index of the cell column.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getColumn ()
```

Return Value

An integer number specifying the cell column.

See Also

CellEvent Members
CellEvent Class
com.mindfusion.diagramming Namespace

CellEvent.getMouseButton Method

Gets the mouse button related to the event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getMouseButton ()
```

Return Value

One of the MouseEvent.BUTTON* constants.

See Also

CellEvent Members
CellEvent Class
com.mindfusion.diagramming Namespace

CellEvent.getPointerPosition Method

Gets the pointer position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D.Float getPointerPosition ()
```

Return Value

A **Point2D.Float** object representing the pointer position in document coordinates.

See Also

CellEvent Members
CellEvent Class
com.mindfusion.diagramming Namespace

CellEvent.getRow Method

Gets the index of the cell row.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getRow ()
```

Return Value

An integer number specifying the cell row.

See Also

CellEvent Members
CellEvent Class
com.mindfusion.diagramming Namespace

CellEvent.getTable Method

Gets a reference to the table related to this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public TableNode getTable ()`

Return Value

A reference to a TableNode object.

See Also

CellEvent Members
CellEvent Class
com.mindfusion.diagramming Namespace

CellFrameStyle Enumeration

The members of this enumeration specify the style of the frame lines of tables' cells. They can be used as parameters of the setCellFrameStyle method of the TableNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum CellFrameStyle`

Members

	Member name	Description
	None	TableNode cells have no border.
	Simple	The borders of table cells are simple lines.
	System3D	The borders have 3D look.

See Also

com.mindfusion.diagramming Namespace

CellList Class

A strongly typed list of Cell objects.

Syntax

Java
`public class CellList extends BaseList<E> implements Cloneable`

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.BaseList(E)
        com.mindfusion.diagramming.CellList

See Also

CellList Members
com.mindfusion.diagramming Namespace

CellList Members

A strongly typed list of Cell objects.

The following tables list the members exposed by the CellList type.

Public Constructors

	Name	Description
	CellList	Initializes a new instance of the **CellList** class.

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)
	listEvent	(Inherited from BaseList.)
	notifyParent	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	Adds a new element to the list. (Inherited from BaseList.)
	clear	Removes all elements from the list. (Inherited from BaseList.)
	clone	
	contains	Determines if this list contains the specified element. (Inherited from BaseList.)
	first	Gets the first element of this list. (Inherited from BaseList.)
	get	Gets the element at the specified position in this list. (Inherited from BaseList.)
	last	Gets the last element of this list. (Inherited from BaseList.)
	readExternal	Loads the list's contents. (Inherited from BaseList.)
	remove	Overloaded. (Inherited from BaseList.)

	removeRange	Removes a range of elements from this list. (Inherited from BaseList.)
	set	Sets the element at the specified position in this list. (Inherited from BaseList.)
	size	Gets the number of elements in this list. (Inherited from BaseList.)
	writeExternal	Saves the list's contents. (Inherited from BaseList.)

Protected Methods

	Name	Description
	raiseAdding	Raises the adding event. (Inherited from BaseList.)
	raiseClearing	Raises the clearing event. (Inherited from BaseList.)
	raiseRemoving	Raises the removing event. (Inherited from BaseList.)

See Also

CellList Class
com.mindfusion.diagramming Namespace

CellList Constructor

Initializes a new instance of the CellList class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CellList ()
```

See Also

CellList Class
com.mindfusion.diagramming Namespace

CellList Methods

CellList.clone Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object clone ()
```

Return Value

See Also

CellList Members
CellList Class
com.mindfusion.diagramming Namespace

CellValidationEvent Class

Contains the arguments passed to event handlers, such as CellTextEditing.

Syntax

Java
`public class CellValidationEvent extends CellEvent`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.CellEvent
      com.mindfusion.diagramming.CellValidationEvent

See Also

CellValidationEvent Members
com.mindfusion.diagramming Namespace

CellValidationEvent Members

Contains the arguments passed to event handlers, such as CellTextEditing.

The following tables list the members exposed by the CellValidationEvent type.

Public Constructors

	Name	Description
	CellValidationEvent	Initializes a new instance of the **CellValidationEvent** class.

Public Methods

	Name	Description
	cancelDrag	
	getCancel	Gets a value indicating whether to prevent the user from completing the operation.

	getCell	Gets a reference to the cell related to the event. (Inherited from CellEvent.)
	getColumn	Gets the index of the cell column. (Inherited from CellEvent.)
	getMouseButton	Gets the mouse button related to the event. (Inherited from CellEvent.)
	getPointerPosition	Gets the pointer position. (Inherited from CellEvent.)
	getRow	Gets the index of the cell row. (Inherited from CellEvent.)
	getTable	Gets a reference to the table related to this event. (Inherited from CellEvent.)
	setCancel	Sets a value indicating whether to prevent the user from completing the operation.

See Also

CellValidationEvent Class
com.mindfusion.diagramming Namespace

CellValidationEvent Constructor

Initializes a new instance of the CellValidationEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CellValidationEvent (
    Object source,
    Cell cell,
    int mouseButton,
    Point2D pointerPosition,
    int column,
    int row
)
```

Parameters

source

cell

mouseButton

mousePosition

column

row

See Also

CellValidationEvent Class
com.mindfusion.diagramming Namespace

CellValidationEvent Methods

CellValidationEvent.cancelDrag Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void cancelDrag ()
```

See Also

CellValidationEvent Members
CellValidationEvent Class
com.mindfusion.diagramming Namespace

CellValidationEvent.getCancel Method

Gets a value indicating whether to prevent the user from completing the operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getCancel ()
```

Return Value

true to cancel the operation; false to approve it.

See Also

CellValidationEvent Members
CellValidationEvent Class
com.mindfusion.diagramming Namespace

CellValidationEvent.setCancel Method

Sets a value indicating whether to prevent the user from completing the operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCancel (
    boolean cancel
)
```

Parameters

cancel

See Also

CellValidationEvent Members
CellValidationEvent Class
com.mindfusion.diagramming Namespace

ChangeItemCmd Class

Handles undo / redo of property changes.

Syntax

Java
`public class ChangeItemCmd extends Command`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.ChangeItemCmd

See Also

ChangeItemCmd Members
com.mindfusion.diagramming Namespace

ChangeItemCmd Members

Handles undo / redo of property changes.

The following tables list the members exposed by the ChangeItemCmd type.

Public Constructors

	Name	Description
	ChangeItemCmd	Initializes a new **ChangeItemCmd** instance.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)

	execute	Overloaded.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	This method is called by the UndoManager when redoing actions.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	This method is called by the **UndoManager** when undoing actions.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

ChangeItemCmd Class
com.mindfusion.diagramming Namespace

ChangeItemCmd Constructor

Initializes a new ChangeItemCmd instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ChangeItemCmd (
    DiagramItem item,
    String title
)
```

Parameters

item
The DiagramItem whose properties will be changed through this command.

title
A String containing the command title.

See Also

ChangeItemCmd Methods

ChangeItemCmd.execute Method

Overload List

Name	Description
ChangeItemCmd.execute ()	Saves the property changes.
ChangeItemCmd.execute (boolean)	This method is called internally by JDiagram when saving item properties for later undo/redo of the property changes.

See Also

ChangeItemCmd Members
ChangeItemCmd Class
com.mindfusion.diagramming Namespace

ChangeItemCmd.execute Method ()

Saves the property changes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void execute ()`

See Also

execute Method Overload List
ChangeItemCmd Members
ChangeItemCmd Class
com.mindfusion.diagramming Namespace

ChangeItemCmd.execute Method (boolean)

This method is called internally by JDiagram when saving item properties for later undo/redo of the property changes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled
true if the undo manager is enabledat this time, otherwise false.

See Also

execute Method Overload List
ChangeItemCmd Members
ChangeItemCmd Class
com.mindfusion.diagramming Namespace

ChangeItemCmd.redo Method

This method is called by the UndoManager when redoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void redo ()
```

See Also

ChangeItemCmd Members
ChangeItemCmd Class
com.mindfusion.diagramming Namespace

ChangeItemCmd.undo Method

This method is called by the UndoManager when undoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void undo ()
```

See Also

ChangeItemCmd Members
ChangeItemCmd Class
com.mindfusion.diagramming Namespace

CircularLayout Class

Implements a circular graph layout algorithm. Nodes are distributed evenly on the circumference of a circle at positions that result in as few link crossing as possible.

Syntax

Java
`public class CircularLayout extends AbstractLayout`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AbstractLayout
    com.mindfusion.diagramming.CircularLayout

See Also

CircularLayout Members
com.mindfusion.diagramming Namespace

CircularLayout Members

Implements a circular graph layout algorithm. Nodes are distributed evenly on the circumference of a circle at positions that result in as few link crossing as possible.

The following tables list the members exposed by the CircularLayout type.

Public Constructors

	Name	Description
	CircularLayout	Initializes a new instance of the **CircularLayout** class with the default settings.

Public Methods

	Name	Description
	arrange	Overloaded.
	getAnchoring	Gets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	getGrowToFit	Gets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	getKeepGroupLayout	Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	getLayoutLink	Gets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	getLayoutNode	Gets an object, which is notified when the position of a node is changed by the layout. (Inherited from

		AbstractLayout.)
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	getMultipleGraphsPlacement	Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	getProgress	Gets the progress callback delegate. (Inherited from AbstractLayout.)
	getRadius	Gets the radius of the layout circle.
	getSiftingRounds	Gets the number of sifts to perform during the layout.
	init	Returns a CircularLayoutBuilder object used to configure this CircularLayout instance.
S	removeMidleSegmentPoint	(Inherited from AbstractLayout.)
	setAnchoring	Sets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	setGrowToFit	Sets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	setKeepGroupLayout	Sets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	setLayoutLink	Sets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	setLayoutNode	Sets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	setMultipleGraphsPlacement	Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	setProgress	Sets the progress callback delegate. (Inherited from AbstractLayout.)
	setRadius	Sets the radius of the layout circle.
	setSiftingRounds	Sets the number of sifts to perform during the layout.
S	with	Returns a CircularLayoutBuilder object used to configure and create new CircularLayout instances.

See Also

CircularLayout Class
com.mindfusion.diagramming Namespace

CircularLayout Constructor

Initializes a new instance of the CircularLayout class with the default settings.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public CircularLayout ()`

See Also

CircularLayout Class
com.mindfusion.diagramming Namespace

CircularLayout Methods

CircularLayout.arrange Method

Overload List

Name	Description
CircularLayout.arrange (Diagram)	Applies the layout on the specified Diagram instance.
CircularLayout.arrange (Diagram, DiagramItemList)	Applies the layout on the specified subset of items from the specified **Diagram** instance.

See Also

CircularLayout Members
CircularLayout Class
com.mindfusion.diagramming Namespace

CircularLayout.arrange Method (Diagram)

Applies the layout on the specified Diagram instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram diagram
)
```

Parameters

diagram
The Diagram that should be arranged.

Return Value

This method always returns **true**.

See Also

arrange Method Overload List
CircularLayout Members
CircularLayout Class
com.mindfusion.diagramming Namespace

CircularLayout.arrange Method (Diagram, DiagramItemList)

Applies the layout on the specified subset of items from the specified Diagram instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram diagram,
    DiagramItemList items
)
```

Parameters

diagram
The Diagram that should be arranged.

items
A collection of nodes and links from diagram that define the subgraph to arrange.

Return Value

This method always returns **true**.

See Also

arrange Method Overload List
CircularLayout Members
CircularLayout Class
com.mindfusion.diagramming Namespace

CircularLayout.getRadius Method

Gets the radius of the layout circle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getRadius ()
```

Return Value

A float value specifying the radius. The default value is 60.

See Also

CircularLayout Members
CircularLayout Class
com.mindfusion.diagramming Namespace

CircularLayout.getSiftingRounds Method

Gets the number of sifts to perform during the layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getSiftingRounds ()
```

Return Value

An integer value specifying the number of sifting rounds. The default value is 1.

See Also

CircularLayout Members
CircularLayout Class
com.mindfusion.diagramming Namespace

CircularLayout.init Method

Returns a CircularLayoutBuilder object used to configure this CircularLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public CircularLayoutBuilder init ()
```

Return Value

A **CircularLayoutBuilder** instance.

See Also

CircularLayout Members
CircularLayout Class
com.mindfusion.diagramming Namespace

CircularLayout.setRadius Method

Sets the radius of the layout circle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRadius (
    float value
)
```

Parameters

value
A float value specifying the radius.

See Also

CircularLayout Members
CircularLayout Class
com.mindfusion.diagramming Namespace

CircularLayout.setSiftingRounds Method

Sets the number of sifts to perform during the layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSiftingRounds (
    int value
)
```

Parameters

value
An integer value specifying the number of sifting rounds.

Remarks

After calculating the initial placement of nodes using a fast but inaccurate layout function, the algorithm can run a few sifting rounds to reduce the link crossings, as set in this property.

See Also

CircularLayout Members
CircularLayout Class
com.mindfusion.diagramming Namespace

CircularLayout.with Method

Returns a CircularLayoutBuilder object used to configure and create new CircularLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static CircularLayoutBuilder with ()
```

Return Value

A **CircularLayoutBuilder** instance.

See Also

CircularLayout Members
CircularLayout Class
com.mindfusion.diagramming Namespace

ClassDescriptor Class

Implements XML serialization support for diagram items.

Syntax

```
Java
public class ClassDescriptor
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.ClassDescriptor

See Also

ClassDescriptor Members
com.mindfusion.diagramming Namespace

ClassDescriptor Members

Implements XML serialization support for diagram items.

The following tables list the members exposed by the ClassDescriptor type.

Public Constructors

	Name	Description
	ClassDescriptor	

Public Methods

	Name	Description
	getClassId	
	getClassType	
	getClassVersion	

See Also

ClassDescriptor Class
com.mindfusion.diagramming Namespace

ClassDescriptor Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ClassDescriptor (
    Class<?> classType,
    String classId,
    int classVersion
)
```

Parameters

classType

classId

classVersion

See Also

ClassDescriptor Class
com.mindfusion.diagramming Namespace

ClassDescriptor Methods

ClassDescriptor.getClassId Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getClassId ()
```

Return Value

See Also

ClassDescriptor Members
ClassDescriptor Class
com.mindfusion.diagramming Namespace

ClassDescriptor.getClassType Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Class<?> getClassType ()
```

Return Value

See Also

ClassDescriptor Members
ClassDescriptor Class
com.mindfusion.diagramming Namespace

ClassDescriptor.getClassVersion Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getClassVersion ()
```

Return Value

See Also

ClassDescriptor Members
ClassDescriptor Class
com.mindfusion.diagramming Namespace

Column Class

Represents a column of cells in a table.

Syntax

Java
`public class Column implements Cloneable, Externalizable`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Column

See Also

Column Members
com.mindfusion.diagramming Namespace

Column Members

Represents a column of cells in a table.

The following tables list the members exposed by the Column type.

Public Constructors

	Name	Description
	Column	Overloaded. Initializes a new instance of the **Column** class.

Public Methods

	Name	Description
	clone	Copies the column properties to a new **Column** instance.
	getColumnStyle	Gets a value indicating whether this column is automatically resized when the table is resized.
	getWidth	Gets the width of this column.
	readExternal	Implements Externalizable.
	setColumnStyle	Sets a value indicating whether this column should be automatically resized when the table is resized.
	setWidth	Sets the width of this column and all cells inside it.

	writeExternal	Implements Externalizable.

Protected Methods

	Name	Description
	loadFromJson	Loads the column from a JSON object.
	loadFromXml	
	saveToJson	Saves the column as a JSON object.
	saveToXml	

See Also

Column Class
com.mindfusion.diagramming Namespace

Column Constructor

Initializes a new instance of the Column class.

Overload List

Name	Description
Column ()	Used internally to implement serialization functionality.
Column (TableNode)	Initializes a new instance of the **Column** class and assigns the specified table as its parent.

See Also

Column Class
com.mindfusion.diagramming Namespace

Column Constructor ()

Used internally to implement serialization functionality.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Column ()`

See Also

Column Constructor Overload List
Column Class
com.mindfusion.diagramming Namespace

Column Constructor (TableNode)

Initializes a new instance of the Column class and assigns the specified table as its parent.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Column (
    TableNode table
)
```

Parameters

table
The TableNode that contains this column.

See Also

Column Constructor Overload List
Column Class
com.mindfusion.diagramming Namespace

Column Methods

Column.clone Method

Copies the column properties to a new Column instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object clone ()
```

Return Value

A Column instance.

See Also

Column Members
Column Class
com.mindfusion.diagramming Namespace

Column.getColumnStyle Method

Gets a value indicating whether this column is automatically resized when the table is resized.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ColumnStyle getColumnStyle ()
```

Return Value

A member of the ColumnStyle enumeration.

See Also

Column Members
Column Class
com.mindfusion.diagramming Namespace

Column.getWidth Method

Gets the width of this column.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getWidth ()
```

Return Value

A float value specifying the column width.

Remarks

The user can resize columns interactively when table's AllowResizeColumns property is enabled.

See Also

Column Members
Column Class
com.mindfusion.diagramming Namespace

Column.loadFromJson Method

Loads the column from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the column's data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

Column Members
Column Class
com.mindfusion.diagramming Namespace

Column.loadFromXml Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

Column Members
Column Class
com.mindfusion.diagramming Namespace

Column.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

Column Members
Column Class
com.mindfusion.diagramming Namespace

Column.saveToJson Method

Saves the column as a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject instance to contain the serialized data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

Column Members
Column Class
com.mindfusion.diagramming Namespace

Column.saveToXml Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
```

```
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

Column Members
Column Class
com.mindfusion.diagramming Namespace

Column.setColumnStyle Method

Sets a value indicating whether this column should be automatically resized when the table is resized.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setColumnStyle (
    ColumnStyle value
)
```

Parameters

value
A member of the ColumnStyle enumeration. The default is **FixedWidth**.

Remarks

This property is used for calculating the width of a table column. The column can have either a fixed width set through the Width property, or can be resized proportionally to the table width.

See Also

Column Members
Column Class
com.mindfusion.diagramming Namespace

Column.setWidth Method

Sets the width of this column and all cells inside it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setWidth (
    float value
)
```

Parameters

value
A float value specifying the column width.

Remarks

The user can resize columns interactively when table's AllowResizeColumns property is enabled.

See Also

Column Members
Column Class
com.mindfusion.diagramming Namespace

Column.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

Column Members
Column Class
com.mindfusion.diagramming Namespace

ColumnList Class

A strongly typed list of Column objects.

Syntax

Java

```
public class ColumnList extends BaseList<E> implements Cloneable
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.BaseList(E)
        com.mindfusion.diagramming.ColumnList

See Also

ColumnList Members
com.mindfusion.diagramming Namespace

ColumnList Members

A strongly typed list of Column objects.

The following tables list the members exposed by the ColumnList type.

Public Constructors

	Name	Description
	ColumnList	

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)
	listEvent	(Inherited from BaseList.)
	notifyParent	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	Adds a new element to the list. (Inherited from BaseList.)
	clear	Removes all elements from the list. (Inherited from BaseList.)
	clone	
	contains	Determines if this list contains the specified element. (Inherited from BaseList.)
	first	Gets the first element of this list. (Inherited from BaseList.)
	get	Gets the element at the specified position in this list. (Inherited from BaseList.)
	last	Gets the last element of this list. (Inherited from BaseList.)
	readExternal	Loads the list's contents. (Inherited from BaseList.)
	remove	Overloaded. (Inherited from BaseList.)
	removeRange	Removes a range of elements from this list. (Inherited from BaseList.)

	set	Sets the element at the specified position in this list. (Inherited from BaseList.)
	size	Gets the number of elements in this list. (Inherited from BaseList.)
	writeExternal	Saves the list's contents. (Inherited from BaseList.)

Protected Methods

	Name	Description
	raiseAdding	Raises the adding event. (Inherited from BaseList.)
	raiseClearing	Raises the clearing event. (Inherited from BaseList.)
	raiseRemoving	Raises the removing event. (Inherited from BaseList.)

See Also

ColumnList Class
com.mindfusion.diagramming Namespace

ColumnList Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public ColumnList ()`

See Also

ColumnList Class
com.mindfusion.diagramming Namespace

ColumnList Methods

ColumnList.clone Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Object clone ()`

Return Value

See Also

ColumnList Members
ColumnList Class
com.mindfusion.diagramming Namespace

ColumnStyle Enumeration

The members of this enumeration specify whether a table's column is automatically resized when the table is resized. These constants can be used as parameters of the setColumnStyle method of the Column class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum ColumnStyle`

Members

	Member name	Description
	AutoWidth	The column grows or shrinks automatically if the table is resized. The available width is divided equally between all AutoWidth columns.
	FixedWidth	The column width stays fixed even if the table is resized.

See Also

com.mindfusion.diagramming Namespace

Command Class

Represents an action that can be undone or redone.

Syntax

Java
`public abstract class Command`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.AddGroupCmd
    com.mindfusion.diagramming.AddItemCmd
    com.mindfusion.diagramming.AddToContainerCmd
    com.mindfusion.diagramming.ChangeItemCmd
    com.mindfusion.diagramming.CompositeCmd
    com.mindfusion.diagramming.DisconnectLinkCmd

com.mindfusion.diagramming.EditTextCmd
com.mindfusion.diagramming.ExpandHeaderRowCmd
com.mindfusion.diagramming.ExpandItemCmd
com.mindfusion.diagramming.ExpandTreeViewItemCmd
com.mindfusion.diagramming.FoldContainerCmd
com.mindfusion.diagramming.GroupAttachCmd
com.mindfusion.diagramming.GroupDetachCmd
com.mindfusion.diagramming.ModifyItemCmd
com.mindfusion.diagramming.RedimTableCmd
com.mindfusion.diagramming.RemoveFromContainerCmd
com.mindfusion.diagramming.RemoveGroupCmd
com.mindfusion.diagramming.RemoveItemCmd
com.mindfusion.diagramming.ResizeTableColumnCmd
com.mindfusion.diagramming.ResizeTableRowCmd
com.mindfusion.diagramming.ScrollTableCmd
com.mindfusion.diagramming.ScrollTreeViewCmd

See Also

Command Members
com.mindfusion.diagramming Namespace

Command Members

Represents an action that can be undone or redone.

The following tables list the members exposed by the Command type.

Public Constructors

	Name	Description
	Command	Initializes a new **Command** instance.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command.
	execute	This method is called internally by JDiagram when performing the action.
	getSubCommands	Gets a collection of all command objects contained within the composite one.
	getTitle	Gets the title of this command.
	redo	This method is called by the UndoManager when redoing actions.
	setTitle	Sets the command title.
	undo	This method is called by the **UndoManager** when undoing actions.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related.
	getContext	Gets the command's context.
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative.

See Also

Command Class
com.mindfusion.diagramming Namespace

Command Constructor

Initializes a new Command instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Command (
    String title
)
```

Parameters

title
A String containing the command title.

See Also

Command Class
com.mindfusion.diagramming Namespace

Command Methods

Command.addSubCmd Method

Adds a command object to a compound command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addSubCmd (
    Command cmd
)
```

Parameters

cmd
A subordinate action that should be executed, undone or redone together with this command.

See Also

Command Members
Command Class
com.mindfusion.diagramming Namespace

Command.adopt Method

Merges adjacent commands in the history queue if they are related.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean adopt (
    Command command
)
```

Parameters

command
The Command that might be adopted by this command.

Return Value

true if the specified command has been adopted; otherwise, **false**.

See Also

Command Members
Command Class
com.mindfusion.diagramming Namespace

Command.execute Method

This method is called internally by JDiagram when performing the action.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public abstract void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled
true if the undo manager is enabled at this time, otherwise **false**.

See Also

Command Members
Command Class
com.mindfusion.diagramming Namespace

Command.getContext Method

Gets the command's context.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected CommandContext getContext ()
```

Return Value

See Also

Command Members
Command Class
com.mindfusion.diagramming Namespace

Command.getSubCommands Method

Gets a collection of all command objects contained within the composite one.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public CommandList getSubCommands ()
```

Return Value

A CommandList containing the child commands.

See Also

Command Members
Command Class
com.mindfusion.diagramming Namespace

Command.getTitle Method

Gets the title of this command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getTitle ()
```

Return Value

A String containing the command's title.

See Also

Command Members
Command Class
com.mindfusion.diagramming Namespace

Command.isContainerOf Method

Determines whether a command has been initiated by this command and should be treated as a derivative.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean isContainerOf (
    Command command
)
```

Parameters

command
The Command for which to determine whether it is a derivative.

Return Value

true if the specified command should be considered a derivative; otherwise, **false**.

See Also

Command Members
Command Class
com.mindfusion.diagramming Namespace

Command.redo Method

This method is called by the UndoManager when redoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void redo ()
```

See Also

Command Members
Command Class
com.mindfusion.diagramming Namespace

Command.setTitle Method

Sets the command title.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTitle (
    String value
)
```

Parameters

value
A String containing the command's title.

See Also

Command Members
Command Class
com.mindfusion.diagramming Namespace

Command.undo Method

This method is called by the UndoManager when undoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void undo ()
```

See Also

CommandContext Class

Represents the context in which a command is executed.

Syntax

Java
`public class CommandContext`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.CommandContext

See Also

CommandContext Members
com.mindfusion.diagramming Namespace

CommandContext Members

Represents the context in which a command is executed.

The following tables list the members exposed by the CommandContext type.

Public Constructors

	Name	Description
	CommandContext	Initializes a new CommandContext instance.

Public Methods

	Name	Description
	getDocument	

See Also

CommandContext Class
com.mindfusion.diagramming Namespace

CommandContext Constructor

Initializes a new CommandContext instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public CommandContext (
    Diagram document
)
```

Parameters

document
The flowchart associated with this context.

See Also

CommandContext Class
com.mindfusion.diagramming Namespace

CommandContext Methods

CommandContext.getDocument Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Diagram getDocument ()
```

Return Value

See Also

CommandContext Members
CommandContext Class
com.mindfusion.diagramming Namespace

CommandHistory Class

Represent the command undo/redo history.

Syntax

```
Java
public class CommandHistory
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.CommandHistory

See Also

CommandHistory Members
com.mindfusion.diagramming Namespace

CommandHistory Members

Represent the command undo/redo history.

The following tables list the members exposed by the CommandHistory type.

Public Constructors

	Name	Description
	CommandHistory	Initializes a new **CommandHistory** instance.

Public Methods

	Name	Description
	clear	Clears the undo/redo history.
	getCapacity	Gets how much commands can be saved in the undo history.
	getNextRedo	Gets the command that will be redone by the next call to UndoManager.redo.
	getNextUndo	Gets the command that will be undone by the next call to UndoManager.undo.
	mergeUndoRecords	Merges several undo records into a single composite record.
	setCapacity	Sets the maximum number of commands that can be saved in the undo history.

See Also

CommandHistory Class
com.mindfusion.diagramming Namespace

CommandHistory Constructor

Initializes a new CommandHistory instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public CommandHistory ()`

See Also

CommandHistory Methods

CommandHistory.clear Method

Clears the undo/redo history.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void clear ()
```

See Also

CommandHistory Members
CommandHistory Class
com.mindfusion.diagramming Namespace

CommandHistory.getCapacity Method

Gets how much commands can be saved in the undo history.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getCapacity ()
```

Return Value

An integer value specifying how much commands can be saved in the undo/redo history before dropping the oldest command.

See Also

CommandHistory Members
CommandHistory Class
com.mindfusion.diagramming Namespace

CommandHistory.getNextRedo Method

Gets the command that will be redone by the next call to UndoManager.redo.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Command getNextRedo ()
```

Return Value

See Also

CommandHistory Members
CommandHistory Class
com.mindfusion.diagramming Namespace

CommandHistory.getNextUndo Method

Gets the command that will be undone by the next call to UndoManager.undo.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Command getNextUndo ()
```

Return Value

See Also

CommandHistory Members
CommandHistory Class
com.mindfusion.diagramming Namespace

CommandHistory.mergeUndoRecords Method

Merges several undo records into a single composite record.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean mergeUndoRecords (
    int numRecords,
    String title
)
```

Parameters

numRecords
Specifies how many records at the end of the command list should be merged.

title

Specifies the title of the new command.

Return Value

false if the commands saved in the history are less than *numRecords*; otherwise, **true**.

See Also

CommandHistory Members
CommandHistory Class
com.mindfusion.diagramming Namespace
startComposite Method

CommandHistory.setCapacity Method

Sets the maximum number of commands that can be saved in the undo history.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCapacity (
    int value
)
```

Parameters

value
An integer value specifying how much commands can be saved in the undo/redo history before dropping the oldest command.

See Also

CommandHistory Members
CommandHistory Class
com.mindfusion.diagramming Namespace

CommandList Class

A strongly typed list of Command objects.

Syntax

Java

```
public class CommandList extends BaseList<E>
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)

com.mindfusion.diagramming.BaseList(E)
com.mindfusion.diagramming.CommandList

See Also

CommandList Members
com.mindfusion.diagramming Namespace

CommandList Members

A strongly typed list of Command objects.

The following tables list the members exposed by the CommandList type.

Public Constructors

	Name	Description
	CommandList	Overloaded.

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)
	listEvent	(Inherited from BaseList.)
	notifyParent	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	Adds a new element to the list. (Inherited from BaseList.)
	clear	Removes all elements from the list. (Inherited from BaseList.)
	contains	Determines if this list contains the specified element. (Inherited from BaseList.)
	first	Gets the first element of this list. (Inherited from BaseList.)
	get	Gets the element at the specified position in this list. (Inherited from BaseList.)
	last	Gets the last element of this list. (Inherited from BaseList.)
	readExternal	Loads the list's contents. (Inherited from BaseList.)
	remove	Overloaded. (Inherited from BaseList.)
	removeRange	Removes a range of elements from this list. (Inherited from BaseList.)
	set	Sets the element at the specified position in this list. (Inherited from BaseList.)

	size	Gets the number of elements in this list. (Inherited from BaseList.)
	writeExternal	Saves the list's contents. (Inherited from BaseList.)

Protected Methods

	Name	Description
	raiseAdding	Raises the adding event. (Inherited from BaseList.)
	raiseClearing	Raises the clearing event. (Inherited from BaseList.)
	raiseRemoving	Raises the removing event. (Inherited from BaseList.)

See Also

CommandList Class
com.mindfusion.diagramming Namespace

CommandList Constructor

Overload List

Name	Description
CommandList ()	
CommandList (int)	

See Also

CommandList Class
com.mindfusion.diagramming Namespace

CommandList Constructor ()

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public CommandList ()`

See Also

CommandList Constructor Overload List
CommandList Class
com.mindfusion.diagramming Namespace

CommandList Constructor (int)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CommandList (
    int capacity
)
```

Parameters

capacity

See Also

CommandList Constructor Overload List
CommandList Class
com.mindfusion.diagramming Namespace

CompositeCmd Class

Represents a composite command object that contains other commands.

Syntax

Java

```
public class CompositeCmd extends Command
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.CompositeCmd

See Also

CompositeCmd Members
com.mindfusion.diagramming Namespace

CompositeCmd Members

Represents a composite command object that contains other commands.

The following tables list the members exposed by the CompositeCmd type.

Public Constructors

	Name	Description

	CompositeCmd	Overloaded.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	Overloaded.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	This method is called by the UndoManager when redoing actions.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	This method is called by the **UndoManager** when undoing actions.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

CompositeCmd Class
com.mindfusion.diagramming Namespace

CompositeCmd Constructor

Overload List

Name	Description
CompositeCmd (Diagram, String)	Initializes a new CompositeCmd instance.
CompositeCmd (Diagram, String, boolean)	Initializes a new **CompositeCmd** instance.

See Also

CompositeCmd Constructor (Diagram, String)

Initializes a new CompositeCmd instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CompositeCmd (
    Diagram diagram,
    String title
)
```

Parameters

diagram
The Diagram upon which this command will be performed.

title
A String containing the command title.

See Also

CompositeCmd Constructor Overload List
CompositeCmd Class
com.mindfusion.diagramming Namespace

CompositeCmd Constructor (Diagram, String, boolean)

Initializes a new CompositeCmd instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CompositeCmd (
    Diagram diagram,
    String title,
    boolean saveZOrder
)
```

Parameters

diagram
The Diagram upon which this command will be performed.

title
A String containing the command title.

saveZOrder

See Also

CompositeCmd Constructor Overload List
CompositeCmd Class
com.mindfusion.diagramming Namespace

CompositeCmd Methods

CompositeCmd.execute Method

Overload List

Name	Description
CompositeCmd.execute ()	Adds the composite command to the undo/redo history.
CompositeCmd.execute (boolean)	This method is called internally by JDiagram when performing the action.

See Also

CompositeCmd Members
CompositeCmd Class
com.mindfusion.diagramming Namespace

CompositeCmd.execute Method ()

Adds the composite command to the undo/redo history.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void execute ()`

See Also

execute Method Overload List
CompositeCmd Members
CompositeCmd Class
com.mindfusion.diagramming Namespace

CompositeCmd.execute Method (boolean)

This method is called internally by JDiagram when performing the action.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled
true if the undo manager is enabled at this time, otherwise **false**.

See Also

execute Method Overload List
CompositeCmd Members
CompositeCmd Class
com.mindfusion.diagramming Namespace

CompositeCmd.redo Method

This method is called by the UndoManager when redoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void redo ()
```

See Also

CompositeCmd Members
CompositeCmd Class
com.mindfusion.diagramming Namespace

CompositeCmd.undo Method

This method is called by the UndoManager when undoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void undo ()
```

See Also

CompositeCmd Members
CompositeCmd Class
com.mindfusion.diagramming Namespace

CompositeNode Class

The **CompositeNode** class represents nodes that are defined via hierarchies of child components, arranged within layout panels.

Syntax

Java
`public class CompositeNode extends DiagramNode implements ComponentHost`

Remarks

Use the Components property to add components to the node. The components are arranged on top of each other by default. To apply custom arrangement logic either place the components inside a ContainerComponent, such as GridPanel, and add this **ContainerComponent** to the **CompositeNode** or override the arrangeComponents method to apply custom arrangement logic.

To search for a component given its name, use the findComponent method. To get a component at a specific position, use getComponentAt.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItem
    com.mindfusion.diagramming.DiagramNode
      com.mindfusion.diagramming.CompositeNode

See Also

CompositeNode Members
com.mindfusion.diagramming Namespace

CompositeNode Members

The CompositeNode class represents nodes that are defined via hierarchies of child components, arranged within layout panels.

The following tables list the members exposed by the **CompositeNode** type.

Public Constructors

	Name	Description
	CompositeNode	Overloaded.

Protected Fields

	Name	Description
	allowIncomingLinks	(Inherited from DiagramNode.)
	allowOutgoingLinks	(Inherited from DiagramNode.)
	anchorPattern	(Inherited from DiagramNode.)
	AV_Cancel	(Inherited from DiagramNode.)

	AV_EndModIncoming	(Inherited from DiagramNode.)
	AV_EndModOutgoing	(Inherited from DiagramNode.)
	AV_StartModIncoming	(Inherited from DiagramNode.)
	AV_StartModOutgoing	(Inherited from DiagramNode.)
	AV_UpdateIncoming	(Inherited from DiagramNode.)
	AV_UpdateOutgoing	(Inherited from DiagramNode.)
	AV_UpdIntscIncoming	(Inherited from DiagramNode.)
	AV_UpdIntscOutgoing	(Inherited from DiagramNode.)
	AV_UpdPosIncoming	(Inherited from DiagramNode.)
	AV_UpdPosOutgoing	(Inherited from DiagramNode.)
	bounds	(Inherited from DiagramNode.)
	brush	(Inherited from DiagramItem.)
	cycleDetected	(Inherited from DiagramItem.)
	cycleProtect	(Inherited from DiagramItem.)
	enabledHandles	(Inherited from DiagramNode.)
	handlesStyle	(Inherited from DiagramNode.)
	incomingLinks	(Inherited from DiagramNode.)
	masterGroup	(Inherited from DiagramNode.)
	modifyDX	(Inherited from DiagramItem.)
	modifyDY	(Inherited from DiagramItem.)
	modifyHandle	(Inherited from DiagramItem.)
	modifying	(Inherited from DiagramItem.)
	obstacle	(Inherited from DiagramNode.)
	outgoingLinks	(Inherited from DiagramNode.)
	pen	(Inherited from DiagramItem.)
	ptEnd	(Inherited from DiagramItem.)
	ptMdfLast	(Inherited from DiagramItem.)
	ptOrg	(Inherited from DiagramItem.)
	ptSavedEnd	(Inherited from DiagramItem.)
	ptSavedOrg	(Inherited from DiagramItem.)
	savedBounds	(Inherited from DiagramNode.)
	subordinateGroup	(Inherited from DiagramItem.)

Public Methods

	Name	Description
	addLabel	Overloaded. (Inherited from DiagramNode.)
	applyEffects	For internal use.
	arrangeComponents	Invokes when the components within this node are being arranged.
	as	Down-casts the item to specified type. (Inherited from DiagramItem.)
	attachTo	Overloaded. (Inherited from DiagramNode.)
	clone	Creates a copy of this item. (Inherited from DiagramItem.)
	containsComponent	Checks whether the specified component is contained in this node.
	containsPoint	Overloaded. (Inherited from DiagramNode.)
	detach	Detaches a node from its master group. (Inherited from DiagramNode.)
	docToComponent	Converts a point from document coordinates to the local coordinate space of a component inside this node.
	drawLocal	Draws the node on the specified Graphics2D surface.
	drawShadowLocal	Draws the shadow of this node on the specified Graphics2D surface.
	findComponent	Returns the child component with the specified name or null, if the component was not found.
	getAllIncomingLinks	Gets a collection of all links entering this node. (Inherited from DiagramNode.)
	getAllLinks	Gets all links connected to this node. (Inherited from DiagramNode.)
	getAllOutgoingLinks	Gets a collection of all links going out of this node. (Inherited from DiagramNode.)
	getAllowIncomingLinks	Gets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	getAllowOutgoingLinks	Gets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	getAnchorPattern	Gets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)
	getBounds	DiagramNode.getBounds override
	getBrush	Gets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	getCenter	Returns the center point of this node. (Inherited from DiagramNode.)
	getClipboard	Implements ComponentHost.getClipboard

	getComponentAt	Returns the component at the specified point, expressed in document coordinates.
	getComponents	Gets a list with the root components contained in the node.
	getConstraints	Gets the movement and size constraints applied to a node. (Inherited from DiagramNode.)
	getContainer	Gets the parent ContainerNode containing this node. (Inherited from DiagramNode.)
	getEffectiveBrush	Gets the effective brush of the item. (Inherited from DiagramItem.)
	getEffectiveFont	Gets the currently effective font of the item. This property returns getFont if it is not null, or a font with the DiagramItemStyle.getFontFamily, DiagramItemStyle.getFontSize, and DiagramItemStyle.getFontStyle properties of the item's style. (Inherited from DiagramItem.)
	getEffectivePen	Gets the effective pen of the item. (Inherited from DiagramItem.)
	getEffectiveShadowBrush	Creates a Brush object representing the currently effective shadow brush of the item. This method returns a system brush corresponding to the item's getShadowBrush if the item's **getShadowBrush** is not null, or a system brush corresponding to the DiagramItemStyle.getShadowBrush property of the item's style. (Inherited from DiagramItem.)
	getEffectiveTextBrush	Gets the effective text brush of the item. (Inherited from DiagramItem.)
	getEffects	Gets a collection with all effects applied to this node. (Inherited from DiagramNode.)
	getEnabledHandles	Gets a combination of NodeHandleType members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	getExpandable	Gets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	getExpanded	Gets a value indicating whether the tree branch that starts from a node is expanded or collapsed. (Inherited from DiagramNode.)
	getFocusedComponent	Implements ComponentHost.getFocusedComponent
	getFont	Gets the font used to draw the text of an item. (Inherited from DiagramItem.)
	getHandlesStyle	Gets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	getHyperLink	Gets the hyperlink associated with an item. (Inherited from DiagramItem.)

	getId	Gets user-defined identifier associated with this item. (Inherited from DiagramItem.)
	getIgnoreLayout	Gets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	getIncomingLinks	Gets the links coming into a node. (Inherited from DiagramNode.)
	getLabels	Returns the list of supplementary labels displayed by this node. (Inherited from DiagramNode.)
	getLayerIndex	Gets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	getLayoutTraits	Returns a hashtable containing properties specific to layout algorithms. (Inherited from DiagramItem.)
	getLocalCenter	(Inherited from DiagramNode.)
	getLocked	Gets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	getMasterGroup	Gets the hierarchical group in which this node is a subordinate item. (Inherited from DiagramNode.)
	getMasterItem	Returns the node's **Container** or main item of **MasterGroup**. (Inherited from DiagramNode.)
	getNearestBorderPoint	Returns a point that lies on the outline of this node, at the shortest distance from the specified point. (Inherited from DiagramNode.)
	getObstacle	Gets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	getOpacity	Gets the opacity of this item. (Inherited from DiagramItem.)
	getOutgoingLinks	Gets the links going out from a node. (Inherited from DiagramNode.)
	getParent	Gets the diagram that contains this item. (Inherited from DiagramItem.)
	getPen	Gets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	getPrintable	Gets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	getRotatedBounds	Gets the bounding rectangle of this node, when it is rotated at the specified angle around the specified pivot. (Inherited from DiagramNode.)
	getRotationAngle	Gets the rotation angle of this node. (Inherited from DiagramNode.)
	getRuntimeIndex	For internal use. (Inherited from DiagramItem.)
	getSelected	Gets a value indicating whether this item is selected. (Inherited from DiagramItem.)

	getShadowBrush	Gets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	getShadowOffsetX	Gets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getShadowOffsetY	Gets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getStyle	Gets the style associated with the item. (Inherited from DiagramItem.)
	getSubordinateGroup	Gets the group of subordinated items attached to this one. (Inherited from DiagramItem.)
	getTag	Gets user-defined data assigned to an item. (Inherited from DiagramItem.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	getTextPadding	Gets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	getToolTip	Gets the tooltip text displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	getVisible	Gets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	getWeight	Gets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	getZIndex	Gets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	hasSubordinates	Checks whether there are any nodes attached to this item. (Inherited from DiagramItem.)
	hitTest	Returns the diagram item that contains the specified point. (Inherited from DiagramItem.)
	hitTestHandle	DiagramItem.hitTestHandle override. (Inherited from DiagramNode.)
	init	Returns a CompositeNodeBuilder object used to configure this CompositeNode instance.
	invalidate	Overloaded.
	invalidateLayout	Overloaded.
	labelFromPoint	Returns the label whose layout rectangle contains the specified point. (Inherited from DiagramNode.)
	moveTo	Moves a node to the specified location. (Inherited from DiagramNode.)
S	nodesIntersect	Determines whether two nodes intersect. (Inherited from DiagramNode.)
	onDragOut	Invoked when a diagram item is being dragged out of this node. (Inherited from DiagramNode.)

	onDragOver	Invoked when a diagram item is being dragged over this node. (Inherited from DiagramNode.)
	onDropOver	Invoked when a diagram item is dropped over this node. (Inherited from DiagramNode.)
	pointToComponent	For internal use.
	query	Returns the items that can be reached from this item by following the path specified in the given query expression. (Inherited from DiagramItem.)
	readExternal	Implements Externalizable
	removeLabel	Removes the specified label from this node. (Inherited from DiagramNode.)
	resize	Sets the size of a node. (Inherited from DiagramNode.)
	setAllowIncomingLinks	Sets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	setAllowOutgoingLinks	Sets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	setAnchorPattern	Sets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)
	setBounds	Overloaded. (Inherited from DiagramNode.)
	setBoundsDirect	For internal use. (Inherited from DiagramNode.)
	setBrush	Sets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	setClipboard	Implements ComponentHost.setClipboard
	setConstraints	Sets constraints to the node size and movement direction. The constraints are applied when a user modifies the node interactively. They are not checked when the position of a node is set programmatically. (Inherited from DiagramNode.)
	setEnabledHandles	Sets a combination of **NodeHandleType** members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	setExpandable	Sets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	setExpanded	Expands or collapses the tree branch that starts from a node. (Inherited from DiagramNode.)
	setExpandedFlag	Changes the "expanded" flag without actually expanding or collapsing the tree branch that starts from a node. (Inherited from DiagramNode.)
	setFocusedComponent	Implements ComponentHost.setFocusedComponent

	setFont	Sets the font used to draw the text of an item. (Inherited from DiagramItem.)
	setHandlesStyle	Sets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	setHyperLink	Sets the hyperlink associated with an item. (Inherited from DiagramItem.)
	setId	Assigns user-defined identifier to this item. (Inherited from DiagramItem.)
	setIgnoreLayout	Sets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	setLayerIndex	Sets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	setLocked	Sets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	setObstacle	Sets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	setOpacity	Sets the opacity of this item. (Inherited from DiagramItem.)
	setPen	Sets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	setPrintable	Sets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	setRotationAngle	Sets the rotation angle of a node. (Inherited from DiagramNode.)
	setSelected	Selects or deselects an item. (Inherited from DiagramItem.)
	setShadowBrush	Sets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	setShadowOffsetX	Sets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShadowOffsetY	Sets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setStyle	Sets the style associated with the item. (Inherited from DiagramItem.)
	setTag	Assigns user-defined data to an item. If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event. (Inherited from DiagramItem.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItem.)

	setTextPadding	Sets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	setToolTip	Sets the tooltip text that should be displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	setVisible	Sets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	setWeight	Sets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	setZIndex	Sets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
S	with	Returns a CompositeNodeBuilder object used to configure and create new CompositeNode instances.
	writeExternal	Implements Externalizable
	zBottom	Moves an item to the bottom of the Z order. (Inherited from DiagramItem.)
	zLevelDown	Moves an item down in the Z order. (Inherited from DiagramItem.)
	zLevelUp	Moves an item up in the Z order. (Inherited from DiagramItem.)
	zTop	Moves an item to the top of the Z order. (Inherited from DiagramItem.)

Protected Methods

	Name	Description
	allowCreate	DiagramItem.allowCreate override. (Inherited from DiagramNode.)
	allowModify	(Inherited from DiagramNode.)
	allowModifyImpl	(Inherited from DiagramNode.)
	cancelModify	DiagramItem.cancelModify override. Invoked when the interactive modification of this node has been canceled. (Inherited from DiagramNode.)
	completeCreate	DiagramItem.completeCreate override. (Inherited from DiagramNode.)
	completeModify	(Inherited from DiagramNode.)
	constraintsInfringed	(Inherited from DiagramNode.)
	createConnectionPoint	(Inherited from DiagramNode.)
	createProperties	DiagramItem.createProperties override. (Inherited from DiagramNode.)
	createState	DiagramItem.createState override. (Inherited from DiagramNode.)
	draw	DiagramItem.draw override. (Inherited from DiagramNode.)

	drawShadow	DiagramItem.drawShadow override. (Inherited from DiagramNode.)
	getLocalBounds	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getLocalBoundsD	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getMeasureUnit	(Inherited from DiagramItem.)
	getRepaintRect	DiagramItem.getRepaintRect override. (Inherited from DiagramNode.)
	getRgnInRect	Overloaded.
	getValue	Gets the effective value of the style property with the specified name. (Inherited from DiagramItem.)
	groupContains	(Inherited from DiagramNode.)
	loadFromJson	Loads the node from a JSON object.
	loadFromXml	DiagramNode.loadFromXml override
	move	(Inherited from DiagramNode.)
	onAdd	Called when an item is added to a Diagram, either by the user, programmatically or by undo / redo. (Inherited from DiagramItem.)
	onChangeFont	(Inherited from DiagramItem.)
	onChangeTextPadding	(Inherited from DiagramItem.)
	onChildModified	Called when a group child node has been modified. Override this method if you need to know when a node from the **SubordinateGroup** is modified. (Inherited from DiagramItem.)
	onClick	Invoked when the user clicks this item. (Inherited from DiagramItem.)
	onDoubleClick	Invoked when the user double-clicks this item. (Inherited from DiagramItem.)
	onLoad	Called when this item is loaded from a file. (Inherited from DiagramItem.)
	onMeasureUnitChanged	
	onModify	Called when an item is modified (Inherited from DiagramNode.)
	onRemove	DiagramNode.onRemove override
	onRotationAngleChanged	Called when the node's rotation angle changes. (Inherited from DiagramNode.)
	onStyleChanged	Invoked when the associated style or theme have changed. (Inherited from DiagramItem.)
	onStyleFontChanged	Invoked when font property values of an associated style change. (Inherited from DiagramItem.)

	onUpdateBounds	DiagramNode.onUpdateBounds override
	parentConstraintsInfringed	(Inherited from DiagramNode.)
	putExpandable	(Inherited from DiagramNode.)
	putSelected	(Inherited from DiagramItem.)
	rectFromPoints	(Inherited from DiagramNode.)
	repaint	Overloaded. (Inherited from DiagramItem.)
	resizeToFitImage	(Inherited from DiagramNode.)
	restoreProperties	DiagramItem.restoreProperties override. (Inherited from DiagramNode.)
	restoreState	DiagramItem.restoreState override. (Inherited from DiagramNode.)
	saveProperties	DiagramItem.saveProperties override. (Inherited from DiagramNode.)
	saveState	DiagramItem.saveState override. (Inherited from DiagramNode.)
	saveToJson	Saves the node as a JSON object.
	saveToXml	DiagramNode.saveToXml override
	scaleElements	Scales the node's elements by specified amount. (Inherited from DiagramNode.)
	serializeComponents	Invoked to query whether the underlying component structure should be automatically serialized.
	setDiagramDirty	Marks the diagram as changed. (Inherited from DiagramItem.)
	setReflexive	Invoked to let a node set the shape of a reflexive link connected to it. (Inherited from DiagramNode.)
	shouldRender	Determines whether the item is rendered in the current context. (Inherited from DiagramItem.)
	shouldRenderAnchors	Determines whether the node should render its anchor points. (Inherited from DiagramNode.)
	startCreate	DiagramItem.startCreate override. (Inherited from DiagramNode.)
	startModify	DiagramItem.startModify override. Invoked when the user starts modifying this node interactively. (Inherited from DiagramNode.)
	updateCreate	DiagramItem.updateCreate override. (Inherited from DiagramNode.)
	updateLinkPositions	(Inherited from DiagramNode.)
	updateModify	DiagramItem.updateModify override. Invoked during interactive modification of this node. (Inherited from DiagramNode.)

See Also

CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode Constructor

Overload List

Name	Description
CompositeNode ()	Initializes a new instance of the CompositeNode class.
CompositeNode (CompositeNode)	Initializes a new instance of the CompositeNode class using the specified diagram item as a prototype.
CompositeNode (Diagram)	Initializes a new instance of the CompositeNode class with default values supplied form the specified Diagram.

See Also

CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode Constructor ()

Initializes a new instance of the CompositeNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CompositeNode ()
```

See Also

CompositeNode Constructor Overload List
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode Constructor (CompositeNode)

Initializes a new instance of the CompositeNode class using the specified diagram item as a prototype.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CompositeNode (
    CompositeNode prototype
)
```

Parameters

prototype
The item to use as a prototype. The properties of the new item are initialized from the property values of this item.

See Also

CompositeNode Constructor Overload List
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode Constructor (Diagram)

Initializes a new instance of the CompositeNode class with default values supplied form the specified Diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CompositeNode (
    Diagram diagram
)
```

Parameters

diagram
The Diagram from which to obtain default values for the node properties.

See Also

CompositeNode Constructor Overload List
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode Methods

CompositeNode.applyEffects Method

For internal use.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void applyEffects (
    ComponentBase component,
    Object parameters,
    EffectPhase phase
)
```

Parameters

component

parameters

phase

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.arrangeComponents Method

Invokes when the components within this node are being arranged.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void arrangeComponents (
    Rectangle2D.Float availableSpace,
    Graphics2D g2d
)
```

Parameters

availableSpace

g2d

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.containsComponent Method

Checks whether the specified component is contained in this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean containsComponent (
    ComponentBase component
)
```

Parameters

component
The component to check.

Return Value

true if the component is contained in the node; otherwise, false.

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.docToComponent Method

Converts a point from document coordinates to the local coordinate space of a component inside this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point docToComponent (
    Point2D.Float docPoint,
    ComponentBase component
)
```

Parameters

docPoint
The point to convert.

component
The target component.

Return Value

A Point object representing the point in local coordinates.

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.drawLocal Method

Draws the node on the specified Graphics2D surface.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void drawLocal (
    Graphics2D g2d,
    RenderOptions options
)
```

Parameters

g2d

options

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.drawShadowLocal Method

Draws the shadow of this node on the specified Graphics2D surface.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void drawShadowLocal (
    Graphics2D g2d,
    RenderOptions options
)
```

Parameters

g2d

options

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.findComponent Method

Returns the child component with the specified name or null, if the component was not found.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ComponentBase findComponent (
    String name
)
```

Parameters

name
The name of the component to search for.

Return Value

An instance of the ComponentBase class identifying the found component or null.

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.getBounds Method

DiagramNode.getBounds override

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D.Float getBounds ()
```

Return Value

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.getClipboard Method

Implements ComponentHost.getClipboard

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object getClipboard (
    ComponentBase source,
```

```
    Class<?> dataType
)
```

Parameters

source

dataType

Return Value

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.getComponentAt Method

Returns the component at the specified point, expressed in document coordinates.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ComponentBase getComponentAt (
    Point2D point
)
```

Parameters

point
A **Point2D** specifying the point to test, expressed in document coordinates.

Return Value

An instance of the ComponentBase class identifying the topmost component at the specified point, or **null** if none found.

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.getComponents Method

Gets a list with the root components contained in the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public List<ComponentBase> getComponents ()`

Return Value

A list with the components contained in this node.

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.getFocusedComponent Method

Implements ComponentHost.getFocusedComponent

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public ComponentBase getFocusedComponent ()`

Return Value

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.getRgnInRect Method

Overload List

Name	Description
CompositeNode.getRgnInRect (Rectangle2D.Float)	Creates a java.awt.Shape object specifying the node shape for a specified bounding rectangle.
CompositeNode.getRgnInRect (Rectangle2D.Float, boolean)	Creates a java.awt.Shape object specifying the node shape for a specified bounding rectangle.

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.getRgnInRect Method (Rectangle2D.Float)

Creates a java.awt.Shape object specifying the node shape for a specified bounding rectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Shape getRgnInRect (
    Rectangle2D.Float rc
)
```

Parameters

rc
The target rectangle.

Return Value

A java.awt.Shape instance.

See Also

getRgnInRect Method Overload List
CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.getRgnInRect Method (Rectangle2D.Float, boolean)

Creates a java.awt.Shape object specifying the node shape for a specified bounding rectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Shape getRgnInRect (
    Rectangle2D.Float rc,
    boolean inLocal
)
```

Parameters

rc
The target rectangle.

inLocal
true if the shape's coordinate should be relative to the node.

Return Value

A java.awt.Shape instance.

See Also

getRgnInRect Method Overload List
CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.init Method

Returns a CompositeNodeBuilder object used to configure this CompositeNode instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public CompositeNodeBuilder init ()`

Return Value

A **CompositeNodeBuilder** instance.

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.invalidate Method

Overload List

Name	Description
CompositeNode.invalidate ()	Implements ComponentHost.invalidate
CompositeNode.invalidate (Rectangle2D.Float)	Implements ComponentHost.invalidate

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.invalidate Method ()

Implements ComponentHost.invalidate

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void invalidate ()
```

See Also

invalidate Method Overload List
CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.invalidate Method (Rectangle2D.Float)

Implements ComponentHost.invalidate

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void invalidate (
    Rectangle2D.Float bounds
)
```

Parameters

bounds

See Also

invalidate Method Overload List
CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.invalidateLayout Method

Overload List

Name	Description
CompositeNode.invalidateLayout ()	Invalidates the component layout, causing rearrangement of content.
CompositeNode.invalidateLayout (ComponentBase)	Implements ComponentHost.invalidateLayout

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.invalidateLayout Method ()

Invalidates the component layout, causing rearrangement of content.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void invalidateLayout ()
```

See Also

invalidateLayout Method Overload List
CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.invalidateLayout Method (ComponentBase)

Implements ComponentHost.invalidateLayout

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void invalidateLayout (
    ComponentBase component
)
```

Parameters

component

See Also

invalidateLayout Method Overload List
CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.loadFromJson Method

Loads the node from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the node's data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

Remarks

By default, all components of a CompositeNode are saved in the JSON document along with their associated data. This will lead to wasted space if the instances of a derived class are built upon the same hierarchy of components and expose only a few properties corresponding to component attributes. The recommended approach of serializing such classes is to override serializeComponents and return **false** to stop the built-in serialization of components, and save / load the node properties from saveToJson / **loadFromJson** overrides.

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.loadFromXml Method

DiagramNode.loadFromXml override

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.onMeasureUnitChanged Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onMeasureUnitChanged ()
```

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.onRemove Method

DiagramNode.onRemove override

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onRemove ()
```

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.onUpdateBounds Method

DiagramNode.onUpdateBounds override

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onUpdateBounds (
    Rectangle2D oldBounds
)
```

Parameters

oldBounds

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.pointToComponent Method

For internal use.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D.Float pointToComponent (
    Point2D.Float point
)
```

Parameters

point

Return Value

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.readExternal Method

Implements Externalizable

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.saveToJson Method

Saves the node as a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject instance to contain the serialized data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.saveToXml Method

DiagramNode.saveToXml override

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.serializeComponents Method

Invoked to query whether the underlying component structure should be automatically serialized.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean serializeComponents ()
```

Return Value

true to automatically serialize the component tree; false to skip the automatic component serialization.

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.setClipboard Method

Implements ComponentHost.setClipboard

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setClipboard (
    ComponentBase source,
    Object data
)
```

Parameters

source

data

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.setFocusedComponent Method

Implements ComponentHost.setFocusedComponent

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setFocusedComponent (
    ComponentBase value
)
```

Parameters

value

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.with Method

Returns a CompositeNodeBuilder object used to configure and create new CompositeNode instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static CompositeNodeBuilder with ()
```

Return Value

A **CompositeNodeBuilder** instance.

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNode.writeExternal Method

Implements Externalizable

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

CompositeNode Members
CompositeNode Class
com.mindfusion.diagramming Namespace

CompositeNodeStyle Class

Syntax

Java
`public class CompositeNodeStyle extends DiagramNodeStyle`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Style
    com.mindfusion.diagramming.DiagramItemStyle
      com.mindfusion.diagramming.DiagramNodeStyle
        com.mindfusion.diagramming.CompositeNodeStyle

See Also

CompositeNodeStyle Members
com.mindfusion.diagramming Namespace

CompositeNodeStyle Members

The following tables list the members exposed by the CompositeNodeStyle type.

Public Constructors

	Name	Description
	CompositeNodeStyle	Initializes a new instance of the CompositeNodeStyle class.

Public Methods

	Name	Description
	addPropertyChangeListener	(Inherited from Style.)
	getBrush	Gets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	getEffects	Gets a list of the effects applied to the node. (Inherited from DiagramNodeStyle.)
	getFontFamily	Gets the font family of the item text. (Inherited from DiagramItemStyle.)

	getFontSize	Gets the font size of the item text. (Inherited from DiagramItemStyle.)
	getFontStyle	Gets the font style of the item text. (Inherited from DiagramItemStyle.)
	getFontUnit	Gets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	getShadowBrush	Gets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	getStroke	Gets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	getStrokeThickness	Gets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
	init	Returns a CompositeNodeStyleBuilder object used to configure this CompositeNodeStyle instance.
	readExternal	**Externalizable.readExternal** implementation. (Inherited from Style.)
	registerType	Associates a type with an alias. The alias is used when saving and loading objects of the specified type during style serialization and deserialization. (Inherited from Style.)
	removePropertyChangeListener	(Inherited from Style.)
	setBrush	Sets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	setFontFamily	Sets the font family of the item text. (Inherited from DiagramItemStyle.)
	setFontSize	Sets the font size of the item text. (Inherited from DiagramItemStyle.)
	setFontStyle	Sets the font style of the item text. (Inherited from DiagramItemStyle.)
	setFontUnit	Sets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	setShadowBrush	Sets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	setStroke	Sets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	setStrokeThickness	Sets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
	with	Returns a CompositeNodeStyleBuilder object used to configure and create new CompositeNodeStyle instances.

	writeExternal	**Externalizable.writeExternal** implementation. (Inherited from Style.)

Protected Methods

	Name	Description
	getValue	Gets the value of the specified property. (Inherited from Style.)
	isPropertySet	Checks whether the specified property has a value. (Inherited from Style.)
	loadFromJson	Loads the style content from a JsonObject. (Inherited from DiagramNodeStyle.)
	loadFromXml	Loads the style content from an XML element. (Inherited from Style.)
	registerProperty	Registers a new property with the specified name and type. (Inherited from Style.)
	saveToJson	Saves the style content into a JsonObject. (Inherited from DiagramNodeStyle.)
	saveToXml	Saves the style content into an XML element. (Inherited from Style.)
	setValue	Sets the value of the specified property. (Inherited from Style.)
	unsetValue	Clears the value of the specified property. (Inherited from Style.)

See Also

CompositeNodeStyle Class
com.mindfusion.diagramming Namespace

CompositeNodeStyle Constructor

Initializes a new instance of the CompositeNodeStyle class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CompositeNodeStyle ()
```

See Also

CompositeNodeStyle Class
com.mindfusion.diagramming Namespace

CompositeNodeStyle Methods

CompositeNodeStyle.init Method

Returns a CompositeNodeStyleBuilder object used to configure this CompositeNodeStyle instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public CompositeNodeStyleBuilder init ()
```

Return Value

A **CompositeNodeStyleBuilder** instance.

See Also

CompositeNodeStyle Members
CompositeNodeStyle Class
com.mindfusion.diagramming Namespace

CompositeNodeStyle.with Method

Returns a CompositeNodeStyleBuilder object used to configure and create new CompositeNodeStyle instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static CompositeNodeStyleBuilder with ()
```

Return Value

A **CompositeNodeStyleBuilder** instance.

See Also

CompositeNodeStyle Members
CompositeNodeStyle Class
com.mindfusion.diagramming Namespace

CompositeRouter Class

Implements a chain of link routers (objects implementing LinkRouter interface) so that a link passes through the sequence until it gets routed successfully.

Syntax

Java
`public class CompositeRouter implements LinkRouter`

Remarks

By default diagram's LinkRouter is set to a **CompositeRouter** instance that chains PatternRouter and GridRouter. You can insert additional link routers into the Routers list, including custom implementations of **LinkRouter** if target diagram should favor some specific link paths.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.CompositeRouter

See Also

CompositeRouter Members
com.mindfusion.diagramming Namespace

CompositeRouter Members

Implements a chain of link routers (objects implementing LinkRouter interface) so that a link passes through the sequence until it gets routed successfully.

The following tables list the members exposed by the CompositeRouter type.

Public Constructors

	Name	Description
	CompositeRouter	Overloaded.

Public Methods

	Name	Description
	getDiagram	Gets the Diagram whose links will be routed.
	getMinLinkSpacing	Gets the minimal spacing between links when distributing.
	getRouters	Gets a list of router objects forming a chain through which links pass until they are routed successfully.
	routeLink	Implements LinkRouter.routeLink.
	routeLinks	Implements LinkRouter.routeLinks.
	setDiagram	Sets the **Diagram** whose links will be routed.
	setMinLinkSpacing	Sets the minimal spacing between links when distributing.
	setRouters	Sets a list of router objects forming a chain through which links pass until they are routed successfully.

See Also

CompositeRouter Constructor

Overload List

Name	Description
CompositeRouter ()	Initializes a new instance of the CompositeRouter class.
CompositeRouter (Diagram)	Initializes a new instance of the **CompositeRouter** class.

See Also

CompositeRouter Class
com.mindfusion.diagramming Namespace

CompositeRouter Constructor ()

Initializes a new instance of the CompositeRouter class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CompositeRouter ()
```

See Also

CompositeRouter Constructor Overload List
CompositeRouter Class
com.mindfusion.diagramming Namespace

CompositeRouter Constructor (Diagram)

Initializes a new instance of the CompositeRouter class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CompositeRouter (
    Diagram diagram
)
```

Parameters

diagram
The Diagram whose links will be routed.

See Also

CompositeRouter Constructor Overload List
CompositeRouter Class
com.mindfusion.diagramming Namespace

CompositeRouter Methods

CompositeRouter.getDiagram Method

Gets the Diagram whose links will be routed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Diagram getDiagram ()
```

Return Value

A Diagram instance.

See Also

CompositeRouter Members
CompositeRouter Class
com.mindfusion.diagramming Namespace

CompositeRouter.getMinLinkSpacing Method

Gets the minimal spacing between links when distributing.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Double getMinLinkSpacing ()
```

Return Value

An optional **Double** value to apply as padding space between links. The default value is **null**.

Remarks

If this property is not set, links are pulled apart only if they would overlap, and distributed across fixed 1-cm space.

See Also

CompositeRouter Members
CompositeRouter Class
com.mindfusion.diagramming Namespace

CompositeRouter.getRouters Method

Gets a list of router objects forming a chain through which links pass until they are routed successfully.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public List<LinkRouter> getRouters ()
```

Return Value

A list of objects implementing LinkRouter interface.

Remarks

By default the list contains PatternRouter and GridRouter objects.

See Also

CompositeRouter Members
CompositeRouter Class
com.mindfusion.diagramming Namespace

CompositeRouter.routeLink Method

Implements LinkRouter.routeLink.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean routeLink (
    DiagramLink link,
    ConnectionPoint originConnection,
    ConnectionPoint destinationConnection,
    boolean nowCreating
)
```

Parameters

link
The DiagramLink to route.

originConnection

Represents connection to Origin node, potentially different from link's stored connection when modifying first control point.

destinationConnection
Represents connection to Destination node, potentially different from link's stored connection when modifying last control point.

nowCreating
Indicates whether link is currently being created.

Return Value

true if a path has been found successfully, otherwise **false**.

See Also

CompositeRouter Members
CompositeRouter Class
com.mindfusion.diagramming Namespace

CompositeRouter.routeLinks Method

Implements LinkRouter.routeLinks.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLinkList routeLinks (
    DiagramLinkList links
)
```

Parameters

links
A list of DiagramLink objects that should be routed.

Return Value

A list of links that were not routed successfully.

See Also

CompositeRouter Members
CompositeRouter Class
com.mindfusion.diagramming Namespace

CompositeRouter.setDiagram Method

Sets the Diagram whose links will be routed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setDiagram (
    Diagram value
)
```

Parameters

value
A Diagram instance.

See Also

CompositeRouter Members
CompositeRouter Class
com.mindfusion.diagramming Namespace

CompositeRouter.setMinLinkSpacing Method

Sets the minimal spacing between links when distributing.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setMinLinkSpacing (
    Double value
)
```

Parameters

value
An optional **Double** value to apply as padding space between links.

Remarks

If this property is not set, links are pulled apart only if they would overlap, and distributed across fixed 1-cm space.

See Also

CompositeRouter Members
CompositeRouter Class
com.mindfusion.diagramming Namespace

CompositeRouter.setRouters Method

Sets a list of router objects forming a chain through which links pass until they are routed successfully.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRouters (
    List<LinkRouter> value
)
```

Parameters

value
A list of objects implementing LinkRouter interface.

See Also

CompositeRouter Members
CompositeRouter Class
com.mindfusion.diagramming Namespace

ConnectionPoint Class

This class represents a connection between an edge and a node in a graph. It decouples the DiagramLink class from the DiagramNode class, allowing edges to connect different types of nodes without knowing anything of their implementation details. Each **DiagramLink** object contains two **ConnectionPoint** instances describing the connections at both ends of the link.

Syntax

Java

```
public class ConnectionPoint implements Externalizable
```

Remarks

If custom nodes should store additional information about their connections, inherit the **ConnectionPoint** class, add the necessary members and return an instance of this class from the createConnectionPoint override. For example, TreeViewNode uses TreeViewConnectionPoint objects to store reference to the item associated with the connection.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ConnectionPoint
    com.mindfusion.diagramming.TreeViewConnectionPoint

See Also

ConnectionPoint Members
com.mindfusion.diagramming Namespace

ConnectionPoint Members

This class represents a connection between an edge and a node in a graph. It decouples the DiagramLink class from the DiagramNode class, allowing edges to connect different types of nodes without knowing anything of their implementation details. Each **DiagramLink** object contains two ConnectionPoint instances describing the connections at both ends of the link.

The following tables list the members exposed by the **ConnectionPoint** type.

Public Constructors

	Name	Description
	ConnectionPoint	Overloaded.

Protected Fields

	Name	Description
	node	

Public Methods

	Name	Description
	addLinkToNode	Adds the link associated with this connection point to the associated node.
	anchorPointFromIndex	Returns the AnchorPoint instance with the specified index.
	calculateIntersections	Determines whether the end of a link should be aligned to the point where the node contour is intersected by the line connecting the centers of the connected nodes.
	canMoveLink	Checks whether the specified point, expressed in document coordinates, is a valid location for this connection point.
	getAnchorPos	Overloaded.
	getEndPoint	Calculates the coordinates of the this connection point expressed in document coordinates.
	getInitialPoint	Returns a point (usually the center of the bounding rectangle) contained within the associated node.
	getIntersection	Calculates the intersection point between the specified line segment and the contour of the node associated with this connection point.
	getNodeRect	Returns the bounding rectangle of the node associated with this connection point.
	getRelativePosition	Gets the position of this connection point, relative to the associated node's bounding rectangle, expressed in percents.
	getRow	Gets the index of a constituent item within the associated node where the link represented by this connection point is connected, or -1, if the link is connected to the node itself.
	linkChanges	Checks whether the relationship represented by the associated link would change if the link is attached to the specified node at the specified point.
	nodesIntersect	Checks whether the node associated with the current connection point and the node associated with the specified connection point intersect.
	readExternal	Deserializes the connection point data.

	removeLinkFromNode	Removes the link associated with this connection point from the associated node.
	sameNode	Checks whether the current connection point and the specified connection point are associated with the same node.
	saveEndRelative	Updates the coordinates of the connection point represented by this link, relative to the bounding rectangle of the associated node.
	setRelativePosition	Sets the position of this connection point, relative to the associated node's bounding rectangle, expressed in percents.
	writeExternal	Serializes the connection point data.

Protected Methods

	Name	Description
	getIncoming	Gets a flag indicating whether this connection point is at the origin or the destination of the associated link.
	getLink	Gets the link associated with this connection point.
	getNearestBorderPoint	Returns the nearest point lying on the node border.
	getNode	Gets the node associated with this connection point.
	updateFromPoint	Updates the connection state according to the specified point, without changing the related node.

See Also

ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint Fields

ConnectionPoint.node Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`protected DiagramNode node`

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint Constructor

Overload List

Name	Description
ConnectionPoint ()	Initializes a new instance of the ConnectionPoint class. This constructor is used only during deserialization.
ConnectionPoint (DiagramNode, DiagramLink, boolean)	Initializes a new instance of the **ConnectionPoint** class between the specified node and link.

See Also

ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint Constructor ()

Initializes a new instance of the ConnectionPoint class. This constructor is used only during deserialization.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ConnectionPoint ()
```

See Also

ConnectionPoint Constructor Overload List
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint Constructor (DiagramNode, DiagramLink, boolean)

Initializes a new instance of the ConnectionPoint class between the specified node and link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ConnectionPoint (
    DiagramNode node,
    DiagramLink link,
    boolean incoming
)
```

Parameters

node

The node whose connection to a link is managed by this ConnectionPoint.

link
The link whose connection to a node is managed by this ConnectionPoint.

incoming
Specifies which end of the link is represented by this ConnectionPoint.

See Also

ConnectionPoint Constructor Overload List
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint Methods

ConnectionPoint.addLinkToNode Method

Adds the link associated with this connection point to the associated node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addLinkToNode ()
```

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.anchorPointFromIndex Method

Returns the AnchorPoint instance with the specified index.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPoint anchorPointFromIndex (
    int index
)
```

Parameters

index
An index of a point within the target AnchorPattern.

Return Value

An instance of the AnchorPoint class.

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.calculateIntersections Method

Determines whether the end of a link should be aligned to the point where the node contour is intersected by the line connecting the centers of the connected nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean calculateIntersections ()
```

Return Value

true to align the link end; otherwise, **false**.

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.canMoveLink Method

Checks whether the specified point, expressed in document coordinates, is a valid location for this connection point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean canMoveLink (
    Point2D.Float point
)
```

Parameters

point
The **Point2D** to check for validity.

Return Value

true if the specified point represents a valid location for the connection point; otherwise, **false**.

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.getAnchorPos Method

Overload List

Name	Description
ConnectionPoint.getAnchorPos (int)	Returns the point from the node's associated anchor pattern (if any) with the specified index or the link's initial point.
ConnectionPoint.getAnchorPos (int, Point2D.Float)	Returns the point from the node's associated anchor pattern (if any) with the specified index.

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.getAnchorPos Method (int)

Returns the point from the node's associated anchor pattern (if any) with the specified index or the link's initial point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D getAnchorPos (
    int anchor
)
```

Parameters

anchor

Return Value

See Also

getAnchorPos Method Overload List
ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.getAnchorPos Method (int, Point2D.Float)

Returns the point from the node's associated anchor pattern (if any) with the specified index.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAnchorPos (
    int anchorIdx,
    Point2D.Float point
)
```

Parameters

anchorIdx

point

Return Value

See Also

getAnchorPos Method Overload List
ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.getEndPoint Method

Calculates the coordinates of the this connection point expressed in document coordinates.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D getEndPoint ()
```

Return Value

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.getIncoming Method

Gets a flag indicating whether this connection point is at the origin or the destination of the associated link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected boolean getIncoming ()
```

Return Value

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.getInitialPoint Method

Returns a point (usually the center of the bounding rectangle) contained within the associated node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Point2D getInitialPoint ()
```

Return Value

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.getIntersection Method

Calculates the intersection point between the specified line segment and the contour of the node associated with this connection point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Point2D getIntersection (
    Point2D pt1,
    Point2D pt2
)
```

Parameters

pt1

pt2

Return Value

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.getLink Method

Gets the link associated with this connection point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramLink getLink ()
```

Return Value

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.getNearestBorderPoint Method

Returns the nearest point lying on the node border.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Point2D getNearestBorderPoint (
    Point2D point
)
```

Parameters

point
A **Point2D** instance specifying the point to align to node's borders.

Return Value

A **Point2D** instance containing coordinates of nearest border point.

See Also

ConnectionPoint Members
ConnectionPoint Class

ConnectionPoint.getNode Method

Gets the node associated with this connection point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramNode getNode ()
```

Return Value

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.getNodeRect Method

Returns the bounding rectangle of the node associated with this connection point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getNodeRect (
    boolean rotated
)
```

Parameters

rotated

Return Value

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.getRelativePosition Method

Gets the position of this connection point, relative to the associated node's bounding rectangle, expressed in percents.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Point2D.Float getRelativePosition ()
```

Return Value

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.getRow Method

Gets the index of a constituent item within the associated node where the link represented by this connection point is connected, or -1, if the link is connected to the node itself.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getRow ()
```

Return Value

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.linkChanges Method

Checks whether the relationship represented by the associated link would change if the link is attached to the specified node at the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean linkChanges (
    DiagramNode node,
    Point2D point
)
```

Parameters

node

point

Return Value

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.nodesIntersect Method

Checks whether the node associated with the current connection point and the node associated with the specified connection point intersect.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean nodesIntersect (
    ConnectionPoint connectionPoint
)
```

Parameters

connectionPoint

Return Value

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.readExternal Method

Deserializes the connection point data.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.removeLinkFromNode Method

Removes the link associated with this connection point from the associated node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeLinkFromNode ()
```

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.sameNode Method

Checks whether the current connection point and the specified connection point are associated with the same node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean sameNode (
    ConnectionPoint otherConnectionPoint
)
```

Parameters

otherConnectionPoint

Return Value

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.saveEndRelative Method

Updates the coordinates of the connection point represented by this link, relative to the bounding rectangle of the associated node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveEndRelative ()
```

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.setRelativePosition Method

Sets the position of this connection point, relative to the associated node's bounding rectangle, expressed in percents.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRelativePosition (
    Point2D.Float value
)
```

Parameters

value

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.updateFromPoint Method

Updates the connection state according to the specified point, without changing the related node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void updateFromPoint (
    Point2D point
)
```

Parameters

point

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

ConnectionPoint.writeExternal Method

Serializes the connection point data.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

ConnectionPoint Members
ConnectionPoint Class
com.mindfusion.diagramming Namespace

Constants Class

Syntax

Java

```
public class Constants
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Constants

See Also

Constants Members

The following tables list the members exposed by the Constants type.

Public Constructors

	Name	Description
	Constants	

Public Fields

	Name	Description
	E	A very small positive real number (0.01).

Public Methods

	Name	Description
	getFitTextStep	Gets a value used when fitting the size of a node to its contained text.
	getMinItemSize	
	getPixel	
	getVScrollButtonSize	Gets the size of vertical scrollbar arrow buttons.

See Also

Constants Class
com.mindfusion.diagramming Namespace

Constants Fields

Constants.E Field

A very small positive real number (0.01).

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static final float E`

See Also

Constants Members
Constants Class
com.mindfusion.diagramming Namespace

Constants Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Constants ()
```

See Also

Constants Class
com.mindfusion.diagramming Namespace

Constants Methods

Constants.getFitTextStep Method

Gets a value used when fitting the size of a node to its contained text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static float getFitTextStep (
    GraphicsUnit currUnit
)
```

Parameters

currUnit

Return Value

See Also

Constants Members
Constants Class
com.mindfusion.diagramming Namespace

Constants.getMinItemSize Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static float getMinItemSize (
    GraphicsUnit currUnit
)
```

Parameters

currUnit

Return Value

See Also

Constants Members
Constants Class
com.mindfusion.diagramming Namespace

Constants.getPixel Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static double getPixel (
    GraphicsUnit currUnit
)
```

Parameters

currUnit

Return Value

See Also

Constants Members
Constants Class
com.mindfusion.diagramming Namespace

Constants.getVScrollButtonSize Method

Gets the size of vertical scrollbar arrow buttons.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public static Dimension getVScrollButtonSize (
    GraphicsUnit currUnit
)
```

Parameters

currUnit

Return Value

See Also

Constants Members
Constants Class
com.mindfusion.diagramming Namespace

ContainerChildEvent Class

Contains arguments passed to ContainerChildEvent Handler.

Syntax

Java
`public class ContainerChildEvent extends NodeEvent`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.NodeEvent
      com.mindfusion.diagramming.ContainerChildEvent

See Also

ContainerChildEvent Members
com.mindfusion.diagramming Namespace

ContainerChildEvent Members

Contains arguments passed to ContainerChildEvent Handler.

The following tables list the members exposed by the ContainerChildEvent type.

Public Constructors

	Name	Description
	ContainerChildEvent	Represents methods that will handle containerChildAdded, containerChildRemoved events.

Public Methods

	Name	Description

	getAdjustmentHandle	Gets the adjustment handle being moved by the user. (Inherited from NodeEvent.)
	getContainer	The parent ContainerNode that the Node belongs.
	getLabel	Gets a NodeLabel related to this event. (Inherited from NodeEvent.)
	getMouseButton	Gets which mouse button has been pressed. (Inherited from NodeEvent.)
	getNode	Gets the node for which the event was raised. (Inherited from NodeEvent.)
	getNodeHandleType	Gets the type of adjustment handle moved by the user. (Inherited from NodeEvent.)
	getPointerPosition	Gets the current pointer position. (Inherited from NodeEvent.)
	setAdjustmentHandle	Sets the adjustment handle being moved by the user. (Inherited from NodeEvent.)
	setPointerPosition	Sets the current pointer position. (Inherited from NodeEvent.)
	toString	Returns the identifier of this **ContainerNode**.

See Also

ContainerChildEvent Class
com.mindfusion.diagramming Namespace

ContainerChildEvent Constructor

Represents methods that will handle containerChildAdded, containerChildRemoved events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ContainerChildEvent (
    Object source,
    ContainerNode container,
    DiagramNode node
)
```

Parameters

source
The source of the event.

container
A ContainerChildEvent that contains the event data.

node
A DiagramNode instance

See Also

ContainerChildEvent Class
com.mindfusion.diagramming Namespace

ContainerChildEvent Methods

ContainerChildEvent.getContainer Method

The parent ContainerNode that the Node belongs.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ContainerNode getContainer ()
```

Return Value

See Also

ContainerChildEvent Members
ContainerChildEvent Class
com.mindfusion.diagramming Namespace

ContainerChildEvent.toString Method

Returns the identifier of this ContainerNode.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String toString ()
```

Return Value

See Also

ContainerChildEvent Members
ContainerChildEvent Class
com.mindfusion.diagramming Namespace

ContainerNode Class

Implements nodes that can contain other nodes.

Syntax

Java

```
public class ContainerNode
    extends DiagramNode
    implements InplaceEditable, Scrollable
```

Remarks

Users can drag nodes into a container interactively. When a dragged node is over a container, the container frame is painted using the HighlightPen property to indicate that the node would be added to the container.

Call the add method to add a node to container programmatically, and the remove method to remove a node from the container. Child nodes of a container are stored in its Children list. The Container property of child nodes returns their parent **ContainerNode**.

AutoShrink specifies whether the size of a container should shrink when a node is removed from it. The container node will not shrink to a size smaller than MinimumSize, even if it does not contain any items. Adding child nodes to a container will automatically grow its size, unless AutoGrow is set to **false**. Enable the Scrollable property to let users scroll container's content if it overflows.

A container node can be folded and unfolded, either interactively or programmatically, as specified through the Foldable and Folded properties. When a container is folded, it occupies a minimal area and its child nodes are hidden. You can get the original size of a folded container using the getUnfoldedSize method.

The Caption property specifies the caption text of a container node, and CaptionBrush specifies its color. Use the CaptionFormat property to define the alignment and position of the caption text. The height of the caption bar of a container can be set using the CaptionHeight property.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItem
    com.mindfusion.diagramming.DiagramNode
      com.mindfusion.diagramming.ContainerNode

See Also

ContainerNode Members
com.mindfusion.diagramming Namespace

ContainerNode Members

Implements nodes that can contain other nodes.

The following tables list the members exposed by the ContainerNode type.

Public Constructors

	Name	Description
	ContainerNode	Overloaded.

Protected Fields

	Name	Description

	allowIncomingLinks	(Inherited from DiagramNode.)
	allowOutgoingLinks	(Inherited from DiagramNode.)
	anchorPattern	(Inherited from DiagramNode.)
	AV_Cancel	(Inherited from DiagramNode.)
	AV_EndModIncoming	(Inherited from DiagramNode.)
	AV_EndModOutgoing	(Inherited from DiagramNode.)
	AV_StartModIncoming	(Inherited from DiagramNode.)
	AV_StartModOutgoing	(Inherited from DiagramNode.)
	AV_UpdateIncoming	(Inherited from DiagramNode.)
	AV_UpdateOutgoing	(Inherited from DiagramNode.)
	AV_UpdIntscIncoming	(Inherited from DiagramNode.)
	AV_UpdIntscOutgoing	(Inherited from DiagramNode.)
	AV_UpdPosIncoming	(Inherited from DiagramNode.)
	AV_UpdPosOutgoing	(Inherited from DiagramNode.)
	bounds	(Inherited from DiagramNode.)
	brush	(Inherited from DiagramItem.)
	cycleDetected	(Inherited from DiagramItem.)
	cycleProtect	(Inherited from DiagramItem.)
	enabledHandles	(Inherited from DiagramNode.)
	handlesStyle	(Inherited from DiagramNode.)
	incomingLinks	(Inherited from DiagramNode.)
	masterGroup	(Inherited from DiagramNode.)
	modifyDX	(Inherited from DiagramItem.)
	modifyDY	(Inherited from DiagramItem.)
	modifyHandle	(Inherited from DiagramItem.)
	modifying	(Inherited from DiagramItem.)
	obstacle	(Inherited from DiagramNode.)
	outgoingLinks	(Inherited from DiagramNode.)
	pen	(Inherited from DiagramItem.)
	ptEnd	(Inherited from DiagramItem.)
	ptMdfLast	(Inherited from DiagramItem.)
	ptOrg	(Inherited from DiagramItem.)
	ptSavedEnd	(Inherited from DiagramItem.)

	ptSavedOrg	(Inherited from DiagramItem.)
	savedBounds	(Inherited from DiagramNode.)
	subordinateGroup	(Inherited from DiagramItem.)

Public Methods

	Name	Description
	add	Adds a node to this container.
	addLabel	Overloaded. (Inherited from DiagramNode.)
	as	Down-casts the item to specified type. (Inherited from DiagramItem.)
	attachTo	Overloaded. (Inherited from DiagramNode.)
	clone	DiagramItem.clone override. Creates a copy of this item.
	containsPoint	Overloaded. (Inherited from DiagramNode.)
	containsRecursively	Determines whether this container contains the specified node, either directly or recursively through other containers.
	createScrollCommand	Implements the Scrollable interface. Creates a ScrollContainerCmd instance that can be used to undo the scroll operation.
	detach	Detaches a node from its master group. (Inherited from DiagramNode.)
	draw	DiagramNode.draw override.
	drawLocal	Draws the container on the specified **Graphics2D** surface.
	getAllIncomingLinks	Gets a collection of all links entering this node. (Inherited from DiagramNode.)
	getAllLinks	Gets all links connected to this node. (Inherited from DiagramNode.)
	getAllOutgoingLinks	Gets a collection of all links going out of this node. (Inherited from DiagramNode.)
	getAllowAddChildren	Gets a value indicating whether child nodes can be added interactively to this container.
	getAllowIncomingLinks	Gets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	getAllowOutgoingLinks	Gets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	getAllowRemoveChildren	Gets a value indicating whether child nodes can be removed interactively from this container.
	getAnchorPattern	Gets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)

	getAutoDeleteChildren	Gets whether deleting this container should also remove its child items from the diagram.
	getAutoGrow	Gets a value indicating whether the container should grow in size when nodes are added to it.
	getAutoShrink	Gets a value indicating whether the container should shrink in size when nodes are removed from it.
	getBounds	Gets the node location and size. (Inherited from DiagramNode.)
	getBrush	Gets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	getCaption	Gets the container's caption text.
	getCaptionBackBrush	Gets the brush used to paint the caption bar of this container.
	getCaptionBrush	Gets the brush used to draw the container's caption text.
	getCaptionFormat	Gets the caption alignment and format.
	getCaptionHeight	Gets the height of the container's caption bar.
	getCenter	Returns the center point of this node. (Inherited from DiagramNode.)
	getChildren	Gets the child nodes of this container.
	getClipChildren	Gets a value indicating whether child items should be clipped by container boundaries.
	getConstraints	Gets the movement and size constraints applied to a node. (Inherited from DiagramNode.)
	getContainer	Gets the parent **ContainerNode** containing this node. (Inherited from DiagramNode.)
S	getContainer	Retrieves the container node (if any) the specified node belongs to.
	getCornerRadius	Gets the radius of node's corner arcs when its Shape is set to RoundedRectangle.
	getDividerPen	Gets the Pen used to draw the the divider line between node's caption bar and content area.
	getEditRect	Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).
	getEffectiveBrush	Gets the effective brush of the item. (Inherited from DiagramItem.)
	getEffectiveCaptionBrush	Returns a Brush object representing the currently effective caption brush of the container.

	getEffectiveFont	Gets the currently effective font of the item. This property returns getFont if it is not null, or a font with the DiagramItemStyle.getFontFamily, DiagramItemStyle.getFontSize, and DiagramItemStyle.getFontStyle properties of the item's style. (Inherited from DiagramItem.)
	getEffectivePen	Gets the effective pen of the item. (Inherited from DiagramItem.)
	getEffectiveShadowBrush	Creates a Brush object representing the currently effective shadow brush of the item. This method returns a system brush corresponding to the item's getShadowBrush if the item's **getShadowBrush** is not null, or a system brush corresponding to the DiagramItemStyle.getShadowBrush property of the item's style. (Inherited from DiagramItem.)
	getEffectiveTextBrush	Gets the effective text brush of the item. (Inherited from DiagramItem.)
	getEffects	Gets a collection with all effects applied to this node. (Inherited from DiagramNode.)
	getEnabledHandles	Gets a combination of NodeHandleType members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	getExpandable	Gets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	getExpanded	Gets a value indicating whether the tree branch that starts from a node is expanded or collapsed. (Inherited from DiagramNode.)
	getFoldable	Gets a value indicating whether the user is allowed to fold this container.
	getFolded	Gets a value indicating whether this container is folded.
	getFoldedSize	Gets the size of the container when folded.
	getFoldIconSize	Gets the size of the fold / unfold icon.
	getFont	Gets the font used to draw the text of an item. (Inherited from DiagramItem.)
	getHandlesStyle	Gets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	getHighlightPen	Gets the Pen used to draw the container frame lines when an item is dragged over the container.
	getHyperLink	Gets the hyperlink associated with an item. (Inherited from DiagramItem.)
	getId	Gets user-defined identifier associated with this item. (Inherited from DiagramItem.)
	getIgnoreLayout	Gets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from

		DiagramItem.)
	getIncomingLinks	Gets the links coming into a node. (Inherited from DiagramNode.)
	getLabels	Returns the list of supplementary labels displayed by this node. (Inherited from DiagramNode.)
	getLayerIndex	Gets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	getLayoutTraits	Returns a hashtable containing properties specific to layout algorithms. (Inherited from DiagramItem.)
	getLocalCenter	(Inherited from DiagramNode.)
	getLocked	Gets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	getMargin	Gets how much space should be left between contained nodes and the container borders.
	getMasterGroup	Gets the hierarchical group in which this node is a subordinate item. (Inherited from DiagramNode.)
	getMasterItem	Returns the node's **Container** or main item of **MasterGroup**. (Inherited from DiagramNode.)
	getMinimumSize	Gets the minimum size of the container.
	getNearestBorderPoint	Returns a point that lies on the outline of this node, at the shortest distance from the specified point. (Inherited from DiagramNode.)
	getObstacle	Gets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	getOpacity	Gets the opacity of this item. (Inherited from DiagramItem.)
	getOutgoingLinks	Gets the links going out from a node. (Inherited from DiagramNode.)
	getParent	Gets the diagram that contains this item. (Inherited from DiagramItem.)
	getPen	Gets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	getPrintable	Gets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	getRotatedBounds	Gets the bounding rectangle of this node, when it is rotated at the specified angle around the specified pivot. (Inherited from DiagramNode.)
	getRotationAngle	Gets the rotation angle of this node. (Inherited from DiagramNode.)
	getRuntimeIndex	For internal use. (Inherited from DiagramItem.)
	getScrollable	Gets a value indicating whether users are allowed to scroll the contents of this container.

	getScrollbarLargeChange	Implements the Scrollable interface. Gets the amount to scroll by when the user clicks above or below the scrollbar thumb.
	getScrollbarMaximum	Implements the Scrollable interface. Gets the maximum scroll position.
	getScrollX	Gets the container's horizontal scroll position.
	getScrollY	Gets the container's vertical scroll position.
	getSelected	Gets a value indicating whether this item is selected. (Inherited from DiagramItem.)
	getShadowBrush	Gets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	getShadowOffsetX	Gets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getShadowOffsetY	Gets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getShape	Gets the shape of this container.
	getStyle	Gets the style associated with the item. (Inherited from DiagramItem.)
	getSubordinateGroup	Gets the group of subordinated items attached to this one. (Inherited from DiagramItem.)
	getTag	Gets user-defined data assigned to an item. (Inherited from DiagramItem.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	getTextPadding	Gets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	getTextToEdit	Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when the container's caption is edited in-place.
	getToolTip	Gets the tooltip text displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	getUnfoldedSize	Returns the original size of a folded container.
	getVisible	DiagramItem.getVisible override.
	getWeight	Gets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	getZIndex	Gets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	hasSubordinates	Checks whether there are any nodes attached to this item. (Inherited from DiagramItem.)
	hitTest	DiagramItem.hitTest override.
	hitTestHandle	DiagramNode.hitTestHandle override.

	init	Returns a ContainerNodeBuilder object used to configure this ContainerNode instance.
	labelFromPoint	Returns the label whose layout rectangle contains the specified point. (Inherited from DiagramNode.)
	moveTo	Moves a node to the specified location. (Inherited from DiagramNode.)
	nodesIntersect	Determines whether two nodes intersect. (Inherited from DiagramNode.)
	onDragOut	Invoked when a diagram item is being dragged out of this node.
	onDragOver	Invoked when a diagram item is being dragged over this node.
	onDropOver	Invoked when a diagram item is dropped over this node.
	query	Returns the items that can be reached from this item by following the path specified in the given query expression. (Inherited from DiagramItem.)
	readExternal	Implements Externalizable.
	remove	Removes a node from this container.
	removeLabel	Removes the specified label from this node. (Inherited from DiagramNode.)
	resize	Sets the size of a node. (Inherited from DiagramNode.)
	resizeToFitChildren	Resizes the container making it big enough to contain its child nodes.
	setAllowAddChildren	Sets a value indicating whether child nodes can be added interactively to this container.
	setAllowIncomingLinks	Sets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	setAllowOutgoingLinks	Sets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	setAllowRemoveChildren	Sets a value indicating whether child nodes can be removed interactively from this container.
	setAnchorPattern	Sets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)
	setAutoDeleteChildren	Sets whether deleting this container should also remove its child items from the diagram.
	setAutoGrow	Sets a value indicating whether the container should grow in size when nodes are added to it.
	setAutoShrink	Sets a value indicating whether the container should shrink in size when nodes are removed from it.
	setBounds	Overloaded. (Inherited from DiagramNode.)
	setBoundsDirect	For internal use. (Inherited from DiagramNode.)

	setBrush	Sets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	setCaption	Sets the container's caption text.
	setCaptionBackBrush	Sets the brush used to paint the caption bar of this container.
	setCaptionBrush	Sets the brush used to draw the container's caption text.
	setCaptionFormat	Sets the caption alignment and format.
	setCaptionHeight	Sets the height of the container's caption bar.
	setClipChildren	Sets a value indicating whether child items should be clipped by container boundaries.
	setConstraints	Sets constraints to the node size and movement direction. The constraints are applied when a user modifies the node interactively. They are not checked when the position of a node is set programmatically. (Inherited from DiagramNode.)
	setCornerRadius	Sets the radius of node's corner arcs when its Shape is set to RoundedRectangle.
	setDividerPen	Sets the **Pen** used to draw the the divider line between node's caption bar and content area.
	setEditedText	Implements InplaceEditable.setEditedText. Assigns the edited text to the container's caption after in-place edit operation completes successfully.
	setEnabledHandles	Sets a combination of **NodeHandleType** members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	setExpandable	Sets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	setExpanded	Expands or collapses the tree branch that starts from a node. (Inherited from DiagramNode.)
	setExpandedFlag	Changes the "expanded" flag without actually expanding or collapsing the tree branch that starts from a node. (Inherited from DiagramNode.)
	setFoldable	Sets a value indicating whether the user is allowed to fold this container. A foldable container can be folded and unfolded by clicking the up/down arrow displayed in the caption bar.
	setFolded	Sets a value indicating whether this container is folded. When folded, the container children are not visible, and only its caption bar is displayed.
	setFoldedSize	Sets the size of the container when folded.
	setFoldIconSize	Sets the size of the fold / unfold icon.

	setFont	Sets the font used to draw the text of an item. (Inherited from DiagramItem.)
	setHandlesStyle	Sets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	setHighlightPen	Sets the Pen used to draw the container frame lines when an item is dragged over the container.
	setHyperLink	Sets the hyperlink associated with an item. (Inherited from DiagramItem.)
	setId	Assigns user-defined identifier to this item. (Inherited from DiagramItem.)
	setIgnoreLayout	Sets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	setLayerIndex	Sets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	setLocked	Sets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	setMargin	Sets how much space should be left between contained nodes and the container borders.
	setMinimumSize	Sets the minimum size of the container. The container won't shrink smaller than that size, even if it does not contain any items.
	setObstacle	Sets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	setOpacity	Sets the opacity of this item. (Inherited from DiagramItem.)
	setPen	Sets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	setPrintable	Sets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	setRotationAngle	Sets the rotation angle of a node. (Inherited from DiagramNode.)
	setScrollable	Sets a value indicating whether users are allowed to scroll the contents of this container.
	setScrollX	Sets the container's horizontal scroll position.
	setScrollY	Sets the container's vertical scroll position.
	setSelected	Selects or deselects an item. (Inherited from DiagramItem.)
	setShadowBrush	Sets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	setShadowOffsetX	Sets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)

	setShadowOffsetY	Sets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShape	Sets the shape of this container.
	setStyle	Sets the style associated with the item. (Inherited from DiagramItem.)
	setTag	Assigns user-defined data to an item. If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event. (Inherited from DiagramItem.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	setTextPadding	Sets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	setToolTip	Sets the tooltip text that should be displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	setVisible	Sets a value indicating whether the container is visible.
	setWeight	Sets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	setZIndex	Sets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	updateBounds	
	updateBounds	Updates the container bounds to fit its contents.
	updateScrollPosition	Implements the Scrollable interface. Updates the node's scroll position from scrollbar's value.
S	with	Returns a ContainerNodeBuilder object used to configure and create new ContainerNode instances.
	writeExternal	Implements Externalizable.
	zBottom	Moves an item to the bottom of the Z order. (Inherited from DiagramItem.)
	zLevelDown	Moves an item down in the Z order. (Inherited from DiagramItem.)
	zLevelUp	Moves an item up in the Z order. (Inherited from DiagramItem.)
	zTop	Moves an item to the top of the Z order. (Inherited from DiagramItem.)

Protected Methods

	Name	Description
	allowCreate	DiagramItem.allowCreate override. (Inherited from DiagramNode.)

	allowModify	(Inherited from DiagramNode.)
	allowModifyImpl	(Inherited from DiagramNode.)
	cancelModify	DiagramItem.cancelModify override. Invoked when the interactive modification of this node has been canceled. (Inherited from DiagramNode.)
	completeCreate	DiagramItem.completeCreate override. (Inherited from DiagramNode.)
	completeModify	(Inherited from DiagramNode.)
	constraintsInfringed	(Inherited from DiagramNode.)
	createConnectionPoint	(Inherited from DiagramNode.)
	createProperties	DiagramItem.createProperties override.
	createState	DiagramItem.createState override. (Inherited from DiagramNode.)
	drawShadow	DiagramItem.drawShadow override. (Inherited from DiagramNode.)
	drawShadowLocal	Override in a derived class to provide implementation specific drawing for the shadow of the node. (Inherited from DiagramNode.)
	getLocalBounds	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getLocalBoundsD	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getMeasureUnit	(Inherited from DiagramItem.)
	getRepaintRect	DiagramNode.getRepaintRect override.
	getValue	Gets the effective value of the style property with the specified name. (Inherited from DiagramItem.)
	groupContains	(Inherited from DiagramNode.)
	loadFromJson	Loads the node from a JSON object.
	loadFromXml	Loads the item content from an XML element.
	move	(Inherited from DiagramNode.)
	onAdd	Called when an item is added to a Diagram, either by the user, programmatically or by undo / redo. (Inherited from DiagramItem.)
	onChangeFont	(Inherited from DiagramItem.)
	onChangeTextPadding	(Inherited from DiagramItem.)
	onChildModified	Called when a group child node has been modified.
	onClick	Invoked when the user clicks this item. (Inherited from DiagramItem.)
	onDoubleClick	Invoked when the user double-clicks this item. (Inherited from DiagramItem.)

	onLoad	DiagramItem.onLoad override.
	onMeasureUnitChanged	Called when the diagram's MeasureUnit changes. (Inherited from DiagramItem.)
	onModify	Called when an item is modified (Inherited from DiagramNode.)
	onRemove	
	onRotationAngleChanged	Called when the node's rotation angle changes. (Inherited from DiagramNode.)
	onSelectedChildrenModified	
	onStyleChanged	Invoked when the associated style or theme have changed. (Inherited from DiagramItem.)
	onStyleFontChanged	Invoked when font property values of an associated style change. (Inherited from DiagramItem.)
	onUpdateBounds	Invoked when the bounding rectangle of this node has changed. (Inherited from DiagramNode.)
	parentConstraintsInfringed	(Inherited from DiagramNode.)
	putExpandable	(Inherited from DiagramNode.)
	putSelected	(Inherited from DiagramItem.)
	rectFromPoints	(Inherited from DiagramNode.)
	repaint	Overloaded. (Inherited from DiagramItem.)
	resizeToFitImage	(Inherited from DiagramNode.)
	restoreProperties	DiagramItem.restoreProperties override.
	restoreState	DiagramItem.restoreState override. (Inherited from DiagramNode.)
	saveProperties	DiagramItem.saveProperties override.
	saveState	DiagramItem.saveState override. (Inherited from DiagramNode.)
	saveToJson	Saves the node as a JSON object.
	saveToXml	Saves the item content into an XML element.
	scaleElements	DiagramNode.scaleElements override.
	setDiagramDirty	Marks the diagram as changed. (Inherited from DiagramItem.)
	setReflexive	Invoked to let a node set the shape of a reflexive link connected to it. (Inherited from DiagramNode.)
	shouldRender	Determines whether the item is rendered in the current context. (Inherited from DiagramItem.)
	shouldRenderAnchors	Determines whether the node should render its anchor points. (Inherited from DiagramNode.)

	startCreate	DiagramItem.startCreate override. (Inherited from DiagramNode.)
	startModify	DiagramItem.startModify override. Invoked when the user starts modifying this node interactively. (Inherited from DiagramNode.)
	updateCreate	DiagramItem.updateCreate override. (Inherited from DiagramNode.)
	updateLinkPositions	(Inherited from DiagramNode.)
	updateModify	DiagramItem.updateModify override. Invoked during interactive modification of this node. (Inherited from DiagramNode.)

See Also

ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode Constructor

Overload List

Name	Description
ContainerNode ()	Initializes a new instance of the ContainerNode class.
ContainerNode (ContainerNode)	Initializes a new instance of the **ContainerNode** class using the specified node as a prototype.
ContainerNode (Diagram)	Initializes a new instance of the **ContainerNode** class with the default values of the specified diagram.

See Also

ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode Constructor ()

Initializes a new instance of the ContainerNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ContainerNode ()
```

See Also

ContainerNode Constructor Overload List
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode Constructor (ContainerNode)

Initializes a new instance of the ContainerNode class using the specified node as a prototype.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ContainerNode (
    ContainerNode prototype
)
```

Parameters

prototype

See Also

ContainerNode Constructor Overload List
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode Constructor (Diagram)

Initializes a new instance of the ContainerNode class with the default values of the specified diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ContainerNode (
    Diagram parent
)
```

Parameters

parent

See Also

ContainerNode Constructor Overload List
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode Methods

ContainerNode.add Method

Adds a node to this container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void add (
    DiagramNode node
)
```

Parameters

node
The DiagramNode that should be added to the container.

Remarks

By default, if container's bounding rectangle does not include specified node's bounds, the container grows automatically to accommodate the new node. To disable that, set AutoGrow to **false**.

Child nodes that have been added to a container are stored in its Children list. The parent ContainerNode of a child node can be accessed via the Container property.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
remove Method
setAllowAddChildren Method

ContainerNode.clone Method

DiagramItem.clone override. Creates a copy of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public DiagramItem clone (
    boolean clipboard
)
```

Parameters

clipboard
true if the copy will be stored in the OS clipboard, or **false** otherwise.

Return Value

A copy of this ContainerNode.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.containsRecursively Method

Determines whether this container contains the specified node, either directly or recursively through other containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean containsRecursively (
    DiagramNode node
)
```

Parameters

node
The DiagramNode to check.

Return Value

true if this container contains the node; otherwise, **false**.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
getContainer Method

ContainerNode.createProperties Method

DiagramItem.createProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramItemProperties createProperties ()
```

Return Value

An instance of the ContainerNodeProperties class.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.createScrollCommand Method

Implements the Scrollable interface. Creates a ScrollContainerCmd instance that can be used to undo the scroll operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Command createScrollCommand ()
```

Return Value

A ScrollContainerCmd instance.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.draw Method

DiagramNode.draw override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void draw (
    Graphics2D graphics,
    RenderOptions options
)
```

Parameters

graphics
A **Graphics2D** object where the node should be rendered.

options
Provides options for the drawing operation.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.drawLocal Method

Draws the container on the specified **Graphics2D** surface.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void drawLocal (
    Graphics2D graphics,
    RenderOptions options
)
```

Parameters

graphics
A **Graphics2D** object where the node should be rendered.

options
Provides options for the drawing operation.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.getAllowAddChildren Method

Gets a value indicating whether child nodes can be added interactively to this container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowAddChildren ()
```

Return Value

true if users are allowed to add child nodes to this container; otherwise, **false**.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

setAllowAddChildren Method
getAllowRemoveChildren Method

ContainerNode.getAllowRemoveChildren Method

Gets a value indicating whether child nodes can be removed interactively from this container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowRemoveChildren ()
```

Return Value

true if users are allowed to remove child nodes from this container; otherwise, **false**.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setAllowRemoveChildren Method
getAllowAddChildren Method

ContainerNode.getAutoDeleteChildren Method

Gets whether deleting this container should also remove its child items from the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAutoDeleteChildren ()
```

Return Value

true to automatically delete child items, or **false** otherwise.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
getChildren Method

ContainerNode.getAutoGrow Method

Gets a value indicating whether the container should grow in size when nodes are added to it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getAutoGrow ()
```

Return Value

true to grow container's size automatically, or **false** otherwise. The default value is **true**.

Remarks

When AutoGrow is enabled, the container size will grow to include newly added nodes when they wouldn't fit in its current size. The new Bounds of the container is set to the union of bounding rectangles of all child nodes inflated by Margin.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
getAutoShrink Method
resizeToFitChildren Method

ContainerNode.getAutoShrink Method

Gets a value indicating whether the container should shrink in size when nodes are removed from it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getAutoShrink ()
```

Return Value

true if the container should shrink automatically; otherwise, **false**. The default is **false**.

Remarks

The container won't shrink to a size smaller than MinimumSize.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setAutoShrink Method
getAutoGrow Method
resizeToFitChildren Method

ContainerNode.getCaption Method

Gets the container's caption text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getCaption ()
```

Return Value

A **String** containing the caption text.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setCaption Method

ContainerNode.getCaptionBackBrush Method

Gets the brush used to paint the caption bar of this container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getCaptionBackBrush ()
```

Return Value

An instance of a Brush -derived class.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setCaptionBackBrush Method
CaptionHeight Property
CaptionBrush Property
DividerPen Property

ContainerNode.getCaptionBrush Method

Gets the brush used to draw the container's caption text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getCaptionBrush ()
```

Return Value

An instance of a Brush -derived class.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setCaptionBrush Method

ContainerNode.getCaptionFormat Method

Gets the caption alignment and format.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public TextFormat getCaptionFormat ()
```

Return Value

An instance of the TextFormat class.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setCaptionFormat Method

ContainerNode.getCaptionHeight Method

Gets the height of the container's caption bar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getCaptionHeight ()
```

Return Value

A **float** value specifying the height of the container caption.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setCaptionHeight Method

ContainerNode.getChildren Method

Gets the child nodes of this container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ReadOnlyDiagramNodeList getChildren ()
```

Return Value

A list containing the child nodes of this container.

Remarks

Call the add method of ContainerNode to add a child node to the container. Call remove to remove a child node.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
getContainer Method
setAutoDeleteChildren Method
resizeToFitChildren Method

ContainerNode.getClipChildren Method

Gets a value indicating whether child items should be clipped by container boundaries.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getClipChildren ()
```

Return Value

true if child items should be clipped, otherwise **false**.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
getShape Method
getChildren Method

ContainerNode.getContainer Method

Retrieves the container node (if any) the specified node belongs to.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static ContainerNode getContainer (
    DiagramNode node
)
```

Parameters

node
The DiagramNode whose container you need to find.

Return Value

A ContainerNode that contains the specified node, or null if the node is not contained.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
containsRecursively Method

ContainerNode.getCornerRadius Method

Gets the radius of node's corner arcs when its Shape is set to RoundedRectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getCornerRadius ()
```

Return Value

The radius of node's corner arcs.

See Also

ContainerNode.getDividerPen Method

Gets the Pen used to draw the the divider line between node's caption bar and content area.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Pen getDividerPen ()
```

Return Value

A Pen instance. The default value is **null**.

Remarks

If DividerPen is not set, the divider line is drawn using the pen assigned to Pen property.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
Pen Property
CaptionBackBrush Property

ContainerNode.getEditRect Method

Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getEditRect (
    DiagramItem item,
    Point2D mousePosition
)
```

Parameters

item
A reference to this node.

mousePosition
A **Point2D** instance specifying the current pointer position.

Return Value

A **Rectangle2D** specifying where the edit box should be placed.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.getEffectiveCaptionBrush Method

Returns a Brush object representing the currently effective caption brush of the container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getEffectiveCaptionBrush ()
```

Return Value

An instance of a Brush -derived class.

Remarks

This method returns a brush corresponding to the container's CaptionBrush property if it has a local value set, or otherwise a brush corresponding to the ContainerNodeStyle.TextBrush property of the container's Style or current diagram Theme.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
Styles and Themes

ContainerNode.getFoldable Method

Gets a value indicating whether the user is allowed to fold this container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getFoldable ()
```

Return Value

true if the container can be folded; otherwise, **false**. Initialized with the value of ContainersFoldable.

Remarks

A foldable container can be folded and unfolded by clicking the up/down arrow displayed in the caption bar. The appearance of that icon can be customized by setting Renderers.FoldIconRenderer.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setFoldable Method
getFolded Method

ContainerNode.getFolded Method

Gets a value indicating whether this container is folded.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getFolded ()
```

Return Value

true if the container is folded; otherwise, **false**. The default is **false**.

Remarks

When folded, the container children are not visible, and only its caption bar is displayed.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setFolded Method
getFoldable Method
getFoldedSize Method

ContainerNode.getFoldedSize Method

Gets the size of the container when folded.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension2D getFoldedSize ()
```

Return Value

A **Dimension2D** instance specifying the folded size of a container. The default is **null**.

Remarks

If this property is not set, the width of the folded container is set to its MinimumSize.width, and the height to CaptionHeight.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setFoldedSize Method
getFolded Method

ContainerNode.getFoldIconSize Method

Gets the size of the fold / unfold icon.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Float getFoldIconSize ()
```

Return Value

An optional **Float** value specifying the size of fold / unfold icon. The default value is **null**.

Remarks

If this size is not specified, the fold icon is drawn as big as container's CaptionHeight.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.getHighlightPen Method

Gets the Pen used to draw the container frame lines when an item is dragged over the container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Pen getHighlightPen ()
```

Return Value

An instance of the Pen class.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setHighlightPen Method

ContainerNode.getMargin Method

Gets how much space should be left between contained nodes and the container borders.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getMargin ()
```

Return Value

A **float** value specifying the margin size.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setMargin Method

ContainerNode.getMinimumSize Method

Gets the minimum size of the container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension2D getMinimumSize ()
```

Return Value

A **Dimension2D** object specifying the minimum size. Initialized with the value of ContainerMinimumSize.

Remarks

The container won't shrink smaller than that size, even if it does not contain any items.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setMinimumSize Method

ContainerNode.getRepaintRect Method

DiagramNode.getRepaintRect override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Rectangle2D getRepaintRect (
    boolean includeConnected
)
```

Parameters

includeConnected
true is related items should be considered too, or **false** otherwise.

Return Value

A rectangular region that should be repainted when this node is modified.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.getScrollable Method

Gets a value indicating whether users are allowed to scroll the contents of this container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getScrollable ()
```

Return Value

true if scrolling is allowed, or **false** otherwise.

Remarks

Note that in order to let container's contents overflow and become scrollable, you must either disable AutoGrow, or allow users reduce container size by changing HandlesStyle and EnabledHandles properties from their default MoveOnly / Move values.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
getScrollX Method
getScrollY Method

ContainerNode.getScrollbarLargeChange Method

Implements the Scrollable interface. Gets the amount to scroll by when the user clicks above or below the scrollbar thumb.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getScrollbarLargeChange (
    boolean vertical
)
```

Parameters

vertical
true if scrolling using a vertical scrollbar, or **false** if horizontal one.

Return Value

A **float** value specifying the amount to scroll.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.getScrollbarMaximum Method

Implements the Scrollable interface. Gets the maximum scroll position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getScrollbarMaximum (
    boolean vertical
)
```

Parameters

vertical
true if scrolling using a vertical scrollbar, or **false** if horizontal one.

Return Value

The maximum scroll position for specified scroll direction.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.getScrollX Method

Gets the container's horizontal scroll position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getScrollX ()
```

Return Value

A **float** value indicating horizontal scroll offset.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
getScrollY Method
getScrollable Method

ContainerNode.getScrollY Method

Gets the container's vertical scroll position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getScrollY ()
```

Return Value

A **float** value indicating vertical scroll offset.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
getScrollX Method
getScrollable Method

ContainerNode.getShape Method

Gets the shape of this container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SimpleShape getShape ()
```

Return Value

A member of the SimpleShape enumeration.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setShape Method

ContainerNode.getTextToEdit Method

Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when the container's caption is edited in-place.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getTextToEdit ()
```

Return Value

A **String** containing the container's caption text.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.getUnfoldedSize Method

Returns the original size of a folded container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension2D getUnfoldedSize ()
```

Return Value

A **Dimension2D** object specifying the container's size.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.getVisible Method

DiagramItem.getVisible override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getVisible ()
```

Return Value

true if this container will be drawn on the diagram canvas, otherwise **false**.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setVisible Method

ContainerNode.hitTest Method

DiagramItem.hitTest override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem hitTest (
    Point2D point,
    float threshold,
    boolean onlyNodes,
    boolean onlyInteractive,
    boolean includeHandles,
    boolean includeLabels
)
```

Parameters

point
A Point2D value specifying the logical coordinates of a diagram point.

threshold
Specifies the size of the area around the item outlines where the point is still considered inside the item.

onlyNodes
true to exclude child links from the search.

onlyInteractive
true to exclude locked items from the search.

includeHandles
true to also consider adjustment handle locations (possibly outside of item's bounds).

includeLabels
true to also consider item label locations (possibly outside of item's bounds).

Return Value

The item that contains the specified point.

Remarks

This method performs recursive search if items contain child items.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.hitTestHandle Method

DiagramNode.hitTestHandle override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AdjustmentHandle hitTestHandle (
    Point2D point
)
```

Parameters

point

A Point2D value specifying where to look for a selection handle.

Return Value

An AdjustmentHandle instance representing the adjustment handle found at the specified location, or **null** if there is none.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.init Method

Returns a ContainerNodeBuilder object used to configure this ContainerNode instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ContainerNodeBuilder init ()
```

Return Value

A **ContainerNodeBuilder** instance.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.loadFromJson Method

Loads the node from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the node's data.

context

A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.loadFromXml Method

Loads the item content from an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An Element containing the item's data.

context
Provides contextual information about the serialization process and some helper serialization methods.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.onChildModified Method

Called when a group child node has been modified.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onChildModified (
    DiagramNode node,
    AdjustmentHandle handle
)
```

Parameters

node

The DiagramNode that has been moved or resized.

handle
An AdjustmentHandles instance indicating which handle has been used to modify the node.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.onDragOut Method

Invoked when a diagram item is being dragged out of this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onDragOut (
    DiagramItem item
)
```

Parameters

item
The DiagramItem being dragged.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.onDragOver Method

Invoked when a diagram item is being dragged over this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean onDragOver (
    DiagramItem item
)
```

Parameters

item
The DiagramItem being dragged.

Return Value

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.onDropOver Method

Invoked when a diagram item is dropped over this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean onDropOver (
    DiagramItem item
)
```

Parameters

item
The DiagramItem being dragged.

Return Value

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.onLoad Method

DiagramItem.onLoad override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onLoad (
    Diagram diagram
)
```

Parameters

diagram
The Diagram being loaded.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.onRemove Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onRemove ()
```

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.onSelectedChildrenModified Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onSelectedChildrenModified (
    Selection selection
)
```

Parameters

selection

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.remove Method

Removes a node from this container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void remove (
    DiagramNode node
)
```

Parameters

node
The DiagramNode that should be removed from the container.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
add Method
setAllowRemoveChildren Method
getChildren Method

ContainerNode.resizeToFitChildren Method

Resizes the container making it big enough to contain its child nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void resizeToFitChildren (
    boolean allowShrink,
```

```
    Dimension2D margins
)
```

Parameters

allowShrink

true to allow reducing container's size, or **false** otherwise.

margins

A **Dimension2D** specifying size of margin space left around container's child items.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
getChildren Method
setAutoGrow Method
setAutoShrink Method

ContainerNode.restoreProperties Method

DiagramItem.restoreProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void restoreProperties (
    DiagramItemProperties props
)
```

Parameters

props

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.saveProperties Method

DiagramItem.saveProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveProperties (
    DiagramItemProperties props
```

```
)
```

Parameters

props

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.saveToJson Method

Saves the node as a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject instance to contain the serialized data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.saveToXml Method

Saves the item content into an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An Element the item's data should be stored into.

context
Provides contextual information about the serialization process and some helper serialization methods.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.scaleElements Method

DiagramNode.scaleElements override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void scaleElements (
    float scale
)
```

Parameters

scale
The value by which to multiply node elements' sizes.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.setAllowAddChildren Method

Sets a value indicating whether child nodes can be added interactively to this container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowAddChildren (
    boolean value
)
```

Parameters

value

true to allow adding child nodes, otherwise **false**. The default value is **true**.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
getAllowAddChildren Method
setAllowRemoveChildren Method
getChildren Method

ContainerNode.setAllowRemoveChildren Method

Sets a value indicating whether child nodes can be removed interactively from this container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowRemoveChildren (
    boolean value
)
```

Parameters

value
true to allow removing child nodes, otherwise **false**. The default value is **true**.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
getAllowRemoveChildren Method
setAllowAddChildren Method
getChildren Method

ContainerNode.setAutoDeleteChildren Method

Sets whether deleting this container should also remove its child items from the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAutoDeleteChildren (
    boolean value
)
```

Parameters

value

true to automatically delete child items, or **false** otherwise.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
getChildren Method

ContainerNode.setAutoGrow Method

Sets a value indicating whether the container should grow in size when nodes are added to it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAutoGrow (
    boolean value
)
```

Parameters

value
true to grow container's size automatically, or **false** otherwise.

Remarks

When AutoGrow is enabled, the container size will grow to include newly added nodes when they wouldn't fit in its current size. The new Bounds of the container is set to the union of bounding rectangles of all child nodes inflated by Margin.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setAutoShrink Method
resizeToFitChildren Method

ContainerNode.setAutoShrink Method

Sets a value indicating whether the container should shrink in size when nodes are removed from it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAutoShrink (
    boolean value
)
```

Parameters

value
true if the container should shrink automatically, or **false** otherwise. The default is **false**.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setAutoGrow Method
resizeToFitChildren Method

ContainerNode.setCaption Method

Sets the container's caption text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCaption (
    String value
)
```

Parameters

value

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.setCaptionBackBrush Method

Sets the brush used to paint the caption bar of this container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCaptionBackBrush (
    Brush value
)
```

Parameters

value
An instance of Brush -derived class.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
CaptionHeight Property
CaptionBrush Property
DividerPen Property

ContainerNode.setCaptionBrush Method

Sets the brush used to draw the container's caption text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCaptionBrush (
    Brush value
)
```

Parameters

value
An instance of a Brush -derived class.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.setCaptionFormat Method

Sets the caption alignment and format.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCaptionFormat (
    TextFormat value
)
```

Parameters

value

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.setCaptionHeight Method

Sets the height of the container's caption bar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCaptionHeight (
    float value
)
```

Parameters

value

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.setClipChildren Method

Sets a value indicating whether child items should be clipped by container boundaries.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setClipChildren (
    boolean value
)
```

Parameters

value
true to clip child items, otherwise **false**. The default value is **true**.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setShape Method
getChildren Method

ContainerNode.setCornerRadius Method

Sets the radius of node's corner arcs when its Shape is set to RoundedRectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCornerRadius (
    float value
)
```

Parameters

value
The radius of node's corner arcs.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.setDividerPen Method

Sets the Pen used to draw the the divider line between node's caption bar and content area.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDividerPen (
    Pen value
)
```

Parameters

value
A Pen instance.

Remarks

If **DividerPen** is not set, the divider line is drawn using the pen assigned to Pen property.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
Pen Property
CaptionBackBrush Property

ContainerNode.setEditedText Method

Implements InplaceEditable.setEditedText. Assigns the edited text to the container's caption after in-place edit operation completes successfully.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEditedText (
    String newText
)
```

Parameters

newText
The new text of the container's caption.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.setFoldable Method

Sets a value indicating whether the user is allowed to fold this container. A foldable container can be folded and unfolded by clicking the up/down arrow displayed in the caption bar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFoldable (
    boolean value
)
```

Parameters

value
true to let users fold this container, or **false** otherwise.

Remarks

A foldable container can be folded and unfolded by clicking the up/down arrow displayed in the caption bar. The appearance of that icon can be customized by setting Renderers.FoldIconRenderer.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

setFoldIconSize Method
setFolded Method

ContainerNode.setFolded Method

Sets a value indicating whether this container is folded. When folded, the container children are not visible, and only its caption bar is displayed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFolded (
    boolean value
)
```

Parameters

value
true if the container is folded, or **false** otherwise.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setFoldable Method
setFoldedSize Method

ContainerNode.setFoldedSize Method

Sets the size of the container when folded.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFoldedSize (
    Dimension2D value
)
```

Parameters

value
A **Dimension2D** instance specifying the folded size of a container. The default is **null**.

Remarks

If this property is not set, the width of the folded container is set to its MinimumSize.width, and the height to CaptionHeight.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.setFoldIconSize Method

Sets the size of the fold / unfold icon.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFoldIconSize (
    Float value
)
```

Parameters

value
A **Float** value specifying the size of fold / unfold icon.

Remarks

If this size is not specified, the fold icon is drawn as big as container's CaptionHeight.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setFoldable Method

ContainerNode.setHighlightPen Method

Sets the Pen used to draw the container frame lines when an item is dragged over the container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHighlightPen (
    Pen value
)
```

Parameters

value
A Pen object.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.setMargin Method

Sets how much space should be left between contained nodes and the container borders.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMargin (
    float value
)
```

Parameters

value

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.setMinimumSize Method

Sets the minimum size of the container. The container won't shrink smaller than that size, even if it does not contain any items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMinimumSize (
    Dimension2D value
)
```

Parameters

value

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.setScrollable Method

Sets a value indicating whether users are allowed to scroll the contents of this container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setScrollable (
    boolean value
)
```

Parameters

value
true if scrolling is allowed, or **false** otherwise.

Remarks

Note that in order to let container's contents overflow and become scrollable, you must either disable AutoGrow, or allow users reduce container size by changing HandlesStyle and EnabledHandles properties from their default MoveOnly / Move values.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setScrollX Method
setScrollY Method

ContainerNode.setScrollX Method

Sets the container's horizontal scroll position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setScrollX (
    float value
)
```

Parameters

value
A **float** value indicating horizontal scroll offset.

Remarks

ScrollX is one of the few properties that automatically create a record in the undo history. If you need to undo a sequence of property changes that includes **ScrollX** as a single operation, you will need to use composite undo commands.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setScrollY Method
setScrollable Method

ContainerNode.setScrollY Method

Sets the container's vertical scroll position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setScrollY (
    float value
)
```

Parameters

value
A **float** value indicating vertical scroll offset.

Remarks

ScrollY is one of the few properties that automatically create a record in the undo history. If you need to undo a sequence of property changes that includes **ScrollY** as a single operation, you will need to use composite undo commands.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace
setScrollX Method
setScrollable Method

ContainerNode.setShape Method

Sets the shape of this container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShape (
    SimpleShape value
)
```

Parameters

value
A member of the SimpleShape enumeration.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.setVisible Method

Sets a value indicating whether the container is visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setVisible (
    boolean value
)
```

Parameters

value

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.updateBounds Method

Updates the container bounds to fit its contents.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void updateBounds ()
```

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.updateBounds Method

Overload List

Name	Description
ContainerNode.updateBounds (boolean)	Updates the container bounds to fit its contents.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.updateBounds Method (boolean)

Updates the container bounds to fit its contents.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void updateBounds (
    boolean includeLinks
)
```

Parameters

includeLinks
true if the new container bounds should include links between child nodes, otherwise **false**.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.updateScrollPosition Method

Implements the Scrollable interface. Updates the node's scroll position from scrollbar's value.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void updateScrollPosition (
    float newValue,
    boolean vertical
)
```

Parameters

newValue
A **float** value specifying scroll offset.

vertical
true if scrolling using a vertical scrollbar, or **false** if horizontal one.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.with Method

Returns a ContainerNodeBuilder object used to configure and create new ContainerNode instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static ContainerNodeBuilder with ()
```

Return Value

A **ContainerNodeBuilder** instance.

See Also

ContainerNode Members
ContainerNode Class
com.mindfusion.diagramming Namespace

ContainerNode.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

ContainerNodeProperties Class

Stores the values of ContainerNode properties during undo / redo operations. If you need to implement undo support for the additional properties defined by a class derived from **ContainerNode**, do so by deriving from **ContainerNodeProperties** and overriding the saveProperties, restoreProperties, and createProperties methods.

Syntax

Java
`public class ContainerNodeProperties extends DiagramNodeProperties`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItemProperties
    com.mindfusion.diagramming.DiagramNodeProperties
      com.mindfusion.diagramming.ContainerNodeProperties

See Also

ContainerNodeProperties Members
com.mindfusion.diagramming Namespace

ContainerNodeProperties Members

Stores the values of ContainerNode properties during undo / redo operations. If you need to implement undo support for the additional properties defined by a class derived from **ContainerNode**, do so by deriving from ContainerNodeProperties and overriding the saveProperties, restoreProperties, and createProperties methods.

The following tables list the members exposed by the **ContainerNodeProperties** type.

Public Constructors

	Name	Description
	ContainerNodeProperties	

Public Fields

	Name	Description
	allowAddChildren	
	allowRemoveChildren	
	autoDeleteChildren	
	autoGrow	

	autoShrink	
	caption	
	captionBackBrush	
	captionColor	
	captionFormat	
	captionHeight	
	clipChildren	
	cornerRadius	
	foldedSize	
	foldIconSize	
	highlightPen	
	margin	
	minimumSize	
	scrollable	
	shape	
	textPadding	(Inherited from DiagramItemProperties.)

See Also

ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties Fields

ContainerNodeProperties.allowAddChildren Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean allowAddChildren
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.allowRemoveChildren Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean allowRemoveChildren
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.autoDeleteChildren Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean autoDeleteChildren
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.autoGrow Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean autoGrow
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.autoShrink Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean autoShrink
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.caption Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String caption
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.captionBackBrush Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush captionBackBrush
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.captionColor Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color captionColor
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.captionFormat Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TextFormat captionFormat
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.captionHeight Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float captionHeight
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.clipChildren Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean clipChildren
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.cornerRadius Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float cornerRadius
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.foldedSize Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension2D foldedSize
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.foldIconSize Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Float foldIconSize
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.highlightPen Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Pen highlightPen
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.margin Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float margin
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.minimumSize Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension2D minimumSize
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.scrollable Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean scrollable
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties.shape Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SimpleShape shape
```

See Also

ContainerNodeProperties Members
ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeProperties Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public ContainerNodeProperties ()`

See Also

ContainerNodeProperties Class
com.mindfusion.diagramming Namespace

ContainerNodeStyle Class

Represents a reusable set of properties that define the appearance of container nodes.

Syntax

Java
`public class ContainerNodeStyle extends DiagramNodeStyle`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Style
    com.mindfusion.diagramming.DiagramItemStyle
      com.mindfusion.diagramming.DiagramNodeStyle
        com.mindfusion.diagramming.ContainerNodeStyle

See Also

ContainerNodeStyle Members
com.mindfusion.diagramming Namespace

ContainerNodeStyle Members

Represents a reusable set of properties that define the appearance of container nodes.

The following tables list the members exposed by the ContainerNodeStyle type.

Public Constructors

	Name	Description
	ContainerNodeStyle	Initializes a new instance of the **ContainerNodeStyle** class.

Public Methods

	Name	Description
	addPropertyChangeListener	(Inherited from Style.)
	getBrush	Gets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	getEffects	Gets a list of the effects applied to the node. (Inherited from DiagramNodeStyle.)
	getFontFamily	Gets the font family of the item text. (Inherited from DiagramItemStyle.)
	getFontSize	Gets the font size of the item text. (Inherited from DiagramItemStyle.)
	getFontStyle	Gets the font style of the item text. (Inherited from DiagramItemStyle.)
	getFontUnit	Gets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	getShadowBrush	Gets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	getStroke	Gets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	getStrokeThickness	Gets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
	init	Returns a ContainerNodeStyleBuilder object used to configure this ContainerNodeStyle instance.
	readExternal	**Externalizable.readExternal** implementation. (Inherited from Style.)
S	registerType	Associates a type with an alias. The alias is used when saving and loading objects of the specified type during style serialization and deserialization. (Inherited from Style.)
	removePropertyChangeListener	(Inherited from Style.)
	setBrush	Sets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	setFontFamily	Sets the font family of the item text. (Inherited from DiagramItemStyle.)
	setFontSize	Sets the font size of the item text. (Inherited from DiagramItemStyle.)
	setFontStyle	Sets the font style of the item text. (Inherited from DiagramItemStyle.)
	setFontUnit	Sets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	setShadowBrush	Sets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)

	setStroke	Sets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	setStrokeThickness	Sets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
S	with	Returns a ContainerNodeStyleBuilder object used to configure and create new ContainerNodeStyle instances.
	writeExternal	**Externalizable.writeExternal** implementation. (Inherited from Style.)

Protected Methods

	Name	Description
	getValue	Gets the value of the specified property. (Inherited from Style.)
	isPropertySet	Checks whether the specified property has a value. (Inherited from Style.)
	loadFromJson	Loads the style content from a JsonObject. (Inherited from DiagramNodeStyle.)
	loadFromXml	Loads the style content from an XML element. (Inherited from Style.)
	registerProperty	Registers a new property with the specified name and type. (Inherited from Style.)
	saveToJson	Saves the style content into a JsonObject. (Inherited from DiagramNodeStyle.)
	saveToXml	Saves the style content into an XML element. (Inherited from Style.)
	setValue	Sets the value of the specified property. (Inherited from Style.)
	unsetValue	Clears the value of the specified property. (Inherited from Style.)

See Also

ContainerNodeStyle Class
com.mindfusion.diagramming Namespace

ContainerNodeStyle Constructor

Initializes a new instance of the ContainerNodeStyle class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ContainerNodeStyle ()
```

See Also

ContainerNodeStyle Class
com.mindfusion.diagramming Namespace

ContainerNodeStyle Methods

ContainerNodeStyle.init Method

Returns a ContainerNodeStyleBuilder object used to configure this ContainerNodeStyle instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ContainerNodeStyleBuilder init ()
```

Return Value

A **ContainerNodeStyleBuilder** instance.

See Also

ContainerNodeStyle Members
ContainerNodeStyle Class
com.mindfusion.diagramming Namespace

ContainerNodeStyle.with Method

Returns a ContainerNodeStyleBuilder object used to configure and create new ContainerNodeStyle instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static ContainerNodeStyleBuilder with ()
```

Return Value

A **ContainerNodeStyleBuilder** instance.

See Also

ContainerNodeStyle Members
ContainerNodeStyle Class
com.mindfusion.diagramming Namespace

ControlNode Class

ControlNode is an adapter class that enables using any **java.awt.Component** -derived object as a diagram node.

Syntax

```
Java
public class ControlNode extends DiagramNode
```

Remarks

A **ControlNode** object might be used to implement advanced entity viewers or editors. An instance of any **java.awt.Component** -derived class can be assigned to the Control property of the host node. That might be a standard Java Swing component such as a **JTable** or your own custom control.

If the Behavior property of DiagramView is set to DrawControls or LinkControls, then users are allowed to draw control host nodes interactively. Such host nodes will have their **Control** initialized to an instance of the type specified via DefaultControlType.

If a user presses the mouse button while the mouse pointer is over a hosted control, JDiagram will either pass the mouse event to the control, or will try to intercept it in order to start moving or resizing the host node. That depends on the value of the MouseInputMode property.

When serializing a diagram to XML, JDiagram uses the Java introspection API to get or set the simple attributes of hosted controls. It also raises the serializeControl and deserializeControl events to let you save the content of hosted nodes using custom code, in case the built-in serialization mechanism is not sufficient.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItem
    com.mindfusion.diagramming.DiagramNode
      com.mindfusion.diagramming.ControlNode

See Also

ControlNode Members
com.mindfusion.diagramming Namespace

ControlNode Members

ControlNode is an adapter class that enables using any **java.awt.Component** -derived object as a diagram node.

The following tables list the members exposed by the **ControlNode** type.

Public Constructors

	Name	Description

	ControlNode	Overloaded.

Protected Fields

	Name	Description
	allowIncomingLinks	(Inherited from DiagramNode.)
	allowOutgoingLinks	(Inherited from DiagramNode.)
	anchorPattern	(Inherited from DiagramNode.)
	AV_Cancel	(Inherited from DiagramNode.)
	AV_EndModIncoming	(Inherited from DiagramNode.)
	AV_EndModOutgoing	(Inherited from DiagramNode.)
	AV_StartModIncoming	(Inherited from DiagramNode.)
	AV_StartModOutgoing	(Inherited from DiagramNode.)
	AV_UpdateIncoming	(Inherited from DiagramNode.)
	AV_UpdateOutgoing	(Inherited from DiagramNode.)
	AV_UpdIntscIncoming	(Inherited from DiagramNode.)
	AV_UpdIntscOutgoing	(Inherited from DiagramNode.)
	AV_UpdPosIncoming	(Inherited from DiagramNode.)
	AV_UpdPosOutgoing	(Inherited from DiagramNode.)
	bounds	(Inherited from DiagramNode.)
	brush	(Inherited from DiagramItem.)
	cycleDetected	(Inherited from DiagramItem.)
	cycleProtect	(Inherited from DiagramItem.)
	enabledHandles	(Inherited from DiagramNode.)
	handlesStyle	(Inherited from DiagramNode.)
	incomingLinks	(Inherited from DiagramNode.)
	masterGroup	(Inherited from DiagramNode.)
	modifyDX	(Inherited from DiagramItem.)
	modifyDY	(Inherited from DiagramItem.)
	modifyHandle	(Inherited from DiagramItem.)
	modifying	(Inherited from DiagramItem.)
	obstacle	(Inherited from DiagramNode.)
	outgoingLinks	(Inherited from DiagramNode.)
	pen	(Inherited from DiagramItem.)

	ptEnd	(Inherited from DiagramItem.)
	ptMdfLast	(Inherited from DiagramItem.)
	ptOrg	(Inherited from DiagramItem.)
	ptSavedEnd	(Inherited from DiagramItem.)
	ptSavedOrg	(Inherited from DiagramItem.)
	savedBounds	(Inherited from DiagramNode.)
	subordinateGroup	(Inherited from DiagramItem.)

Public Methods

	Name	Description
	addLabel	Overloaded. (Inherited from DiagramNode.)
	as	Down-casts the item to specified type. (Inherited from DiagramItem.)
	attachTo	Overloaded. (Inherited from DiagramNode.)
	clone	Creates a copy of this item. (Inherited from DiagramItem.)
	containsPoint	Overloaded. (Inherited from DiagramNode.)
	detach	Detaches a node from its master group. (Inherited from DiagramNode.)
	getAllIncomingLinks	Gets a collection of all links entering this node. (Inherited from DiagramNode.)
	getAllLinks	Gets all links connected to this node. (Inherited from DiagramNode.)
	getAllOutgoingLinks	Gets a collection of all links going out of this node. (Inherited from DiagramNode.)
	getAllowIncomingLinks	Gets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	getAllowOutgoingLinks	Gets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	getAnchorPattern	Gets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)
	getBounds	Gets the node location and size. (Inherited from DiagramNode.)
	getBrush	Gets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	getCenter	Returns the center point of this node. (Inherited from DiagramNode.)
	getConstraints	Gets the movement and size constraints applied to a node. (Inherited from DiagramNode.)

	getContainer	Gets the parent ContainerNode containing this node. (Inherited from DiagramNode.)
	getControl	Gets the **java.awt.Component** hosted inside this node.
	getEffectiveBrush	Gets the effective brush of the item. (Inherited from DiagramItem.)
	getEffectiveFont	Gets the currently effective font of the item. This property returns getFont if it is not null, or a font with the DiagramItemStyle.getFontFamily, DiagramItemStyle.getFontSize, and DiagramItemStyle.getFontStyle properties of the item's style. (Inherited from DiagramItem.)
	getEffectivePen	Gets the effective pen of the item. (Inherited from DiagramItem.)
	getEffectiveShadowBrush	Creates a Brush object representing the currently effective shadow brush of the item. This method returns a system brush corresponding to the item's getShadowBrush if the item's **getShadowBrush** is not null, or a system brush corresponding to the DiagramItemStyle.getShadowBrush property of the item's style. (Inherited from DiagramItem.)
	getEffectiveTextBrush	Gets the effective text brush of the item. (Inherited from DiagramItem.)
	getEffects	Gets a collection with all effects applied to this node. (Inherited from DiagramNode.)
	getEnabledHandles	Gets a combination of NodeHandleType members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	getExpandable	Gets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	getExpanded	Gets a value indicating whether the tree branch that starts from a node is expanded or collapsed. (Inherited from DiagramNode.)
	getFont	Gets the font used to draw the text of an item. (Inherited from DiagramItem.)
	getHandlesStyle	Gets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	getHyperLink	Gets the hyperlink associated with an item. (Inherited from DiagramItem.)
	getId	Gets user-defined identifier associated with this item. (Inherited from DiagramItem.)
	getIgnoreLayout	Gets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	getIncomingLinks	Gets the links coming into a node. (Inherited from DiagramNode.)

	getLabels	Returns the list of supplementary labels displayed by this node. (Inherited from DiagramNode.)
	getLayerIndex	Gets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	getLayoutTraits	Returns a hashtable containing properties specific to layout algorithms. (Inherited from DiagramItem.)
	getLocalCenter	(Inherited from DiagramNode.)
	getLocked	Gets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	getMasterGroup	Gets the hierarchical group in which this node is a subordinate item. (Inherited from DiagramNode.)
	getMasterItem	Returns the node's **Container** or main item of **MasterGroup**. (Inherited from DiagramNode.)
	getMouseInputMode	Gets whether mouse input is processed by the diagram or the hosted control.
	getNearestBorderPoint	Returns a point that lies on the outline of this node, at the shortest distance from the specified point. (Inherited from DiagramNode.)
	getObstacle	Gets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	getOpacity	Gets the opacity of this item. (Inherited from DiagramItem.)
	getOutgoingLinks	Gets the links going out from a node. (Inherited from DiagramNode.)
	getParent	Gets the diagram that contains this item. (Inherited from DiagramItem.)
	getPen	Gets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	getPrintable	Gets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
S	getRotatedBounds	Gets the bounding rectangle of this node, when it is rotated at the specified angle around the specified pivot. (Inherited from DiagramNode.)
	getRotationAngle	Gets the rotation angle of this node. (Inherited from DiagramNode.)
	getRuntimeIndex	For internal use. (Inherited from DiagramItem.)
	getSelected	Gets a value indicating whether this item is selected. (Inherited from DiagramItem.)
	getShadowBrush	Gets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	getShadowOffsetX	Gets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)

	getShadowOffsetY	Gets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getStyle	Gets the style associated with the item. (Inherited from DiagramItem.)
	getSubordinateGroup	Gets the group of subordinated items attached to this one. (Inherited from DiagramItem.)
	getTag	Gets user-defined data assigned to an item. (Inherited from DiagramItem.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	getTextPadding	Gets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	getToolTip	Gets the tooltip text displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	getVisible	Gets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	getWeight	Gets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	getZIndex	Gets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	hasSubordinates	Checks whether there are any nodes attached to this item. (Inherited from DiagramItem.)
	hitTest	Returns the diagram item that contains the specified point. (Inherited from DiagramItem.)
	hitTestHandle	DiagramItem.hitTestHandle override. (Inherited from DiagramNode.)
	init	Returns a ControlNodeBuilder object used to configure this ControlNode instance.
	labelFromPoint	Returns the label whose layout rectangle contains the specified point. (Inherited from DiagramNode.)
	moveTo	Moves a node to the specified location. (Inherited from DiagramNode.)
S	nodesIntersect	Determines whether two nodes intersect. (Inherited from DiagramNode.)
	onDragOut	Invoked when a diagram item is being dragged out of this node. (Inherited from DiagramNode.)
	onDragOver	Invoked when a diagram item is being dragged over this node. (Inherited from DiagramNode.)
	onDropOver	Invoked when a diagram item is dropped over this node. (Inherited from DiagramNode.)
	query	Returns the items that can be reached from this item by following the path specified in the given query expression. (Inherited from DiagramItem.)

	readExternal	Implements Externalizable.
	removeLabel	Removes the specified label from this node. (Inherited from DiagramNode.)
	resize	Sets the size of a node. (Inherited from DiagramNode.)
	setAllowIncomingLinks	Sets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	setAllowOutgoingLinks	Sets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	setAnchorPattern	Sets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)
	setBounds	Overloaded. (Inherited from DiagramNode.)
	setBoundsDirect	For internal use. (Inherited from DiagramNode.)
	setBrush	Sets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	setConstraints	Sets constraints to the node size and movement direction. The constraints are applied when a user modifies the node interactively. They are not checked when the position of a node is set programmatically. (Inherited from DiagramNode.)
	setControl	Sets the **java.awt.Component** that should be hosted inside this node.
	setEnabledHandles	Sets a combination of **NodeHandleType** members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	setExpandable	Sets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	setExpanded	Expands or collapses the tree branch that starts from a node. (Inherited from DiagramNode.)
	setExpandedFlag	Changes the "expanded" flag without actually expanding or collapsing the tree branch that starts from a node. (Inherited from DiagramNode.)
	setFont	Sets the font used to draw the text of an item. (Inherited from DiagramItem.)
	setHandlesStyle	Sets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	setHyperLink	Sets the hyperlink associated with an item. (Inherited from DiagramItem.)
	setId	Assigns user-defined identifier to this item. (Inherited from DiagramItem.)
	setIgnoreLayout	Sets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from

		DiagramItem.)
	setLayerIndex	Sets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	setLocked	Sets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	setMouseInputMode	Sets whether mouse input is processed by the diagram or the hosted control.
	setObstacle	Sets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	setOpacity	Sets the opacity of this item. (Inherited from DiagramItem.)
	setPen	Sets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	setPrintable	Sets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	setRotationAngle	Sets the rotation angle of a node. (Inherited from DiagramNode.)
	setSelected	Selects or deselects an item. (Inherited from DiagramItem.)
	setShadowBrush	Sets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	setShadowOffsetX	Sets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShadowOffsetY	Sets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setStyle	Sets the style associated with the item. (Inherited from DiagramItem.)
	setTag	Assigns user-defined data to an item. If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event. (Inherited from DiagramItem.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	setTextPadding	Sets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	setToolTip	Sets the tooltip text that should be displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	setVisible	Sets a value indicating whether the node is visible.
	setWeight	Sets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	setZIndex	Sets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)

	with	Returns a ControlNodeBuilder object used to configure and create new ControlNode instances.
	writeExternal	Implements Externalizable.
	zBottom	Moves an item to the bottom of the Z order. (Inherited from DiagramItem.)
	zLevelDown	Moves an item down in the Z order. (Inherited from DiagramItem.)
	zLevelUp	Moves an item up in the Z order. (Inherited from DiagramItem.)
	zTop	Moves an item to the top of the Z order. (Inherited from DiagramItem.)

Protected Methods

	Name	Description
	allowCreate	DiagramItem.allowCreate override. (Inherited from DiagramNode.)
	allowModify	(Inherited from DiagramNode.)
	allowModifyImpl	(Inherited from DiagramNode.)
	cancelModify	DiagramItem.cancelModify override. Invoked when the interactive modification of this node has been canceled. (Inherited from DiagramNode.)
	completeCreate	DiagramItem.completeCreate override. (Inherited from DiagramNode.)
	completeModify	(Inherited from DiagramNode.)
	constraintsInfringed	(Inherited from DiagramNode.)
	createConnectionPoint	(Inherited from DiagramNode.)
	createProperties	DiagramItem.createProperties override.
	createState	DiagramItem.createState override. (Inherited from DiagramNode.)
	draw	DiagramItem.draw override. (Inherited from DiagramNode.)
	drawLocal	DiagramItem.drawShadow override. Draws the hosted control on the specified Graphics2D surface.
	drawShadow	**DiagramItem.drawShadow** override. (Inherited from DiagramNode.)
	drawShadowLocal	Override in a derived class to provide implementation specific drawing for the shadow of the node. (Inherited from DiagramNode.)
	getLocalBounds	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getLocalBoundsD	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)

	getMeasureUnit	(Inherited from DiagramItem.)
	getRepaintRect	DiagramItem.getRepaintRect override. (Inherited from DiagramNode.)
	getValue	Gets the effective value of the style property with the specified name. (Inherited from DiagramItem.)
	groupContains	(Inherited from DiagramNode.)
	loadFromJson	Loads the node from a JSON object. (Inherited from DiagramNode.)
	loadFromXml	Loads the item content from an XML element.
	move	(Inherited from DiagramNode.)
	onAdd	DiagramItem.onAdd override.
	onChangeFont	(Inherited from DiagramItem.)
	onChangeTextPadding	(Inherited from DiagramItem.)
	onChildModified	Called when a group child node has been modified. Override this method if you need to know when a node from the **SubordinateGroup** is modified. (Inherited from DiagramItem.)
	onClick	Invoked when the user clicks this item. (Inherited from DiagramItem.)
	onDoubleClick	Invoked when the user double-clicks this item. (Inherited from DiagramItem.)
	onLoad	onLoad override.
	onMeasureUnitChanged	Called when the diagram's MeasureUnit changes. (Inherited from DiagramItem.)
	onModify	Called when an item is modified (Inherited from DiagramNode.)
	onRemove	DiagramItem.onRemove override.
	onRotationAngleChanged	Called when the node's rotation angle changes. (Inherited from DiagramNode.)
	onStyleChanged	Invoked when the associated style or theme have changed. (Inherited from DiagramItem.)
	onStyleFontChanged	Invoked when font property values of an associated style change. (Inherited from DiagramItem.)
	onUpdateBounds	DiagramNode.onUpdateBounds override.
	parentConstraintsInfringed	(Inherited from DiagramNode.)
	putExpandable	(Inherited from DiagramNode.)
	putSelected	(Inherited from DiagramItem.)
	rectFromPoints	(Inherited from DiagramNode.)
	repaint	Overloaded. (Inherited from DiagramItem.)

	resizeToFitImage	(Inherited from DiagramNode.)
	restoreProperties	DiagramItem.restoreProperties override.
	restoreState	DiagramItem.restoreState override. (Inherited from DiagramNode.)
	saveProperties	DiagramItem.saveProperties override.
	saveState	DiagramItem.saveState override. (Inherited from DiagramNode.)
	saveToJson	Saves the node as a JSON object. (Inherited from DiagramNode.)
	saveToXml	Saves the item content into an XML element.
	scaleElements	Scales the node's elements by specified amount. (Inherited from DiagramNode.)
	setDiagramDirty	Marks the diagram as changed. (Inherited from DiagramItem.)
	setReflexive	Invoked to let a node set the shape of a reflexive link connected to it. (Inherited from DiagramNode.)
	shouldRender	Determines whether the item is rendered in the current context. (Inherited from DiagramItem.)
	shouldRenderAnchors	Determines whether the node should render its anchor points. (Inherited from DiagramNode.)
	startCreate	DiagramItem.startCreate override. (Inherited from DiagramNode.)
	startModify	DiagramItem.startModify override. Invoked when the user starts modifying this node interactively. (Inherited from DiagramNode.)
	updateCreate	DiagramItem.updateCreate override. (Inherited from DiagramNode.)
	updateLinkPositions	(Inherited from DiagramNode.)
	updateModify	DiagramItem.updateModify override. Invoked during interactive modification of this node. (Inherited from DiagramNode.)

See Also

ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode Constructor

Overload List

Name	Description
ControlNode ()	Initializes a new instance of the ControlNode class.

ControlNode (ControlNode)	Initializes a new instance of the **ControlNode** class using the specified control node as a prototype.
ControlNode (Diagram)	Initializes a new instance of the **ControlNode** class with default values supplied form the specified Diagram.
ControlNode (DiagramView)	Initializes a new instance of the **ControlNode** class.
ControlNode (DiagramView, Component)	Initializes a new instance of the **ControlNode** class.

See Also

ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode Constructor ()

Initializes a new instance of the ControlNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ControlNode ()
```

See Also

ControlNode Constructor Overload List
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode Constructor (ControlNode)

Initializes a new instance of the ControlNode class using the specified control node as a prototype.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ControlNode (
    ControlNode prototype
)
```

Parameters

prototype
The node to use as a prototype. The properties of the new node are initialized from the property values of this node.

See Also

ControlNode Constructor Overload List
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode Constructor (Diagram)

Initializes a new instance of the ControlNode class with default values supplied form the specified Diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ControlNode (
    Diagram parent
)
```

Parameters

parent
The Diagram from which to obtain default values for the node properties.

See Also

ControlNode Constructor Overload List
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode Constructor (DiagramView)

Initializes a new instance of the ControlNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ControlNode (
    DiagramView diagramView
)
```

Parameters

diagramView
The DiagramView that should become a parent of the hosted control.

See Also

ControlNode Constructor Overload List
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode Constructor (DiagramView, Component)

Initializes a new instance of the ControlNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ControlNode (
    DiagramView diagramView,
    Component control
)
```

Parameters

diagramView
The DiagramView that should become a parent of the hosted control.

control
The **java.awt.Component** that should be hosted inside this node.

See Also

ControlNode Constructor Overload List
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode Methods

ControlNode.createProperties Method

DiagramItem.createProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramItemProperties createProperties ()
```

Return Value

An instance of the ControlNodeProperties class.

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.drawLocal Method

DiagramItem.drawShadow override. Draws the hosted control on the specified Graphics2D surface.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void drawLocal (
    Graphics2D g,
    RenderOptions options
)
```

Parameters

g
A Graphics2D object where the link should be rendered.

options
A RenderOptions object specifying options for the drawing operation.

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.getControl Method

Gets the **java.awt.Component** hosted inside this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Component getControl ()
```

Return Value

An instance of any **java.awt.Component** derived class.

Remarks

A ControlNode drawn by the user has its Control initialized to an instance of the DefaultControlType type. At any time you can assign another control to this property.

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace
setControl Method

ControlNode.getMouseInputMode Method

Gets whether mouse input is processed by the diagram or the hosted control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public MouseInputMode getMouseInputMode ()
```

Return Value

A member of the MouseInputMode enumeration.

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.init Method

Returns a ControlNodeBuilder object used to configure this ControlNode instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ControlNodeBuilder init ()
```

Return Value

A **ControlNodeBuilder** instance.

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.loadFromXml Method

Loads the item content from an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An Element containing the item's data.

context
Provides contextual information about the serialization process and some helper serialization methods.

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.onAdd Method

DiagramItem.onAdd override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onAdd ()
```

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.onLoad Method

onLoad override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onLoad (
    Diagram diagram
)
```

Parameters

diagram
The Diagram whose content is being loaded.

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.onRemove Method

DiagramItem.onRemove override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onRemove ()
```

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.onUpdateBounds Method

DiagramNode.onUpdateBounds override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onUpdateBounds (
    Rectangle2D oldBounds
)
```

Parameters

oldBounds

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.restoreProperties Method

DiagramItem.restoreProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void restoreProperties (
    DiagramItemProperties props
)
```

Parameters

props
An instance of the ControlNodeProperties class.

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.saveProperties Method

DiagramItem.saveProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveProperties (
    DiagramItemProperties props
)
```

Parameters

props
An instance of the ControlNodeProperties class.

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.saveToXml Method

Saves the item content into an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An Element the item's data should be stored into.

context
Provides contextual information about the serialization process and some helper serialization methods.

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.setControl Method

Sets the **java.awt.Component** that should be hosted inside this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setControl (
    Component value
```

```
)
```

Parameters

value
An instance of any **java.awt.Component** derived class.

Remarks

A ControlNode drawn by the user has its **Control** initialized to an instance of the DefaultControlType type. You can assign another control to this property at any time.

Example

The example below shows how to create a new **ControlNode** instance and set its control:

Java

```
ControlNode host = new ControlNode(diagramView);
host.setControl(new JTable(3, 3));
host.setMouseInputMode(MouseInputMode.HandledByHostedControl);
diagram.getNodes().add(host);
```

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.setMouseInputMode Method

Sets whether mouse input is processed by the diagram or the hosted control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMouseInputMode (
    MouseInputMode value
)
```

Parameters

value
A member of the MouseInputMode enumeration.

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.setVisible Method

Sets a value indicating whether the node is visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setVisible (
    boolean value
)
```

Parameters

value
true if the node should be visible,otherwise false.

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.with Method

Returns a ControlNodeBuilder object used to configure and create new ControlNode instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static ControlNodeBuilder with ()
```

Return Value

A **ControlNodeBuilder** instance.

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNode.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public void writeExternal (`
`    ObjectOutput out`
`)`

Parameters

out

See Also

ControlNode Members
ControlNode Class
com.mindfusion.diagramming Namespace

ControlNodeEvent Class

Contains the arguments passes to handlers of the control host serialization events.

Syntax

Java
`public class ControlNodeEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.ControlNodeEvent

See Also

ControlNodeEvent Members
com.mindfusion.diagramming Namespace

ControlNodeEvent Members

Contains the arguments passes to handlers of the control host serialization events.

The following tables list the members exposed by the ControlNodeEvent type.

Public Constructors

	Name	Description
	ControlNodeEvent	Initializes a new instance of the **ControlNodeEvent** class.

Public Methods

	Name	Description

	getContext	Gets an XmlPersistContext object that provides serialization helper methods.
	getHandled	Gets a value indicating whether the event is handled.
	getNode	Gets a reference to the ControlNode being serialized or deserialized.
	getXmlElement	Gets an XML element that stores the control attributes.
	setHandled	Sets a value indicating whether the event is handled.

See Also

ControlNodeEvent Class
com.mindfusion.diagramming Namespace

ControlNodeEvent Constructor

Initializes a new instance of the ControlNodeEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ControlNodeEvent (
    Object source,
    ControlNode node,
    Element element,
    XmlPersistContext context
)
```

Parameters

source
Specifies the event source.

node
The ControlNode being serialized or deserialized.

element
The **org.w3c.dom.Element** that stores the control attributes.

context
An XmlPersistContext object that provides serialization helper methods.

See Also

ControlNodeEvent Class
com.mindfusion.diagramming Namespace

ControlNodeEvent Methods

ControlNodeEvent.getContext Method

Gets an XmlPersistContext object that provides serialization helper methods.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public XmlPersistContext getContext ()
```

Return Value

An XmlPersistContext instance.

See Also

ControlNodeEvent Members
ControlNodeEvent Class
com.mindfusion.diagramming Namespace

ControlNodeEvent.getHandled Method

Gets a value indicating whether the event is handled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getHandled ()
```

Return Value

true if some handler has already serialized the control, otherwise **false**.

See Also

ControlNodeEvent Members
ControlNodeEvent Class
com.mindfusion.diagramming Namespace

ControlNodeEvent.getNode Method

Gets a reference to the ControlNode being serialized or deserialized.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ControlNode getNode ()
```

Return Value

A ControlNode instance.

See Also

ControlNodeEvent Members
ControlNodeEvent Class
com.mindfusion.diagramming Namespace

ControlNodeEvent.getXmlElement Method

Gets an XML element that stores the control attributes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element getXmlElement ()
```

Return Value

An **org.w3c.dom.Element** instance.

See Also

ControlNodeEvent Members
ControlNodeEvent Class
com.mindfusion.diagramming Namespace

ControlNodeEvent.setHandled Method

Sets a value indicating whether the event is handled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHandled (
    boolean value
)
```

Parameters

value
true to indicate that the control has been serialized, otherwise **false**.

See Also

ControlNodeEvent Members
ControlNodeEvent Class
com.mindfusion.diagramming Namespace

ControlNodeProperties Class

Stores the values of ControlNode properties during undo / redo operations. If you need to implement undo support for the additional properties defined by a class derived from ControlNode, do so by deriving from **ControlNodeProperties** and overriding the saveProperties, restoreProperties, and createProperties methods of **ControlNode**.

Syntax

Java
`public class ControlNodeProperties extends DiagramNodeProperties`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItemProperties
    com.mindfusion.diagramming.DiagramNodeProperties
      com.mindfusion.diagramming.ControlNodeProperties

See Also

ControlNodeProperties Members
com.mindfusion.diagramming Namespace

ControlNodeProperties Members

Stores the values of ControlNode properties during undo / redo operations. If you need to implement undo support for the additional properties defined by a class derived from ControlNode, do so by deriving from ControlNodeProperties and overriding the saveProperties, restoreProperties, and createProperties methods of **ControlNode**.

The following tables list the members exposed by the **ControlNodeProperties** type.

Public Constructors

	Name	Description
	ControlNodeProperties	

Public Fields

	Name	Description
	textPadding	(Inherited from DiagramItemProperties.)

See Also

ControlNodeProperties Class
com.mindfusion.diagramming Namespace

ControlNodeProperties Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public ControlNodeProperties ()`

See Also

ControlNodeProperties Class
com.mindfusion.diagramming Namespace

Converter Class

Provides capabilities to convert various types to and from strings in a culture-independent way.

Syntax

Java
`public class Converter`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.Converter

See Also

Converter Members
com.mindfusion.diagramming Namespace

Converter Members

Provides capabilities to convert various types to and from strings in a culture-independent way.

The following tables list the members exposed by the Converter type.

Public Constructors

	Name	Description
	Converter	

Public Methods

	Name	Description
	byteToHex	
	fromBoolean	
	fromByte	
	fromChar	
	fromColor	
	fromDouble	
	fromImage	
	fromInt	
	fromLong	
	fromShort	
	fromSingle	
	toBoolean	
	toByte	
	toChar	
	toColor	
	toDouble	
	toImage	
	toInt	Overloaded.
	toLong	
	toShort	
	toSingle	

See Also

Converter Class
com.mindfusion.diagramming Namespace

Converter Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Converter ()`

See Also

Converter Class
com.mindfusion.diagramming Namespace

Converter Methods

Converter.byteToHex Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static String byteToHex (
    int byteVal
)
```

Parameters

byteVal

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.fromBoolean Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static String fromBoolean (
    boolean val
)
```

Parameters

val

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.fromByte Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static String fromByte (
    Byte val
)
```

Parameters

val

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.fromChar Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static String fromChar (
    Character val
)
```

Parameters

val

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.fromColor Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static String fromColor (
    Color val
)
```

Parameters

val

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.fromDouble Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static String fromDouble (
    double val
)
```

Parameters

val

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.fromImage Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static String fromImage (
    Image image
)
```

Parameters

image

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.fromInt Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static String fromInt (
    int val
)
```

Parameters

val

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.fromLong Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public static String fromLong (
    long val
)
```

Parameters

val

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.fromShort Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static String fromShort (
    short val
)
```

Parameters

val

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.fromSingle Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static String fromSingle (
    float val
)
```

Parameters

val

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.toBoolean Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static boolean toBoolean (
    String s
)
```

Parameters

s

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.toByte Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static byte toByte (
    String s
)
```

Parameters

s

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.toChar Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Character toChar (
    String s
)
```

Parameters

s

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.toColor Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Color toColor (
    String s
)
```

Parameters

s

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.toDouble Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static double toDouble (
    String s
)
```

Parameters

s

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.toImage Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Image toImage (
    String s
)
```

Parameters

s

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.toInt Method

Overload List

Name	Description
Converter.toInt (String)	
Converter.toInt (String, int)	

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.toInt Method (String)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static int toInt (
    String s
)
```

Parameters

s

Return Value

See Also

toInt Method Overload List
Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.toInt Method (String, int)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static int toInt (
    String s,
    int defaultValue
)
```

Parameters

s

defaultValue

Return Value

See Also

toInt Method Overload List
Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.toLong Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static long toLong (
    String s
)
```

Parameters

s

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.toShort Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static short toShort (
    String s
)
```

Parameters

s

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

Converter.toSingle Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static float toSingle (
    String s
)
```

Parameters

s

Return Value

See Also

Converter Members
Converter Class
com.mindfusion.diagramming Namespace

CursorHint Enumeration

Specifies what mouse cursor to display while a user interacts with the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public enum CursorHint
```

Members

	Member name	Description
	AllowLink	Indicates the cursor specified by the AllowLinkCursor property.
	CounterDiagonalResize	Indicates the cursor specified by the CounterDiagonalResizeCursor property.

	DiagonalResize	Indicates the cursor specified by the DiagonalResizeCursor property.
	Disallow	Indicates the cursor specified by the DisallowCursor property.
	DisallowLink	Indicates the cursor specified by the DisallowLinkCursor property.
	DontChange	Indicates the cursor specified by the Cursor property.
	DrawLink	Indicates the cursor specified by the DrawLinkCursor property.
	EditText	Indicates the cursor specified by the EditTextCursor property.
	HorizontalResize	Indicates the cursor specified by the HorizontalResizeCursor property.
	Move	Indicates the cursor specified by the MoveCursor property.
	Pointer	Indicates the cursor specified by the PointerCursor property.
	Rotate	Indicates the cursor specified by the RotateCursor property.
	VerticalResize	Indicates the cursor specified by the VerticalResizeCursor property.

See Also

com.mindfusion.diagramming Namespace

CustomDraw Enumeration

The members of this enumeration specify what type of custom-drawing will be performed on an item. These constants can be used as parameters of the setCustomDraw method of the ShapeNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum CustomDraw`

Members

	Member name	Description
	Additional	Perform custom drawing additional to the standard one.
	Additional2	Perform custom drawing additional to the standard one.
	Additional3	Perform custom drawing additional to the standard one.
	Full	Do not execute any standard drawing code, but only custom one.

	None	Standard drawing.
	ShadowOnly	Custom draw only the item shadow.

See Also

com.mindfusion.diagramming Namespace

DecisionLayout Class

Implements a flowchart layout algorithm.

Syntax

Java

```
public class DecisionLayout extends AbstractLayout
```

Remarks

This algorithm arranges simple flowcharts consisting of decision boxes with up to three outgoing links per node and activity boxes with a single outgoing link per node. The nodes are arranged in columns and rows, whose distance depends on the HorizontalPadding and VerticalPadding property values. When links share the same row or column, they are placed at a distance specified via LinkPadding.

The layout arranges nodes recursively starting from StartNode. If **StartNode** is not specified, the algorithm selects the root of the deepest branch of the graph's spanning tree as start node.

The overall orientation of the layout can be set via the Orientation property. There is no distinction made between yes/no links, and the node sides by which links are aligned depend only on the order of links in OutgoingLinks collection. If you have a preferred position for links depending on their yes/no type, make sure the **OutgoingLinks** collections of nodes are sorted by links' logical values.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AbstractLayout
    com.mindfusion.diagramming.DecisionLayout

See Also

DecisionLayout Members
com.mindfusion.diagramming Namespace
FlowchartLayout Class

DecisionLayout Members

Implements a flowchart layout algorithm.

The following tables list the members exposed by the DecisionLayout type.

Public Constructors

	Name	Description

	DecisionLayout	Initializes a new instance of the **DecisionLayout** class with the default settings.

Public Methods

	Name	Description
	arrange	Applies the layout to the specified diagram.
	getAnchoring	Gets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	getGrowToFit	Gets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	getHorizontalPadding	Gets the horizontal distance between adjacent nodes.
	getKeepGroupLayout	Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	getLayoutLink	Gets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	getLayoutNode	Gets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	getLinkPadding	Gets the distance between parallel links.
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	getMultipleGraphsPlacement	Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	getOrientation	Gets the orientation of the arranged diagram.
	getProgress	Gets the progress callback delegate. (Inherited from AbstractLayout.)
	getStartNode	Gets the initial (top-left) node in the arranged diagram.
	getVerticalPadding	Gets the vertical distance between adjacent nodes.
	init	Returns a DecisionLayoutBuilder object used to configure this DecisionLayout instance.
S	removeMidleSegmentPoint	(Inherited from AbstractLayout.)
	setAnchoring	Sets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	setGrowToFit	Sets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	setHorizontalPadding	Sets the horizontal distance between adjacent nodes.

	setKeepGroupLayout	Sets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	setLayoutLink	Sets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	setLayoutNode	Sets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	setLinkPadding	Sets the distance between parallel links.
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	setMultipleGraphsPlacement	Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	setOrientation	Sets the orientation of the arranged diagram.
	setProgress	Sets the progress callback delegate. (Inherited from AbstractLayout.)
	setStartNode	Sets the initial (top-left) node in the arranged diagram.
	setVerticalPadding	Sets the vertical distance between adjacent nodes.
S	with	Returns a DecisionLayoutBuilder object used to configure and create new DecisionLayout instances.

Protected Methods

	Name	Description
	getDefaultMarginValue	Gets the default value of the **Margins** property.

See Also

DecisionLayout Class
com.mindfusion.diagramming Namespace

DecisionLayout Constructor

Initializes a new instance of the DecisionLayout class with the default settings.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DecisionLayout ()
```

See Also

DecisionLayout Methods

DecisionLayout.arrange Method

Applies the layout to the specified diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram diagram,
    DiagramItemList items
)
```

Parameters

diagram

items

Return Value

See Also

DecisionLayout Members
DecisionLayout Class
com.mindfusion.diagramming Namespace

DecisionLayout.getDefaultMarginValue Method

Gets the default value of the Margins property.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected XDimension2D.Double getDefaultMarginValue ()
```

Return Value

See Also

DecisionLayout Members
DecisionLayout Class
com.mindfusion.diagramming Namespace

DecisionLayout.getHorizontalPadding Method

Gets the horizontal distance between adjacent nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getHorizontalPadding ()
```

Return Value

A real number specifying the distance between adjacent nodes. The default is 15.

See Also

DecisionLayout Members
DecisionLayout Class
com.mindfusion.diagramming Namespace

DecisionLayout.getLinkPadding Method

Gets the distance between parallel links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getLinkPadding ()
```

Return Value

A real number specifying the distance between parallel links. The default is 2.

See Also

DecisionLayout Members
DecisionLayout Class
com.mindfusion.diagramming Namespace

DecisionLayout.getOrientation Method

Gets the orientation of the arranged diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Orientation getOrientation ()
```

Return Value

A member of the Orientation enumeration. The default is Vertical.

See Also

DecisionLayout Members
DecisionLayout Class
com.mindfusion.diagramming Namespace

DecisionLayout.getStartNode Method

Gets the initial (top-left) node in the arranged diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode getStartNode ()
```

Return Value

A DiagramNode object that specifies the initial node. The default is **null**.

Remarks

If this property is **null**, the layout will pick-up the start node automatically.

See Also

DecisionLayout Members
DecisionLayout Class
com.mindfusion.diagramming Namespace

DecisionLayout.getVerticalPadding Method

Gets the vertical distance between adjacent nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getVerticalPadding ()
```

Return Value

A real number specifying the distance between adjacent nodes. The default is 15.

See Also

DecisionLayout Members
DecisionLayout Class
com.mindfusion.diagramming Namespace

DecisionLayout.init Method

Returns a DecisionLayoutBuilder object used to configure this DecisionLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DecisionLayoutBuilder init ()
```

Return Value

A **DecisionLayoutBuilder** instance.

See Also

DecisionLayout Members
DecisionLayout Class
com.mindfusion.diagramming Namespace

DecisionLayout.setHorizontalPadding Method

Sets the horizontal distance between adjacent nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHorizontalPadding (
    float value
)
```

Parameters

value
A real number specifying the distance between adjacent nodes.

See Also

DecisionLayout Members
DecisionLayout Class
com.mindfusion.diagramming Namespace

DecisionLayout.setLinkPadding Method

Sets the distance between parallel links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkPadding (
    float value
)
```

Parameters

value
A real number specifying the distance between parallel links.

See Also

DecisionLayout Members
DecisionLayout Class
com.mindfusion.diagramming Namespace

DecisionLayout.setOrientation Method

Sets the orientation of the arranged diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value
A member of the Orientation enumeration.

See Also

DecisionLayout Members
DecisionLayout Class
com.mindfusion.diagramming Namespace

DecisionLayout.setStartNode Method

Sets the initial (top-left) node in the arranged diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setStartNode (
    DiagramNode value
)
```

Parameters

value
A DiagramNode object that specifies the initial node.

Remarks

If this property is **null**, the layout will pick-up the start node automatically.

See Also

DecisionLayout Members
DecisionLayout Class
com.mindfusion.diagramming Namespace

DecisionLayout.setVerticalPadding Method

Sets the vertical distance between adjacent nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setVerticalPadding (
    float value
)
```

Parameters

value
A real number specifying the distance between adjacent nodes.

See Also

DecisionLayout Members
DecisionLayout Class
com.mindfusion.diagramming Namespace

DecisionLayout.with Method

Returns a DecisionLayoutBuilder object used to configure and create new DecisionLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static DecisionLayoutBuilder with ()`

Return Value

A **DecisionLayoutBuilder** instance.

See Also

DecisionLayout Members
DecisionLayout Class
com.mindfusion.diagramming Namespace

DefaultPaletteModel Class

A default implementation of the PaletteModel.

Syntax

Java

`public class DefaultPaletteModel`
`    extends AbstractListModel<E>`
`    implements PaletteModel`

Remarks

DefaultPaletteModel is the standard implementation of the PaletteModel interface, providing a concrete list-based store for PaletteCategory objects. It manages category additions and removals while automatically notifying the Palette control to keep the user interface in sync.

Inheritance Hierarchy

java.lang.Object
  javax.swing.AbstractListModel(E)
    com.mindfusion.diagramming.DefaultPaletteModel

See Also

DefaultPaletteModel Members
com.mindfusion.diagramming Namespace

DefaultPaletteModel Members

A default implementation of the PaletteModel.

The following tables list the members exposed by the DefaultPaletteModel type.

Public Constructors

	Name	Description
	DefaultPaletteModel	Initializes a new instance of the **DefaultPaletteModel** class.

Public Methods

	Name	Description
	addCategory	Adds a category to the model.
	clear	Removes all categories from the model.
	getCategories	
	getElementAt	
	getSize	
	removeCategory	Removes a category from the model.

See Also

DefaultPaletteModel Class
com.mindfusion.diagramming Namespace

DefaultPaletteModel Constructor

Initializes a new instance of the DefaultPaletteModel class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DefaultPaletteModel ()
```

See Also

DefaultPaletteModel Class
com.mindfusion.diagramming Namespace

DefaultPaletteModel Methods

DefaultPaletteModel.addCategory Method

Adds a category to the model.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addCategory (
    PaletteCategory category
)
```

Parameters

category
The PaletteCategory to add.

See Also

DefaultPaletteModel Members
DefaultPaletteModel Class
com.mindfusion.diagramming Namespace
removeCategory Method

DefaultPaletteModel.clear Method

Removes all categories from the model.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void clear ()
```

See Also

DefaultPaletteModel Members
DefaultPaletteModel Class
com.mindfusion.diagramming Namespace

DefaultPaletteModel.getCategories Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public List<PaletteCategory> getCategories ()
```

Return Value

See Also

DefaultPaletteModel Members
DefaultPaletteModel Class
com.mindfusion.diagramming Namespace

DefaultPaletteModel.getElementAt Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public PaletteCategory getElementAt (
    int index
)
```

Parameters

index

Return Value

See Also

DefaultPaletteModel Members
DefaultPaletteModel Class
com.mindfusion.diagramming Namespace

DefaultPaletteModel.getSize Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getSize ()
```

Return Value

See Also

DefaultPaletteModel Members
DefaultPaletteModel Class
com.mindfusion.diagramming Namespace

DefaultPaletteModel.removeCategory Method

Removes a category from the model.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void removeCategory (
    PaletteCategory category
)
```

Parameters

category
The PaletteCategory to remove.

See Also

DefaultPaletteModel Members
DefaultPaletteModel Class
com.mindfusion.diagramming Namespace
addCategory Method

DelKeyAction Enumeration

The members of this enumeration specify the type of action performed when the user presses the DEL key.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum DelKeyAction`

Members

	Member name	Description
	DeleteActiveItem	Indicates that only the ActiveItem is deleted.
	DeleteSelectedItems	Indicates that all selected items are deleted.
	None	Indicates that nothing happens.

See Also

com.mindfusion.diagramming Namespace

Diagram Class

The **Diagram** class represents a flow diagram.

Syntax

Java
`public class Diagram extends DiagramBase implements IItemFactory, ImageObserver`

Remarks

The diagram document contains connected nodes and links. Nodes are instances of the ShapeNode, TableNode, or ContainerNode classes. The nodes can be accessed through getNodes. Links in JDiagram are instances of the DiagramLink class and can be accessed through the getLinks method. Diagram items can be grouped in hierarchical structures and the so formed groups can be accessed by getGroups.

Managing items: Use the createShapeNode, createTableNode, createDiagramLink or createContainerNode methods of the Factory class to create new diagram items. Optionally, items can be created using the **new** operator and added to the diagram with the add method. Items are deleted using the remove method of the list returned by the getItems method.

The createGroup method creates a new hierarchical Group of items. The subordinated items in a group always follow the movement of their master item. Use the destroyGroup method to destroy a group.

Searching for a particular kind of items is done with the findLink, findNode and findGroup methods, which look for an item that has a particular Tag. To get whatever object is placed at a certain location, use the getItemAt, getNodeAt and getLinkAt methods.

Serialization: Binary serialization of diagrams is provided by the saveTo and loadFrom methods which serialize diagrams to / from Java streams or files. Use the saveToXml and loadFromXml methods to serialize a diagram into/from XML documents.

Controlling users actions: Users actions can be validated by handling some events declared in DiagramListener, fired while items are being created or modified. In addition, the **Diagram** class provides some methods that control user interaction. The setBehavior method specifies how user interaction is interpreted by creating nodes, links, selection, and so on. The order in which items are hit-tested when clicking on them depends on the value assigned through setHitTestPriority.

The following attribute setters let you control what kind of links users can create: setAllowLinksRepeat, setAllowSelfLoops, setAllowUnanchoredLinks, setAllowUnconnectedLinks. To specify whether users are allowed to edit the text of nodes by double-clicking, use setAllowInplaceEdit.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramBase
    com.mindfusion.diagramming.Diagram
      com.mindfusion.diagramming.DiagramPage

See Also

Diagram Members
com.mindfusion.diagramming Namespace

Diagram Members

The Diagram class represents a flow diagram.

The following tables list the members exposed by the **Diagram** type.

Public Constructors

	Name	Description
	Diagram	Initializes a new instance of the **Diagram** class.

Public Methods

	Name	Description
	addDiagramListener	Registers listener so that it will receive events when users create, modify or delete diagram items.
	alignPointToGrid	Aligns a point to the alignment grid.
	arrange	Arranges the diagram using the specified graph layout algorithm.

	arrangeLinkLabels	Rearranges link labels whose AutoArrange property is enabled.
	changeUnit	Sets new MeasureUnit value and scales the coordinates of diagram items so that their absolute size remains unchanged.
	clearAll	Deletes all items from the diagram.
	copySelection	Creates a copy of the currently selected objects and groups.
	createImage	Overloaded. Creates a bitmap image representing the diagram contents.
	createItem	Implements the IItemFactory interface.
	createStyledText	Creates a styled text object for the specified text string.
	createThemeFromDefaults	Creates a Theme object representing the default properties of the diagram. This method is only for compatibility with files saved with versions earlier than 4.0.
	destroyGroup	Destroys the specified group. The group items are not deleted, unless its setAutoDeleteItems method is calles.
	draw	Renders the diagram on the specified **Graphics2D** object.
	drawAlignmentGuides	Draws the current alignment guides.
	drawLayer	Renders all items of a layer to the specified graphics.
	drawString	
	drawStyledText	
	drawTextObject	
	enumByReverseZ	Overloaded. Hit-tests diagram items in reverse Z order.
	enumTopLevelByReverseZ	Overloaded. Hit-tests diagram top-level items in reverse Z order.
	executeCommand	Executes a command and saves it in the undo/redo history.
	findGroup	Finds the group that has the specified tag.
	findLink	Finds the link that has the specified tag.
	findLinkById	Finds the link that has the specified id value.
	findNode	Finds the node that has the specified tag.
	findNodeById	Finds the node that has the specified id value.
	getActiveItem	Gets the active item.
	getActiveItemHandlesStyle	Gets the visual style of the manipulation handles displayed around the active item.
	getActiveLayer	Gets the zero-based index of the active layer.
	getAdjustmentHandlesSize	Gets the size of selection handles.
	getAlignmentGuidePen	Gets the pen used to draw alignment guides.

	getAlignToGrid	Gets a value indicating whether items are aligned to the alignment grid while users draw them.
	getAllowLinksRepeat	Gets a value indicating whether users are allowed to draw more than one links between the same nodes.
	getAllowMultipleResize	Gets whether multiple selected nodes can be resized simultaneously.
	getAllowSelfLoops	Gets whether users are allowed to draw reflexive links.
	getAllowSplitLinks	Gets whether link segments can be added and removed interactively.
	getAllowUnanchoredLinks	Gets a value indicating whether users are allowed to attach links to nodes that do not have any anchor points.
	getAllowUnconnectedLinks	Gets a value indicating whether users are allowed to draw unconnected links.
	getAutoAlignDistance	Gets the maximal horizontal or vertical distance at which a node aligns to the borders of other nodes.
	getAutoAlignNodes	Gets whether nodes should automatically align to the borders of other nodes during user interaction.
	getAutoCloseDistance	Gets the maximum distance between first and last points of a FreeFormNode for which the node's outline is closed automatically.
	getAutoDeleteLinks	Gets whether links are deleted automatically when their Origin or Destination is deleted.
	getAutoResize	Gets a value specifying whether the document scrollable area is resized automatically when users draw items near the edges of the diagram.
	getAutoSnapDistance	Specifies the maximum distance at which links auto-snap to nodes.
	getAutoSnapLinks	Gets the default value for the AutoSnapToNode property of new links.
	getBackBrush	Gets the diagram's background brush.
	getBackgroundImage	Gets the background image.
	getBackgroundImageAlign	Gets how the background image is positioned relatively to the scrollable area of the diagram.
	getBackgroundImageUrl	Gets the URL of the background image.
	getBookmarks	Gets a collection of all saved bookmarks / areas of interest defined in this diagram.
	getBounds	Gets the bounds of the scrollable area of the diagram.
	getBoundsPen	Gets the pen with which the diagram bounds are drawn.
	getCellCustomDraw	Gets the default type of custom painting applied to cells of new tables.
	getCellFrameStyle	Gets the default style of the cell frames of new tables.
	getClsidTable	Gets the table of registered item identifiers.

	getContainerCaption	Gets the default value for the Caption attribute of containers.
	getContainerCaptionHeight	Gets the default value for the CaptionHeight attribute of containers.
	getContainerHighlightPen	Gets the default value for the HighlightPen attribute of containers.
	getContainerMargin	Gets the default value for the Margin attribute of containers.
	getContainerMinimumSize	Gets the default value for the MinimumSize attribute of containers.
	getContainerNodeStyle	Gets the theme-level style for container nodes.
	getContainersFoldable	Gets the default value for the Foldable attribute of containers.
	getContentBounds	Returns the smallest rectangle that bounds all diagram items.
	getCrossingRadius	Gets the radius of the shapes drawn at link crossing points.
	getDefaultControlType	Gets the type of components that will be hosted by default in newly created ControlNode objects.
	getDefaultShape	Gets the default shape of nodes.
	getDiagramLinkStyle	Gets the theme-level style for diagram links.
	getDiagramListeners	Gets the list of currently registered event listeners.
	getDiagramStyle	Gets the theme-level style for the diagram.
	getDirty	Indicates whether the diagram has changed since the last save.
	getDisabledHandlesStyle	Gets the visual style of disabled manipulation handles.
	getDummy	
	getDynamicLinks	Gets a value indicating whether links automatically update their end points positions so that they will always point towards the node centers.
	getEffectiveBackBrush	Gets the currently effective background brush of the diagram. This property returns the BackBrush if it is not null, or the brush from the associated style or theme otherwise.
	getEnableLanes	Gets whether lanes are enabled.
	getEnableSpatialIndex	Gets whether to index item positions for faster hit-testing and viewport clipping queries.
	getEnableStyledText	Gets a value indicating whether new nodes display richly formatted text.
	getExpandButtonAction	Gets what should happen when a user clicks the +/- button that is displayed near expandable nodes.
	getExpandButtonPosition	Gets where expand/collapse buttons are located relatively to their nodes.

	getExpandOnIncoming	Gets which direction of links is considered the tree direction when expanding or collapsing diagram branches.
	getFactory	Gets a Factory instance that lets you add programmatically new items to the diagram.
	getFocusedComponent	Gets the component within this diagram which is currently holding the input focus.
	getFocusedManipulator	Gets the manipulator currently holding the input focus.
	getFoldedContainerSize	Gets the size of folded containers.
	getFont	Gets the default font for new diagram items.
S	getFormatBeingLoaded	Returns the file format id of the file currently being loaded.
	getFreeFormAttractDistance	Gets the radius around dragged free-form adjustment handle in which other points of **FreeFormNode** are modified too.
	getFreeFormTargets	Gets an array of Shape objects used to replace **FreeFormNode** instances with ShapeNode ones when Behavior is set to LinkFreeShapes or DrawFreeShapes.
	getGridColor	Gets the color of the alignment grid.
	getGridOffsetX	Gets the horizontal offset of the first point of the alignment grid.
	getGridOffsetY	Gets the vertical offset of the first point of the alignment grid.
	getGridSizeX	Gets the horizontal distance between grid points.
	getGridSizeY	Gets the vertical distance between grid points.
	getGridStyle	Gets the appearance style of the alignment grid.
	getGroups	Gets a collection of all groups in the diagram.
	getHitTestPriority	Gets a value indicating the order in which items are hit-tested.
	getHoverDelay	Gets the time in milliseconds that mouse pointer should remain stationary before reporting hover events.
	getImageDpiX	Specifies the default resolution of images.
	getImageDpiY	
	getInteraction	Gets an InteractionState instance representing the current action being carried out by the user.
	getItemAt	Overloaded.
	getItems	Gets a collection of all items in the diagram.
	getLaneGrid	Gets the Grid instance that represents the lane grid.
	getLayers	Gets a list of the layers in the current diagram.
	getLinkAt	Overloaded.
	getLinkBaseShape	Gets the default shape displayed at the origin of new links.

	getLinkBaseShapeSize	Gets the default size of the shape displayed at the origin of new links.
	getLinkBranchIndicator	
	getLinkBrush	Gets the default brush assigned to new links.
	getLinkCascadeOrientation	Gets the default orientation of the first segments of cascading links.
	getLinkCrossings	Gets what shapes are drawn at link crossing points.
	getLinkCustomDraw	Gets the default type of custom painting done on links.
	getLinkEndsMovable	Gets a value indicating that users are allowed to move the end points of a link after the link is created.
	getLinkHandlesStyle	Gets the default style of link selection handles.
	getLinkHeadShape	Gets the default shape displayed as head of new links.
	getLinkHeadShapeSize	Gets the default size of the shape displayed as arrowhead of new links.
	getLinkIntermediateShape	Gets the default shape displayed at the middle of links segments.
	getLinkIntermediateShapeSize	Gets the default size of the shape displayed at the middle of links segments.
	getLinkPen	Gets the default pen assigned to new links.
	getLinkRouter	Gets the component used to find paths for auto-routed links when diagram nodes are added or their positions change.
	getLinks	Gets a collection of all links in the diagram.
	getLinksAt	Returns the links that contain the specified point.
	getLinkSegments	Gets the default number of link segments.
	getLinkShape	Gets the default shape of links.
	getLinksRetainForm	Gets a value indicating whether new links are set to maintain their shapes while the nodes they connect are moved around.
	getLinkText	Gets the default text assigned to new links.
	getLinkTextStyle	Gets the default placement and orientation of links' text.
	getMeasureUnit	Gets the current unit of measure.
	getMergeThreshold	Gets the maximum distance between adjacent control points of a link at which the respective segments can be merged.
	getNearestNode	Returns the nearest node whose bounding rectangle is intersected by the circle, defined by origin point and radius.
	getNodeAt	Overloaded.

	getNodeEffects	Gets a collection with all effects applied to the nodes of this diagram.
	getNodes	Gets a collection of all nodes in the diagram.
	getNodesAt	Returns the nodes that contain the specified point.
	getNodesExpandable	Gets whether the tree branches that start from new nodes are expandable by default.
	getRecursiveExpand	Gets whether tree branches are expanded recursively.
	getRenderOptions	
	getRestrictItemsToBounds	Gets a value indicating whether users are allowed to move items outside the currently defined document bounds.
	getRoundedLinks	Gets if the joins between segments of Polyline and Cascading links should be rounded.
	getRoundedLinksRadius	Gets the radius of arc joins of rounded links' segments.
	getRouteLinks	Gets a value indicating whether links should avoid nodes by going the shortest path from their origin to their destination without crossing any other nodes.
	getRoutingOptions	Gets a RoutingOptions instance that lets you set various attributes of link routing algorithms.
	getSelectAfterCreate	Gets a value indicating whether newly created items are selected automatically.
	getSelectedItemHandlesStyle	Gets the visual style of the manipulation handles displayed around selected items.
	getSelection	Gets a Selection instance representing the current selection.
	getSelectionOnTop	Gets a value indicating whether selected items are drawn on top of the non-selected ones.
	getShadowBrush	Gets .the default brush used to paint the shadows cast by diagram items.
	getShadowOffsetX	Gets the default horizontal distance between shadows and the items that cast them.
	getShadowOffsetY	Gets the default vertical distance between shadows and the items that cast them.
	getShadowsStyle	Gets the style of shadows.
	getShapeBrush	Gets the default brush assigned to new nodes.
	getShapeCustomDraw	Gets whether new nodes should be custom drawn and what type of custom drawing will be performed on them.
	getShapeHandlesStyle	Gets the default value for the HandlesStyle property of new shape nodes.
	getShapeNodeStyle	Gets the theme-level style for shape nodes.
	getShapeOrientation	Gets the default shape definition orientation angle assigned to new nodes.

	getShapePen	Gets the default pen assigned to new nodes.
	getShapeText	Gets the default text assigned to new nodes.
	getShowAnchors	Gets a value indicating whether anchor points should be shown on screen.
	getShowDisabledHandles	Gets whether disabled manipulation handles are displayed.
	getShowGrid	Gets a value indicating whether the alignment grid is displayed.
	getShowHandlesOnDrag	Gets whether selection handles of objects under the pointer are displayed while another object is being modified.
	getSnapToAnchor	Gets a value indicating when links should snap to anchor points.
	getStyle	Gets the style associated with the diagram.
	getSvgNodeStyle	Gets the theme-level style for SVG nodes.
	getTableBrush	Gets the default brush assigned to new tables.
	getTableCaption	Gets the default caption text assigned to new tables.
	getTableCaptionHeight	Gets the default height of the caption bar of new tables.
	getTableColumnCount	Gets how many columns new tables have by default.
	getTableColumnWidth	Gets the default width of the columns of new tables.
	getTableConnectionStyle	Gets how users are allowed to link tables to each other - as integral entities, by rows, or both.
	getTableCustomDraw	Gets the default type of custom painting applied to new tables.
	getTableHandlesStyle	Gets the default style of table selection handles.
	getTableNodeStyle	Gets the theme-level style for table nodes.
	getTablePen	Gets the default pen assigned to new tables.
	getTableRowCount	Gets how many rows new tables have by default.
	getTableRowHeight	Gets the default height of the row of new tables.
	getTableShape	Gets the default value of the Shape property of new tables.
	getTablesScrollable	Gets a value indicating whether users are allowed to scroll new tables.
	getTag	Gets the custom data associated with this diagram.
	getTextColor	Gets the default text color that is assigned to new items.
	getTextFormat	Gets the default format and alignment of the text of new items.
	getTheme	Gets the theme associated with the diagram.
	getToolTip	Gets the tooltip text.

	getTreeViewNodeStyle	Gets the theme-level style for tree view nodes.
	getTypeTable	Gets the table of registered item types.
	getUndoManager	Gets the diagram's UndoManager.
	getValidityChecks	
	handleKeyDown	Propagates keyboard input to interested manipulators and components.
	handleKeyPress	Propagates keyboard input to interested manipulators.
	handleKeyUp	Propagates keyboard input to interested components.
	handlePointerMove	Propagates mouse input to interested manipulators.
	hitTestComponents	
	hitTestLabels	Returns the item label located at specified position.
	imageToDoc	Transforms points from the image coordinate space to the document coordinate space.
	imageToDocX	Converts from image coordinates to document coordinates.
	imageToDocY	Converts from image coordinates to document coordinates.
	imageUpdate	
	init	Returns a DiagramBuilder object used to configure this Diagram instance.
	isClassRegistered	
	isClientClassRegistered	
	isItemInteractive	Checks if the specified item can be modified interactively.
	isItemLocked	Checks if the specified item is locked.
	isItemVisible	Checks if the specified item is currently visible.
	items	Iterates over diagram items of the desired type
	loadFromJson	Overloaded.
	loadFromJsonString	Loads the diagram from a JSON-formatted string.
	loadFromString	Decodes diagram contents from a string previously created by saveToString.
	loadFromXml	Overloaded.
	measureString	Measures a text taking into consideration the current affine transform of the diagram.
	pasteSelection	Adds the specified items and groups to the specified diagram document.
	raiseActionRedone	Raises the actionRedone event.
	raiseActionUndone	Raises the actionUndone event.

	raiseCellTextEdited	Raises the DiagramListener.cellTextEdited event.
	raiseCellTextEditing	Raises the cellTextEditing event to validate entering in-place editing mode.
	raiseClicked	Overloaded.
	raiseDeleting	Raises the appropriate *Deleting (linkDeleting or nodeDeleting) event.
	raiseDoubleClicked	Overloaded.
	raiseLinkTextEdited	Raises the linkTextEdited event.
	raiseLinkTextEditing	Raises the linkTextEditing event to validate entering in-place editing mode.
	raiseNodeTextEdited	Raises the nodeTextEdited event.
	raiseNodeTextEditing	Raises the nodeTextEditing event to validate entering inplace edit mode.
	raiseTreeCollapsed	Raises the treeCollapsed event.
	raiseTreeExpanded	Raises the treeExpanded event.
	raiseTreeItemTextEdited	Raises the DiagramListener.treeItemTextEdited event.
	raiseViewRemoved	Raises the DiagramListener.viewRemoved event.
S	registerClass	Overloaded.
S	registerItemClass	Overloaded.
	removeDiagramListener	Unregisters listener so that it will no longer receive diagram events.
	repaint	Overloaded.
	resizeToFitItems	Overloaded.
	resumeLinkRouter	Called when the control ends a batch update operation that might affect many links.
	routeAllLinks	Overloaded.
	saveTo	Overloaded.
	saveToJson	Overloaded.
	saveToJsonString	Saves the diagram to a JSON-formatted string.
	saveToString	Overloaded. Saves the diagram contents into a string.
	saveToXml	Overloaded.
	setActiveItem	Sets the active item.
	setActiveLayer	Sets the zero-based index of the active layer.
	setAdjustmentHandlesSize	Sets the size of selection handles.
	setAlignmentGuidePen	Sets the pen used to draw alignment guides.

	setAlignToGrid	Sets a value indicating whether items should be aligned to the alignment grid while users draw them.
	setAllowLinksRepeat	Sets a value indicating whether users are allowed to draw more than one links between the same nodes.
	setAllowMultipleResize	Sets whether multiple selected nodes can be resized simultaneously.
	setAllowSelfLoops	Sets whether users are allowed to draw reflexive links.
	setAllowSplitLinks	Sets whether link segments can be added and removed interactively.
	setAllowUnanchoredLinks	Sets a value indicating whether users are allowed to attach links to nodes that do not have any anchor points.
	setAllowUnconnectedLinks	Sets a value indicating whether users are allowed to draw unconnected links.
	setAutoAlignDistance	Sets the maximal horizontal or vertical distance at which a node aligns to the borders of other nodes.
	setAutoAlignNodes	Sets whether nodes should automatically align to the borders of other nodes during user interaction.
	setAutoCloseDistance	Sets the maximum distance between first and last points of a **FreeFormNode** for which the node's outline is closed automatically.
	setAutoDeleteLinks	Sets whether links are deleted automatically when their **Origin** or **Destination** is deleted.
	setAutoResize	Sets a value specifying whether the document scrollable area should be resized automatically when users draw items near the edges of the diagram.
	setAutoSnapDistance	Specifies the maximum distance at which links auto-snap to nodes.
	setAutoSnapLinks	Sets the default value for the **AutoSnapToNode** property of new links.
	setBackBrush	Sets the diagram's background brush.
	setBackgroundImage	Overloaded.
	setBackgroundImageAlign	Sets how the background image should be positioned relatively to the scrollable area of the diagram.
	setBackgroundImageUrl	Sets the URL of the background image.
	setBounds	Overloaded.
	setBoundsPen	Sets the pen with which document bounds are drawn.
	setCellCustomDraw	Sets the default type of custom painting applied to cells of new tables.
	setCellFrameStyle	Sets the default style of the cell frames of new tables.
	setContainerCaption	Sets the default value for the caption of containers.
	setContainerCaptionHeight	Sets the default value for the caption height of containers.

	setContainerHighlightPen	Sets the default value for the HighlightPen of containers.
	setContainerMargin	Sets the default value for the Margin attribute of containers.
	setContainerMinimumSize	Sets the default value for the minimum size of containers.
	setContainersFoldable	Sets the default value for the Foldable property of containers.
	setCrossingRadius	Sets the radius of the shapes drawn at link crossing points.
	setDefaultControlType	Sets the type of components that will be hosted by default in newly created **ControlNode** objects.
	setDefaultShape	Sets the default shape that should be assigned to new nodes. The shape of individual nodes can be set by calling their ShapeNode.setShape method.
	setDirty	Overloaded. Lets you set or clear the diagram's modification flag.
	setDynamicLinks	Sets a value indicating whether links should automatically update their end points positions so that they will always point towards the node centers.
	setEnableLanes	Sets whether lanes are enabled.
	setEnableSpatialIndex	Sets whether to index item positions for faster hit-testing and viewport clipping queries.
	setEnableStyledText	Sets a value indicating whether newly created nodes should display richly formatted text.
	setExpandButtonAction	Sets what should happen when a user clicks the +/- button that is displayed near expandable nodes.
	setExpandButtonPosition	Sets where expand/collapse buttons are located relatively to their nodes.
	setExpandOnIncoming	Sets which direction of links is considered the tree direction when expanding or collapsing diagram branches.
	setFocusedComponent	Sets the component within this diagram which is currently holding the input focus.
	setFocusedManipulator	Sets the manipulator currently holding the input focus.
	setFoldedContainerSize	Sets the size of folded containers.
	setFont	Sets the default font for new diagram items.
	setFreeFormAttractDistance	Sets the radius around dragged free-form adjustment handle in which other points of **FreeFormNode** are modified too.
	setFreeFormTargets	Sets an array of **Shape** objects used to replace **FreeFormNode** instances with **ShapeNode** ones when Behavior is set to LinkFreeShapes or DrawFreeShapes.
	setGridColor	Sets the color of the alignment grid.
	setGridOffsetX	Sets the horizontal offset of the first point of the alignment grid.

	setGridOffsetY	Sets the vertical offset of the first point of the alignment grid.
	setGridSizeX	Sets the horizontal distance between grid points.
	setGridSizeY	Sets the vertical distance between grid points.
	setGridStyle	Sets the appearance style of the alignment grid.
	setHitTestPriority	Sets a value indicating the order in which items are hit-tested.
	setHoverDelay	Sets the time in milliseconds that mouse pointer should remain stationary before reporting hover events.
	setImageDpiX	Sets the default resolution of images.
	setImageDpiY	
	setLinkBaseShape	Sets what shape should be displayed at the origin of new links.
	setLinkBaseShapeSize	Sets the default size of the shape displayed at the origin of new links.
	setLinkBranchIndicator	
	setLinkBrush	Sets the default brush that should be assigned to new links.
	setLinkCascadeOrientation	Sets the default orientation of the first segments of cascading links.
	setLinkCrossings	Sets what shapes should be drawn at the points where links cross.
	setLinkCustomDraw	Sets the default type of custom painting done on links.
	setLinkEndsMovable	Sets a value indicating users are allowed to move the end points of a link after the link is created.
	setLinkHandlesStyle	Sets the style of selection handles that should be assigned to new links.
	setLinkHeadShape	Sets what shape should be displayed as arrowhead of new links.
	setLinkHeadShapeSize	Sets the default size of the shape displayed as arrowhead of new links.
	setLinkIntermediateShape	Sets what shape should be displayed at the middle of links segments.
	setLinkIntermediateShapeSize	Sets the default size of the shape displayed at the middle of links segments.
	setLinkPen	Sets the default pen that should be assigned to new links.
	setLinkRouter	Sets the component used to find paths for auto-routed links when diagram nodes are added or their positions change.
	setLinkSegments	Sets the default number of link segments.
	setLinkShape	Sets the style that should be assigned to new links.

	setLinksRetainForm	Sets a value indicating whether new links are set to maintain their shapes while the nodes they connect are moved around.
	setLinkText	Sets the default text that should be assigned to new links.
	setLinkTextStyle	Sets the default placement and orientation of the links labels.
	setMeasureUnit	Sets the units for measuring of lengths and sizes.
	setMergeThreshold	Sets the maximum distance between adjacent control points of a link at which the respective segments can be merged.
	setNodesExpandable	Sets whether the tree branches that start from new nodes should be expandable by default.
	setRecursiveExpand	Sets whether tree branches should be expanded recursively.
	setRestrictItemsToBounds	Sets a value indicating whether users are allowed to move items outside the currently define document bounds.
	setRoundedLinks	Sets if the joins between segments of Polyline and Cascading links should be rounded.
	setRoundedLinksRadius	Sets the radius of arc joins of rounded links' segments.
	setRouteLinks	Sets a value indicating whether links should avoid nodes by going the shortest path from their origin to their destination without crossing any other nodes.
	setSelectAfterCreate	Sets a value indicating whether newly created items should be selected automatically.
	setSelectionOnTop	Sets a value indicating whether selected items should be drawn on top of the non-selected ones.
	setShadowBrush	Sets the default brush used to paint the shadows cast by diagram items.
	setShadowOffset	Sets the distance at which shadows are offset from the items that cast them.
	setShadowOffsetX	Sets the default horizontal distance between shadows and the items that cast them.
	setShadowOffsetY	Sets the default vertical distance between shadows and the items that cast them.
	setShadowsStyle	Sets the style of shadows.
	setShapeBrush	Sets the default brush that should be assigned to new nodes.
	setShapeCustomDraw	Sets whether new nodes should be custom drawn and what type of custom drawing will be performed on them.
	setShapeHandlesStyle	Sets the default value for the HandlesStyle property of new shape nodes.
	setShapeOrientation	Sets the default shape definition orientation angle assigned to new nodes.

	setShapePen	Sets the default pen that should be assigned to new nodes.
	setShapeText	Sets the default text to new nodes.
	setShowAnchors	Sets a value indicating whether anchor points should be shown on screen.
	setShowDisabledHandles	Sets whether disabled manipulation handles will be displayed.
	setShowGrid	Sets a value indicating whether the alignment grid is displayed.
	setShowHandlesOnDrag	Sets whether selection handles of objects under the pointer are displayed while another object is being modified.
	setSnapToAnchor	Sets a value indicating when links should snap to anchor points.
	setStyle	Sets the style associated with the diagram.
	setTableBrush	Sets the default brush that is assigned to new tables.
	setTableCaption	Sets the default caption text that should be assigned to new tables.
	setTableCaptionHeight	Sets the default height of the caption bar of new tables.
	setTableColumnCount	Sets how many columns should be allocated to new tables.
	setTableColumnWidth	Sets the default width of columns in newly created tables.
	setTableConnectionStyle	Sets how users are allowed to link tables to each other - as integral entities, by rows, or both.
	setTableCustomDraw	Sets the default type of custom painting applied to new tables.
	setTableHandlesStyle	Sets the style of selection handles that should be assigned to new tables.
	setTablePen	Sets the default pen that should be assigned to new tables.
	setTableRowCount	Sets how many rows should be allocated to new tables.
	setTableRowHeight	Sets the default height of rows in newly created tables.
	setTableShape	Sets the default value of the **Shape** property of new tables.
	setTablesScrollable	Sets a value indicating whether users are allowed to scroll new tables.
	setTag	Associates a custom data with this diagram.
	setTextColor	Sets the default text color to be assigned to new items.
	setTextFormat	Sets the default format and alignment of the text of new items.
	setTheme	Sets the theme associated with the diagram.
	setToolTip	Sets the tooltip text that is displayed when the pointer hovers over an unoccupied area of the diagram.

	setValidityChecks	
	suspendLinkRouter	Called when the control starts a batch update operation that might affect many links. The diagram collects links specified through route and routeAllLinks calls and defers finding their paths to when **resumeLinkRouter** is called.
	updateRuntimeIndices	Assigns consecutive values to the RuntimeIndex property of items.
S	with	Returns a DiagramBuilder object used to configure and create new Diagram instances.

Protected Methods

	Name	Description
	getValue	Gets the effective value of the style property with the specified name.

See Also

Diagram Class
com.mindfusion.diagramming Namespace

Diagram Constructor

Initializes a new instance of the Diagram class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Diagram ()`

See Also

Diagram Class
com.mindfusion.diagramming Namespace

Diagram Methods

Diagram.add Method

Overload List

Name	Description
Diagram.add (DiagramItem)	Adds a new item to the diagram.

Diagram.add (DiagramItem, boolean)	Adds a new item to the diagram and optionally selects it.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.add Method (DiagramItem)

Adds a new item to the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void add (
    DiagramItem item
)
```

Parameters

item
A DiagramItem that should be added to the diagram.

See Also

add Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.add Method (DiagramItem, boolean)

Adds a new item to the diagram and optionally selects it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void add (
    DiagramItem item,
    boolean select
)
```

Parameters

item
A DiagramItem that should be added to the diagram.

select

true if the item should be selected, otherwise **false**.

See Also

add Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.addDiagramListener Method

Registers listener so that it will receive events when users create, modify or delete diagram items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addDiagramListener (
    DiagramListener listener
)
```

Parameters

listener
An object implementing the DiagramListener interface.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
removeDiagramListener Method
getDiagramListeners Method

Diagram.alignPointToGrid Method

Aligns a point to the alignment grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D.Float alignPointToGrid (
    Point2D.Float point
)
```

Parameters

point
A **Point2D.Float** object representing the point that must be aligned to the grid.

Return Value

A **Point2D.Float** object representing the aligned point.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.arrange Method

Arranges the diagram using the specified graph layout algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    AbstractLayout layout
)
```

Parameters

layout
An instance of an AbstractLayout subclass.

Return Value

true if the diagram has been arranged successfully, or **false** otherwise.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.arrangeLinkLabels Method

Rearranges link labels whose AutoArrange property is enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void arrangeLinkLabels ()
```

See Also

Diagram Members
Diagram Class

Diagram.changeUnit Method

Sets new MeasureUnit value and scales the coordinates of diagram items so that their absolute size remains unchanged.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void changeUnit (
    GraphicsUnit newUnit
)
```

Parameters

newUnit
A member of the GraphicsUnit enumeration.

Remarks

This method scales the coordinates of nodes' Bounds values and links' ControlPoints to preserve their size when measured in the new unit. In addition, it scales values of some size and distance -related properties such as HeadShapeSize and CaptionHeight.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.clearAll Method

Deletes all items from the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void clearAll ()
```

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.copySelection Method

Creates a copy of the currently selected objects and groups.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SelectionCopy copySelection (
    Diagram source,
    boolean unconnectedLinks,
    boolean copyGroups
)
```

Parameters

source
The source diagram.

unconnectedLinks
true to allow copying unconnected links; otherwise, **false**.

copyGroups
true to copy group information; otherwise, **false**.

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.createImage Method

Creates a bitmap image representing the diagram contents.

Overload List

Name	Description
Diagram.createImage ()	Creates a bitmap image representing the diagram contents.
Diagram.createImage (int)	Creates a bitmap image representing the diagram contents.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.createImage Method ()

Creates a bitmap image representing the diagram contents.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Image createImage ()
```

Return Value

java.awt.Image object containing a representation of the diagram.

See Also

createImage Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.createImage Method (int)

Creates a bitmap image representing the diagram contents.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public BufferedImage createImage (
    int imageType
)
```

Parameters

imageType
One of the BufferedImage type constants.

Return Value

A **java.awt.image.BufferedImage** object containinga representation of the diagram.

See Also

createImage Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.createItem Method

Implements the IItemFactory interface.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Object createItem (
    String itemClass
)
```

Parameters

itemClass
The class string id of the item to create.

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.createStyledText Method

Creates a styled text object for the specified text string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Object createStyledText (
    Graphics2D graphics,
    String text,
    Font font
)
```

Parameters

graphics

text

font

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.createThemeFromDefaults Method

Creates a Theme object representing the default properties of the diagram. This method is only for compatibility with files saved with versions earlier than 4.0.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Theme createThemeFromDefaults ()
```

Return Value

An instance of the Theme class.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.destroyGroup Method

Destroys the specified group. The group items are not deleted, unless its setAutoDeleteItems method is calles.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void destroyGroup (
    Group group
)
```

Parameters

group
The Group to destroy.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.draw Method

Renders the diagram on the specified **Graphics2D** object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public void draw (
    Graphics2D graphics,
    RenderOptions options,
    Rectangle2D clipRect
)
```

Parameters

graphics
The **Graphics2D** surface to draw the diagram on.

options
A RenderOptions object specifying options for the drawing operation.

clipRect
A **Rectangle2D** specifying the current clipping rectangle.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.drawAlignmentGuides Method

Draws the current alignment guides.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void drawAlignmentGuides (
    Graphics2D graphics
)
```

Parameters

graphics
A **Graphics2D** instance.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.drawLayer Method

Renders all items of a layer to the specified graphics.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void drawLayer (
    Graphics2D g,
    Rectangle2D backgroundRect,
    int layerIndex,
    RenderOptions options
)
```

Parameters

g

backgroundRect

layerIndex

options

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.drawString Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void drawString (
    String text,
    Graphics2D graphics,
    Font font,
    Brush brush,
    Rectangle2D bounds,
    TextFormat format
)
```

Parameters

text

graphics

font

brush

bounds

format

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.drawStyledText Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void drawStyledText (
    Graphics2D graphics,
    String text,
    Font font,
    Rectangle2D textBounds,
    TextFormat format,
    Brush textBrush
)
```

Parameters

graphics

text

font

textBounds

format

textBrush

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.drawTextObject Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void drawTextObject (
    Graphics2D graphics,
    Object text,
    Font font,
    Rectangle2D textBounds,
    TextFormat format,
    Brush textBrush
)
```

Parameters

graphics

text

font

textBounds

format

textBrush

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.enumByReverseZ Method

Hit-tests diagram items in reverse Z order.

Overload List

Name	Description
Diagram.enumByReverseZ (Point2D, double, ProcessItem)	Hit-tests diagram items in reverse Z order.
Diagram.enumByReverseZ (Point2D, ProcessItem)	Hit-tests diagram items in reverse Z order.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.enumByReverseZ Method (Point2D, double, ProcessItem<DiagramItem>)

Hit-tests diagram items in reverse Z order.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void enumByReverseZ (
    Point2D hitTest,
    double threshold,
    ProcessItem<DiagramItem> processItem
)
```

Parameters

hitTest

threshold

processItem

See Also

enumByReverseZ Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.enumByReverseZ Method (Point2D, ProcessItem<DiagramItem>)

Hit-tests diagram items in reverse Z order.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void enumByReverseZ (
    Point2D hitTest,
    ProcessItem<DiagramItem> processItem
)
```

Parameters

hitTest

processItem

See Also

enumByReverseZ Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.enumTopLevelByReverseZ Method

Hit-tests diagram top-level items in reverse Z order.

Overload List

Name	Description
Diagram.enumTopLevelByReverseZ (Point2D, double, ProcessItem)	Hit-tests diagram top-level items in reverse Z order.
Diagram.enumTopLevelByReverseZ (Point2D, ProcessItem)	Hit-tests diagram top-level items in reverse Z order.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.enumTopLevelByReverseZ Method (Point2D, double, ProcessItem<DiagramItem>)

Hit-tests diagram top-level items in reverse Z order.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void enumTopLevelByReverseZ (
    Point2D hitTest,
    double threshold,
    ProcessItem<DiagramItem> processItem
)
```

Parameters

hitTest

threshold

processItem

See Also

enumTopLevelByReverseZ Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.enumTopLevelByReverseZ Method (Point2D, ProcessItem<DiagramItem>)

Hit-tests diagram top-level items in reverse Z order.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void enumTopLevelByReverseZ (
    Point2D hitTest,
    ProcessItem<DiagramItem> processItem
)
```

Parameters

hitTest

processItem

See Also

enumTopLevelByReverseZ Method Overload List
Diagram Members

Diagram.executeCommand Method

Executes a command and saves it in the undo/redo history.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void executeCommand (
    Command cmd
)
```

Parameters

cmd
The Command to execute.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.findGroup Method

Finds the group that has the specified tag.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Group findGroup (
    Object tag
)
```

Parameters

tag
An Object to which the tag of the found group should be equal.

Return Value

A reference to the found Group.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.findLink Method

Finds the link that has the specified tag.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink findLink (
    Object tag
)
```

Parameters

tag
An Object to which the tag of the found link should be equal.

Return Value

A reference to the found DiagramLink.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.findLinkById Method

Finds the link that has the specified id value.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink findLinkById (
    Object id
)
```

Parameters

id
An Object to which the id of the found link should be equal.

Return Value

A reference to the found DiagramLink.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.findNode Method

Finds the node that has the specified tag.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode findNode (
    Object tag
)
```

Parameters

tag
An **Object** to which the tag of the found node should be equal.

Return Value

A reference to the found DiagramNode.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.findNodeById Method

Finds the node that has the specified id value.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode findNodeById (
    Object id
)
```

Parameters

id
An Object to which the id of the found node should be equal.

Return Value

A reference to the found DiagramNode.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getActiveItem Method

Gets the active item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem getActiveItem ()
```

Return Value

A reference to the active DiagramItem.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getActiveItemHandlesStyle Method

Gets the visual style of the manipulation handles displayed around the active item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public HandlesVisualStyle getActiveItemHandlesStyle ()
```

Return Value

A HandlesVisualStyle object representing the visual style of theselection handles of the active item.

Example

This style object provides Pen and Brush attributes that let you customize the appearance of adjustment handles drawn around the active item.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getActiveLayer Method

Gets the zero-based index of the active layer.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getActiveLayer ()
```

Return Value

An integer value that specifies the index of the active layer.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getAdjustmentHandlesSize Method

Gets the size of selection handles.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getAdjustmentHandlesSize ()
```

Return Value

A float value specifying the size of selection handles.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getAlignmentGuidePen Method

Gets the pen used to draw alignment guides.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Pen getAlignmentGuidePen ()
```

Return Value

A Pen instance.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
setAlignmentGuidePen method

Diagram.getAlignToGrid Method

Gets a value indicating whether items are aligned to the alignment grid while users draw them.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getAlignToGrid ()
```

Return Value

true if items are automatically aligned to the grid, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getAllowLinksRepeat Method

Gets a value indicating whether users are allowed to draw more than one links between the same nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getAllowLinksRepeat ()
```

Return Value

true if users are allowed to draw more than one link between the same nodes, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getAllowMultipleResize Method

Gets whether multiple selected nodes can be resized simultaneously.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowMultipleResize ()
```

Return Value

true to let the user resize multiple selected nodes; otherwise, **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getAllowSelfLoops Method

Gets whether users are allowed to draw reflexive links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowSelfLoops ()
```

Return Value

true if users are allowed to draw reflexive links, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getAllowSplitLinks Method

Gets whether link segments can be added and removed interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getAllowSplitLinks ()
```

Return Value

true to make new links splittable by default, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getAllowUnanchoredLinks Method

Gets a value indicating whether users are allowed to attach links to nodes that do not have any anchor points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getAllowUnanchoredLinks ()
```

Return Value

true if users are allowed to attach links to nodes that do not have anchor points, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getAllowUnconnectedLinks Method

Gets a value indicating whether users are allowed to draw unconnected links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getAllowUnconnectedLinks ()
```

Return Value

true if users are allowed to draw unconnected links, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getAutoAlignDistance Method

Gets the maximal horizontal or vertical distance at which a node aligns to the borders of other nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getAutoAlignDistance ()
```

Return Value

A float value specifying the maximal distance.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
setAutoAlignDistance Method

Diagram.getAutoAlignNodes Method

Gets whether nodes should automatically align to the borders of other nodes during user interaction.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAutoAlignNodes ()
```

Return Value

true if nodes should align, otherwise **false**. The default value is **false**.

See Also

Diagram Members
Diagram Class

Diagram.getAutoCloseDistance Method

Gets the maximum distance between first and last points of a FreeFormNode for which the node's outline is closed automatically.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getAutoCloseDistance ()
```

Return Value

A **float** value.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
Closed Property

Diagram.getAutoDeleteLinks Method

Gets whether links are deleted automatically when their Origin or Destination is deleted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getAutoDeleteLinks ()
```

Return Value

true if links are deleted automatically, or **false** otherwise. The default value is **true**.

Remarks

If this property is set to **false**, deleting a node will leave its links in the diagram as unconnected links.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
DelKeyAction Property

Diagram.getAutoResize Method

Gets a value specifying whether the document scrollable area is resized automatically when users draw items near the edges of the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AutoResize getAutoResize ()
```

Return Value

A member of the AutoResize enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getAutoSnapDistance Method

Specifies the maximum distance at which links auto-snap to nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getAutoSnapDistance ()
```

Return Value

A float value specifying the maximum distance.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getAutoSnapLinks Method

Gets the default value for the AutoSnapToNode property of new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAutoSnapLinks ()
```

Return Value

true to snap links to nearest node, otherwise **false**; the default value is **false**.

Remarks

Only nodes at a distance smaller than AutoSnapDistance are considered. A link does not snap to its current origin or destination nodes if that would create a self-loop.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getBackBrush Method

Gets the diagram's background brush.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getBackBrush ()
```

Return Value

The background Brush.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getBackgroundImage Method

Gets the background image.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Image getBackgroundImage ()
```

Return Value

The background **java.awt.Image** object.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getBackgroundImageAlign Method

Gets how the background image is positioned relatively to the scrollable area of the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ImageAlign getBackgroundImageAlign ()
```

Return Value

A member of the ImageAlign enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getBackgroundImageUrl Method

Gets the URL of the background image.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getBackgroundImageUrl ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getBookmarks Method

Gets a collection of all saved bookmarks / areas of interest defined in this diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ObservableList<DiagramBookmark> getBookmarks ()
```

Return Value

An ObservableList of DiagramBookmark objects.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getBounds Method

Gets the bounds of the scrollable area of the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Rectangle2D.Float getBounds ()
```

Return Value

A **Rectangle2D.Float** object representing the current diagram scrollable region.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getBoundsPen Method

Gets the pen with which the diagram bounds are drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Pen getBoundsPen ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getCellCustomDraw Method

Gets the default type of custom painting applied to cells of new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public CustomDraw getCellCustomDraw ()
```

Return Value

A member of the CustomDraw enumeration. The default is **CustomDraw.None**.

Remarks

This value is assigned to the CellCustomDraw property of new tables.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getCellFrameStyle Method

Gets the default style of the cell frames of new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public CellFrameStyle getCellFrameStyle ()
```

Return Value

A member of the CellFrameStyle enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getClsidTable Method

Gets the table of registered item identifiers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public HashMap<String, ClassDescriptor> getClsidTable ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getContainerCaption Method

Gets the default value for the Caption attribute of containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getContainerCaption ()
```

Return Value

A **String** containing the default caption string.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getContainerCaptionHeight Method

Gets the default value for the CaptionHeight attribute of containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getContainerCaptionHeight ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getContainerHighlightPen Method

Gets the default value for the HighlightPen attribute of containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Pen getContainerHighlightPen ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getContainerMargin Method

Gets the default value for the Margin attribute of containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getContainerMargin ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getContainerMinimumSize Method

Gets the default value for the MinimumSize attribute of containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Dimension2D getContainerMinimumSize ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getContainerNodeStyle Method

Gets the theme-level style for container nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ContainerNodeStyle getContainerNodeStyle ()
```

Return Value

A ContainerNodeStyle instance.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getContainersFoldable Method

Gets the default value for the Foldable attribute of containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getContainersFoldable ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getContentBounds Method

Returns the smallest rectangle that bounds all diagram items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getContentBounds (
    boolean forPrint,
    boolean onlyVisible
)
```

Parameters

forPrint
Specifies whether only printable items should be considered.

onlyVisible
Specifies whether only visible items should be considered.

Return Value

A Rectangle2D instance representing the smallest rectangle that bounds all diagram items.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getCrossingRadius Method

Gets the radius of the shapes drawn at link crossing points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getCrossingRadius ()
```

Return Value

A float value specifying the size of the shapes drawn at link intersection points.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getDefaultControlType Method

Gets the type of components that will be hosted by default in newly created ControlNode objects.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Class<? extends Component> getDefaultControlType ()
```

Return Value

A **Class** instance specifying a **java.awt.Component** -derived type.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
setDefaultControlType Method

Diagram.getDefaultShape Method

Gets the default shape of nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Shape getDefaultShape ()
```

Return Value

The default Shape object that is assigned to newly created nodes.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getDiagramLinkStyle Method

Gets the theme-level style for diagram links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramLinkStyle getDiagramLinkStyle ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getDiagramListeners Method

Gets the list of currently registered event listeners.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public EventListenerList getDiagramListeners ()
```

Return Value

A **javax.swing.event.EventListenerList** instance.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
addDiagramListener Method

Diagram.getDiagramStyle Method

Gets the theme-level style for the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramStyle getDiagramStyle ()
```

Return Value

A DiagramStyle instance.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getDirty Method

Indicates whether the diagram has changed since the last save.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getDirty ()
```

Return Value

true if there diagram has changed since the last save, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getDisabledHandlesStyle Method

Gets the visual style of disabled manipulation handles.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public HandlesVisualStyle getDisabledHandlesStyle ()
```

Return Value

A HandlesVisualStyle object representing the visual style ofdisabled selection handles.

Remarks

This style object provides Pen and Brush attributes that let you customize the appearance of disabled adjustment handles.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getDummy Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DummyNode getDummy ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getDynamicLinks Method

Gets a value indicating whether links automatically update their end points positions so that they will always point towards the node centers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getDynamicLinks ()
```

Return Value

true if newly created links are set to update their end point positions automatically, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getEffectiveBackBrush Method

Gets the currently effective background brush of the diagram. This property returns the BackBrush if it is not null, or the brush from the associated style or theme otherwise.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getEffectiveBackBrush ()
```

Return Value

A Brush instance.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getEnableLanes Method

Gets whether lanes are enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getEnableLanes ()
```

Return Value

true if lanes are enabled; otherwise, **false**. The default is **false**.

Remarks

The swimlane grid can be customized through the Grid instance returned by getLaneGrid.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
setEnableLanes method

Diagram.getEnableSpatialIndex Method

Gets whether to index item positions for faster hit-testing and viewport clipping queries.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getEnableSpatialIndex ()
```

Return Value

true to enable spatial indexing, or **false** otherwise. The default value is **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getEnableStyledText Method

Gets a value indicating whether new nodes display richly formatted text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getEnableStyledText ()
```

Return Value

true if text formatting tags are processed by default, otherwise false.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getExpandButtonAction Method

Gets what should happen when a user clicks the +/- button that is displayed near expandable nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ExpandButtonAction getExpandButtonAction ()
```

Return Value

A member of the ExpandButtonAction enumeration; the default value is **ExpandTreeBranch**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getExpandButtonPosition Method

Gets where expand/collapse buttons are located relatively to their nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ExpandButtonPosition getExpandButtonPosition ()
```

Return Value

A member of the ExpandButtonPosition enumeration. The default is **OuterRight**.

Remarks

If diagram links tend to flow vertically, it would be useful to have the expand/collapse buttons stay at the left- or right-hand side of nodes. If diagram links tend to flow horizontally, choose position for expand buttons such that they stay above or below nodes. That will prevent button icons from being overlapped by links.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
setExpandButtonPosition Method
getExpandButtonAction Method
getNodesExpandable Method

Diagram.getExpandOnIncoming Method

Gets which direction of links is considered the tree direction when expanding or collapsing diagram branches.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getExpandOnIncoming ()
```

Return Value

true is tree branches are expanded in the direction of incoming links, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getFactory Method

Gets a Factory instance that lets you add programmatically new items to the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Factory getFactory ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getFocusedComponent Method

Gets the component within this diagram which is currently holding the input focus.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ComponentBase getFocusedComponent ()
```

Return Value

An instance of ComponentBase -derived class that should receive keyboard events.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getFocusedManipulator Method

Gets the manipulator currently holding the input focus.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Manipulator getFocusedManipulator ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getFoldedContainerSize Method

Gets the size of folded containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Dimension2D getFoldedContainerSize ()
```

Return Value

A **Dimension2D** instance specifying the size of folded containers. The default value is **null**.

Remarks

The FoldedSize property of new containers is initialized with this value.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getFont Method

Gets the default font for new diagram items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Font getFont ()
```

Return Value

A **Font** object.

See Also

Diagram Members
Diagram Class

Diagram.getFormatBeingLoaded Method

Returns the file format id of the file currently being loaded.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static int getFormatBeingLoaded ()
```

Return Value

An integer value specifying the file version.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getFreeFormAttractDistance Method

Gets the radius around dragged free-form adjustment handle in which other points of FreeFormNode are modified too.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getFreeFormAttractDistance ()
```

Return Value

A **float** value.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getFreeFormTargets Method

Gets an array of Shape objects used to replace FreeFormNode instances with ShapeNode ones when Behavior is set to LinkFreeShapes or DrawFreeShapes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Shape[] getFreeFormTargets ()
```

Return Value

A Shape array.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getGridColor Method

Gets the color of the alignment grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Color getGridColor ()
```

Return Value

A **Color** object representing the grid color.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getGridOffsetX Method

Gets the horizontal offset of the first point of the alignment grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getGridOffsetX ()
```

Return Value

A float value that specifies the horizontal grid offset.

Remarks

The property specifies the offset of the first point of the alignment grid. The default value NaN makes the grid start at offset GridSizeX / 2.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
getShowGrid Method
getGridOffsetY Method
getMeasureUnit Method

Diagram.getGridOffsetY Method

Gets the vertical offset of the first point of the alignment grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getGridOffsetY ()
```

Return Value

A float value that specifies the vertical grid offset.

Remarks

The property specifies the offset of the first point of the alignment grid. The default value NaN makes the grid start at offset GridSizeY / 2.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
getShowGrid Method
getGridOffsetX Method
getMeasureUnit Method

Diagram.getGridSizeX Method

Gets the horizontal distance between grid points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getGridSizeX ()
```

Return Value

An integer value specifying the horizontal distance between grid points.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getGridSizeY Method

Gets the vertical distance between grid points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getGridSizeY ()
```

Return Value

An integer value specifying the vertical distance between grid points.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getGridStyle Method

Gets the appearance style of the alignment grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GridStyle getGridStyle ()
```

Return Value

A member of the GridStyle enumeration.

See Also

Diagram Members
Diagram Class

Diagram.getGroups Method

Gets a collection of all groups in the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GroupList getGroups ()
```

Return Value

A GroupList containing all groups in the diagram.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getHitTestPriority Method

Gets a value indicating the order in which items are hit-tested.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public HitTestPriority getHitTestPriority ()
```

Return Value

A member of the HitTestPriority enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getHoverDelay Method

Gets the time in milliseconds that mouse pointer should remain stationary before reporting hover events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getHoverDelay ()
```

Return Value

An integer value specifying milliseconds. The default value is 1500.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
nodeHovered Event
linkHovered Event
TrackPointedItem Property

Diagram.getImageDpiX Method

Specifies the default resolution of images.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getImageDpiX ()
```

Return Value

Remarks

It is used for conversion between image (pixel) coordinates and document coordinates. Some image formats contain this information and some not. Java has no standard way to obtain it, so this property is used instead. Zero means use default value. The default value is obtained from **Toolkit.getScreenResolution**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getImageDpiY Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getImageDpiY ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getInteraction Method

Gets an InteractionState instance representing the current action being carried out by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public InteractionState getInteraction ()`

Return Value

The current InteractionState.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getItemAt Method

Overload List

Name	Description
Diagram.getItemAt (Point2D, boolean)	Returns the top-most item that contains the specified point.
Diagram.getItemAt (Point2D, boolean, boolean)	Returns the top-most item that contains the specified point.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getItemAt Method (Point2D, boolean)

Returns the top-most item that contains the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem getItemAt (
    Point2D point,
    boolean excludeLocked
)
```

Parameters

point
A Point2D object specifying where to look for an item.

excludeLocked
true if locked items should be excluded from the search, otherwise **false**.

Return Value

The DiagramItem found at the specified position.

See Also

getItemAt Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getItemAt Method (Point2D, boolean, boolean)

Returns the top-most item that contains the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem getItemAt (
    Point2D point,
    boolean excludeLocked,
    boolean excludeModified
)
```

Parameters

point
A Point2D.Float object specifying where to look for an item.

excludeLocked
true if locked items should be excluded from the search, otherwise **false**.

excludeModified
true if modified items should be excluded from the search, otherwise **false**.

Return Value

The DiagramItem found at the specified position.

See Also

getItemAt Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getItems Method

Gets a collection of all items in the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItemList getItems ()
```

Return Value

An DiagramItemList containing all items in the diagram.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLaneGrid Method

Gets the Grid instance that represents the lane grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Grid getLaneGrid ()
```

Return Value

An instance of the Grid class.

Remarks

The Grid object gives you full control over the lane grid. For example, it lets you set the number of rows and columns in the grid, add headers, customize the appearance, subscribe to events and so on.

To show the swimlane grid, set the EnableLanes property to **true**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLayers Method

Gets a list of the layers in the current diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public List<Layer> getLayers ()
```

Return Value

A list of Layer objects.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkAt Method

Overload List

Name	Description
Diagram.getLinkAt (Point2D, double, boolean)	Returns the top-most link that passes near the specified point.
Diagram.getLinkAt (Point2D, double, boolean, boolean)	Returns the top-most link that passes near the specified point.
Diagram.getLinkAt (Point2D, double, boolean, boolean, ByRef)	Returns the top-most link that passes near the specified point.
Diagram.getLinkAt (Point2D.Float, float)	Returns the top-most link that passes near the specified point.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkAt Method (Point2D, double, boolean)

Returns the top-most link that passes near the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink getLinkAt (
    Point2D point,
    double maxDist,
    boolean exclLocked
)
```

Parameters

point
A **Point2D** object specifying where to look for a link.

maxDist
Specifies the maximum allowed distance from the point to the link.

exclLocked
true if locked links should be excluded from the search, otherwise **false**.

Return Value

The DiagramLink found at the specified position.

See Also

getLinkAt Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkAt Method (Point2D, double, boolean, boolean)

Returns the top-most link that passes near the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink getLinkAt (
    Point2D point,
    double maxDist,
    boolean excludeLocked,
    boolean excludeModified
)
```

Parameters

point
A **Point2D** object specifying where to look for a link.

maxDist
Specifies the maximum allowed distance from the point to the link.

excludeLocked
true if locked links should be excluded from the search, otherwise **false**.

excludeModified
true if modified links should be excluded from the search, otherwise **false**.

Return Value

The DiagramLink found at the specified position.

See Also

getLinkAt Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkAt Method (Point2D, double, boolean, boolean, ByRef<Integer>)

Returns the top-most link that passes near the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink getLinkAt (
    Point2D point,
    double maxDist,
    boolean excludeLocked,
    boolean excludeModified,
    ByRef<Integer> segmNum
)
```

Parameters

point
A Point2D objectspecifying where to look for a link.

maxDist
Specifies the maximum allowed distancefrom the point to the link.

excludeLocked
true if locked links should be excluded from the search, otherwise **false**.

excludeModified
true if links being modified should be excluded from the search, otherwise **false**.

segmNum
An output parameter that returns the index of the link segment that is closest to the specified point

Return Value

The DiagramLink found at the specified position.

See Also

getLinkAt Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkAt Method (Point2D.Float, float)

Returns the top-most link that passes near the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink getLinkAt (
    Point2D.Float point,
    float maxDist
)
```

Parameters

point
A **Point2D.Float** object specifying where to look for a link.

maxDist
Specifies the maximum allowed distance from the point to the link.

Return Value

The DiagramLink found at the specified position.

See Also

getLinkAt Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkBaseShape Method

Gets the default shape displayed at the origin of new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Shape getLinkBaseShape ()
```

Return Value

A Shape instance that represents an arrowhead shape. The default is None.

Remarks

This property specifies the default shape displayed as arrowhead at the links' origin points. The ArrowHeads class exposes several predefined shapes as static properties.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkBaseShapeSize Method

Gets the default size of the shape displayed at the origin of new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getLinkBaseShapeSize ()
```

Return Value

A float value specifying the default size of the shapes displayed at the link base.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkBranchIndicator Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public BranchIndicator getLinkBranchIndicator ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkBrush Method

Gets the default brush assigned to new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getLinkBrush ()
```

Return Value

A Brush object that is assigned to newly created links.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkCascadeOrientation Method

Gets the default orientation of the first segments of cascading links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Orientation getLinkCascadeOrientation ()
```

Return Value

A member of the Orientation enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkCrossings Method

Gets what shapes are drawn at link crossing points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public LinkCrossings getLinkCrossings ()
```

Return Value

A member of the LinkCrossings enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkCustomDraw Method

Gets the default type of custom painting done on links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CustomDraw getLinkCustomDraw ()
```

Return Value

A member of the CustomDraw enumeration. The default is **None**.

Remarks

This property specifies whether and how custom painting of links is performed. Its value is assigned to the CustomDraw property of new links.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkEndsMovable Method

Gets a value indicating that users are allowed to move the end points of a link after the link is created.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getLinkEndsMovable ()
```

Return Value

true if users are allowed to move the end points of new links, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkHandlesStyle Method

Gets the default style of link selection handles.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public HandlesStyle getLinkHandlesStyle ()
```

Return Value

A member of the HandlesStyle enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkHeadShape Method

Gets the default shape displayed as head of new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Shape getLinkHeadShape ()
```

Return Value

A Shape instance that represents an arrowhead shape. The default is Arrow.

Remarks

This property specifies the default shape displayed as arrowhead at the links' end points. The ArrowHeads class exposes several predefined shapes as static properties.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkHeadShapeSize Method

Gets the default size of the shape displayed as arrowhead of new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getLinkHeadShapeSize ()
```

Return Value

A float value specifying the default arrowhead size.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkIntermediateShape Method

Gets the default shape displayed at the middle of links segments.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Shape getLinkIntermediateShape ()
```

Return Value

A Shape instance that represents an arrowhead shape. The default is None.

Remarks

The property specifies default shape to be displayed at the middle of each segment of new links. It facilitates users by following the path of a link across the diagram, especially for longer links in large documents. The ArrowHeads class exposes several predefined shapes as static properties.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkIntermediateShapeSize Method

Gets the default size of the shape displayed at the middle of links segments.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getLinkIntermediateShapeSize ()
```

Return Value

A float value specifying the default size of the shapes displayed in the middles of link segments.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkPen Method

Gets the default pen assigned to new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Pen getLinkPen ()
```

Return Value

A Pen object that is assigned to newly created links.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkRouter Method

Gets the component used to find paths for auto-routed links when diagram nodes are added or their positions change.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public LinkRouter getLinkRouter ()
```

Return Value

An instance of a class implementing the LinkRouter interface.

Remarks

The default value is a CompositeRouter instance that chains PatternRouter and GridRouter.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
AutoRoute Property
RouteLinks Property
routeAllLinks Method
CompositeRouter Class
GridRouter Class
PatternRouter Class
QuickRouter Class

Diagram.getLinks Method

Gets a collection of all links in the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLinkList getLinks ()
```

Return Value

An DiagramLinkList containing all links in the diagram.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinksAt Method

Returns the links that contain the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLinkList getLinksAt (
    Point2D.Float point
```

```
)
```

Parameters

point
A Point2D object specifying the location at which to look for links.

Return Value

A DiagramLinkList instance containing the links lying at the specified location.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkSegments Method

Gets the default number of link segments.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getLinkSegments ()
```

Return Value

An integer value specifying the default number of link segments.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkShape Method

Gets the default shape of links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkShape getLinkShape ()
```

Return Value

A member of the LinkShape enumeration. The default value is **Polyline**.

Remarks

Use this property to specify how new links are composed and what they look like. The segments of a link could be curves or straight lines, and they might be restricted to be horizontal / vertical only.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinksRetainForm Method

Gets a value indicating whether new links are set to maintain their shapes while the nodes they connect are moved around.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getLinksRetainForm ()
```

Return Value

true if newly created links keep their shapes, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getLinkText Method

Gets the default text assigned to new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getLinkText ()
```

Return Value

A **String** containing the default link text.

See Also

Diagram Members
Diagram Class

Diagram.getLinkTextStyle Method

Gets the default placement and orientation of links' text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkTextStyle getLinkTextStyle ()
```

Return Value

A member of the LinkTextStyle enumeration. The default value is **Center**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getMeasureUnit Method

Gets the current unit of measure.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GraphicsUnit getMeasureUnit ()
```

Return Value

A member of the GraphicsUnit enumeration. The default value is Millimeter.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getMergeThreshold Method

Gets the maximum distance between adjacent control points of a link at which the respective segments can be merged.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getMergeThreshold ()
```

Return Value

A float value specifying the maximal merge distance.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getNearestNode Method

Returns the nearest node whose bounding rectangle is intersected by the circle, defined by origin point and radius.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramNode getNearestNode (
    Point2D point,
    float maxDistance,
    DiagramNode ignored
)
```

Parameters

point
A Point2D object specifying where to look for nodes.

maxDistance
The maximum distance from point where to look for nodes.

ignored
Exclude this node from the search.

Return Value

The DiagramNode closest to point if one is found within the specified distance.

Remarks

The last argument is useful when calling this method from nodeCreated and nodeModified handlers and the affected node should not be included in the search.

See Also

Diagram.getNodeAt Method

Overload List

Name	Description
Diagram.getNodeAt (Point2D)	Returns the top-most node that contains the specified point.
Diagram.getNodeAt (Point2D, boolean)	Returns the topmost node that lies at the specified position.
Diagram.getNodeAt (Point2D, boolean, boolean)	Returns the top-most node that contains the specified point.
Diagram.getNodeAt (Point2D, float)	Returns the top-most node that contains the specified point.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getNodeAt Method (Point2D)

Returns the top-most node that contains the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode getNodeAt (
    Point2D point
)
```

Parameters

point
A Point2D object specifying where to look for a node.

Return Value

The DiagramNode found at the specified position.

See Also

getNodeAt Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getNodeAt Method (Point2D, boolean)

Returns the topmost node that lies at the specified position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode getNodeAt (
    Point2D point,
    boolean excludeLocked
)
```

Parameters

point
A **Point2D** object specifying where to look for a node.

excludeLocked
Specifies whether locked nodes should be excluded from the search.

Return Value

A DiagramNode instance if a node lies at the specified location, otherwise **null**.

See Also

getNodeAt Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getNodeAt Method (Point2D, boolean, boolean)

Returns the top-most node that contains the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode getNodeAt (
    Point2D point,
    boolean excludeLocked,
    boolean excludeSelected
)
```

Parameters

point
A **Point2D** object specifying where to look for a node.

excludeLocked
true if locked items should be excluded from the search, otherwise **false**.

excludeSelected

true if selected items should be excluded from the search, otherwise **false**.

Return Value

The DiagramNode found at the specified position.

See Also

getNodeAt Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getNodeAt Method (Point2D, float)

Returns the top-most node that contains the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode getNodeAt (
    Point2D point,
    float threshold
)
```

Parameters

point
A **Point2D** object specifying where to look for a node.

threshold
Allowed distance from the node.

Return Value

The DiagramNode found at the specified position.

See Also

getNodeAt Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getNodeEffects Method

Gets a collection with all effects applied to the nodes of this diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public List<NodeEffect> getNodeEffects ()
```

Return Value

A list of NodeEffect objects.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getNodes Method

Gets a collection of all nodes in the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNodeList getNodes ()
```

Return Value

A ShapeNodeList containing all nodes in the diagram.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getNodesAt Method

Returns the nodes that contain the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNodeList getNodesAt (
    Point2D.Float point
)
```

Parameters

point
A **Point2D.Float** object specifying where to look for nodes.

Return Value

A DiagramNodeList containing all nodes found at the specified position.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getNodesExpandable Method

Gets whether the tree branches that start from new nodes are expandable by default.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getNodesExpandable ()
```

Return Value

true if nodes are expandable by default, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getRecursiveExpand Method

Gets whether tree branches are expanded recursively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getRecursiveExpand ()
```

Return Value

true if tree branches are expanded recursively.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getRenderOptions Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RenderOptions getRenderOptions ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getRestrictItemsToBounds Method

Gets a value indicating whether users are allowed to move items outside the currently defined document bounds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RestrictToBounds getRestrictItemsToBounds ()
```

Return Value

A member of the RestrictToBounds enumeration. The default value is **Intersection**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getRoundedLinks Method

Gets if the joins between segments of Polyline and Cascading links should be rounded.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getRoundedLinks ()
```

Return Value

true to use rounded segment joins; otherwise, **false**. The default is **false**.

Remarks

The value of this property is considered when drawing links whose Shape is set to Polyline or Cascading. If the property is enabled, the joins between the segments of all such links are drawn as arcs, whose radius equals the value of RoundedLinksRadius.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getRoundedLinksRadius Method

Gets the radius of arc joins of rounded links' segments.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getRoundedLinksRadius ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getRouteLinks Method

Gets a value indicating whether links should avoid nodes by going the shortest path from their origin to their destination without crossing any other nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getRouteLinks ()
```

Return Value

true to route links, or **false** otherwise. The default is **false**.

Remarks

The value of RouteLinks is used to initialize the AutoRoute property of new links. If a node is moved or resized, all links that intersect with its new position and have AutoRoute enabled are rerouted. Keep in mind that number of link segments will probably change when routing is enabled.

RoutingOptions allows tuning the routing algorithm. The most important options are the cost values exposed as LengthCost, TurnCost and CrossingCost properties. They greatly influence the shape of the generated route.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
routeAllLinks Method
DynamicLinks Property
LinkCrossings Property
LinkRouter Property

Diagram.getRoutingOptions Method

Gets a RoutingOptions instance that lets you set various attributes of link routing algorithms.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RoutingOptions getRoutingOptions ()
```

Return Value

A reference to a RoutingOptions object.

Remarks

RoutingOptions values are considered mainly by GridRouter.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
RouteLinks Property
routeAllLinks Method
LinkRouter Property

Diagram.getSelectAfterCreate Method

Gets a value indicating whether newly created items are selected automatically.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getSelectAfterCreate ()
```

Return Value

true if newly created items are selected automatically, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getSelectedItemHandlesStyle Method

Gets the visual style of the manipulation handles displayed around selected items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public HandlesVisualStyle getSelectedItemHandlesStyle ()
```

Return Value

A HandlesVisualStyle object representing the visual style ofselection handles.

Remarks

This style object provides Pen and Brush attributes that let you customize the appearance of adjustment handles drawn around selected items.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getSelection Method

Gets a Selection instance representing the current selection.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Selection getSelection ()
```

Return Value

A reference to the Selection object.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getSelectionOnTop Method

Gets a value indicating whether selected items are drawn on top of the non-selected ones.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getSelectionOnTop ()
```

Return Value

true if selected items are drawn above non-selected ones, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getShadowBrush Method

Gets .the default brush used to paint the shadows cast by diagram items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getShadowBrush ()
```

Return Value

A Brush object representing the shadow brush.

Example

An instance of a Brush -derived class. The default is SolidBrush(new Color(110, 110, 140).

See Also

Diagram Members
Diagram Class

Diagram.getShadowOffsetX Method

Gets the default horizontal distance between shadows and the items that cast them.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getShadowOffsetX ()
```

Return Value

A float value specifying the horizontal shadow offset.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getShadowOffsetY Method

Gets the default vertical distance between shadows and the items that cast them.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getShadowOffsetY ()
```

Return Value

A float value specifying the vertical shadow offset.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getShadowsStyle Method

Gets the style of shadows.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ShadowsStyle getShadowsStyle ()
```

Return Value

A member of the ShadowsStyle enumeration. The default value is **OneLevel**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getShapeBrush Method

Gets the default brush assigned to new nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getShapeBrush ()
```

Return Value

A Brush object.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getShapeCustomDraw Method

Gets whether new nodes should be custom drawn and what type of custom drawing will be performed on them.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public CustomDraw getShapeCustomDraw ()
```

Return Value

A member of the CustomDraw enumeration. The default is **None**.

See Also

Diagram.getShapeHandlesStyle Method

Gets the default value for the HandlesStyle property of new shape nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public HandlesStyle getShapeHandlesStyle ()
```

Return Value

A member of the HandlesStyle enumeration. The default value is **SquareHandles**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getShapeNodeStyle Method

Gets the theme-level style for shape nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ShapeNodeStyle getShapeNodeStyle ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getShapeOrientation Method

Gets the default shape definition orientation angle assigned to new nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getShapeOrientation ()
```

Return Value

The default orientation applied to shape definitions when assigning shapes to nodes.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getShapePen Method

Gets the default pen assigned to new nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Pen getShapePen ()
```

Return Value

A Pen object.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getShapeText Method

Gets the default text assigned to new nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getShapeText ()
```

Return Value

A **String** containing the default box text.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getShowAnchors Method

Gets a value indicating whether anchor points should be shown on screen.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShowAnchors getShowAnchors ()
```

Return Value

A member of the ShowAnchors enumeration. The default value is **Auto**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getShowDisabledHandles Method

Gets whether disabled manipulation handles are displayed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getShowDisabledHandles ()
```

Return Value

true if disabled selection handles are shown, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getShowGrid Method

Gets a value indicating whether the alignment grid is displayed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getShowGrid ()
```

Return Value

true if the alignment grid is drawn on the screen, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getShowHandlesOnDrag Method

Gets whether selection handles of objects under the pointer are displayed while another object is being modified.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getShowHandlesOnDrag ()
```

Return Value

true to display selection handles, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getSnapToAnchor Method

Gets a value indicating when links should snap to anchor points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public SnapToAnchor getSnapToAnchor ()
```

Return Value

A member of the SnapToAnchor enumeration. The default is **OnCreate**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getStyle Method

Gets the style associated with the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramStyle getStyle ()
```

Return Value

An instance of the DiagramStyle class.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getSvgNodeStyle Method

Gets the theme-level style for SVG nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgNodeStyle getSvgNodeStyle ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTableBrush Method

Gets the default brush assigned to new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getTableBrush ()
```

Return Value

A Brush object that is assigned to newly created tables.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTableCaption Method

Gets the default caption text assigned to new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getTableCaption ()
```

Return Value

A **String** containing the default table caption.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTableCaptionHeight Method

Gets the default height of the caption bar of new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getTableCaptionHeight ()
```

Return Value

A float value specifying the default height of table caption bars.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTableColumnCount Method

Gets how many columns new tables have by default.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getTableColumnCount ()
```

Return Value

An integer value specifying the default number of table columns.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTableColumnWidth Method

Gets the default width of the columns of new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getTableColumnWidth ()
```

Return Value

A float value specifying the default width of table columns.

See Also

Diagram Members
Diagram Class

Diagram.getTableConnectionStyle Method

Gets how users are allowed to link tables to each other - as integral entities, by rows, or both.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public TableConnectionStyle getTableConnectionStyle ()
```

Return Value

A member of the TableConnectionStyle enumeration. The default value is **Rows**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTableCustomDraw Method

Gets the default type of custom painting applied to new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public CustomDraw getTableCustomDraw ()
```

Return Value

A member of the CustomDraw enumeration.

Remarks

This value is assigned to the CustomDraw property of new tables.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTableHandlesStyle Method

Gets the default style of table selection handles.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public HandlesStyle getTableHandlesStyle ()
```

Return Value

A member of the HandlesStyle enumeration. The default value is **DashFrame**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTableNodeStyle Method

Gets the theme-level style for table nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public TableNodeStyle getTableNodeStyle ()
```

Return Value

An instance of the TableNodeStyle class.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTablePen Method

Gets the default pen assigned to new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Pen getTablePen ()
```

Return Value

A Pen object that is assigned to newly created tables.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTableRowCount Method

Gets how many rows new tables have by default.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getTableRowCount ()
```

Return Value

An integer value specifying the default number of table rows.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTableRowHeight Method

Gets the default height of the row of new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getTableRowHeight ()
```

Return Value

A float value specifying the default height of table rows.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTableShape Method

Gets the default value of the Shape property of new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public SimpleShape getTableShape ()
```

Return Value

A member of the SimpleShape enumeration. The default value is **Rectangle**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTablesScrollable Method

Gets a value indicating whether users are allowed to scroll new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getTablesScrollable ()
```

Return Value

true if the rows of newly created tables can be scrolled up or down, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTag Method

Gets the custom data associated with this diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public Object getTag ()
```

Return Value

An **Object** assigned to the diagram by using setTag.

Remarks

If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the serializeTag event.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTextColor Method

Gets the default text color that is assigned to new items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getTextColor ()
```

Return Value

A **Color** object representing the default text color.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTextFormat Method

Gets the default format and alignment of the text of new items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TextFormat getTextFormat ()
```

Return Value

A TextFormat object specifying the text format and alignment.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTheme Method

Gets the theme associated with the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Theme getTheme ()
```

Return Value

An instance of the Theme class.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getToolTip Method

Gets the tooltip text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getToolTip ()
```

Return Value

A **String** containing the tooltip text.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTreeViewNodeStyle Method

Gets the theme-level style for tree view nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public TreeViewNodeStyle getTreeViewNodeStyle ()
```

Return Value

An instance of the TreeViewNodeStyle class.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getTypeTable Method

Gets the table of registered item types.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public HashMap<Class<?>, ClassDescriptor> getTypeTable ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getUndoManager Method

Gets the diagram's UndoManager.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public UndoManager getUndoManager ()
```

Return Value

An UndoManager object.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getValidityChecks Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getValidityChecks ()
```

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.getValue Method

Gets the effective value of the style property with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Object getValue (
    String name
)
```

Parameters

name
The name of a styleable property.

Return Value

The effective value of the specified property.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.handleKeyDown Method

Propagates keyboard input to interested manipulators and components.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean handleKeyDown (
    int keyCode,
    int modifiers
)
```

Parameters

keyCode

modifiers

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.handleKeyPress Method

Propagates keyboard input to interested manipulators.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void handleKeyPress (
    Character keyChar
)
```

Parameters

keyChar

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.handleKeyUp Method

Propagates keyboard input to interested components.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void handleKeyUp (
    int keyCode,
    int modifiers
)
```

Parameters

keyCode

modifiers

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.handlePointerMove Method

Propagates mouse input to interested manipulators.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CursorHint handlePointerMove (
    Point2D point
)
```

Parameters

point
The current pointer position.

Return Value

Remarks

A member of the CursorHint enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.hitTestComponents Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ComponentBase hitTestComponents (
    Point2D point
)
```

Parameters

point

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.hitTestLabels Method

Returns the item label located at specified position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ItemLabel hitTestLabels (
    Point2D point
)
```

Parameters

point
A **Point2D** specifying where to look for labels.

Return Value

An ItemLabel instance, or **null** if there was no label found.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
LinkLabel Class
NodeLabel Class

Diagram.imageToDoc Method

Transforms points from the image coordinate space to the document coordinate space.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D.Float imageToDoc (
    int x,
    int y
)
```

Parameters

x

y

Return Value

A **Point2D.Float** object, which represents the document coordinates of image point.

Remarks

Images have its own coordinate space probably different than device space because they may have different resolution than the screen.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.imageToDocX Method

Converts from image coordinates to document coordinates.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public double imageToDocX (
    int x
)
```

Parameters

x
An image point x coordinate

Return Value

The document x coordinate for the image point.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.imageToDocY Method

Converts from image coordinates to document coordinates.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public double imageToDocY (
    int y
)
```

Parameters

y
An image point y coordinate

Return Value

The document y coordinate for the image point.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.imageUpdate Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean imageUpdate (
    Image img,
    int infoflags,
    int x,
    int y,
    int width,
    int height
)
```

Parameters

img

infoflags

x

y

width

height

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.init Method

Returns a DiagramBuilder object used to configure this Diagram instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramBuilder init ()
```

Return Value

A **DiagramBuilder** instance.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.isClassRegistered Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static boolean isClassRegistered (
    Class classType
)
```

Parameters

classType

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.isClientClassRegistered Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static boolean isClientClassRegistered (
    Class classType
)
```

Parameters

classType

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.isItemInteractive Method

Checks if the specified item can be modified interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean isItemInteractive (
    DiagramItem item
)
```

Parameters

item
The DiagramItem to check.

Return Value

true, if the item is currently visible and unlocked and it is not associated with a hidden or locked layer; otherwise, **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.isItemLocked Method

Checks if the specified item is locked.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean isItemLocked (
    DiagramItem item
)
```

Parameters

item
The DiagramItem to check.

Return Value

true, if the item's Locked property is set to true or if the item is associated with a locked layer; otherwise, **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.isItemVisible Method

Checks if the specified item is currently visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean isItemVisible (
    DiagramItem item
)
```

Parameters

item
The DiagramItem to check.

Return Value

true if the item's Visible property is set to true and the item is not associated with a hidden layer; otherwise, **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.items<T> Method

Iterates over diagram items of the desired type

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public <T> Iterable<T> items (
    Class<T> desiredType
)
```

Parameters

desiredType
A Class specifying the type of items to iterate over.

Return Value

Iterable<T> which lets you iterate the specified items

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.loadFrom Method

Overload List

Name	Description
Diagram.loadFrom (InputStream)	Loads the diagram contents from a stream.
Diagram.loadFrom (String)	Loads the diagram contents from a file.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.loadFrom Method (InputStream)

Loads the diagram contents from a stream.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFrom (
    InputStream in
)
```

Parameters

in
A **java.io.InputStream** from which to load the diagram contents.

See Also

loadFrom Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.loadFrom Method (String)

Loads the diagram contents from a file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFrom (
    String fileName
)
```

Parameters

fileName
The name of the file from which the diagram contents should be loaded.

See Also

loadFrom Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.loadFromJson Method

Overload List

Name	Description
Diagram.loadFromJson (InputStream)	Loads the diagram from a JSON stream.
Diagram.loadFromJson (JsonObject, JsonPersistContext)	Loads the diagram from a JSON object.
Diagram.loadFromJson (String)	Loads the diagram from a JSON file.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.loadFromJson Method (InputStream)

Loads the diagram from a JSON stream.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromJson (
    InputStream stream
)
```

Parameters

stream
A **java.io.InputStream** instance from which to load diagram data in JSON format.

See Also

loadFromJson Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
saveToJson Method

Diagram.loadFromJson Method (JsonObject, JsonPersistContext)

Loads the diagram from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromJson (
    JsonObject diagramObj,
    JsonPersistContext context
)
```

Parameters

diagramObj
A JsonObject containing diagram data.

context
A JsonPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

loadFromJson Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
saveToJson Method

Diagram.loadFromJson Method (String)

Loads the diagram from a JSON file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromJson (
    String fileName
)
```

Parameters

fileName
A string specifying the file name or full path.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
saveToJson Method

Diagram.loadFromJsonString Method

Loads the diagram from a JSON-formatted string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromJsonString (
    String json
)
```

Parameters

json
A string created by the saveToJsonString method.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
saveToJsonString Method
loadFromString Method
saveToString Method

Diagram.loadFromString Method

Decodes diagram contents from a string previously created by saveToString.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromString (
    String chartData
)
```

Parameters

chartData
A string containing the serialized diagram contents.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.loadFromXml Method

Overload List

Name	Description
Diagram.loadFromXml (Document, boolean)	Loads the contents of the XML diagram document.
Diagram.loadFromXml (InputSource)	Loads the contents of the XML diagram document.

Diagram.loadFromXml (InputStream)	Loads the contents of the XML diagram document.
Diagram.loadFromXml (String)	Loads the contents of the XML diagram document.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.loadFromXml Method (Document, boolean)

Loads the contents of the XML diagram document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromXml (
    Document document,
    boolean freeProcessedXml
)
```

Parameters

document
A DOM Document object from which to load the diagram data.

freeProcessedXml

See Also

loadFromXml Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.loadFromXml Method (InputSource)

Loads the contents of the XML diagram document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromXml (
    InputSource source
)
```

Parameters

source

An **InputSource** where the XML markup should be read from.

See Also

loadFromXml Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.loadFromXml Method (InputStream)

Loads the contents of the XML diagram document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromXml (
    InputStream stream
)
```

Parameters

stream
A **java.io.InputStream** where the XML markup should be read from.

See Also

loadFromXml Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.loadFromXml Method (String)

Loads the contents of the XML diagram document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromXml (
    String fileName
)
```

Parameters

fileName
The name of the XML file the data should be read from.

See Also

loadFromXml Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.measureString Method

Measures a text taking into consideration the current affine transform of the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension2D measureString (
    String text,
    Font font
)
```

Parameters

text
The **String** to measure.

font
A **Font** that will be used to render the text.

Return Value

This method returns a **Dimension2D** object that represents the size of the string text when drawn with the font parameter and the string parameter.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.pasteSelection Method

Adds the specified items and groups to the specified diagram document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean pasteSelection (
    Diagram doc,
    SelectionCopy data,
    CompositeCmd cmd,
    float dx,
    float dy
)
```

Parameters

doc
A Diagram object to which the items should be added.

data
A SelectionCopy object returned by a previous call to copySelection.

cmd
A CompositeCmd object where the items state should be recorded for later undo or redo.

dx
Horizontal offset of pasted items from their original positions.

dy
Vertical offset of pasted items from their original positions.

Return Value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseActionRedone Method

Raises the actionRedone event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void raiseActionRedone (
    Command command
)
```

Parameters

command

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseActionUndone Method

Raises the actionUndone event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void raiseActionUndone (
    Command command
)
```

Parameters

command

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseCellTextEdited Method

Raises the DiagramListener.cellTextEdited event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void raiseCellTextEdited (
    Cell cell,
    String oldText,
    String newText,
    int column,
    int row
)
```

Parameters

cell
The Cell whose text has been edited.

oldText
The old text.

newText
The new text.

column
The column index of the cell.

row
The row index of the cell.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseCellTextEditing Method

Raises the cellTextEditing event to validate entering in-place editing mode.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean raiseCellTextEditing (
    TableNode table,
    int column,
    int row
)
```

Parameters

table
The TableNode related to the event.

column
The zero-based index of the table column related to the event.

row
The zero-based index of the table row related to the event.

Return Value

true if the event handlers allow the operation, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseClicked Method

Overload List

Name	Description
Diagram.raiseClicked (DiagramItem, Point2D, int)	Raises the appropriate *Clicked (cellClicked, nodeClicked or linkClicked) event.
Diagram.raiseClicked (int, Point2D)	Raises the DiagramListener.clicked event.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseClicked Method (DiagramItem, Point2D, int)

Raises the appropriate *Clicked (cellClicked, nodeClicked or linkClicked) event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void raiseClicked (
    DiagramItem item,
    Point2D pointerPosition,
    int mouseButton
)
```

Parameters

item
The DiagramItem that has been clicked.

mousePosition
The mouse position in logical diagram coordinates.

mouseButton
Indicates which button has been clicked.

See Also

raiseClicked Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseClicked Method (int, Point2D)

Raises the DiagramListener.clicked event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void raiseClicked (
    int mouseButton,
    Point2D pointerPosition
)
```

Parameters

mouseButton
Indicates which mouse button has been pressed.

mousePosition
The mouse position in logical diagram coordinates.

See Also

raiseClicked Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseDeleting Method

Raises the appropriate *Deleting (linkDeleting or nodeDeleting) event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean raiseDeleting (
    DiagramItem item
)
```

Parameters

item
The DiagramItem that will be deleted.

Return Value

true if the item should be deleted, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseDoubleClicked Method

Overload List

Name	Description
Diagram.raiseDoubleClicked (DiagramItem, Point2D, int)	Raises the appropriate doubleClicked event.
Diagram.raiseDoubleClicked (int, Point2D)	Raises the **DiagramListener.doubleClicked** event.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseDoubleClicked Method (DiagramItem, Point2D, int)

Raises the appropriate doubleClicked event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void raiseDoubleClicked (
    DiagramItem item,
    Point2D pointerPosition,
    int mouseButton
)
```

Parameters

item
The DiagramItem that has been clicked.

mousePosition
The mouse position in logical diagram coordinates.

mouseButton
Indicates which button has been clicked.

See Also

raiseDoubleClicked Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseDoubleClicked Method (int, Point2D)

Raises the DiagramListener.doubleClicked event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void raiseDoubleClicked (
    int mouseButton,
    Point2D pointerPosition
)
```

Parameters

mouseButton
Indicates which mouse button has been pressed.

mousePosition
The mouse position in logical diagram coordinates.

See Also

raiseDoubleClicked Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseLinkTextEdited Method

Raises the linkTextEdited event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void raiseLinkTextEdited (
    DiagramLink link,
    String oldText,
    String newText,
    LinkLabel label
)
```

Parameters

link
The DiagramLink whose text has been edited.

oldText
The old text.

newText
The new text.

label
The LinkLabel related to the event.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseLinkTextEditing Method

Raises the linkTextEditing event to validate entering in-place editing mode.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean raiseLinkTextEditing (
    DiagramLink link
)
```

Parameters

link
The DiagramLink whose text will be edited.

Return Value

true if the event handlers allow the operation, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseNodeTextEdited Method

Raises the nodeTextEdited event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void raiseNodeTextEdited (
    DiagramNode node,
    String oldText,
    String newText,
    NodeLabel label
)
```

Parameters

node
The node whose text has been edited.

oldText
The old text.

newText
The new text.

label
The NodeLabel related to the event.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseNodeTextEditing Method

Raises the nodeTextEditing event to validate entering inplace edit mode.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean raiseNodeTextEditing (
    DiagramNode node,
    NodeLabel label
)
```

Parameters

node
The DiagramNode whose text will be edited.

label
The NodeLabel related to the event.

Return Value

true if the event handlers allow the operation, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseTreeCollapsed Method

Raises the treeCollapsed event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void raiseTreeCollapsed (
    DiagramNode root
)
```

Parameters

root
The root node of the collapsed branch.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseTreeExpanded Method

Raises the treeExpanded event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void raiseTreeExpanded (
    DiagramNode root
)
```

Parameters

root
The root node of the expanded branch.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseTreeItemTextEdited Method

Raises the DiagramListener.treeItemTextEdited event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void raiseTreeItemTextEdited (
    TreeViewItem item,
    String oldText,
    String newText
)
```

Parameters

item
A TreeViewItem instance.

oldText
The item's original text.

newText
The item's old text.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.raiseViewRemoved Method

Raises the DiagramListener.viewRemoved event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void raiseViewRemoved ()`

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.registerClass Method

Overload List

Name	Description
Diagram.registerClass (Class, String, int)	Registers a diagram item or lane header class for serialization support.
Diagram.registerClass (Class, String, int, String)	Registers a diagram item or lane header class for serialization support.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.registerClass Method (Class<?>, String, int)

Registers a diagram item or lane header class for serialization support.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void registerClass (
    Class<?> classType,
    String classId,
    int classVersion
)
```

Parameters

classType
A Type instance identifying the class.

classId
A class identifier to use when saving and loading objects of the specified type.

classVersion

A revision number of the serialization format.

See Also

registerClass Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.registerClass Method (Class<?>, String, int, String)

Registers a diagram item or lane header class for serialization support.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void registerClass (
    Class<?> classType,
    String classId,
    int classVersion,
    String clientClass
)
```

Parameters

classType
A Type instance identifying the class.

classId
A class identifier to use when saving and loading objects of the specified type.

classVersion
A revision number of the serialization format.

clientClass
A class identifier to use when serializing objects of the specified type to JSON.

See Also

registerClass Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.registerItemClass Method

Overload List

Name	Description
Diagram.registerItemClass (Class, String, int)	Registers a diagram item class for serialization support.

Diagram.registerItemClass (Class, String, int, String)	Registers a diagram item class for serialization support.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.registerItemClass Method (Class<?>, String, int)

Registers a diagram item class for serialization support.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void registerItemClass (
    Class<?> itemClass,
    String classId,
    int classVersion
)
```

Parameters

itemClass
A Class instance identifying the item class.

classId
A class identifier to use when saving and loading items of the specified type.

classVersion
A revision number of the item's class serialization format.

See Also

registerItemClass Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.registerItemClass Method (Class<?>, String, int, String)

Registers a diagram item class for serialization support.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void registerItemClass (
    Class<?> itemClass,
    String classId,
    int classVersion,
```

```
    String clientClass
)
```

Parameters

itemClass
A Class instance identifying the item class.

classId
A class identifier to use when saving and loading items of the specified type.

classVersion
A revision number of the item's class serialization format.

clientClass
A class identifier to use when serializing item of the specified type to JSON.

See Also

registerItemClass Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.removeDiagramListener Method

Unregisters listener so that it will no longer receive diagram events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeDiagramListener (
    DiagramListener listener
)
```

Parameters

listener
An object implementing the DiagramListener interface.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.repaint Method

Overload List

Name	Description
Diagram.repaint ()	Repaints the diagram.

Diagram.repaint (boolean)	Causes the entire visible diagram area to be repainted.
Diagram.repaint (Object, Rectangle2D)	Repaints the specified region of the diagram.
Diagram.repaint (Rectangle2D)	Repaints the specified region of the diagram.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.repaint Method ()

Repaints the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void repaint ()
```

See Also

repaint Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.repaint Method (boolean)

Causes the entire visible diagram area to be repainted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void repaint (
    boolean redrawCacheImage
)
```

Parameters

redrawCacheImage

See Also

repaint Method Overload List
Diagram Members

Diagram Class
com.mindfusion.diagramming Namespace

Diagram.repaint Method (Object, Rectangle2D)

Repaints the specified region of the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void repaint (
    Object sender,
    Rectangle2D docRect
)
```

Parameters

sender

docRect

See Also

repaint Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.repaint Method (Rectangle2D)

Repaints the specified region of the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void repaint (
    Rectangle2D docRect
)
```

Parameters

docRect
A **Rectangle2D** object representing the region of the diagram that should be repainted.

See Also

repaint Method Overload List
Diagram Members

Diagram.resizeToFitItems Method

Overload List

Name	Description
Diagram.resizeToFitItems (float)	Resizes the document area so that it fits exactly the diagram items.
Diagram.resizeToFitItems (float, boolean)	Resizes the document area so that it fits exactly the diagram items.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.resizeToFitItems Method (float)

Resizes the document area so that it fits exactly the diagram items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void resizeToFitItems (
    float margins
)
```

Parameters

margins
A float value specifying how much space to leave between the items and the document borders.

See Also

resizeToFitItems Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.resizeToFitItems Method (float, boolean)

Resizes the document area so that it fits exactly the diagram items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void resizeToFitItems (
    float margins,
    boolean onlyVisible
)
```

Parameters

margins
A float value specifying how much space to leave between the items and the document borders.

onlyVisible
true to include only visible items in the new document size, otherwise **false**.

See Also

resizeToFitItems Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.resumeLinkRouter Method

Called when the control ends a batch update operation that might affect many links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void resumeLinkRouter (
    boolean routeDeferredLinks
)
```

Parameters

routeDeferredLinks
true if the links should be routed, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.routeAllLinks Method

Overload List

Name	Description

Diagram.routeAllLinks ()	Routes all links in the diagram so that they will not cross any node.
Diagram.routeAllLinks (DiagramLinkList)	Reroutes the specified links.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.routeAllLinks Method ()

Routes all links in the diagram so that they will not cross any node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void routeAllLinks ()
```

Remarks

Each link is routed so that it goes the shortest possible way between the nodes it links without crossing any other nodes. To do so, this method might modify the number of link segments. The value of AutoRoute is not considered when **routeAllLinks** executes.

RoutingOptions allows tuning the routing algorithm. The most important options are the cost values exposed as LengthCost, TurnCost and CrossingCost properties. They greatly influence the shape of the generated route.

See Also

routeAllLinks Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
RouteLinks Property
LinkRouter Property

Diagram.routeAllLinks Method (DiagramLinkList)

Reroutes the specified links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void routeAllLinks (
    DiagramLinkList linksToRoute
```

```
)
```

Parameters

linksToRoute
A list of diagram links.

See Also

routeAllLinks Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.saveTo Method

Overload List

Name	Description
Diagram.saveTo (OutputStream)	Saves the diagram contents into a stream.
Diagram.saveTo (String)	Saves the diagram contents into a file.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.saveTo Method (OutputStream)

Saves the diagram contents into a stream.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveTo (
    OutputStream out
)
```

Parameters

out
A **java.io.OutputStream** where the diagram contents should be saved.

See Also

saveTo Method Overload List
Diagram Members

Diagram Class
com.mindfusion.diagramming Namespace

Diagram.saveTo Method (String)

Saves the diagram contents into a file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveTo (
    String fileName
)
```

Parameters

fileName
The name of the file into which the diagram contents should be saved.

See Also

saveTo Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.saveToJson Method

Overload List

Name	Description
Diagram.saveToJson (JsonObject, JsonPersistContext)	Saves the diagram to a JSON object.
Diagram.saveToJson (OutputStream)	Saves the diagram into a JSON stream.
Diagram.saveToJson (String)	Saves the diagram into a JSON file.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.saveToJson Method (JsonObject, JsonPersistContext)

Saves the diagram to a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToJson (
    JsonObject diagramObj,
    JsonPersistContext context
)
```

Parameters

diagramObj
A JsonObject the diagram's data should be stored into.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

saveToJson Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
loadFromJson Method

Diagram.saveToJson Method (OutputStream)

Saves the diagram into a JSON stream.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToJson (
    OutputStream stream
)
```

Parameters

stream
A **java.io.OutputStream** instance to which to write the diagram data in JSON format.

See Also

saveToJson Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
loadFromJson Method

Diagram.saveToJson Method (String)

Saves the diagram into a JSON file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void saveToJson (
    String fileName
)
```

Parameters

fileName
A string specifying the file name or full path.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
loadFromJson Method
saveToJsonString Method

Diagram.saveToJsonString Method

Saves the diagram to a JSON-formatted string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String saveToJsonString ()
```

Return Value

A string containing the diagram's JSON representation.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
loadFromJsonString Method
saveToJson Method
saveToString Method
loadFromString Method

Diagram.saveToString Method

Saves the diagram contents into a string.

Overload List

Name	Description
Diagram.saveToString ()	Saves the diagram contents into a string.
Diagram.saveToString (SaveToStringFormat, boolean)	Saves the diagram contents into a string.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.saveToString Method ()

Saves the diagram contents into a string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String saveToString ()
```

Return Value

A String containing the base64 encoded diagram contents.

See Also

saveToString Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.saveToString Method (SaveToStringFormat, boolean)

Saves the diagram contents into a string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String saveToString (
    SaveToStringFormat format,
    boolean includeUnalteredProperties
)
```

Parameters

format
A member of the SaveToStringFormat enumeration indicating the output format.

includeUnalteredProperties
true to serialize all properties; **false** to serialize only properties with non-default values.

Return Value

A String containing the serialized form of the diagram.

See Also

saveToString Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
loadFromString Method

Diagram.saveToXml Method

Overload List

Name	Description
Diagram.saveToXml (Document)	Saves the diagram to the specified XML document.
Diagram.saveToXml (Document, boolean)	Saves the diagram to the specified XML document.
Diagram.saveToXml (OutputStream, boolean)	Saves the diagram to the specified XML document.
Diagram.saveToXml (String)	Saves the diagram to the specified XML document.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.saveToXml Method (Document)

Saves the diagram to the specified XML document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToXml (
    Document document
)
```

Parameters

document
A DOM Document object where the diagram should be saved.

See Also

saveToXml Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.saveToXml Method (Document, boolean)

Saves the diagram to the specified XML document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToXml (
    Document document,
    boolean includeUnalteredProperties
)
```

Parameters

document
A DOM Document object where the diagram should be saved.

includeUnalteredProperties
true to serialize all properties; **false** to serialize only properties with non-default values.

See Also

saveToXml Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.saveToXml Method (OutputStream, boolean)

Saves the diagram to the specified XML document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToXml (
    OutputStream stream,
    boolean includeUnalteredProperties
)
```

Parameters

stream
A **java.io.OutputStream** where the XML markup should be serialized.

includeUnalteredProperties
true to serialize all properties; **false** to serialize only properties with non-default values.

See Also

saveToXml Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.saveToXml Method (String)

Saves the diagram to the specified XML document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToXml (
    String fileName
)
```

Parameters

fileName
The full path and name of the disk file where the diagram should be saved.

See Also

saveToXml Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setActiveItem Method

Sets the active item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setActiveItem (
    DiagramItem value
)
```

Parameters

value
A reference to an DiagramItem that should be made the active one.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setActiveLayer Method

Sets the zero-based index of the active layer.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setActiveLayer (
    int value
)
```

Parameters

value
An integer value that specifies the index of the active layer.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setAdjustmentHandlesSize Method

Sets the size of selection handles.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAdjustmentHandlesSize (
    float value
)
```

Parameters

value
A float value specifying the size of selection handles.

See Also

Diagram.setAlignmentGuidePen Method

Sets the pen used to draw alignment guides.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAlignmentGuidePen (
    Pen value
)
```

Parameters

value
A Pen instance.

Remarks

This pen is used to draw alignment guides shown when AutoAlignNodes is enabled.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
getAlignmentGuidePen method

Diagram.setAlignToGrid Method

Sets a value indicating whether items should be aligned to the alignment grid while users draw them.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAlignToGrid (
    boolean value
)
```

Parameters

value
true if items should be automatically aligned to the grid, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setAllowLinksRepeat Method

Sets a value indicating whether users are allowed to draw more than one links between the same nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowLinksRepeat (
    boolean value
)
```

Parameters

value
true if users are allowed to draw more than one link between the same nodes, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setAllowMultipleResize Method

Sets whether multiple selected nodes can be resized simultaneously.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowMultipleResize (
    boolean value
)
```

Parameters

value
true to let the user resize multiple selected nodes; otherwise, **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setAllowSelfLoops Method

Sets whether users are allowed to draw reflexive links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowSelfLoops (
    boolean value
)
```

Parameters

value
true if users are allowed to draw reflexive links, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setAllowSplitLinks Method

Sets whether link segments can be added and removed interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowSplitLinks (
    boolean value
)
```

Parameters

value
true to make new links splittable by default, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setAllowUnanchoredLinks Method

Sets a value indicating whether users are allowed to attach links to nodes that do not have any anchor points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAllowUnanchoredLinks (
    boolean value
)
```

Parameters

value
true to lets users attach links to nodes that do not have anchor points, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setAllowUnconnectedLinks Method

Sets a value indicating whether users are allowed to draw unconnected links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAllowUnconnectedLinks (
    boolean value
)
```

Parameters

value
true if users are allowed to draw unconnected links, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setAutoAlignDistance Method

Sets the maximal horizontal or vertical distance at which a node aligns to the borders of other nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAutoAlignDistance (
    float value
)
```

Parameters

value
A float value specifying the maximal distance. The default value is 3.

Remarks

To enable node alignment, set AutoAlignNodes to true. When either the horizontal or vertical borders of the dragged node are within the specified distance from the respective borders of a nearby node, the dragged node snaps to a position where the borders are aligned.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
getAutoAlignDistance Method

Diagram.setAutoAlignNodes Method

Sets whether nodes should automatically align to the borders of other nodes during user interaction.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAutoAlignNodes (
    boolean value
)
```

Parameters

value
true if nodes should align, otherwise **false**. The default value is **false**.

Remarks

When either the horizontal or vertical borders of the dragged node are within AutoAlignDistance from the respective borders of a nearby node, the dragged node snaps to a position where the borders are aligned. In addition, an alignment guide that indicates which borders are aligned is drawn using the pen specified via AlignmentGuidePen.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
getAutoAlignNodes Method

Diagram.setAutoCloseDistance Method

Sets the maximum distance between first and last points of a FreeFormNode for which the node's outline is closed automatically.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAutoCloseDistance (
    float value
)
```

Parameters

value
A **float** value.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
Closed Property

Diagram.setAutoDeleteLinks Method

Sets whether links are deleted automatically when their Origin or Destination is deleted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAutoDeleteLinks (
    boolean value
)
```

Parameters

value
true to delete links along with the nodes they connect, or **false** otherwise.

Remarks

If this property is set to **false**, deleting a node will leave its links in the diagram as unconnected links.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
DelKeyAction Property

Diagram.setAutoResize Method

Sets a value specifying whether the document scrollable area should be resized automatically when users draw items near the edges of the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAutoResize (
    AutoResize value
)
```

Parameters

value
A member of the AutoResize enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setAutoSnapDistance Method

Specifies the maximum distance at which links auto-snap to nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAutoSnapDistance (
    float value
)
```

Parameters

value
A float value specifying the maximum distance.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
setAutoSnapLinks Method

Diagram.setAutoSnapLinks Method

Sets the default value for the AutoSnapToNode property of new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAutoSnapLinks (
    boolean value
)
```

Parameters

value
true to snap links to nearest node, otherwise **false**; the default value is **false**.

Remarks

Only nodes at a distance smaller than AutoSnapDistance are considered. A link does not snap to its current origin or destination nodes if that would create a self-loop.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setBackBrush Method

Sets the diagram's background brush.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setBackBrush (
    Brush value
)
```

Parameters

value
A Brush object representing the background brush.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setBackgroundImage Method

Overload List

Name	Description
Diagram.setBackgroundImage (Image)	Sets the background image. The BackgroundImageUrl attribute is reset to null.
Diagram.setBackgroundImage (Image, String)	Allows setting of both **BackgroundImage** and **BackgroundImageUrl** attributes as other setters reset the skipped argument.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setBackgroundImage Method (Image)

Sets the background image. The BackgroundImageUrl attribute is reset to null.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBackgroundImage (
    Image value
)
```

Parameters

value
The background **java.awt.Image** object.

See Also

setBackgroundImage Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setBackgroundImage Method (Image, String)

Allows setting of both BackgroundImage and BackgroundImageUrl attributes as other setters reset the skipped argument.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBackgroundImage (
    Image img,
    String url
)
```

Parameters

img
The **java.awt.Image** object that should be displayed in the background.

url
A string specifying the image URL.

Remarks

If the image is not null, then no download is performed. It is assumed that the specified image is located at the specified URL. This setter is preferred when the image is already available and it is desirable that the url is also present.

See Also

setBackgroundImage Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setBackgroundImageAlign Method

Sets how the background image should be positioned relatively to the scrollable area of the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBackgroundImageAlign (
    ImageAlign value
)
```

Parameters

value
A member of the ImageAlign enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setBackgroundImageUrl Method

Sets the URL of the background image.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public void setBackgroundImageUrl (`
`  String value`
`)`

Parameters

value
The URL of the background image.

Remarks

Default applet security allows only images on the same server. URL may be relative to the document base for applets or current dir for applications. It is assumed that the specified image is located at the specified URL.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setBounds Method

Overload List

Name	Description
Diagram.setBounds (Rectangle2D)	Sets the bounds of the scrollable area of the diagram.
Diagram.setBounds (Rectangle2D.Float)	Sets the size of the diagram's scrollable area.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setBounds Method (Rectangle2D)

Sets the bounds of the scrollable area of the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public void setBounds (`
`  Rectangle2D value`
`)`

Parameters

value
A **Rectangle2D** object representing the document scrollable region.

See Also

setBounds Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setBounds Method (Rectangle2D.Float)

Sets the size of the diagram's scrollable area.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBounds (
    Rectangle2D.Float value
)
```

Parameters

value

See Also

setBounds Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setBoundsPen Method

Sets the pen with which document bounds are drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBoundsPen (
    Pen value
)
```

Parameters

value
A Pen object that should be assigned to the diagram bounds.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setCellCustomDraw Method

Sets the default type of custom painting applied to cells of new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCellCustomDraw (
    CustomDraw value
)
```

Parameters

value
A member of the CustomDraw enumeration.

Remarks

This value is assigned to the CellCustomDraw property of new tables.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setCellFrameStyle Method

Sets the default style of the cell frames of new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCellFrameStyle (
    CellFrameStyle value
)
```

Parameters

value
A member of the CellFrameStyle enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setContainerCaption Method

Sets the default value for the caption of containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setContainerCaption (
    String containerCaption
)
```

Parameters

containerCaption
A **String** containing the default caption string.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setContainerCaptionHeight Method

Sets the default value for the caption height of containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setContainerCaptionHeight (
    float containerCaptionHeight
)
```

Parameters

containerCaptionHeight

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setContainerHighlightPen Method

Sets the default value for the HighlightPen of containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setContainerHighlightPen (
    Pen containerHighlightPen
)
```

Parameters

containerHighlightPen
A Pen object.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setContainerMargin Method

Sets the default value for the Margin attribute of containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setContainerMargin (
    float containerMargin
)
```

Parameters

containerMargin

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setContainerMinimumSize Method

Sets the default value for the minimum size of containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setContainerMinimumSize (
    Dimension2D containerMinimumSize
)
```

Parameters

containerMinimumSize

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setContainersFoldable Method

Sets the default value for the Foldable property of containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setContainersFoldable (
    boolean containersFoldable
)
```

Parameters

containersFoldable

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setCrossingRadius Method

Sets the radius of the shapes drawn at link crossing points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setCrossingRadius (
    float value
)
```

Parameters

value
A float value specifying the size of the shapes drawn at link intersection points.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setDefaultControlType Method

Sets the type of components that will be hosted by default in newly created ControlNode objects.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDefaultControlType (
    Class<? extends Component> value
)
```

Parameters

value
A Class instance specifying a java.awt.Component -derived type.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setDefaultShape Method

Sets the default shape that should be assigned to new nodes. The shape of individual nodes can be set by calling their ShapeNode.setShape method.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDefaultShape (
    Shape value
)
```

Parameters

value
The default Shape object that should be assigned to newly created nodes.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
setDefaultControlType Method

Diagram.setDirty Method

Lets you set or clear the diagram's modification flag.

Overload List

Name	Description
Diagram.setDirty ()	Marks the diagram as modified.
Diagram.setDirty (boolean)	Lets you set or clear the diagram's modification flag.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setDirty Method ()

Marks the diagram as modified.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void setDirty ()`

See Also

setDirty Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setDirty Method (boolean)

Lets you set or clear the diagram's modification flag.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDirty (
    boolean value
)
```

Parameters

value
true to mark the diagram as changed, otherwise **false**.

See Also

setDirty Method Overload List
Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setDynamicLinks Method

Sets a value indicating whether links should automatically update their end points positions so that they will always point towards the node centers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDynamicLinks (
    boolean value
)
```

Parameters

value
true if newly created links should be set to update their end point positions automatically, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setEnableLanes Method

Sets whether lanes are enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableLanes (
    boolean value
)
```

Parameters

value
true to display the swimlane grid; otherwise, **false**. The default is **false**.

Remarks

The swimlane grid can be customized through the Grid instance returned by getLaneGrid.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
getEnableLanes method

Diagram.setEnableSpatialIndex Method

Sets whether to index item positions for faster hit-testing and viewport clipping queries.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableSpatialIndex (
    boolean value
)
```

Parameters

value
true to enable spatial indexing, or **false** otherwise.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setEnableStyledText Method

Sets a value indicating whether newly created nodes should display richly formatted text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableStyledText (
    boolean value
)
```

Parameters

value
true if text formatting tags should be processed by default, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setExpandButtonAction Method

Sets what should happen when a user clicks the +/- button that is displayed near expandable nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setExpandButtonAction (
    ExpandButtonAction value
)
```

Parameters

value
A member of the ExpandButtonAction enumeration; the default value is **ExpandTreeBranch**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setExpandButtonPosition Method

Sets where expand/collapse buttons are located relatively to their nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setExpandButtonPosition (
    ExpandButtonPosition value
)
```

Parameters

value
A member of the ExpandButtonPosition enumeration. The default is **OuterRight**.

Remarks

If diagram links tend to flow vertically, it would be useful to have the expand/collapse buttons stay at the left- or right-hand side of nodes. If diagram links tend to flow horizontally, choose position for expand buttons such that they stay above or below nodes. That will prevent button icons from being overlapped by links.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
setExpandButtonAction Method
setNodesExpandable Method

Diagram.setExpandOnIncoming Method

Sets which direction of links is considered the tree direction when expanding or collapsing diagram branches.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setExpandOnIncoming (
    boolean value
)
```

Parameters

value
true is tree branches should be expanded in the direction of incoming links, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setFocusedComponent Method

Sets the component within this diagram which is currently holding the input focus.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFocusedComponent (
    ComponentBase value
)
```

Parameters

value
An instance of ComponentBase -derived class that should receive keyboard events.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setFocusedManipulator Method

Sets the manipulator currently holding the input focus.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFocusedManipulator (
    Manipulator value
)
```

Parameters

value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setFoldedContainerSize Method

Sets the size of folded containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFoldedContainerSize (
    Dimension2D value
)
```

Parameters

value
A **Dimension2D** instance specifying the size of folded containers. The default value is **null**.

Remarks

The FoldedSize property of new containers is initialized with this value.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setFont Method

Sets the default font for new diagram items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFont (
    Font value
)
```

Parameters

value
A Font object.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setFreeFormAttractDistance Method

Sets the radius around dragged free-form adjustment handle in which other points of FreeFormNode are modified too.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFreeFormAttractDistance (
    float value
)
```

Parameters

value
A **float** value.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setFreeFormTargets Method

Sets an array of Shape objects used to replace FreeFormNode instances with ShapeNode ones when Behavior is set to LinkFreeShapes or DrawFreeShapes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFreeFormTargets (
    Shape[] value
)
```

Parameters

value
A Shape array.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setGridColor Method

Sets the color of the alignment grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setGridColor (
    Color value
)
```

Parameters

value
A **Color** object representing the grid color.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setGridOffsetX Method

Sets the horizontal offset of the first point of the alignment grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setGridOffsetX (
    float value
)
```

Parameters

value
A float value that specifies the horizontal grid offset.

Remarks

The property specifies the offset of the first point of the alignment grid. The default value NaN makes the grid start at offset GridSizeX / 2.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
setShowGrid Method
setGridOffsetY Method
setMeasureUnit Method

Diagram.setGridOffsetY Method

Sets the vertical offset of the first point of the alignment grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setGridOffsetY (
    float value
)
```

Parameters

value
A float value that specifies the vertical grid offset.

Remarks

The property specifies the offset of the first point of the alignment grid. The default value NaN makes the grid start at offset GridSizeY / 2.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
setShowGrid Method
setGridOffsetX Method
setMeasureUnit Method

Diagram.setGridSizeX Method

Sets the horizontal distance between grid points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setGridSizeX (
    float value
)
```

Parameters

value
An float value specifying the horizontal distance between grid points.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
setGridOffsetX Method

Diagram.setGridSizeY Method

Sets the vertical distance between grid points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setGridSizeY (
    float value
)
```

Parameters

value
An float value specifying the vertical distance between grid points.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
setGridOffsetY Method

Diagram.setGridStyle Method

Sets the appearance style of the alignment grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setGridStyle (
    GridStyle value
)
```

Parameters

value
A member of the GridStyle enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
setGridColor Method

Diagram.setHitTestPriority Method

Sets a value indicating the order in which items are hit-tested.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHitTestPriority (
    HitTestPriority value
)
```

Parameters

value
A member of the HitTestPriority enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setHoverDelay Method

Sets the time in milliseconds that mouse pointer should remain stationary before reporting hover events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHoverDelay (
    int value
)
```

Parameters

value
An integer value specifying milliseconds.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
nodeHovered Event
linkHovered Event
TrackPointedItem Property

Diagram.setImageDpiX Method

Sets the default resolution of images.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImageDpiX (
    int dpi
)
```

Parameters

dpi

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setImageDpiY Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImageDpiY (
    int dpi
)
```

Parameters

dpi

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkBaseShape Method

Sets what shape should be displayed at the origin of new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkBaseShape (
    Shape value
)
```

Parameters

value
A Shape instance that represents an arrowhead shape. The default is None.

Remarks

This property specifies the default shape displayed as arrowhead at the links' origin points. The ArrowHeads class exposes several predefined shapes as static properties.

See Also

Diagram Members
Diagram Class

Diagram.setLinkBaseShapeSize Method

Sets the default size of the shape displayed at the origin of new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void setLinkBaseShapeSize (
    float value
)
```

Parameters

value
A float value specifying the default size of the shapesdisplayed at the link base.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkBranchIndicator Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void setLinkBranchIndicator (
    BranchIndicator value
)
```

Parameters

value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkBrush Method

Sets the default brush that should be assigned to new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setLinkBrush (
    Brush value
)
```

Parameters

value
A Brush object that should be assigned to newly created links.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkCascadeOrientation Method

Sets the default orientation of the first segments of cascading links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setLinkCascadeOrientation (
    Orientation value
)
```

Parameters

value
A member of the Orientation enumeration.

Remarks

Use this property to specify the default orientation of the first segment of DiagramLink objects whose Shape is set to Cascading. The default value, **Auto**, lets the component decide whether to draw the first segment horizontally or vertically.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkCrossings Method

Sets what shapes should be drawn at the points where links cross.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setLinkCrossings (
    LinkCrossings value
)
```

Parameters

value
A member of the LinkCrossings enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkCustomDraw Method

Sets the default type of custom painting done on links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setLinkCustomDraw (
    CustomDraw value
)
```

Parameters

value
A member of the CustomDraw enumeration.

Remarks

This property specifies whether and how custom painting of links is performed. Its value is assigned to the CustomDraw property of new links.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkEndsMovable Method

Sets a value indicating users are allowed to move the end points of a link after the link is created.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setLinkEndsMovable (
    boolean value
)
```

Parameters

value
true if users are allowed to move the end pointsof new links, otherwise false.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkHandlesStyle Method

Sets the style of selection handles that should be assigned to new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setLinkHandlesStyle (
    HandlesStyle value
)
```

Parameters

value
A member of the HandlesStyle enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkHeadShape Method

Sets what shape should be displayed as arrowhead of new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkHeadShape (
    Shape value
)
```

Parameters

value
A Shape instance that represents an arrowhead shape. The default is Arrow.

Remarks

This property specifies the default shape displayed as arrowhead at the links' end points. The ArrowHeads class exposes several predefined shapes as static properties.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkHeadShapeSize Method

Sets the default size of the shape displayed as arrowhead of new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkHeadShapeSize (
    float value
)
```

Parameters

value
A float value specifying the default arrowhead size.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkIntermediateShape Method

Sets what shape should be displayed at the middle of links segments.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkIntermediateShape (
    Shape value
)
```

Parameters

value

A Shape instance that represents an arrowhead shape. The default is None.

Remarks

The property specifies default shape to be displayed at the middle of each segment of new links. It facilitates users by following the path of a link across the diagram, especially for longer links in large documents. The ArrowHeads class exposes several predefined shapes as static properties.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkIntermediateShapeSize Method

Sets the default size of the shape displayed at the middle of links segments.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkIntermediateShapeSize (
    float value
)
```

Parameters

value

A float value specifying the default size of the shapesdisplayed in the middles of link segments.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkPen Method

Sets the default pen that should be assigned to new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkPen (
    Pen value
)
```

Parameters

value
A Pen object that should be assignedto newly created links.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkRouter Method

Sets the component used to find paths for auto-routed links when diagram nodes are added or their positions change.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkRouter (
    LinkRouter value
)
```

Parameters

value
An instance of a class implementing the LinkRouter interface.

Remarks

The default value is a CompositeRouter instance that chains PatternRouter and GridRouter.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
AutoRoute Property
RouteLinks Property
routeAllLinks Method
CompositeRouter Class
GridRouter Class
PatternRouter Class
QuickRouter Class

Diagram.setLinkSegments Method

Sets the default number of link segments.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkSegments (
    int value
)
```

Parameters

value
An integer value specifying the default number of link segments.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkShape Method

Sets the style that should be assigned to new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkShape (
    LinkShape value
)
```

Parameters

value
A member of the LinkShape enumeration.

Remarks

Use this property to specify what kind of segments new links are composed of. Curved links can be created using Bezier or **Spline** styles. Straight-segment links can be created using **Polyline** and **Cascading** styles, the latter one restricting segments to horizontal and vertical direction, orienting each segment orthogonally to its neighbor.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinksRetainForm Method

Sets a value indicating whether new links are set to maintain their shapes while the nodes they connect are moved around.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinksRetainForm (
    boolean value
)
```

Parameters

value
true if newly created links should preserve their shapes, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkText Method

Sets the default text that should be assigned to new links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkText (
    String value
)
```

Parameters

value
A **String** containing the default link text.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setLinkTextStyle Method

Sets the default placement and orientation of the links labels.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setLinkTextStyle (
    LinkTextStyle value
)
```

Parameters

value
A member of the LinkTextStyle enumeration. The default value is **Center**.

Remarks

The value of this property is used to initialize the TextStyle property of new links.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setMeasureUnit Method

Sets the units for measuring of lengths and sizes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setMeasureUnit (
    GraphicsUnit value
)
```

Parameters

value
A member of the GraphicsUnit enumeration.

Remarks

Many properties in the JDiagram API are used to specify the dimensions of diagram items or the size of various visual elements, for example, selection handles, arrowhead shapes, frame widths, and so on. **MeasureUnit** specifies the measure of length in which these size values are defined.

Setting new measure unit through this property will not re-scale diagram elements automatically to preserve their actual size. If you need that, call the changeUnit method.

See Also

Diagram.setMergeThreshold Method

Sets the maximum distance between adjacent control points of a link at which the respective segments can be merged.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMergeThreshold (
    float value
)
```

Parameters

value
A float value specifying the maximal merge distance.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setNodesExpandable Method

Sets whether the tree branches that start from new nodes should be expandable by default.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setNodesExpandable (
    boolean value
)
```

Parameters

value
true if nodes should be expandable by default,otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setRecursiveExpand Method

Sets whether tree branches should be expanded recursively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRecursiveExpand (
    boolean value
)
```

Parameters

value
true if tree branches should be expanded recursively.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setRestrictItemsToBounds Method

Sets a value indicating whether users are allowed to move items outside the currently define document bounds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRestrictItemsToBounds (
    RestrictToBounds value
)
```

Parameters

value
A member of the RestrictToBounds enumeration.

Remarks

Use this property to specify whether diagram elements can be drawn or moved outside the document area. It is possible to specify that items have to be entirely inside, partly outside or there is no restriction.

If there is no restriction and AutoResize is disabled, users could place an item to a position where they cannot reach it by scrolling. That might be interpreted as an item deletion operation by handling the nodeModified event and deleting the item if it is outside the document boundaries.

See Also

Diagram.setRoundedLinks Method

Sets if the joins between segments of Polyline and Cascading links should be rounded.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRoundedLinks (
    boolean roundedLinks
)
```

Parameters

roundedLinks
true to use rounded segment joins; otherwise, **false**. The default is **false**.

Remarks

The value of this property is considered when drawing links whose Shape is set to Polyline or Cascading. If the property is enabled, the joins between the segments of all such links are drawn as arcs, whose radius equals the value of RoundedLinksRadius.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setRoundedLinksRadius Method

Sets the radius of arc joins of rounded links' segments.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRoundedLinksRadius (
    float radius
)
```

Parameters

radius
A float value specifying the radius length. The default is 2.

Remarks

The value of this property is used when RoundedLinks is enabled. It specifies the radius of the arcs drawn as joins between link segments.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setRouteLinks Method

Sets a value indicating whether links should avoid nodes by going the shortest path from their origin to their destination without crossing any other nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRouteLinks (
    boolean value
)
```

Parameters

value
true to route links, or **false** otherwise. The default is **false**.

Remarks

The value of RouteLinks is used to initialize the AutoRoute property of new links. If a node is moved or resized, all links that intersect with its new position and have AutoRoute enabled are rerouted. Keep in mind that number of link segments will probably change when routing is enabled.

RoutingOptions allows tuning the routing algorithm. The most important options are the cost values exposed as LengthCost, TurnCost and CrossingCost properties. They greatly influence the shape of the generated route.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
routeAllLinks Method
DynamicLinks Property
LinkCrossings Property
LinkRouter Property

Diagram.setSelectAfterCreate Method

Sets a value indicating whether newly created items should be selected automatically.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setSelectAfterCreate (
    boolean value
)
```

Parameters

value
true if newly created items should be selected automatically, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setSelectionOnTop Method

Sets a value indicating whether selected items should be drawn on top of the non-selected ones.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setSelectionOnTop (
    boolean value
)
```

Parameters

value
true if selected items should be drawn above non-selected ones, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setShadowBrush Method

Sets the default brush used to paint the shadows cast by diagram items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public void setShadowBrush (
    Brush value
)
```

Parameters

value
A Brush object representing the shadow brush.

Remarks

Use the property to specify an initial value for the ShadowBrush property of new diagram elements.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setShadowOffset Method

Sets the distance at which shadows are offset from the items that cast them.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShadowOffset (
    float x,
    float y
)
```

Parameters

x
Specifies the horizontal shadow offset.

y
Specifies the vertical shadow offset.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setShadowOffsetX Method

Sets the default horizontal distance between shadows and the items that cast them.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShadowOffsetX (
    float value
)
```

Parameters

value
A float value specifying the horizontal shadow offset.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setShadowOffsetY Method

Sets the default vertical distance between shadows and the items that cast them.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShadowOffsetY (
    float value
)
```

Parameters

value
A float value specifying the vertical shadow offset.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setShadowsStyle Method

Sets the style of shadows.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShadowsStyle (
    ShadowsStyle value
)
```

Parameters

value
A member of the ShadowsStyle enumeration.

Remarks

This property specifies how the shadows of diagram items are drawn. If its value is None, no shadows are painted. **OneLevel** makes all shadows paint on the lowest z-level, not covering any items. Thus the diagram items will seem to appear on the same z-level. **ZOrder** makes the shadow paint immediately under their items, possibly covering other items. This style gives more 3D-like outlook to the diagram.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
ShadowOffsetX Property
ShadowOffsetY Property

Diagram.setShapeBrush Method

Sets the default brush that should be assigned to new nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShapeBrush (
    Brush value
)
```

Parameters

value
A Brush object.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setShapeCustomDraw Method

Sets whether new nodes should be custom drawn and what type of custom drawing will be performed on them.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShapeCustomDraw (
    CustomDraw value
)
```

Parameters

value
A member of the CustomDraw enumeration.

Remarks

This property specifies whether and how custom painting of shape nodes is performed. Its value is assigned to the CustomDraw property of new shape nodes.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
drawNode Event

Diagram.setShapeHandlesStyle Method

Sets the default value for the HandlesStyle property of new shape nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShapeHandlesStyle (
    HandlesStyle value
)
```

Parameters

value
A member of the HandlesStyle enumeration.

Remarks

This property contains the default value for the HandlesStyle property of new shape nodes, created either programmatically or by the user. **HandlesStyle** specifies how selected nodes are indicated visually, and how they can be moved, resized or connected to other objects.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setShapeOrientation Method

Sets the default shape definition orientation angle assigned to new nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShapeOrientation (
    float value
)
```

Parameters

value
The default orientation applied to shape definitions when assigning shapes to nodes.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setShapePen Method

Sets the default pen that should be assigned to new nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShapePen (
    Pen value
)
```

Parameters

value
A Pen object.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setShapeText Method

Sets the default text to new nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setShapeText (
    String value
)
```

Parameters

value
A **String** containing the default box text.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setShowAnchors Method

Sets a value indicating whether anchor points should be shown on screen.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setShowAnchors (
    ShowAnchors value
)
```

Parameters

value
A member of the ShowAnchors enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace
SnapToAnchor Property
Anchor Points and Patterns

Diagram.setShowDisabledHandles Method

Sets whether disabled manipulation handles will be displayed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShowDisabledHandles (
    boolean value
)
```

Parameters

value
true if disabled selection handles are drawn, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setShowGrid Method

Sets a value indicating whether the alignment grid is displayed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShowGrid (
    boolean value
)
```

Parameters

value
true if the alignment grid is drawn on the screen, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setShowHandlesOnDrag Method

Sets whether selection handles of objects under the pointer are displayed while another object is being modified.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShowHandlesOnDrag (
    boolean value
)
```

Parameters

value
true to display selection handles, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setSnapToAnchor Method

Sets a value indicating when links should snap to anchor points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSnapToAnchor (
    SnapToAnchor value
)
```

Parameters

value
A member of the SnapToAnchor enumeration.

Remarks

The default value OnCreate, specifies that links are snapped to anchor points when they are created, but allows the user to move the link ends to different locations of a node. The **OnCreateOrModify** value makes link ends points connect to node anchors both if links are created or modified.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setStyle Method

Sets the style associated with the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setStyle (
    DiagramStyle value
)
```

Parameters

value
An instance of the DiagramStyle class.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTableBrush Method

Sets the default brush that is assigned to new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTableBrush (
    Brush value
)
```

Parameters

value
A Brush object that is assigned to newly created tables.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTableCaption Method

Sets the default caption text that should be assigned to new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTableCaption (
    String value
)
```

Parameters

value
A **String** containing the default table caption.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTableCaptionHeight Method

Sets the default height of the caption bar of new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTableCaptionHeight (
    float value
)
```

Parameters

value
A float value specifying the default height of table caption bars.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTableColumnCount Method

Sets how many columns should be allocated to new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTableColumnCount (
    int value
)
```

Parameters

value
An integer value specifying the default number of table columns.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTableColumnWidth Method

Sets the default width of columns in newly created tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTableColumnWidth (
    float value
)
```

Parameters

value
A float value specifying the default width of table columns.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTableConnectionStyle Method

Sets how users are allowed to link tables to each other - as integral entities, by rows, or both.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTableConnectionStyle (
    TableConnectionStyle value
)
```

Parameters

value
A member of the TableConnectionStyle enumeration.

Remarks

The value of **TableConnectionStyle** is used to initialize the ConnectionStyle property of new tables. There are three possible ways to relate tables to other nodes. This property specifies how users are allowed to create such relations:

- Rows - relation ends are the rows of a table. A link connected to the table is connected to a particular row. This mode is convenient for database diagrams.
- **Table** - relations target tables as integral entities, and not any particular row. This mode is convenient for class diagrams.
- **Both** - a mixed mode where links can target either a row of a table or the table itself.

Programmatically, links can be connected to a table in any way, regardless of the table's **ConnectionStyle**. The value of ConnectionStyle is considered only when end-users draw links to or from a table. To link to a table as an entity and not to a specific row, pass -1 as row argument of the createDiagramLink method.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTableCustomDraw Method

Sets the default type of custom painting applied to new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTableCustomDraw (
    CustomDraw value
)
```

Parameters

value
A member of the CustomDraw enumeration.

Remarks

This value is assigned to the CustomDraw property of new tables.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTableHandlesStyle Method

Sets the style of selection handles that should be assigned to new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTableHandlesStyle (
    HandlesStyle value
)
```

Parameters

value
A member of the HandlesStyle enumeration.

Remarks

Default value for the HandlesStyle property of new tables, created either programmatically or by the user. That property specifies how selected tables are indicated visually, and how they can be moved, resized or connected to other objects.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTablePen Method

Sets the default pen that should be assigned to new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTablePen (
    Pen value
)
```

Parameters

value
A Pen object that should be assigned to newly created tables.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTableRowCount Method

Sets how many rows should be allocated to new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTableRowCount (
    int value
)
```

Parameters

value
An integer value specifying the default number of table rows.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTableRowHeight Method

Sets the default height of rows in newly created tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTableRowHeight (
    float value
)
```

Parameters

value
A float value specifying the default height of table rows.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTableShape Method

Sets the default value of the Shape property of new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTableShape (
    SimpleShape value
)
```

Parameters

value
A member of the SimpleShape enumeration.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTablesScrollable Method

Sets a value indicating whether users are allowed to scroll new tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTablesScrollable (
    boolean value
)
```

Parameters

value
true if the rows of newly created tablescan be scrolled up or down, otherwise **false**.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTag Method

Associates a custom data with this diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTag (
    Object value
)
```

Parameters

value
An **Object** containing custom data.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTextColor Method

Sets the default text color to be assigned to new items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextColor (
    Color value
)
```

Parameters

value
A **Color** object representing the default text color.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTextFormat Method

Sets the default format and alignment of the text of new items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextFormat (
    TextFormat value
)
```

Parameters

value
A TextFormat object specifying the text format and alignment.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setTheme Method

Sets the theme associated with the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTheme (
    Theme value
)
```

Parameters

value
An instance of the Theme class.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setToolTip Method

Sets the tooltip text that is displayed when the pointer hovers over an unoccupied area of the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setToolTip (
    String value
)
```

Parameters

value
A **String** containing the tooltip text.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.setValidityChecks Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setValidityChecks (
    boolean value
)
```

Parameters

value

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.suspendLinkRouter Method

Called when the control starts a batch update operation that might affect many links. The diagram collects links specified through route and routeAllLinks calls and defers finding their paths to when resumeLinkRouter is called.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void suspendLinkRouter ()
```

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.updateRuntimeIndices Method

Assigns consecutive values to the RuntimeIndex property of items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void updateRuntimeIndices ()
```

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

Diagram.with Method

Returns a DiagramBuilder object used to configure and create new Diagram instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static DiagramBuilder with ()
```

Return Value

A **DiagramBuilder** instance.

See Also

Diagram Members
Diagram Class
com.mindfusion.diagramming Namespace

DiagramAdapter Class

Provides empty implementations for the methods defined in the DiagramListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of **DiagramListener**.

Syntax

Java

```
public class DiagramAdapter implements DiagramListener
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramAdapter

See Also

DiagramAdapter Members
com.mindfusion.diagramming Namespace

DiagramAdapter Members

Provides empty implementations for the methods defined in the DiagramListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of **DiagramListener**.

The following tables list the members exposed by the DiagramAdapter type.

Public Constructors

	Name	Description
	DiagramAdapter	

Public Methods

	Name	Description
	actionRecorded	Raised when an action is recorded in the undo buffer.
	actionRecording	A validation event raised before an action is recorded in the undo buffer.
	actionRedone	Raised when an action is redone.
	actionUndone	Raised when an action is undone.
	activeLayerChanged	Raised when the diagram's active layer has changed.
	cellClicked	Called when a table cell is clicked.
	cellDoubleClicked	Raised when the user double-clicks a table's cell.
	cellTextEdited	Raised when the user edits the text of a table's cell.
	cellTextEditing	A validation event that lets you prevent users from editing the text of a table's cell.
	clicked	Raised when the user clicks the diagram at a point where no items are located.
	containerChildAdded	Raised when a node is added to a ContainerNode, either programmatically or by the user.
	containerChildRemoved	Raised when a node is removed from a **ContainerNode**, either programmatically or by the user.
	containerFolded	Raised when the user folds a container by clicking the arrow-up button in the container's caption bar.
	containerUnfolded	Raised when the user unfolds a container by clicking the arrow-down button in the container's caption bar.
	createEditControl	Called to let you create a custom in-place editor control.
	deserializeControl	Lets you load the attributes of controls hosted inside ControlNode objects.
	deserializeTag	Raised when the Diagram.setTag of a diagram item must be deserialized from XML format.
	destroyEditControl	Called to let you destroy a custom in-place editor control.

	doubleClicked	Raised when the user double-clicks the diagram at a point where no items are located.
	drawAdjustmentHandles	Raised when custom adjustment handles must be drawn.
	drawAnchorPoint	Raised when an anchor point must be custom drawn.
	drawBackground	Raised to let you custom draw the diagram background.
	drawCell	Raised when a table's cell must be custom drawn.
	drawForeground	Raised to let you custom draw the diagram foreground.
	drawLink	Raised when a diagram link must be custom drawn.
	drawNode	Raised when a diagram node must be custom drawn.
	enterInplaceEditMode	Called when entering in-place editing mode.
	expandButtonClicked	Raised when the user clicks the [+/-] button of a DiagramNode.setExpandable node.
	groupDestroyed	Raised when a Group object is destroyed.
	hitTestAdjustmentHandles	Raised to perform custom hit testing of item's adjustment handles.
	imageLoaded	Called when image download initiated with Diagram.setImageUrl completes
	initializeLasso	Raised when the user starts drawing a selection lasso, before it is rendered on screen.
	initializeLink	Raised when the user starts drawing a new link, just after the DiagramLink instance is created.
	initializeNode	Raised when the user starts drawing a new node, just after the DiagramNode instance is created.
	itemAdded	Raised when an item is added to the diagram, either programmatically or interactively.
	itemLoaded	Raised when an item is loaded from a file.
	itemRemoved	Raised when an item is removed from the diagram, either programmatically or interactively.
	jsonDeserializeTag	Raised when the Tag of a diagram item must be deserialized from JSON format.
	jsonSerializeTag	Raised when the **Tag** of a diagram item must be serialized into an JSON document.
	lassoDrawn	Raised when the user completes drawing a selection lasso.
	leaveInplaceEditMode	Called when an in-place editing is accepted or rejected.
	linkActivated	Raised when a link becomes the Diagram.setActiveItem.
	linkClicked	Raised when the user clicks a link.
	linkCreated	Raised when the user draws a new link.
	linkCreating	A validation event raised while the user is drawing a new link.

	linkDeactivated	Raised when a link is no longer the **Diagram.setActiveItem**.
	linkDeleted	Raised when a link is deleted, either programmatically or by the user.
	linkDeleting	Raised when the user tries to delete a link, this event lets you cancel the operation.
	linkDeselected	Raised when a link is deselected, either programmatically or by the user.
	linkDoubleClicked	Raised when the user double-clicks a link.
	linkHovered	Fired when the mouse pointer hovers over a link. Call setTrackPointedItem to enable this event.
	linkModified	Raised when the user moves any control point of a link.
	linkModifying	A validation event raised while the user is modifying a link.
	linkPointerEnter	Fired when the mouse pointer enters the boundaries of a link. Call **setTrackPointedItem** to enable this event.
	linkPointerLeave	Fired when the mouse pointer leaves the boundaries of a link. Call **setTrackPointedItem** to enable this event.
	linkRouted	Raised when a link is routed by the auto-routing algorithm.
	linkSelected	Raised when a link is selected, either programmatically or by the user.
	linkSelecting	Raised when the user tries to select a link, this event lets you cancel the operation.
	linkSplit	Raised when the user splits a link segment interactively.
	linkStartModifying	A validation event raised when the user starts modifying a link.
	linkTextEdited	Raised when the user edits the text of a link.
	linkTextEditing	A validation event that lets you approve or reject changes made to the text of a link.
	nodeActivated	Raised when a node becomes the **Diagram.setActiveItem**.
	nodeClicked	Raised when the user clicks a node.
	nodeCreated	Raised when the user draws a new node.
	nodeCreating	A validation event raised while the user is drawing a new node.
	nodeDeactivated	Raised when a node is no longer the **Diagram.setActiveItem**.
	nodeDeleted	Raised when a node is deleted, either programmatically or by the user.
	nodeDeleting	Raised when the user tries to delete a node, this event lets you cancel the operation.
	nodeDeselected	Raised when a node is deselected, either programmatically or by the user.

nodeDoubleClicked	Raised when the user double-clicks a node.
nodeHovered	Fired when the mouse pointer hovers over a node. Call **setTrackPointedItem** to enable this event.
nodeModified	Raised when the user moves or resizes a node.
nodeModifying	A validation event raised while the user is moving or resizing a node.
nodePointerEnter	Fired when the mouse pointer enters the boundaries of a node. Call **setTrackPointedItem** to enable this event.
nodePointerLeave	Fired when the mouse pointer leaves the boundaries of a node. Call **setTrackPointedItem** to enable this event.
nodeSelected	Raised when a node is selected, either programmatically or by the user.
nodeSelecting	Raised when the user tries to select a node, this event lets you cancel the operation.
nodeStartModifying	A validation event raised when the user starts modifying a node.
nodeTextEdited	Raised when the user edits the text of a node.
nodeTextEditing	A validation event that lets you approve or reject changes made to the text of a node.
repaint	Raised when the diagram views should be repainted.
requestCacheReset	Raised when an object within the diagram requests a reset of the cached bitmap.
selectionChanged	Called when an item is added to or removed from the selection.
selectionModified	Called when multiple selected items are moved or resized.
selectionModifying	Raised while the user is moving or resizing multiple selected items, this event lets you cancel the modification.
serializeControl	Lets you save the attributes of controls hosted inside **ControlNode** objects.
serializeTag	Raised when the **Diagram.setTag** of a diagram item must be serialized into an XML document.
setSelfLoopShape	Raised when a link becomes a self-loop, giving you a chance to override the default look shape.
tableColumnResized	Raised when the user finishes resizing a column in a table.
tableColumnResizing	Raised when the user resizes a column in a table interactively.
tableRowResized	Raised when the user finishes resizing a row in a table.
tableRowResizing	Raised when the user resizes a row in a table interactively.
tableSectionCollapsed	Called when a table section is collapsed
tableSectionExpanded	Called when a table section is expanded

	treeCollapsed	Raised when a user collapses a tree branch by clicking the [-] button of a **DiagramNode.setExpandable** node.
	treeExpanded	Raised when a user expands a tree branch by clicking the [+] button of a **DiagramNode.setExpandable** node.
	treeItemTextEdited	Raised when the text of a TreeViewItem has been edited.
	validateAnchorPoint	A validation event that lets you approve or reject connecting a link to an anchor point.
	viewportChanged	
	viewRemoved	Raised when a DiagramView is detached from this diagram.

See Also

DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramAdapter ()
```

See Also

DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter Methods

DiagramAdapter.actionRecorded Method

Raised when an action is recorded in the undo buffer.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void actionRecorded (
    UndoEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.actionRecording Method

A validation event raised before an action is recorded in the undo buffer.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void actionRecording (
    UndoValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.actionRedone Method

Raised when an action is redone.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void actionRedone (
    UndoEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.actionUndone Method

Raised when an action is undone.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void actionUndone (
    UndoEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.activeLayerChanged Method

Raised when the diagram's active layer has changed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void activeLayerChanged (
    EventObject e
)
```

Parameters

e
An EventObject instance providing more information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.cellClicked Method

Called when a table cell is clicked.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void cellClicked (
    CellEvent e
)
```

Parameters

e
A CellEvent object providing information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.cellDoubleClicked Method

Raised when the user double-clicks a table's cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void cellDoubleClicked (
    CellEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.cellTextEdited Method

Raised when the user edits the text of a table's cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void cellTextEdited (
    EditCellTextEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.cellTextEditing Method

A validation event that lets you prevent users from editing the text of a table's cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void cellTextEditing (
    CellValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.clicked Method

Raised when the user clicks the diagram at a point where no items are located.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void clicked (
    DiagramEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.containerChildAdded Method

Raised when a node is added to a ContainerNode, either programmatically or by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void containerChildAdded (
    ContainerChildEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.containerChildRemoved Method

Raised when a node is removed from a ContainerNode, either programmatically or by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void containerChildRemoved (
    ContainerChildEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.containerFolded Method

Raised when the user folds a container by clicking the arrow-up button in the container's caption bar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void containerFolded (
    NodeEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.containerUnfolded Method

Raised when the user unfolds a container by clicking the arrow-down button in the container's caption bar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void containerUnfolded (
    NodeEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.createEditControl Method

Called to let you create a custom in-place editor control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void createEditControl (
    InPlaceEditEvent e
)
```

Parameters

e
An InPlaceEditEvent object providing information about the event.

Remarks

This event is raised if AllowInplaceEdit is enabled and the user double-clicks an item, or when the application invokes the beginEdit method of DiagramView. If the event is not handled, or if EditControl is set to **null**, MindFusion.Diagramming displays a **JTextArea** component to allow editing the item's text. If you prefer to use the built-in **JTextArea**, you can still customize it by handling the enterInplaceEditMode event.

Note that if you create a custom editor control, you must transfer the values entered into it to the respective properties of the edited diagram item. You could do that in response to the destroyEditControl event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.deserializeControl Method

Lets you load the attributes of controls hosted inside ControlNode objects.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void deserializeControl (
    ControlNodeEvent e
)
```

Parameters

e
A ControlNodeEvent instance providing more information about the event.

Remarks

Handle this event to load the content of nodes saved using serializeControl.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.deserializeTag Method

Raised when the Diagram.setTag of a diagram item must be deserialized from XML format.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void deserializeTag (
    SerializeTagEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.destroyEditControl Method

Called to let you destroy a custom in-place editor control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void destroyEditControl (
    InPlaceEditEvent e
)
```

Parameters

e
An InPlaceEditEvent object providing information about the event.

Remarks

This event is raised when the user clicks outside the editor, or when the endEdit method is invoked. Handle it to hide or destroy the edit control. You might also implement the copying of values from the editor to the diagram item's properties in this event handler.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.doubleClicked Method

Raised when the user double-clicks the diagram at a point where no items are located.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void doubleClicked (
    DiagramEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.drawAdjustmentHandles Method

Raised when custom adjustment handles must be drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void drawAdjustmentHandles (
    DrawItemEvent e
)
```

Parameters

e
A DrawItemEvent instance providing more information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.drawAnchorPoint Method

Raised when an anchor point must be custom drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void drawAnchorPoint (
    DrawAnchorPointEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.drawBackground Method

Raised to let you custom draw the diagram background.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void drawBackground (
    DiagramEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.drawCell Method

Raised when a table's cell must be custom drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void drawCell (
    DrawCellEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.drawForeground Method

Raised to let you custom draw the diagram foreground.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void drawForeground (
    DiagramEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.drawLink Method

Raised when a diagram link must be custom drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void drawLink (
    DrawLinkEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.drawNode Method

Raised when a diagram node must be custom drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void drawNode (
    DrawNodeEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.enterInplaceEditMode Method

Called when entering in-place editing mode.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void enterInplaceEditMode (
    InPlaceEditEvent e
)
```

Parameters

e
An InPlaceEditEvent object providing information about the event.

Remarks

This event allows setting properties of the **JTextArea** component used for in-place editing or attaching custom event handlers to that control. Note that you can use a custom control for in-place editing. This can be done by handling createEditControl and specifying what object should be used as an editor by assigning it to EditControl.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.expandButtonClicked Method

Raised when the user clicks the [+/-] button of a DiagramNode.setExpandable node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void expandButtonClicked (
    NodeEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.groupDestroyed Method

Raised when a Group object is destroyed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void groupDestroyed (
    GroupEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.hitTestAdjustmentHandles Method

Raised to perform custom hit testing of item's adjustment handles.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void hitTestAdjustmentHandles (
    HitTestEvent e
)
```

Parameters

e
A HitTestEvent instance providing more information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.imageLoaded Method

Called when image download initiated with Diagram.setImageUrl completes

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void imageLoaded (
    ImageLoadedEvent e
)
```

Parameters

e
An ImageLoadedEvent object that provides more information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.initializeLasso Method

Raised when the user starts drawing a selection lasso, before it is rendered on screen.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void initializeLasso (
    SelectionEvent e
)
```

Parameters

e
A SelectionEvent providing information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.initializeLink Method

Raised when the user starts drawing a new link, just after the DiagramLink instance is created.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void initializeLink (
    LinkEvent e
)
```

Parameters

e
A LinkEvent instance containing event data.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.initializeNode Method

Raised when the user starts drawing a new node, just after the DiagramNode instance is created.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void initializeNode (
    NodeEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.itemAdded Method

Raised when an item is added to the diagram, either programmatically or interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void itemAdded (
    ItemEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.itemLoaded Method

Raised when an item is loaded from a file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void itemLoaded (
    ItemEvent e
)
```

Parameters

e

An ItemEvent instance providing more information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.itemRemoved Method

Raised when an item is removed from the diagram, either programmatically or interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void itemRemoved (
    ItemEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.jsonDeserializeTag Method

Raised when the Tag of a diagram item must be deserialized from JSON format.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void jsonDeserializeTag (
    JsonSerializeTagEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.jsonSerializeTag Method

Raised when the Tag of a diagram item must be serialized into an JSON document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void jsonSerializeTag (
    JsonSerializeTagEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.lassoDrawn Method

Raised when the user completes drawing a selection lasso.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void lassoDrawn (
    SelectionEvent e
)
```

Parameters

e
A SelectionEvent providing information about the event.

Remarks

This event is best used in conjunction with the DrawLasso behavior, which disables standard selection logic. Upon completing a lasso gesture, you might want to trigger immediate actions based on the lassoed area, such as:

- Opening a custom context menu or UI panel styled for bulk operations.
- Creating a visual screenshot / export of only that specific region.

- Implementing custom selection logic or filters (e.g. select nodes of a specific type, or select only links).
- Bookmarking the selected area (adding it to Bookmarks).

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace
Behavior Property
Behavior Enumeration
initializeLasso Event
selectionChanged Event

DiagramAdapter.leaveInplaceEditMode Method

Called when an in-place editing is accepted or rejected.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void leaveInplaceEditMode (
    InPlaceEditEvent e
)
```

Parameters

e
An InPlaceEditEvent object providing information about the event.

Remarks

This event is raised in all situations that lead to closing the inplace-edit control, for example, when the user accepts or cancels the changes made to an item's text, or when the endEdit method is called.

If you have created a custom edit control by handling the createEditControl event, EditControl refers to the custom editor. Otherwise, it is a **JTextArea** instance.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkActivated Method

Raised when a link becomes the Diagram.setActiveItem.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkActivated (
    LinkEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkClicked Method

Raised when the user clicks a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkClicked (
    LinkEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkCreated Method

Raised when the user draws a new link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkCreated (
    LinkEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkCreating Method

A validation event raised while the user is drawing a new link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkCreating (
    LinkValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkDeactivated Method

Raised when a link is no longer the Diagram.setActiveItem.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkDeactivated (
    LinkEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkDeleted Method

Raised when a link is deleted, either programmatically or by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkDeleted (
    LinkEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkDeleting Method

Raised when the user tries to delete a link, this event lets you cancel the operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkDeleting (
    LinkValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkDeselected Method

Raised when a link is deselected, either programmatically or by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkDeselected (
    LinkEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkDoubleClicked Method

Raised when the user double-clicks a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkDoubleClicked (
    LinkEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkHovered Method

Fired when the mouse pointer hovers over a link. Call setTrackPointedItem to enable this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkHovered (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

Remarks

This event fires when the mouse pointer rests over a link for HoverDelay milliseconds.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkModified Method

Raised when the user moves any control point of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkModified (
    LinkEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkModifying Method

A validation event raised while the user is modifying a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkModifying (
    LinkValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkPointerEnter Method

Fired when the mouse pointer enters the boundaries of a link. Call setTrackPointedItem to enable this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkPointerEnter (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkPointerLeave Method

Fired when the mouse pointer leaves the boundaries of a link. Call setTrackPointedItem to enable this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkPointerLeave (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkRouted Method

Raised when a link is routed by the auto-routing algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkRouted (
    LinkEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkSelected Method

Raised when a link is selected, either programmatically or by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkSelected (
    LinkEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class

DiagramAdapter.linkSelecting Method

Raised when the user tries to select a link, this event lets you cancel the operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkSelecting (
    LinkValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkSplit Method

Raised when the user splits a link segment interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkSplit (
    LinkEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkStartModifying Method

A validation event raised when the user starts modifying a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkStartModifying (
    LinkValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkTextEdited Method

Raised when the user edits the text of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkTextEdited (
    EditLinkTextEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.linkTextEditing Method

A validation event that lets you approve or reject changes made to the text of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkTextEditing (
    LinkValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeActivated Method

Raised when a node becomes the Diagram.setActiveItem.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeActivated (
    NodeEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeClicked Method

Raised when the user clicks a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeClicked (
    NodeEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeCreated Method

Raised when the user draws a new node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeCreated (
    NodeEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeCreating Method

A validation event raised while the user is drawing a new node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeCreating (
    NodeValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeDeactivated Method

Raised when a node is no longer the Diagram.setActiveItem.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeDeactivated (
    NodeEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeDeleted Method

Raised when a node is deleted, either programmatically or by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeDeleted (
    NodeEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeDeleting Method

Raised when the user tries to delete a node, this event lets you cancel the operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeDeleting (
    NodeValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeDeselected Method

Raised when a node is deselected, either programmatically or by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeDeselected (
    NodeEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeDoubleClicked Method

Raised when the user double-clicks a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeDoubleClicked (
    NodeEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeHovered Method

Fired when the mouse pointer hovers over a node. Call setTrackPointedItem to enable this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeHovered (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

Remarks

This event fires when the mouse pointer rests over a node for HoverDelay milliseconds.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeModified Method

Raised when the user moves or resizes a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeModified (
    NodeEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeModifying Method

A validation event raised while the user is moving or resizing a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeModifying (
    NodeValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodePointerEnter Method

Fired when the mouse pointer enters the boundaries of a node. Call setTrackPointedItem to enable this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodePointerEnter (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodePointerLeave Method

Fired when the mouse pointer leaves the boundaries of a node. Call setTrackPointedItem to enable this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodePointerLeave (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeSelected Method

Raised when a node is selected, either programmatically or by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeSelected (
    NodeEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeSelecting Method

Raised when the user tries to select a node, this event lets you cancel the operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeSelecting (
    NodeValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeStartModifying Method

A validation event raised when the user starts modifying a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeStartModifying (
    NodeValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeTextEdited Method

Raised when the user edits the text of a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```java
public void nodeTextEdited (
    EditNodeTextEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.nodeTextEditing Method

A validation event that lets you approve or reject changes made to the text of a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```java
public void nodeTextEditing (
    NodeValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.repaint Method

Raised when the diagram views should be repainted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```java
public void repaint (
    RepaintEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.requestCacheReset Method

Raised when an object within the diagram requests a reset of the cached bitmap.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void requestCacheReset (
    EventObject e
)
```

Parameters

e
An EventObject instance providing more information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.selectionChanged Method

Called when an item is added to or removed from the selection.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void selectionChanged (
    EventObject e
)
```

Parameters

e
An **EventObject** providing information about the event.

Remarks

Use the Nodes and Links properties of the diagram's Selection to find out which items are currently selected.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.selectionModified Method

Called when multiple selected items are moved or resized.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void selectionModified (
    SelectionEvent e
)
```

Parameters

e
A SelectionEvent providing information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.selectionModifying Method

Raised while the user is moving or resizing multiple selected items, this event lets you cancel the modification.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void selectionModifying (
    SelectionValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter.serializeControl Method

Lets you save the attributes of controls hosted inside ControlNode objects.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void serializeControl (
    ControlNodeEvent e
)
```

Parameters

e
A ControlNodeEvent instance providing more information about the event.

Remarks

By default, the diagram component saves and loads hosted controls by getting or setting their property values via the Java introspection API. If the default mechanism cannot serialize the content of nodes automatically, the serializeControl and deserializeControl events can be handled to implement custom serialization.

Example

Java

```
diagram.addDiagramListener(new DiagramAdapter() {
    @Override
    public void serializeControl(ControlNodeEvent e)
    {
        JButton button = (JButton)e.getNode().getControl();
        e.getContext().writeString(button.getText(), "Text", e.getXmlElement());
        e.setHandled(true);
    };

    @Override
    public void deserializeControl(ControlNodeEvent e)
    {
        JButton button = new JButton();
        try
        {
            button.setText(e.getContext().readString("Text", e.getXmlElement()));
        }
        catch (TransformerException ex)
        {
            ex.printStackTrace();
        }
        e.getNode().setControl(button);
        e.setHandled(true);
    };
}
```

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.serializeTag Method

Raised when the Diagram.setTag of a diagram item must be serialized into an XML document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void serializeTag (
    SerializeTagEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.setSelfLoopShape Method

Raised when a link becomes a self-loop, giving you a chance to override the default look shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSelfLoopShape (
    LinkShapeEvent e
)
```

Parameters

e
A LinkShapeEvent instance providing more information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.tableColumnResized Method

Raised when the user finishes resizing a column in a table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void tableColumnResized (
    CellEvent e
)
```

Parameters

e
A CellEvent object providing information about this event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.tableColumnResizing Method

Raised when the user resizes a column in a table interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void tableColumnResizing (
    CellValidationEvent e
)
```

Parameters

e
A CellValidationEvent object providing information about this event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.tableRowResized Method

Raised when the user finishes resizing a row in a table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void tableRowResized (
    CellEvent e
)
```

Parameters

e
A CellEvent object providing information about this event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.tableRowResizing Method

Raised when the user resizes a row in a table interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void tableRowResizing (
    CellValidationEvent e
)
```

Parameters

e
A CellValidationEvent object providing information about this event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.tableSectionCollapsed Method

Called when a table section is collapsed

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public void tableSectionCollapsed (
    RowEvent e
)
```

Parameters

e
A RowEvent object providing information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.tableSectionExpanded Method

Called when a table section is expanded

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void tableSectionExpanded (
    RowEvent e
)
```

Parameters

e
A RowEvent object providing information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.treeCollapsed Method

Raised when a user collapses a tree branch by clicking the [-] button of a DiagramNode.setExpandable node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void treeCollapsed (
    NodeEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.treeExpanded Method

Raised when a user expands a tree branch by clicking the [+] button of a DiagramNode.setExpandable node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void treeExpanded (
    NodeEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.treeItemTextEdited Method

Raised when the text of a TreeViewItem has been edited.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void treeItemTextEdited (
    EditTreeItemTextEvent e
)
```

Parameters

e
An EditTreeItemTextEvent instance providing more information about the event.

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.validateAnchorPoint Method

A validation event that lets you approve or reject connecting a link to an anchor point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void validateAnchorPoint (
    LinkValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.viewportChanged Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void viewportChanged ()
```

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramAdapter.viewRemoved Method

Raised when a DiagramView is detached from this diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void viewRemoved (
    ValidationEvent e
)
```

Parameters

e

See Also

DiagramAdapter Members
DiagramAdapter Class
com.mindfusion.diagramming Namespace

DiagramBase Class

The base class of the Diagram and DiagramDocument classes.

Syntax

Java

```
public abstract class DiagramBase
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramBase
    com.mindfusion.diagramming.Diagram
    com.mindfusion.diagramming.DiagramDocument

See Also

DiagramBase Members
com.mindfusion.diagramming Namespace

DiagramBase Members

The base class of the Diagram and DiagramDocument classes.

The following tables list the members exposed by the DiagramBase type.

Protected Constructors

	Name	Description
	DiagramBase	Initializes a new instance of the **DiagramBase** class.

Public Methods

	Name	Description

	addDiagramListener	Registers listener so that it will receive events when users create, modify or delete diagram items.
	removeDiagramListener	Unregisters listener so that it will no longer receive diagram events.

See Also

DiagramBase Class
com.mindfusion.diagramming Namespace

DiagramBase Constructor

Initializes a new instance of the DiagramBase class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramBase ()
```

See Also

DiagramBase Class
com.mindfusion.diagramming Namespace

DiagramBase Methods

DiagramBase.addDiagramListener Method

Registers listener so that it will receive events when users create, modify or delete diagram items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public abstract void addDiagramListener (
    DiagramListener listener
)
```

Parameters

listener
An object implementing the DiagramListener interface.

See Also

DiagramBase Members
DiagramBase Class

DiagramBase.removeDiagramListener Method

Unregisters listener so that it will no longer receive diagram events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public abstract void removeDiagramListener (
    DiagramListener listener
)
```

Parameters

listener
An object implementing the DiagramListener interface.

See Also

DiagramBase Members
DiagramBase Class
com.mindfusion.diagramming Namespace

DiagramBookmark Class

Represents a saved logical area of interest or landmark zone within a diagram.

Syntax

Java

```
public class DiagramBookmark implements NotifyPropertyChanged
```

Remarks

Instances of this class are stored by the Bookmarks collection of a Diagram. Each bookmark contains coordinates, Title, Brush, Icon, which are persisted with the diagram in XML and JSON formats. These can be used to associate additional metadata with specific sections of flowcharts, floorplans, etc.

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.DiagramBookmark

See Also

DiagramBookmark Members
com.mindfusion.diagramming Namespace

DiagramBookmark Members

Represents a saved logical area of interest or landmark zone within a diagram.

The following tables list the members exposed by the DiagramBookmark type.

Public Constructors

	Name	Description
	DiagramBookmark	Initializes a new instance of the **DiagramBookmark** class.

Public Methods

	Name	Description
	addPropertyChangeListener	
	getBrush	Gets the custom visual brush used to outline or highlight this zone.
	getIcon	Gets the optional image icon used to represent this bookmark pin.
	getTargetBounds	Gets the logical boundaries of this bookmark zone in diagram document units.
	getTitle	Gets the display title of this bookmark.
	loadFromJson	Loads the bookmark content from a JsonObject.
	loadFromXml	Loads the bookmark content from an XML element.
	removePropertyChangeListener	
	saveToJson	Saves the bookmark content into a JsonObject.
	saveToXml	Saves the bookmark content into an XML element.
	setBrush	Sets the custom visual brush used to outline or highlight this zone.
	setIcon	Sets the optional image icon used to represent this bookmark pin.
	setTargetBounds	Sets the logical boundaries of this bookmark zone in diagram document units.
	setTitle	Sets the display title of this bookmark.

See Also

DiagramBookmark Class
com.mindfusion.diagramming Namespace

DiagramBookmark Constructor

Initializes a new instance of the DiagramBookmark class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramBookmark ()
```

See Also

DiagramBookmark Class
com.mindfusion.diagramming Namespace

DiagramBookmark Methods

DiagramBookmark.addPropertyChangeListener Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void addPropertyChangeListener (
    PropertyChangeListener listener
)
```

Parameters

listener

See Also

DiagramBookmark Members
DiagramBookmark Class
com.mindfusion.diagramming Namespace

DiagramBookmark.getBrush Method

Gets the custom visual brush used to outline or highlight this zone.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getBrush ()
```

Return Value

A Brush instance, or null.

See Also

DiagramBookmark Members
DiagramBookmark Class
com.mindfusion.diagramming Namespace

DiagramBookmark.getIcon Method

Gets the optional image icon used to represent this bookmark pin.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Image getIcon ()
```

Return Value

An **Image** instance, or null.

See Also

DiagramBookmark Members
DiagramBookmark Class
com.mindfusion.diagramming Namespace

DiagramBookmark.getTargetBounds Method

Gets the logical boundaries of this bookmark zone in diagram document units.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Rectangle2D getTargetBounds ()
```

Return Value

A **Rectangle2D** specifying the target bounds.

See Also

DiagramBookmark Members
DiagramBookmark Class
com.mindfusion.diagramming Namespace

DiagramBookmark.getTitle Method

Gets the display title of this bookmark.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getTitle ()
```

Return Value

A **String** containing the title.

See Also

DiagramBookmark Members
DiagramBookmark Class
com.mindfusion.diagramming Namespace

DiagramBookmark.loadFromJson Method

Loads the bookmark content from a JsonObject.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject to read from.

context
A JsonPersistContext context.

See Also

DiagramBookmark Members
DiagramBookmark Class
com.mindfusion.diagramming Namespace

DiagramBookmark.loadFromXml Method

Loads the bookmark content from an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

An XML **Element** to read from.

context

An XmlPersistContext context.

See Also

DiagramBookmark Members
DiagramBookmark Class
com.mindfusion.diagramming Namespace

DiagramBookmark.removePropertyChangeListener Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removePropertyChangeListener (
    PropertyChangeListener listener
)
```

Parameters

listener

See Also

DiagramBookmark Members
DiagramBookmark Class
com.mindfusion.diagramming Namespace

DiagramBookmark.saveToJson Method

Saves the bookmark content into a JsonObject.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject to write to.

context
A JsonPersistContext context.

See Also

DiagramBookmark Members
DiagramBookmark Class
com.mindfusion.diagramming Namespace

DiagramBookmark.saveToXml Method

Saves the bookmark content into an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An XML **Element** to write to.

context
An XmlPersistContext context.

See Also

DiagramBookmark Members
DiagramBookmark Class
com.mindfusion.diagramming Namespace

DiagramBookmark.setBrush Method

Sets the custom visual brush used to outline or highlight this zone.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBrush (
    Brush value
)
```

Parameters

value
A Brush instance, or null.

See Also

DiagramBookmark Members
DiagramBookmark Class
com.mindfusion.diagramming Namespace

DiagramBookmark.setIcon Method

Sets the optional image icon used to represent this bookmark pin.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIcon (
    Image value
)
```

Parameters

value
An **Image** instance, or null.

See Also

DiagramBookmark Members
DiagramBookmark Class
com.mindfusion.diagramming Namespace

DiagramBookmark.setTargetBounds Method

Sets the logical boundaries of this bookmark zone in diagram document units.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTargetBounds (
    Rectangle2D value
)
```

Parameters

value
A **Rectangle2D** specifying the target bounds.

See Also

DiagramBookmark Members
DiagramBookmark Class
com.mindfusion.diagramming Namespace

DiagramBookmark.setTitle Method

Sets the display title of this bookmark.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTitle (
    String value
)
```

Parameters

value
A **String** containing the title.

See Also

DiagramBookmark Members
DiagramBookmark Class
com.mindfusion.diagramming Namespace

DiagramDocument Class

Represents a collection of diagram pages.

Syntax

Java

```
public class DiagramDocument extends DiagramBase
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramBase
    com.mindfusion.diagramming.DiagramDocument

See Also

DiagramDocument Members
com.mindfusion.diagramming Namespace

DiagramDocument Members

Represents a collection of diagram pages.

The following tables list the members exposed by the DiagramDocument type.

Public Constructors

	Name	Description
	DiagramDocument	

Public Methods

	Name	Description
	addDiagramListener	DiagramBase.addDiagramListener override.
	getDirty	Gets a value indicating whether the document has changed since the last save.
	getPages	Gets a list of the diagram pages contained in this document.
	loadFrom	Loads the document contents from a stream.
	loadFromFile	Loads the document from the specified file.
	loadFromJson	Overloaded.
	loadFromJsonString	Loads the diagram document from a JSON-formatted string.
	loadFromString	Loads a diagram from the specified string.
	loadFromXml	Overloaded.
	removeDiagramListener	DiagramBase.removeDiagramListener override.
	saveTo	Saves the diagram contents into a stream.
	saveToFile	Saves the document to the specified file in a binary format.
	saveToJson	Overloaded.
	saveToJsonString	Saves the diagram document to a JSON-formatted string.
	saveToString	Overloaded.
	saveToXml	Overloaded.

See Also

DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramDocument ()
```

See Also

DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument Methods

DiagramDocument.addDiagramListener Method

DiagramBase.addDiagramListener override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addDiagramListener (
    DiagramListener listener
)
```

Parameters

listener

See Also

DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.getDirty Method

Gets a value indicating whether the document has changed since the last save.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getDirty ()
```

Return Value

See Also

DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.getPages Method

Gets a list of the diagram pages contained in this document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ObservableList<DiagramPage> getPages ()
```

Return Value

A list of DiagramPage objects.

See Also

DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.loadFrom Method

Loads the document contents from a stream.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFrom (
    InputStream in
)
```

Parameters

in
A **java.io.InputStream** from which to load the diagram contents.

See Also

DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.loadFromFile Method

Loads the document from the specified file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void loadFromFile (
    String fileName
)
```

Parameters

fileName
The name of the file to load from.

See Also

DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.loadFromJson Method

Overload List

Name	Description
DiagramDocument.loadFromJson (InputStream)	Loads the diagram document from a stream in JSON format.
DiagramDocument.loadFromJson (JsonObject)	Loads the diagram document from a JSON object.
DiagramDocument.loadFromJson (String)	Loads the diagram document from a JSON file.

See Also

DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.loadFromJson Method (InputStream)

Loads the diagram document from a stream in JSON format.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void loadFromJson (
    InputStream stream
```

```
)
```

Parameters

stream
A **java.io.InputStream** instance from which to load document data in JSON format.

See Also

loadFromJson Method Overload List
DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace
saveToJson Method

DiagramDocument.loadFromJson Method (JsonObject)

Loads the diagram document from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromJson (
    JsonObject documentObj
)
```

Parameters

documentObj
A JsonObject representing the document.

See Also

loadFromJson Method Overload List
DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace
saveToJson Method

DiagramDocument.loadFromJson Method (String)

Loads the diagram document from a JSON file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromJson (
    String fileName
)
```

Parameters

fileName
A string specifying the file name or full path.

See Also

loadFromJson Method Overload List
DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace
saveToJson Method

DiagramDocument.loadFromJsonString Method

Loads the diagram document from a JSON-formatted string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromJsonString (
    String json
)
```

Parameters

json
A string containing the JSON representation of the document.

See Also

DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.loadFromString Method

Loads a diagram from the specified string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromString (
    String str
)
```

Parameters

str

See Also

DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.loadFromXml Method

Overload List

Name	Description
DiagramDocument.loadFromXml (Document)	Loads the document from the specified XML **Document** object.
DiagramDocument.loadFromXml (InputStream)	Loads the contents of the XML diagram document.
DiagramDocument.loadFromXml (String)	Loads the document from the specified XML file.

See Also

DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.loadFromXml Method (Document)

Loads the document from the specified XML **Document** object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromXml (
    Document document
)
```

Parameters

document
A **Document** object from which to load the diagram data.

See Also

loadFromXml Method Overload List
DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.loadFromXml Method (InputStream)

Loads the contents of the XML diagram document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromXml (
    InputStream stream
)
```

Parameters

stream
An InputStream where the XML markup should be read from.

See Also

loadFromXml Method Overload List
DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.loadFromXml Method (String)

Loads the document from the specified XML file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromXml (
    String fileName
)
```

Parameters

fileName
The name of the XML file the data should be read from.

See Also

loadFromXml Method Overload List
DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.removeDiagramListener Method

DiagramBase.removeDiagramListener override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeDiagramListener (
    DiagramListener listener
)
```

Parameters

listener

See Also

DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.saveTo Method

Saves the diagram contents into a stream.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveTo (
    OutputStream out
)
```

Parameters

out
A **java.io.OutputStream** where the diagram contents should be saved.

See Also

DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.saveToFile Method

Saves the document to the specified file in a binary format.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToFile (
    String fileName
)
```

Parameters

fileName
The full path and name of the disk file where the document should be saved.

See Also

DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.saveToJson Method

Overload List

Name	Description
DiagramDocument.saveToJson (JsonObject, JsonPersistContext)	Saves the diagram document to a JSON object.
DiagramDocument.saveToJson (OutputStream)	Saves the diagram document into a stream in JSON format.
DiagramDocument.saveToJson (String)	Saves the diagram document into a JSON file.

See Also

DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.saveToJson Method (JsonObject, JsonPersistContext)

Saves the diagram document to a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToJson (
    JsonObject documentObj,
    JsonPersistContext context
)
```

Parameters

documentObj
A JsonObject representing the document.

context
A JsonPersistContext object.

See Also

saveToJson Method Overload List
DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace
loadFromJson Method

DiagramDocument.saveToJson Method (OutputStream)

Saves the diagram document into a stream in JSON format.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToJson (
    OutputStream stream
)
```

Parameters

stream
A **java.io.OutputStream** instance to which to write the document data in JSON format.

See Also

saveToJson Method Overload List
DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace
loadFromJson Method

DiagramDocument.saveToJson Method (String)

Saves the diagram document into a JSON file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToJson (
    String fileName
)
```

Parameters

fileName

A string specifying the file name or full path.

See Also

saveToJson Method Overload List
DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace
loadFromJson Method

DiagramDocument.saveToJsonString Method

Saves the diagram document to a JSON-formatted string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public String saveToJsonString ()`

Return Value

A string containing the JSON representation of the document.

See Also

DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.saveToString Method

Overload List

Name	Description
DiagramDocument.saveToString ()	Saves the diagram contents into a string.
DiagramDocument.saveToString (SaveToStringFormat, boolean)	Saves the diagram contents into a string.

See Also

DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.saveToString Method ()

Saves the diagram contents into a string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String saveToString ()
```

Return Value

A String containing the base64 encoded diagram contents.

See Also

saveToString Method Overload List
DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace
loadFromString Method

DiagramDocument.saveToString Method (SaveToStringFormat, boolean)

Saves the diagram contents into a string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String saveToString (
    SaveToStringFormat format,
    boolean includeUnalteredProperties
)
```

Parameters

format
A member of the SaveToStringFormat enumeration indicating the output format.

includeUnalteredProperties
true to serialize all properties; **false** to serialize only properties with non-default values.

Return Value

A String containing the serialized form of the diagram.

See Also

saveToString Method Overload List
DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace
loadFromString Method

DiagramDocument.saveToXml Method

Overload List

Name	Description
DiagramDocument.saveToXml (Document)	Saves the document to the specified **Document** object.
DiagramDocument.saveToXml (Document, boolean)	Saves the document to the specified **Document** object.
DiagramDocument.saveToXml (OutputStream, boolean)	Saves the diagram to the specified XML document.
DiagramDocument.saveToXml (String)	Saves the diagram to the specified XML document.

See Also

DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.saveToXml Method (Document)

Saves the document to the specified **Document** object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToXml (
    Document document
)
```

Parameters

document
A **Document** object where the document should be saved.

See Also

saveToXml Method Overload List
DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.saveToXml Method (Document, boolean)

Saves the document to the specified **Document** object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void saveToXml (
    Document document,
    boolean includeUnalteredProperties
)
```

Parameters

document
An XML **Document** object where the document should be saved.

includeUnalteredProperties
true if properties that have their default value should be saved; otherwise, **false**.

See Also

saveToXml Method Overload List
DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.saveToXml Method (OutputStream, boolean)

Saves the diagram to the specified XML document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void saveToXml (
    OutputStream stream,
    boolean includeUnalteredProperties
)
```

Parameters

stream
A **java.io.OutputStream** where the XML markup should be serialized.

includeUnalteredProperties

See Also

saveToXml Method Overload List
DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramDocument.saveToXml Method (String)

Saves the diagram to the specified XML document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void saveToXml (
    String fileName
)
```

Parameters

fileName
The full path and name of the disk file where the diagram should be saved.

See Also

saveToXml Method Overload List
DiagramDocument Members
DiagramDocument Class
com.mindfusion.diagramming Namespace

DiagramEvent Class

Contains information passed to the events defined in DiagramListener.

Syntax

```
Java
public class DiagramEvent extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.DiagramEvent

See Also

DiagramEvent Members
com.mindfusion.diagramming Namespace

DiagramEvent Members

Contains information passed to the events defined in DiagramListener.

The following tables list the members exposed by the DiagramEvent type.

Public Constructors

	Name	Description
	DiagramEvent	Overloaded.

Public Methods

	Name	Description
	getClipRect	Gets the current clipping rectangle.
	getGraphics	Gets a **Graphics2D** object whose methods should be used to draw the custom graphics.
	getMouseButton	Gets the mouse button related to the event.
	getPointerPosition	Gets the pointer position.
	getVisibleRect	Gets what part of the diagram is currently visible.

See Also

DiagramEvent Class
com.mindfusion.diagramming Namespace

DiagramEvent Constructor

Overload List

Name	Description
DiagramEvent (Object, Graphics2D, Rectangle2D, Rectangle2D)	
DiagramEvent (Object, Point2D, int)	Initializes a new DiagramEvent instance.

See Also

DiagramEvent Class
com.mindfusion.diagramming Namespace

DiagramEvent Constructor (Object, Graphics2D, Rectangle2D, Rectangle2D)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramEvent (
    Object source,
    Graphics2D graphics,
    Rectangle2D visibleRect,
    Rectangle2D clipRect
)
```

Parameters

source

graphics

visibleRect

clipRect

See Also

DiagramEvent Constructor Overload List
DiagramEvent Class
com.mindfusion.diagramming Namespace

DiagramEvent Constructor (Object, Point2D, int)

Initializes a new DiagramEvent instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramEvent (
    Object source,
    Point2D position,
    int button
)
```

Parameters

source
The sender of this event.

position
Specifies the mouse pointer position.

button

See Also

DiagramEvent Constructor Overload List
DiagramEvent Class
com.mindfusion.diagramming Namespace

DiagramEvent Methods

DiagramEvent.getClipRect Method

Gets the current clipping rectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getClipRect ()
```

Return Value

A **Rectangle2D** instance.

See Also

DiagramEvent Members
DiagramEvent Class
com.mindfusion.diagramming Namespace

DiagramEvent.getGraphics Method

Gets a **Graphics2D** object whose methods should be used to draw the custom graphics.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Graphics2D getGraphics ()
```

Return Value

A **Graphics2D** instance.

See Also

DiagramEvent Members
DiagramEvent Class
com.mindfusion.diagramming Namespace

DiagramEvent.getMouseButton Method

Gets the mouse button related to the event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getMouseButton ()
```

Return Value

One of the MouseEvent.BUTTON* constants.

See Also

DiagramEvent Members
DiagramEvent Class
com.mindfusion.diagramming Namespace

DiagramEvent.getPointerPosition Method

Gets the pointer position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D.Float getPointerPosition ()
```

Return Value

A **Point2D.Float** object representing the pointer position in document coordinates.

See Also

DiagramEvent Members
DiagramEvent Class
com.mindfusion.diagramming Namespace

DiagramEvent.getVisibleRect Method

Gets what part of the diagram is currently visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getVisibleRect ()
```

Return Value

A **Rectangle2D** instance

See Also

DiagramEvent Members
DiagramEvent Class
com.mindfusion.diagramming Namespace

DiagramItem Class

The **DiagramItem** class represents an element in a diagram. It defines the basic drawing, interaction, undo/redo and serialization functionality for all the types of elements that can be contained in JDiagram documents.

Syntax

Java

```
public abstract class DiagramItem implements Externalizable
```

Remarks

The interior and borders of the diagram items are painted using the brush and pen specified by setBrush and setPen. The font of items text is set by the setFont method.

The order in which items are painted from bottom to top is called the Z-order. Moving items up or down the Z-order can be done by means of the zBottom, zTop, zLevelUp and zLevelDown methods. Accessing and setting the index of an item in the Z-order can be done using setZIndex and getZIndex.

A hierarchy of items can be built, such that when an item higher in the hierarchy is moved, all subordinated items move too. The immediate subordinates of an item are represented by a Group instance. The group of items attached to another item can be accessed by the getSubordinateGroup method of the latter. getMasterGroup gets the group in which an object is subordinate.

Every item can cast a shadow, whose offset from the object is specified by the setShadowOffsetX and setShadowOffsetY methods. The shadow is painted using the brush specified via setShadowBrush.

An application can associate custom data with an item by means of the getTag and setTag methods. The tags are only meant to hold data related to the entities represented by the chart items. They are not used or modified by JDiagram in any way. The tags are saved and loaded together with the diagram elements when serializing the document to a disk file or a stream.

Items can be locked for interactive modification by the setLocked method. Locked items can still be modified programmatically. Items can also be marked as locked for automatic layout methods by the setIgnoreLayout method.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItem
    com.mindfusion.diagramming.DiagramLink
    com.mindfusion.diagramming.DiagramNode
    com.mindfusion.diagramming.Selection

See Also

DiagramItem Members
com.mindfusion.diagramming Namespace

DiagramItem Members

The DiagramItem class represents an element in a diagram. It defines the basic drawing, interaction, undo/redo and serialization functionality for all the types of elements that can be contained in JDiagram documents.

The following tables list the members exposed by the **DiagramItem** type.

Public Constructors

	Name	Description
	DiagramItem	Overloaded. Initializes a new instance of the **DiagramItem** class.

Protected Fields

	Name	Description

	brush	
	cycleDetected	
	cycleProtect	
	modifyDX	
	modifyDY	
	modifyHandle	
	modifying	
	pen	
	ptEnd	
	ptMdfLast	
	ptOrg	
	ptSavedEnd	
	ptSavedOrg	
	subordinateGroup	

Public Methods

	Name	Description
	as	Down-casts the item to specified type.
	clone	Creates a copy of this item.
	containsPoint	Overloaded.
	getBounds	Gets the item bounds in logical document coordinates.
	getBrush	Gets the brush used to fill the item's interior.
	getEffectiveBrush	Gets the effective brush of the item.
	getEffectiveFont	Gets the currently effective font of the item. This property returns getFont if it is not null, or a font with the DiagramItemStyle.getFontFamily, DiagramItemStyle.getFontSize, and DiagramItemStyle.getFontStyle properties of the item's style.
	getEffectivePen	Gets the effective pen of the item.
	getEffectiveShadowBrush	Creates a Brush object representing the currently effective shadow brush of the item. This method returns a system brush corresponding to the item's getShadowBrush if the item's **getShadowBrush** is not null, or a system brush corresponding to the DiagramItemStyle.getShadowBrush property of the item's style.
	getEffectiveTextBrush	Gets the effective text brush of the item.
	getFont	Gets the font used to draw the text of an item.
	getHyperLink	Gets the hyperlink associated with an item.

	getId	Gets user-defined identifier associated with this item.
	getIgnoreLayout	Gets a value indicating whether an item should be ignored by the automatic layout algorithms.
	getLayerIndex	Gets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer.
	getLayoutTraits	Returns a hashtable containing properties specific to layout algorithms.
	getLocked	Gets a value indicating whether users are allowed to modify an item.
	getMasterGroup	Gets the hierarchical group in which this item is a subordinate.
	getOpacity	Gets the opacity of this item.
	getParent	Gets the diagram that contains this item.
	getPen	Gets the pen used to draw the item frame lines.
	getPrintable	Gets a value indicating whether an item will be printed.
	getRuntimeIndex	For internal use.
	getSelected	Gets a value indicating whether this item is selected.
	getShadowBrush	Gets the brush used to paint the item's shadow.
	getShadowOffsetX	Gets the horizontal distance between a shadow and the item that casts it.
	getShadowOffsetY	Gets the vertical distance between a shadow and the item that casts it.
	getStyle	Gets the style associated with the item.
	getSubordinateGroup	Gets the group of subordinated items attached to this one.
	getTag	Gets user-defined data assigned to an item.
	getTextBrush	Gets the brush used to paint texts inside the item.
	getTextPadding	Gets the spacing between the item boundaries and its text.
	getToolTip	Gets the tooltip text displayed when the pointer rests over this item.
	getVisible	Gets a value indicating whether an item is visible.
	getWeight	Gets a weight value used in layout and path-finding algorithms.
	getZIndex	Gets the position of an item within the diagram's Z-order.
	hasSubordinates	Checks whether there are any nodes attached to this item.
	hitTest	Returns the diagram item that contains the specified point.
	hitTestHandle	Determines whether a selection handle of this item is located at the specified point.

labelFromPoint	Returns the label whose layout rectangle contains the specified point.
query	Returns the items that can be reached from this item by following the path specified in the given query expression.
readExternal	Implements Externalizable.
setBrush	Sets the brush used to fill the item's interior.
setFont	Sets the font used to draw the text of an item.
setHyperLink	Sets the hyperlink associated with an item.
setId	Assigns user-defined identifier to this item.
setIgnoreLayout	Sets a value indicating whether an item should be ignored by the automatic layout algorithms.
setLayerIndex	Sets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer.
setLocked	Sets a value indicating whether users are allowed to modify an item.
setOpacity	Sets the opacity of this item.
setPen	Sets the pen used to draw the item frame lines.
setPrintable	Sets a value indicating whether an item will be printed.
setSelected	Selects or deselects an item.
setShadowBrush	Sets the brush used to paint the item's shadow.
setShadowOffsetX	Sets the horizontal distance between a shadow and the item that casts it.
setShadowOffsetY	Sets the vertical distance between a shadow and the item that casts it.
setStyle	Sets the style associated with the item.
setTag	Assigns user-defined data to an item. If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event.
setTextBrush	Sets the brush used to paint texts inside the item.
setTextPadding	Sets the spacing between the item boundaries and its text.
setToolTip	Sets the tooltip text that should be displayed when the pointer rests over this item.
setVisible	Sets a value indicating whether an item is visible.
setWeight	Sets a weight value used in layout and path-finding algorithms.
setZIndex	Sets the position of an item within the diagram's Z-order.
writeExternal	Implements Externalizable.

	zBottom	Moves an item to the bottom of the Z order.
	zLevelDown	Moves an item down in the Z order.
	zLevelUp	Moves an item up in the Z order.
	zTop	Moves an item to the top of the Z order.

Protected Methods

	Name	Description
	allowCreate	Invoked while the user draws this item to test whether the operation can be completed in the current context.
	allowModify	Invoked during interactive modification of items to test whether the operation can be completed in the current context.
	cancelModify	Invoked when the interactive modification of this item has been canceled.
	completeCreate	Invoked when the user finishes drawing this item.
	completeModify	Invoked when the item modification has been completed.
	createProperties	Creates an item property set corresponding to the type of this diagram item. This method is invoked by the undo/redo subsystem when creating a ChangeItemCmd instance.
	createState	Creates an item state corresponding to the type of this diagram item.
	draw	Draws the item on the specified **Graphics2D** surface.
	drawShadow	Draws the shadow of this diagram item.
	getMeasureUnit	
	getRepaintRect	Gets the repaint region for this item, taking into account factors such as pen, selection handles and shadow.
	getValue	Gets the effective value of the style property with the specified name.
	loadFromJson	Loads the item from a JSON object.
	loadFromXml	Loads the item content from an XML element.
	onAdd	Called when an item is added to a Diagram, either by the user, programmatically or by undo / redo.
	onChangeFont	
	onChangeTextPadding	
	onChildModified	Called when a group child node has been modified. Override this method if you need to know when a node from the **SubordinateGroup** is modified.
	onClick	Invoked when the user clicks this item.
	onDoubleClick	Invoked when the user double-clicks this item.

	onLoad	Called when this item is loaded from a file.
	onMeasureUnitChanged	Called when the diagram's MeasureUnit changes.
	onRemove	Called when an item is removed from a **Diagram**, either by the user, programmatically or by undo / redo.
	onStyleChanged	Invoked when the associated style or theme have changed.
	onStyleFontChanged	Invoked when font property values of an associated style change.
	putSelected	
	repaint	Overloaded.
	restoreProperties	Restores the properties of this diagram item. This method is invoked by the undo/redo subsystem when undoing or redoing a **ChangeItemCmd** instance.
	restoreState	Restores the state of this diagram item.
	saveProperties	Saves the properties of this diagram item. This method is invoked by the undo/redo subsystem when saving a **ChangeItemCmd** instance.
	saveState	Saves the state of this diagram item.
	saveToJson	Saves the item as a JSON object.
	saveToXml	Saves the item content into an XML element.
	setDiagramDirty	Marks the diagram as changed.
	shouldRender	Determines whether the item is rendered in the current context.
	startCreate	Invoked once when the user starts drawing a new item interactively.
	startModify	Invoked when the user starts modifying this item interactively.
	updateCreate	Invoked during interactive creation of this item.
	updateModify	Invoked during interactive modification of this item.

See Also

DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem Fields

DiagramItem.brush Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected Brush brush
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.cycleDetected Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected boolean cycleDetected
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.cycleProtect Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected boolean cycleProtect
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.modifyDX Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected double modifyDX
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.modifyDY Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected double modifyDY
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.modifyHandle Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected AdjustmentHandle modifyHandle
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.modifying Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean modifying
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.pen Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Pen pen
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.ptEnd Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Point2D ptEnd
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.ptMdfLast Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Point2D ptMdfLast
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.ptOrg Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Point2D ptOrg
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.ptSavedEnd Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Point2D ptSavedEnd
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.ptSavedOrg Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`protected Point2D ptSavedOrg`

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.subordinateGroup Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`protected Group subordinateGroup`

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem Constructor

Initializes a new instance of the DiagramItem class.

Overload List

Name	Description
DiagramItem ()	Initializes a new instance of the **DiagramItem** class.
DiagramItem (Diagram)	Initializes a new **DiagramItem** instance by copying property values from a Diagram's default-value instance members.
DiagramItem (DiagramItem)	Initializes a new **DiagramItem** instance by copying property values from another DiagramItem's instance members.

See Also

DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem Constructor ()

Initializes a new instance of the DiagramItem class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramItem ()
```

See Also

DiagramItem Constructor Overload List
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem Constructor (Diagram)

Initializes a new DiagramItem instance by copying property values from a Diagram's default-value instance members.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramItem (
    Diagram parent
)
```

Parameters

parent
A Diagram instance whose default item attributes are copied to this item.

See Also

DiagramItem Constructor Overload List
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem Constructor (DiagramItem)

Initializes a new DiagramItem instance by copying property values from another DiagramItem's instance members.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramItem (
    DiagramItem prototype
)
```

Parameters

prototype
A DiagramItem instance whose attributes are copied to this item.

See Also

DiagramItem Constructor Overload List
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem Methods

DiagramItem.allowCreate Method

Invoked while the user draws this item to test whether the operation can be completed in the current context.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected abstract boolean allowCreate (
    Point2D current,
    InteractionState ist
)
```

Parameters

current
A **Point2D** specifying the current pointer position.

ist
An InteractionState object containing more information about the current state of the operation.

Return Value

true to allow the creation of this item; otherwise, **false**.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.allowModify Method

Invoked during interactive modification of items to test whether the operation can be completed in the current context.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected abstract boolean allowModify (
    Point2D current,
    InteractionState ist
)
```

Parameters

current
A **Point2D** specifying the current pointer position.

ist
An InteractionState object containing more information about the current state of the operation.

Return Value

true to allow the modification of this item; otherwise, **false**.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.as<T> Method

Down-casts the item to specified type.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public <T> T as (
    Class<T> type
)
```

Parameters

type
A **Class** instance specifying the target type.

Return Value

This item cast to specified type, or **null** if it's of a different type.

Remarks

Syntax sugar for a slightly shorter type checking and casting.

Example

Java

```
public void nodeCreated(NodeEvent e)
{
    ContainerNode container = e.getNode().as(ContainerNode.class);
    if (container != null)
    {
```

```
        ...
    }
}

// alternative to

public void nodeCreated(NodeEvent e)
{
    if (e.getNode() instanceof ContainerNode)
    {
        ContainerNode container = (ContainerNode)e.getNode();
        ...
    }
}
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.cancelModify Method

Invoked when the interactive modification of this item has been canceled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void cancelModify (
    InteractionState ist
)
```

Parameters

ist
An InteractionState object containing more information about the current state of the operation.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.clone Method

Creates a copy of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem clone (
    boolean clipboard
```

```
)
```

Parameters

clipboard
true if the copy will be stored in the Windows clipboard; otherwise, **false**.

Return Value

A copy of this item.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.completeCreate Method

Invoked when the user finishes drawing this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void completeCreate (
    Point2D end
)
```

Parameters

end
A **Point2D** specifying the current pointer position.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.completeModify Method

Invoked when the item modification has been completed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void completeModify (
    Point2D end,
    InteractionState ist
)
```

Parameters

end
A **Point2D** specifying the current pointer position.

ist
An InteractionState object containing more information about the current state of the operation.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.containsPoint Method

Overload List

Name	Description
DiagramItem.containsPoint (Point2D)	Determines whether this item contains the specified point.
DiagramItem.containsPoint (Point2D, float)	Determines whether this item contains the specified point.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.containsPoint Method (Point2D)

Determines whether this item contains the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public abstract boolean containsPoint (
    Point2D point
)
```

Parameters

point
The point to check.

Return Value

true it this item contains the specified point; otherwise, **false**.

Remarks

This method is used during hit-testing to determine if the pointer is inside an item.

See Also

containsPoint Method Overload List
DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace
hitTest Method

DiagramItem.containsPoint Method (Point2D, float)

Determines whether this item contains the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public abstract boolean containsPoint (
    Point2D point,
    float threshold
)
```

Parameters

point
A **Point2D** value specifying the logical coordinates of a diagram point.

threshold
Specifies the size of the area around the item outlines where the point is still considered inside the item.

Return Value

true it this item contains the specified point; otherwise, **false**.

Remarks

This method is used during hit-testing to determine if the pointer is inside an item.

See Also

containsPoint Method Overload List
DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace
hitTest Method

DiagramItem.createProperties Method

Creates an item property set corresponding to the type of this diagram item. This method is invoked by the undo/redo subsystem when creating a ChangeItemCmd instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramItemProperties createProperties ()
```

Return Value

A DiagramItemProperties-derived object containing a snapshot of the item's properties.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.createState Method

Creates an item state corresponding to the type of this diagram item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramItemState createState ()
```

Return Value

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.draw Method

Draws the item on the specified **Graphics2D** surface.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected abstract void draw (
    Graphics2D g,
    RenderOptions options
)
```

Parameters

g
The **Graphics2D** surface to draw the item on.

options
A RenderOptions object specifying options for the drawing operation.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.drawShadow Method

Draws the shadow of this diagram item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected abstract void drawShadow (
    Graphics2D g,
    RenderOptions options
)
```

Parameters

g
A **Graphics2D** object where the shadow should be rendered.

options
A RenderOptions object specifying options for the drawing operation.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getBounds Method

Gets the item bounds in logical document coordinates.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public abstract Rectangle2D.Float getBounds ()
```

Return Value

A **Rectangle2D** object representing the item's bounds.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getBrush Method

Gets the brush used to fill the item's interior.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getBrush ()
```

Return Value

A Brush -derived object representing the item's brush.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace
Pen Property
Opacity Property

DiagramItem.getEffectiveBrush Method

Gets the effective brush of the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getEffectiveBrush ()
```

Return Value

A Brush instance.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getEffectiveFont Method

Gets the currently effective font of the item. This property returns getFont if it is not null, or a font with the DiagramItemStyle.getFontFamily, DiagramItemStyle.getFontSize, and DiagramItemStyle.getFontStyle properties of the item's style.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Font getEffectiveFont ()
```

Return Value

A **Font** instance.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getEffectivePen Method

Gets the effective pen of the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Pen getEffectivePen ()
```

Return Value

A Pen instance.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getEffectiveShadowBrush Method

Creates a Brush object representing the currently effective shadow brush of the item. This method returns a system brush corresponding to the item's getShadowBrush if the item's **getShadowBrush** is not null, or a

system brush corresponding to the DiagramItemStyle.getShadowBrush property of the item's style.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Brush getEffectiveShadowBrush ()`

Return Value

A Brush instance.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getEffectiveTextBrush Method

Gets the effective text brush of the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Brush getEffectiveTextBrush ()`

Return Value

A Brush instance.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getFont Method

Gets the font used to draw the text of an item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Font getFont ()`

Return Value

A Font object representing the font usedto draw this item's text.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getHyperLink Method

Gets the hyperlink associated with an item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getHyperLink ()
```

Return Value

A **String** containing the hyperlink.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getId Method

Gets user-defined identifier associated with this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object getId ()
```

Return Value

A custom id Object.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getIgnoreLayout Method

Gets a value indicating whether an item should be ignored by the automatic layout algorithms.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getIgnoreLayout ()
```

Return Value

true if the item is ignored by layout algorithms, otherwise **false**.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getLayerIndex Method

Gets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getLayerIndex ()
```

Return Value

An integer value specifying the layer index.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getLayoutTraits Method

Returns a hashtable containing properties specific to layout algorithms.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Hashtable<Object, Object> getLayoutTraits ()
```

Return Value

A hashtable of key-value pairs that define layout-specific properties for this item.

Remarks

Values from this hashtable are used by the following layout classes:

- SpringLayout looks for values associated with SpringLayoutTraits members.
- TreeLayout looks for values associated with TreeLayoutTraits members.
- SwimlaneLayout looks for values associated with SwimlaneLayoutTraits members.
- LayeredLayout looks for values associated with LayeredLayoutTraits members.
- HierarchicalLayout looks for values associated with HierarchicalLayoutTraits members.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getLocked Method

Gets a value indicating whether users are allowed to modify an item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getLocked ()
```

Return Value

true if the item cannot be modified,otherwise **false**.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getMasterGroup Method

Gets the hierarchical group in which this item is a subordinate.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Group getMasterGroup ()
```

Return Value

A Group to which this item is attached.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getMeasureUnit Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`protected GraphicsUnit getMeasureUnit ()`

Return Value

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getOpacity Method

Gets the opacity of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public float getOpacity ()`

Return Value

A float value between 0 and 1 specifying the item's opacity.

Remarks

This value is applied as a factor multiplying the alpha channel of all colors in the item's graphics.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

Brush Property
Pen Property

DiagramItem.getParent Method

Gets the diagram that contains this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Diagram getParent ()`

Return Value

A reference to the Diagram that contains this item.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getPen Method

Gets the pen used to draw the item frame lines.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Pen getPen ()`

Return Value

A Pen object representing the item's pen.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace
Brush Property
Opacity Property

DiagramItem.getPrintable Method

Gets a value indicating whether an item will be printed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getPrintable ()
```

Return Value

true if the item will be drawn when printing the diagram, otherwise **false**.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getRepaintRect Method

Gets the repaint region for this item, taking into account factors such as pen, selection handles and shadow.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected Rectangle2D getRepaintRect (
    boolean includeConnected
)
```

Parameters

includeConnected
true if related items should be considered too; otherwise, **false**.

Return Value

A rectangular region that should be repainted when this item is modified.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getRuntimeIndex Method

For internal use.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getRuntimeIndex ()
```

Return Value

A sequential integer id for this item.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getSelected Method

Gets a value indicating whether this item is selected.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getSelected ()
```

Return Value

true if the item is selected, otherwise **false**.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getShadowBrush Method

Gets the brush used to paint the item's shadow.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getShadowBrush ()
```

Return Value

An instance of a Brush -derived class. Initialized with the value of ShadowBrush.

Remarks

The shadow of an item has the same shape as the item, but is painted with a different brush and with some offset from the item position. This property specifies the brush used to paint the item's shadow.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getShadowOffsetX Method

Gets the horizontal distance between a shadow and the item that casts it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getShadowOffsetX ()
```

Return Value

A float value representing the horizontal offset of the item's shadow.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getShadowOffsetY Method

Gets the vertical distance between a shadow and the item that casts it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getShadowOffsetY ()
```

Return Value

A float value representing the vertical offset of the item's shadow.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getStyle Method

Gets the style associated with the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItemStyle getStyle ()
```

Return Value

A DiagramItemStyle instance.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getSubordinateGroup Method

Gets the group of subordinated items attached to this one.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Group getSubordinateGroup ()
```

Return Value

A reference to a Group for which this item is the master item.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getTag Method

Gets user-defined data assigned to an item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object getTag ()
```

Return Value

A custom data **Object**.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getTextBrush Method

Gets the brush used to paint texts inside the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getTextBrush ()
```

Return Value

A Brush instance.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getTextPadding Method

Gets the spacing between the item boundaries and its text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Thickness getTextPadding ()
```

Return Value

A Thickness instance specifying the size of the padding space left around the text.

See Also

DiagramItem Members
DiagramItem Class

DiagramItem.getToolTip Method

Gets the tooltip text displayed when the pointer rests over this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getToolTip ()
```

Return Value

A **String** that contains the tooltip text.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getValue Method

Gets the effective value of the style property with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Object getValue (
    String name
)
```

Parameters

name
The name of a styleable property.

Return Value

The effective value of the specified property.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getVisible Method

Gets a value indicating whether an item is visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getVisible ()
```

Return Value

true if the item is visible, otherwise **false**.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getWeight Method

Gets a weight value used in layout and path-finding algorithms.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getWeight ()
```

Return Value

A float value representing the item's weight.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.getZIndex Method

Gets the position of an item within the diagram's Z-order.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getZIndex ()
```

Return Value

An integer value specifying the position of the item within the diagram Z-order.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.hasSubordinates Method

Checks whether there are any nodes attached to this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean hasSubordinates ()
```

Return Value

true if there are some nodes attached to this item, otherwise **false**.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.hitTest Method

Returns the diagram item that contains the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem hitTest (
    Point2D point,
    float threshold,
    boolean onlyNodes,
    boolean onlyInteractive,
    boolean includeHandles,
    boolean includeLabels
)
```

Parameters

point

A **Point2D** value specifying the logical coordinates of a diagram point.

threshold
Specifies the size of the area around the item outlines where the point is still considered inside the item.

onlyNodes
true to exclude child links from the search.

onlyInteractive
true to exclude locked items from the search.

includeHandles
true to also consider adjustment handle locations (possibly outside of item's bounds).

includeLabels
true to also consider item label locations (possibly outside of item's bounds).

Return Value

The item that contains the specified point.

Remarks

This method performs recursive search if items contain child items.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace
containsPoint Method

DiagramItem.hitTestHandle Method

Determines whether a selection handle of this item is located at the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public abstract AdjustmentHandle hitTestHandle (
    Point2D point
)
```

Parameters

point
A **Point2D** instance specifying the location where to look for adjustment handles.

Return Value

Returns an AdjustmentHandle instance representing the adjustment handle found at the specified location, or **null** if there is none.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.labelFromPoint Method

Returns the label whose layout rectangle contains the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ItemLabel labelFromPoint (
    Point2D point
)
```

Parameters

point
A **Point2D** instance.

Return Value

The ItemLabel that contains the specified point.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.loadFromJson Method

Loads the item from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the item's data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

Remarks

This method is invoked when an item is being deserialized from a diagram file saved in JSON format.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.loadFromXml Method

Loads the item content from an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An **XmlElement** containing the item's data.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.onAdd Method

Called when an item is added to a Diagram, either by the user, programmatically or by undo / redo.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onAdd ()
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.onChangeFont Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onChangeFont ()
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.onChangeTextPadding Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onChangeTextPadding ()
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.onChildModified Method

Called when a group child node has been modified. Override this method if you need to know when a node from the SubordinateGroup is modified.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onChildModified (
    DiagramNode node,
    AdjustmentHandle handle
)
```

Parameters

node
The node that has been modified.

handle
The adjustment handle used to modify the node.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.onClick Method

Invoked when the user clicks this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onClick (
    int mouseButton,
    Point2D pointerPosition
)
```

Parameters

mouseButton
Specifies the mouse button used to click the item.

mousePosition
Specifies the mouse position.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.onDoubleClick Method

Invoked when the user double-clicks this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onDoubleClick (
    int mouseButton,
    Point2D pointerPosition
)
```

Parameters

mouseButton
Specifies the mouse button used to click the item.

mousePosition
Specifies the mouse position

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.onLoad Method

Called when this item is loaded from a file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onLoad (
    Diagram diagram
)
```

Parameters

diagram
The Diagram whose content is being loaded.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.onMeasureUnitChanged Method

Called when the diagram's MeasureUnit changes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onMeasureUnitChanged ()
```

See Also

DiagramItem Members
DiagramItem Class

DiagramItem.onRemove Method

Called when an item is removed from a Diagram, either by the user, programmatically or by undo / redo.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void onRemove ()
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.onStyleChanged Method

Invoked when the associated style or theme have changed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void onStyleChanged ()
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.onStyleFontChanged Method

Invoked when font property values of an associated style change.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void onStyleFontChanged ()
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.putSelected Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void putSelected (
    boolean newVal
)
```

Parameters

newVal

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.query Method

Returns the items that can be reached from this item by following the path specified in the given query expression.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItemList query (
    String query
)
```

Parameters

query
A query expression consisting of selectors and boolean predicates.

Return Value

A DiagramItemList collection of the found items.

Remarks

The query string consists of selectors, where each selector specifies the next items that should be selected starting from the current one.

The following selectors can be applied to a node:

links	Selects all links connected to the current node
inlinks	Selects the incoming links of the current node
outlinks	Selects the outgoing links of the current node
parent	Selects the parent item of the current node if it is in a group
children	Selects the child nodes of the current node if it is in a group

The following selectors can be applied to a link:

nodes	Selects the two nodes connected by the current link
origin	Selects the Origin node of the current link
destination	Selects the Destination node of the current link
children	Selects the child nodes of the current link if it is in a group.

Selectors must be separated by the / character. The results returned by a selector can be also filtered using a predicate expression, enclosed in square brackets after the selector name. The predicate expression can include C# like boolean and arithmetic operators, and one of the following property identifiers:

tag	Returns the value of the Tag property.
text	Returns the value of the Text property.
weight	Returns the value of the Weight property.

Example

The following code selects nodes two levels below the current one in a tree or layered graph.

Java

```
DiagramItemList items = diagram.getActiveItem().query(
    "outlinks/destination/outlinks/destination");
diagram.getSelection().clear();
for (DiagramItem item : items)
    item.setSelected(true);
```

The following code finds the neighbors of the currently selected node that can be reached from it by following links with Weight greater than 3.

Java

```
DiagramItemList items = diagram.getActiveItem().query(
 "outlinks[weight>3]/destination");
```

The following example finds the destination nodes of links labeled "exception" going out of children of the current node's group.

Java

```
DiagramItemList items = diagram.getActiveItem().query(
    "children/outlinks[text==\"exception\"]/destination");
```

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace
getIncomingLinks Method
getOutgoingLinks Method
getMasterGroup Method
getSubordinateGroup Method

DiagramItem.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.repaint Method

Overload List

Name	Description
DiagramItem.repaint ()	Repaints the region of the diagram where this item is located. Call this method to repaint the diagram after changing appearance attributes of this item.
DiagramItem.repaint (boolean)	Repaints the specified region of the diagram.
DiagramItem.repaint (Rectangle2D)	Repaints the specified region of the diagram.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.repaint Method ()

Repaints the region of the diagram where this item is located. Call this method to repaint the diagram after changing appearance attributes of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void repaint ()
```

See Also

repaint Method Overload List
DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.repaint Method (boolean)

Repaints the specified region of the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void repaint (
    boolean includeConnected
)
```

Parameters

includeConnected

See Also

repaint Method Overload List
DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.repaint Method (Rectangle2D)

Repaints the specified region of the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void repaint (
    Rectangle2D invalidRect
)
```

Parameters

invalidRect

See Also

repaint Method Overload List
DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.restoreProperties Method

Restores the properties of this diagram item. This method is invoked by the undo/redo subsystem when undoing or redoing a ChangeItemCmd instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void restoreProperties (
    DiagramItemProperties props
)
```

Parameters

props
A DiagramItemProperties-derived object containing a snapshot of the item's properties.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.restoreState Method

Restores the state of this diagram item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void restoreState (
    DiagramItemState state
)
```

Parameters

state

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.saveProperties Method

Saves the properties of this diagram item. This method is invoked by the undo/redo subsystem when saving a ChangeItemCmd instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveProperties (
    DiagramItemProperties props
)
```

Parameters

props
A DiagramItemProperties-derived object where the item's properties should be saved.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.saveState Method

Saves the state of this diagram item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveState (
    DiagramItemState state
)
```

Parameters

state

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.saveToJson Method

Saves the item as a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject instance to contain the serialized data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

Remarks

This method is invoked when an item is being serialized into a JSON-format diagram file.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.saveToXml Method

Saves the item content into an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

An **Element** the item's data should be stored into.

context

An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setBrush Method

Sets the brush used to fill the item's interior.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBrush (
    Brush value
)
```

Parameters

value

A Brush -derived object representing the item's brush.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace
Pen Property
Opacity Property

DiagramItem.setDiagramDirty Method

Marks the diagram as changed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void setDiagramDirty ()
```

See Also

DiagramItem Members
DiagramItem Class

DiagramItem.setFont Method

Sets the font used to draw the text of an item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFont (
    Font value
)
```

Parameters

value
A **Font** object representing the fontused to draw this item's text.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setHyperLink Method

Sets the hyperlink associated with an item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHyperLink (
    String value
)
```

Parameters

value
A **String** containing the hyperlink.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setId Method

Assigns user-defined identifier to this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setId (
    Object value
)
```

Parameters

value
An Object containing custom data.

Remarks

If the id object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the serializeTag event.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setIgnoreLayout Method

Sets a value indicating whether an item should be ignored by the automatic layout algorithms.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIgnoreLayout (
    boolean value
)
```

Parameters

value
true if the item should be ignored by automatic layout algorithms, otherwise **false**.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setLayerIndex Method

Sets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLayerIndex (
    int value
)
```

Parameters

value
An integer value specifying the layer index.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setLocked Method

Sets a value indicating whether users are allowed to modify an item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLocked (
    boolean value
)
```

Parameters

value
true if the item should not be modified, otherwise **false**.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setOpacity Method

Sets the opacity of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOpacity (
    float value
)
```

Parameters

value
A float value between 0 and 1 specifying the item's opacity.

Remarks

This value is applied as a factor multiplying the alpha channel of all colors in the item's graphics.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace
Brush Property
Pen Property

DiagramItem.setPen Method

Sets the pen used to draw the item frame lines.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPen (
    Pen value
)
```

Parameters

value
A Pen object representing the item's pen.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace
Brush Property
Opacity Property

DiagramItem.setPrintable Method

Sets a value indicating whether an item will be printed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPrintable (
    boolean value
)
```

Parameters

value
true if the item should be drawn when printing the diagram, otherwise **false**.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setSelected Method

Selects or deselects an item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSelected (
    boolean value
)
```

Parameters

value
true if the item should be selected, otherwise **false**.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setShadowBrush Method

Sets the brush used to paint the item's shadow.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShadowBrush (
    Brush value
)
```

Parameters

value
An instance of a Brush -derived class. Initialized with the value of ShadowBrush.

Remarks

The shadow of an item has the same shape as the item, but is painted with a different brush and with some offset from the item position. This property specifies the brush used to paint the item's shadow.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setShadowOffsetX Method

Sets the horizontal distance between a shadow and the item that casts it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShadowOffsetX (
    float value
)
```

Parameters

value
A float value representing the horizontal offset of the item's shadow.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setShadowOffsetY Method

Sets the vertical distance between a shadow and the item that casts it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setShadowOffsetY (
    float value
)
```

Parameters

value
A float value representing the vertical offset of the item's shadow.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setStyle Method

Sets the style associated with the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setStyle (
    DiagramItemStyle value
)
```

Parameters

value
A DiagramItemStyle instance.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setTag Method

Assigns user-defined data to an item. If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTag (
    Object value
)
```

Parameters

value
An **Object** containing custom data.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setTextBrush Method

Sets the brush used to paint texts inside the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextBrush (
    Brush value
)
```

Parameters

value
A Brush instance.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setTextPadding Method

Sets the spacing between the item boundaries and its text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextPadding (
    Thickness value
)
```

Parameters

value
A Thickness instance specifying the size of the padding space left around the text.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setToolTip Method

Sets the tooltip text that should be displayed when the pointer rests over this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setToolTip (
    String value
)
```

Parameters

value
A **String** that contains the tooltip text.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setVisible Method

Sets a value indicating whether an item is visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setVisible (
    boolean value
)
```

Parameters

value
true if the item should be visible,otherwise **false**.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setWeight Method

Sets a weight value used in layout and path-finding algorithms.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setWeight (
    float value
)
```

Parameters

value
A float value representing the item's weight.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.setZIndex Method

Sets the position of an item within the diagram's Z-order.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setZIndex (
    int value
)
```

Parameters

value
An integer value specifying the position of the item within the diagram Z-order.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.shouldRender Method

Determines whether the item is rendered in the current context.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean shouldRender ()
```

Return Value

true to draw the item; otherwise, **false**.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.startCreate Method

Invoked once when the user starts drawing a new item interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void startCreate (
    Point2D org
)
```

Parameters

org
A **Point2D** specifying the pointer position.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.startModify Method

Invoked when the user starts modifying this item interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void startModify (
    Point2D org,
    AdjustmentHandle handle,
    InteractionState ist
)
```

Parameters

org
The initial mouse position.

handle
The adjustment handle used to modify this item.

ist
An InteractionState object containing more information about the current state of the operation.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.updateCreate Method

Invoked during interactive creation of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void updateCreate (
    Point2D current
)
```

Parameters

current
A **Point2D** specifying the pointer position.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.updateModify Method

Invoked during interactive modification of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void updateModify (
    Point2D current,
    InteractionState ist
)
```

Parameters

current
A **Point2D** specifying the pointer position.

ist
An InteractionState object containing more information about the current state of the operation.

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.zBottom Method

Moves an item to the bottom of the Z order.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void zBottom (
    boolean keepInLayer
)
```

Parameters

keepInLayer

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.zLevelDown Method

Moves an item down in the Z order.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void zLevelDown (
    boolean keepInLayer
)
```

Parameters

keepInLayer

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.zLevelUp Method

Moves an item up in the Z order.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public void zLevelUp (
    boolean keepInLayer
)
```

Parameters

keepInLayer

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItem.zTop Method

Moves an item to the top of the Z order.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void zTop (
    boolean keepInLayer
)
```

Parameters

keepInLayer

See Also

DiagramItem Members
DiagramItem Class
com.mindfusion.diagramming Namespace

DiagramItemList Class

A strongly typed list of DiagramItem objects.

Syntax

Java

```
public class DiagramItemList extends BaseList<E> implements Cloneable
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.BaseList(E)
        com.mindfusion.diagramming.DiagramItemList

See Also

DiagramItemList Members
com.mindfusion.diagramming Namespace

DiagramItemList Members

A strongly typed list of DiagramItem objects.

The following tables list the members exposed by the DiagramItemList type.

Public Constructors

	Name	Description
	DiagramItemList	

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)
	listEvent	(Inherited from BaseList.)
	notifyParent	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	Adds a new element to the list. (Inherited from BaseList.)
	clear	Removes all elements from the list. (Inherited from BaseList.)
	clone	
	contains	Determines if this list contains the specified element. (Inherited from BaseList.)
	first	Gets the first element of this list. (Inherited from BaseList.)
	get	Gets the element at the specified position in this list. (Inherited from BaseList.)
	last	Gets the last element of this list. (Inherited from BaseList.)
	readExternal	Loads the list's contents. (Inherited from BaseList.)
	remove	Overloaded. (Inherited from BaseList.)
	removeRange	Removes a range of elements from this list. (Inherited from BaseList.)
	set	Sets the element at the specified position in this list. (Inherited from BaseList.)
	size	Gets the number of elements in this list. (Inherited from BaseList.)

	writeExternal	Saves the list's contents. (Inherited from BaseList.)

Protected Methods

	Name	Description
	raiseAdding	Raises the adding event. (Inherited from BaseList.)
	raiseClearing	Raises the clearing event. (Inherited from BaseList.)
	raiseRemoving	Raises the removing event. (Inherited from BaseList.)

See Also

DiagramItemList Class
com.mindfusion.diagramming Namespace

DiagramItemList Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramItemList ()
```

See Also

DiagramItemList Class
com.mindfusion.diagramming Namespace

DiagramItemList Methods

DiagramItemList.clone Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Object clone ()
```

Return Value

See Also

DiagramItemList Members
DiagramItemList Class

DiagramItemProperties Class

The base class for types that store the values of diagram item properties during undo / redo operations.

Syntax

Java
`public class DiagramItemProperties`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItemProperties
    com.mindfusion.diagramming.DiagramLinkProperties
    com.mindfusion.diagramming.DiagramNodeProperties

See Also

DiagramItemProperties Members
com.mindfusion.diagramming Namespace

DiagramItemProperties Members

The base class for types that store the values of diagram item properties during undo / redo operations.

The following tables list the members exposed by the DiagramItemProperties type.

Public Fields

	Name	Description
	textPadding	

See Also

DiagramItemProperties Class
com.mindfusion.diagramming Namespace

DiagramItemProperties Fields

DiagramItemProperties.textPadding Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Thickness textPadding
```

See Also

DiagramItemProperties Members
DiagramItemProperties Class
com.mindfusion.diagramming Namespace

DiagramItemState Class

Contains a snapshot of the internal state of a diagram item. Instances of this class are used to store the state of items for later undo or redo operations.

Syntax

Java
`public class DiagramItemState`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItemState
    com.mindfusion.diagramming.DiagramLinkState
    com.mindfusion.diagramming.DiagramNodeState

See Also

DiagramItemState Members
com.mindfusion.diagramming Namespace

DiagramItemState Members

Contains a snapshot of the internal state of a diagram item. Instances of this class are used to store the state of items for later undo or redo operations.

The following tables list the members exposed by the DiagramItemState type.

Public Constructors

	Name	Description
	DiagramItemState	

Protected Fields

	Name	Description
	item	

See Also

DiagramItemState Fields

DiagramItemState.item Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramItem item
```

See Also

DiagramItemState Members
DiagramItemState Class
com.mindfusion.diagramming Namespace

DiagramItemState Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItemState (
    DiagramItem item
)
```

Parameters

item

See Also

DiagramItemState Class
com.mindfusion.diagramming Namespace

DiagramItemStyle Class

Represents a reusable set of properties that define the appearance of diagram items.

Syntax

Java

```
public class DiagramItemStyle extends Style
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Style
    com.mindfusion.diagramming.DiagramItemStyle
      com.mindfusion.diagramming.DiagramLinkStyle
      com.mindfusion.diagramming.DiagramNodeStyle

See Also

DiagramItemStyle Members
com.mindfusion.diagramming Namespace

DiagramItemStyle Members

Represents a reusable set of properties that define the appearance of diagram items.

The following tables list the members exposed by the DiagramItemStyle type.

Protected Constructors

	Name	Description
	DiagramItemStyle	Initializes a new instance of the **DiagramItemStyle** class.

Public Methods

	Name	Description
	addPropertyChangeListener	(Inherited from Style.)
	getBrush	Gets the brush used to fill the interior of the item.
	getFontFamily	Gets the font family of the item text.
	getFontSize	Gets the font size of the item text.
	getFontStyle	Gets the font style of the item text.
	getFontUnit	Gets the measure unit used to specify font size.
	getShadowBrush	Gets the brush used to paint the shadow of the item.
	getStroke	Gets the brush used to paint the outline of the item.
	getStrokeThickness	Gets the thickness of the item's outline, expressed in the current units of measure.
	getTextBrush	Gets the brush used to paint texts inside the item.
	readExternal	**Externalizable.readExternal** implementation. (Inherited from Style.)
S	registerType	Associates a type with an alias. The alias is used when saving and loading objects of the specified type during style serialization and deserialization. (Inherited from Style.)

	removePropertyChangeListener	(Inherited from Style.)
	setBrush	Sets the brush used to fill the interior of the item.
	setFontFamily	Sets the font family of the item text.
	setFontSize	Sets the font size of the item text.
	setFontStyle	Sets the font style of the item text.
	setFontUnit	Sets the measure unit used to specify font size.
	setShadowBrush	Sets the brush used to paint the shadow of the item.
	setStroke	Sets the brush used to paint the outline of the item.
	setStrokeThickness	Sets the thickness of the item's outline, expressed in the current units of measure.
	setTextBrush	Sets the brush used to paint texts inside the item.
	writeExternal	**Externalizable.writeExternal** implementation. (Inherited from Style.)

Protected Methods

	Name	Description
	getValue	Gets the value of the specified property. (Inherited from Style.)
	isPropertySet	Checks whether the specified property has a value. (Inherited from Style.)
	loadFromJson	Loads the style content from a JsonObject.
	loadFromXml	Loads the style content from an XML element. (Inherited from Style.)
	registerProperty	Registers a new property with the specified name and type. (Inherited from Style.)
	saveToJson	Saves the style content into a JsonObject.
	saveToXml	Saves the style content into an XML element. (Inherited from Style.)
	setValue	Sets the value of the specified property. (Inherited from Style.)
	unsetValue	Clears the value of the specified property. (Inherited from Style.)

See Also

DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle Constructor

Initializes a new instance of the DiagramItemStyle class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected DiagramItemStyle ()
```

See Also

DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle Methods

DiagramItemStyle.getBrush Method

Gets the brush used to fill the interior of the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getBrush ()
```

Return Value

A Brush instance.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle.getFontFamily Method

Gets the font family of the item text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getFontFamily ()
```

Return Value

A string specifying the font name.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle.getFontSize Method

Gets the font size of the item text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getFontSize ()
```

Return Value

A **float** value specifying the font size.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle.getFontStyle Method

Gets the font style of the item text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getFontStyle ()
```

Return Value

A combination of the style constants defined in the **Font** class.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle.getFontUnit Method

Gets the measure unit used to specify font size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public GraphicsUnit getFontUnit ()
```

Return Value

A member of the GraphicsUnit enumeration.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace
setFontUnit Method
getFontSize Method

DiagramItemStyle.getShadowBrush Method

Gets the brush used to paint the shadow of the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getShadowBrush ()
```

Return Value

A Brush instance.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle.getStroke Method

Gets the brush used to paint the outline of the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getStroke ()
```

Return Value

A Brush instance.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle.getStrokeThickness Method

Gets the thickness of the item's outline, expressed in the current units of measure.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public double getStrokeThickness ()
```

Return Value

A **double** value specifying the stroke thickness.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle.getTextBrush Method

Gets the brush used to paint texts inside the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getTextBrush ()
```

Return Value

A Brush instance.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle.loadFromJson Method

Loads the style content from a JsonObject.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the style's data.

context
A JsonPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle.saveToJson Method

Saves the style content into a JsonObject.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject the style's data should be stored into.

context
A JsonPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

DiagramItemStyle Members
DiagramItemStyle Class

DiagramItemStyle.setBrush Method

Sets the brush used to fill the interior of the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBrush (
    Brush value
)
```

Parameters

value
A Brush instance.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle.setFontFamily Method

Sets the font family of the item text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFontFamily (
    String value
)
```

Parameters

value
A string specifying the font name.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle.setFontSize Method

Sets the font size of the item text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFontSize (
    float value
)
```

Parameters

value
A **float** value specifying the font size.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle.setFontStyle Method

Sets the font style of the item text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFontStyle (
    int value
)
```

Parameters

value
A combination of the style constants defined in the **Font** class.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle.setFontUnit Method

Sets the measure unit used to specify font size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setFontUnit (
    GraphicsUnit value
)
```

Parameters

value
A member of the GraphicsUnit enumeration.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace
getFontUnit Method
setFontSize Method

DiagramItemStyle.setShadowBrush Method

Sets the brush used to paint the shadow of the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setShadowBrush (
    Brush value
)
```

Parameters

value
A Brush instance.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle.setStroke Method

Sets the brush used to paint the outline of the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setStroke (
    Brush value
)
```

Parameters

value
A Brush instance.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle.setStrokeThickness Method

Sets the thickness of the item's outline, expressed in the current units of measure.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setStrokeThickness (
    double value
)
```

Parameters

value
A **double** value specifying the stroke thickness.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramItemStyle.setTextBrush Method

Sets the brush used to paint texts inside the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextBrush (
    Brush value
)
```

Parameters

value
A Brush instance.

See Also

DiagramItemStyle Members
DiagramItemStyle Class
com.mindfusion.diagramming Namespace

DiagramLink Class

Links between nodes in JDiagram diagrams are represented by instances of the **DiagramLink** class.

Syntax

Java

```
public class DiagramLink extends DiagramItem implements InplaceEditable, Routable
```

Remarks

Links connect at most two nodes, which can be accessed by the getOrigin and getDestination methods. If linked to node anchor points, the point indices can be accessed using the getOriginAnchor and getDestinationAnchor methods. To control whether users are allowed to move link end points, call one or both of the setAllowMoveStart and setAllowMoveEnd.

Links are built of smaller parts, called segments, which can be straight lines, cascading orthogonal lines or Bezier curves. The type of segments can be set through the setStyle method. The number of links segments is specified by the setSegmentCount method. Access to the control point locations is provided by the getControlPoints method.

Usually only the start and end segments of a link are updated if the nodes it connects are moved around. Number, orientation and/or position of link segments can change dynamically in various ways depending on the values set through setAutoRoute, setDynamic and setRetainForm. The setCascadeOrientation method lets you specify the orientation of the first segment of a link of style Cascading.

If AutoSnapToNode is enabled, a link automatically aligns its end points to the border of the origin or destination nodes when a user moves the first or last control points. This has a higher priority than aligning to the grid, but a lower priority than aligning to an anchor point.

Links can display distinct arrowhead shapes at their ends. These shapes can be set by the setHeadShape and setBaseShape methods. The size of the arrowhead and base shapes can be specified respectively via the setHeadShapeSize and setBaseShapeSize methods. Arrowhead shapes can be displayed in the middle of each segment to facilitate users by distinguishing different links. The type and size of these shapes is set by the setIntermediateShape and setIntermediateShapeSize methods. The outlines of arrowhead shapes are painted with the pen specified by setHeadPen.

Links can have some text associated with them, displayed as specified in the setText, setTextBrush and setTextStyle methods. It is also possible to display multiple labels, added via the addLabel method. They are rendered using the font and text color associated with the link by default, but can be customized with distinct fonts, colors and text alignments through the methods of LinkLabel.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItem
    com.mindfusion.diagramming.DiagramLink

See Also

DiagramLink Members
com.mindfusion.diagramming Namespace

DiagramLink Members

Links between nodes in JDiagram diagrams are represented by instances of the DiagramLink class.

The following tables list the members exposed by the **DiagramLink** type.

Public Constructors

	Name	Description
	DiagramLink	Overloaded.

Protected Fields

	Name	Description
	brush	(Inherited from DiagramItem.)
	cycleDetected	(Inherited from DiagramItem.)
	cycleProtect	(Inherited from DiagramItem.)
	modifyDX	(Inherited from DiagramItem.)
	modifyDY	(Inherited from DiagramItem.)
	modifyHandle	(Inherited from DiagramItem.)
	modifying	(Inherited from DiagramItem.)
	pen	(Inherited from DiagramItem.)
	ptEnd	(Inherited from DiagramItem.)
	ptMdfLast	(Inherited from DiagramItem.)
	ptOrg	(Inherited from DiagramItem.)
	ptSavedEnd	(Inherited from DiagramItem.)
	ptSavedOrg	(Inherited from DiagramItem.)
	subordinateGroup	(Inherited from DiagramItem.)

Public Methods

	Name	Description
	addLabel	Overloaded. Adds a new label to this link.
	applyRoute	
	as	Down-casts the item to specified type. (Inherited from DiagramItem.)

	clone	Creates a copy of this link.
	containsPoint	Overloaded.
	createRouteDescriptor	
	drawArrowhead	Draws an arrowhead shape.
	getAllowMoveEnd	Gets a value indicating whether users are allowed to move the last control point of a link.
	getAllowMoveStart	Gets a value indicating whether users are allowed to move the first control point of a link.
	getAutoRoute	Gets a value indicating whether a link should avoid nodes by going the shortest path from its origin to its destination without crossing any other nodes.
	getAutoSnapToNode	Gets a value indicating whether a link end point should automatically snap to the nearest diagram node while the user moves the point's adjustment handle.
	getBaseBrush	Gets the brush used to fill the arrowhead drawn at the link base.
	getBaseShape	Gets the shape that is displayed at the origin of a link.
	getBaseShapeSize	Gets the size of the shape displayed at the origin of a link.
	getBounds	Gets the smallest rectangle that bounds all points of a link.
	getBrush	Gets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	getCascadeOrientation	Gets the orientation of the first segment of a cascading link.
	getControlPoints	Gets the list of control points of a link.
	getCustomDraw	Gets the type of custom drawing performed on this link.
	getDestination	Gets the destination node of a link.
	getDestinationAnchor	Gets the index of the anchor point to which a link is connected at its destination.
	getDestinationConnection	Gets the ConnectionPoint object representing the link connection to its destination node.
	getDestinationIndex	Gets the index of the row of a table or the anchor point of a box to which a link is connected.
	getDynamic	Gets whether a link should automatically update the position of its end points while a node related to the link is moved, so that the link end segments always point to the center of the link's nodes.
	getEditRect	Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).
	getEffectiveBrush	Gets the effective brush of the item. (Inherited from DiagramItem.)

	getEffectiveFont	Gets the currently effective font of the item. This property returns getFont if it is not null, or a font with the DiagramItemStyle.getFontFamily, DiagramItemStyle.getFontSize, and DiagramItemStyle.getFontStyle properties of the item's style. (Inherited from DiagramItem.)
	getEffectiveHeadPen	Creates a Pen object representing the currently effective head pen of the link. This method returns a pen corresponding to the link's DiagramLink.getHeadPen if it is not null, or a pen with the DiagramLinkStyle.getHeadStroke and DiagramLinkStyle.getHeadStrokeThickness properties of the link's style.
	getEffectivePen	Gets the effective pen of the item. (Inherited from DiagramItem.)
	getEffectiveShadowBrush	Creates a Brush object representing the currently effective shadow brush of the item. This method returns a system brush corresponding to the item's getShadowBrush if the item's **getShadowBrush** is not null, or a system brush corresponding to the DiagramItemStyle.getShadowBrush property of the item's style. (Inherited from DiagramItem.)
	getEffectiveTextBrush	Gets the effective text brush of the item. (Inherited from DiagramItem.)
	getEndPoint	Gets the position of the last control point of this link.
	getFont	Gets the font used to draw the text of an item. (Inherited from DiagramItem.)
	getHandlesStyle	Gets the appearance of the link's selection handles.
	getHeadBrush	Gets the brush used to fill the arrowhead drawn at the link's destination.
	getHeadPen	Gets the pen used to draw the arrowhead shapes outlines.
	getHeadShape	Gets the shape of this link's arrowhead.
	getHeadShapeSize	Gets the size of the arrowhead shape.
	getHyperLink	Gets the hyperlink associated with an item. (Inherited from DiagramItem.)
	getId	Gets user-defined identifier associated with this item. (Inherited from DiagramItem.)
	getIgnoreLayout	Gets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	getIntermediateBrush	Gets the brush used to fill the arrowheads drawn at the middle of link segments.
	getIntermediateShape	Gets the shape that is displayed at the middle of each segment of a link.
	getIntermediateShapeSize	Gets the size of the shape displayed at the middle of each segment of a link.
	getLabels	Returns the list of all labels displayed by this link.

	getLayerIndex	Gets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	getLayoutTraits	Returns a hashtable containing properties specific to layout algorithms. (Inherited from DiagramItem.)
	getLength	Gets the length of this link.
	getLocked	Gets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	getLongestHSegment	Returns the index of the longest non-vertical segment of the link.
	getMasterGroup	Gets the hierarchical group in which this item is a subordinate. (Inherited from DiagramItem.)
	getOpacity	Gets the opacity of this item. (Inherited from DiagramItem.)
	getOrigin	Gets the origin node of a link.
	getOriginAnchor	Gets the index of the anchor point to which a link is connected at its origin.
	getOriginConnection	Gets the **ConnectionPoint** object representing the link connection to its origin node.
	getOriginIndex	Gets the index of the row of a table or the anchor point of a box to which a link is connected.
	getParent	Gets the diagram that contains this item. (Inherited from DiagramItem.)
	getPen	Gets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	getPrintable	Gets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	getRetainForm	Gets a value indicating whether a link should preserve its original shape while the nodes related to that link are moved around.
	getRuntimeIndex	For internal use. (Inherited from DiagramItem.)
	getSegmentCount	Gets the number of segments of this link.
	getSelected	Gets a value indicating whether this item is selected. (Inherited from DiagramItem.)
	getShadowBrush	Gets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	getShadowOffsetX	Gets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getShadowOffsetY	Gets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getShape	Gets the shape of a link.
	getStartPoint	Gets the position of the first control point of this link.

	getStyle	Gets the style associated with the item. (Inherited from DiagramItem.)
	getSubordinateGroup	Gets the group of subordinated items attached to this one. (Inherited from DiagramItem.)
	getTag	Gets user-defined data assigned to an item. (Inherited from DiagramItem.)
	getText	Gets the text of the link's label.
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	getTextPadding	Gets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	getTextStyle	Gets the link's text placement and orientation.
	getTextToEdit	Implements InplaceEditable.getTextToEdit. Returns the string that should be displayed initially when the link's text is edited in-place.
	getToolTip	Gets the tooltip text displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	getVisible	Gets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	getWeight	Gets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	getZIndex	Gets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	hasSubordinates	Checks whether there are any nodes attached to this item. (Inherited from DiagramItem.)
	hitTest	Returns the diagram item that contains the specified point. (Inherited from DiagramItem.)
	hitTestHandle	DiagramItem.hitTestHandle override.
	init	Returns a DiagramLinkBuilder object used to configure this DiagramLink instance.
	intersects	Overloaded.
	isConnected	Gets a value indicating whether a link is connected to any nodes.
	labelFromPoint	Returns the label whose layout rectangle contains the specified point.
	query	Returns the items that can be reached from this item by following the path specified in the given query expression. (Inherited from DiagramItem.)
	readExternal	Implements Externalizable.
	reassignAnchorPoints	Chooses new anchor points for a link.
	removeLabel	Removes the specified label from this link.

	route	Sets the link control points so that a link goes between its related nodes without crossing other nodes.
	setAllowMoveEnd	Sets a value indicating whether users are allowed to move the last control point of a link.
	setAllowMoveStart	Sets a value indicating whether users are allowed to move the first control point of a link.
	setAutoRoute	Sets a value indicating whether a link should avoid nodes by going the shortest path from its origin to its destination without crossing any other nodes.uld automatically find its way between nodes so that it will not cross other nodes.
	setAutoSnapToNode	Sets a value indicating whether a link end point should automatically snap to the nearest diagram node while the user moves the point's adjustment handle.
	setBaseBrush	Sets a brush used to fill the arrowhead drawn at the link base.
	setBaseShape	Sets the shape that is displayed at the origin of a link.
	setBaseShape	
	setBaseShapeSize	Sets the size of the shape displayed at the origin of a link.
	setBrush	Sets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	setCascadeOrientation	Sets the orientation of the first segment of a cascading link.
	setCustomDraw	Sets the type of custom drawing performed on this link.
	setDestination	Sets the destination node of a link.
	setDestinationAnchor	Sets the anchor point to which a link is connected at its destination.
	setDestinationConnection	Sets the **ConnectionPoint** object representing the link connection to its destination node.
	setDestinationIndex	Sets the row of a table or the anchor point of a node to which a link is connected.
	setDynamic	Sets whether a link should automatically update the position of its end points while a node related to the link is moved, so that the link end segments always point to the center of the link's nodes.
	setEditedText	Implements InplaceEditable.setEditedText. Assigns the edited text to this link after in-place edit operation completes successfully.
	setEndPoint	Sets the position of the last control point of this link.
	setFont	Sets the font used to draw the text of an item. (Inherited from DiagramItem.)
	setHandlesStyle	Sets the appearance of the link's selection handles.
	setHeadBrush	Sets a brush used to fill the arrowhead drawn at the link's destination.

	setHeadPen	Sets the pen used to draw the arrowhead shapes outlines.
	setHeadShape	
	setHeadShape	Sets the shape of the link's arrowhead.
	setHeadShapeSize	Sets the size of the arrowhead shape.
	setHyperLink	Sets the hyperlink associated with an item. (Inherited from DiagramItem.)
	setId	Assigns user-defined identifier to this item. (Inherited from DiagramItem.)
	setIgnoreLayout	Sets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	setIntermediateBrush	Sets a brush used to fill the arrowheads drawn at the middle of link segments.
	setIntermediateShape	Sets the shape that is displayed at the middle of each segment of a link.
	setIntermediateShape	
	setIntermediateShapeSize	Sets the size of the shape displayed at the middle of each segment of a link.
	setLayerIndex	Sets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	setLocked	Sets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	setOpacity	Sets the opacity of this item. (Inherited from DiagramItem.)
	setOrigin	Sets the origin node of a link.
	setOriginAnchor	Sets the anchor point to which a link is connected at its origin.
	setOriginConnection	Sets the **ConnectionPoint** object representing the link connection to its origin node.
	setOriginIndex	Sets the row of a table or the anchor point of a box to which a link is connected.
	setPen	Sets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	setPrintable	Sets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	setRetainForm	Sets a value indicating whether a link should preserve its original shape while the nodes related to that link are moved around.
	setSegmentCount	Sets the number of segments of this link.
	setSelected	Selects or deselects an item. (Inherited from DiagramItem.)
	setShadowBrush	Sets the brush used to paint the item's shadow. (Inherited from DiagramItem.)

	setShadowOffsetX	Sets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShadowOffsetY	Sets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShape	Sets the shape of a link.
	setStartPoint	Sets the position of the first control point of this link.
	setStyle	Sets the style associated with the item. (Inherited from DiagramItem.)
	setTag	Assigns user-defined data to an item. If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event. (Inherited from DiagramItem.)
	setText	Sets the text displayed over a link.
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	setTextPadding	Sets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	setTextStyle	Sets the link's text placement and orientation.
	setToolTip	Sets the tooltip text that should be displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	setVisible	Specifies whether the link should be drawn on the screen.
	setWeight	Sets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	setZIndex	Sets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	updateFromPoints	Overloaded.
S	with	Returns a DiagramLinkBuilder object used to configure and create new DiagramLink instances.
	writeExternal	Implements Externalizable.
	zBottom	Moves an item to the bottom of the Z order. (Inherited from DiagramItem.)
	zLevelDown	Moves an item down in the Z order. (Inherited from DiagramItem.)
	zLevelUp	Moves an item up in the Z order. (Inherited from DiagramItem.)
	zTop	Moves an item to the top of the Z order. (Inherited from DiagramItem.)

Protected Methods

	Name	Description

allowCreate	DiagramItem.allowCreate override. Invoked while the user draws this item to test whether the operation can be completed in the current context.
allowModify	DiagramItem.allowModify override. Invoked during interactive modification of items to test whether the operation can be completed in the current context.
cancelModify	DiagramItem.cancelModify override. Invoked when the interactive modification of this link has been canceled.
completeCreate	DiagramItem.completeCreate override. Invoked when the user finishes drawing this item.
completeModify	DiagramItem.completeModify override.
createProperties	DiagramItem.createProperties override.
createState	DiagramItem.createState override.
draw	Draws the link on the specified **Graphics2D** surface.
drawShadow	DiagramItem.drawShadow override. Draws the link's shadow on the specified Graphics2D surface.
getMeasureUnit	(Inherited from DiagramItem.)
getRepaintRect	DiagramItem.getRepaintRect override.
getValue	Gets the effective value of the style property with the specified name. (Inherited from DiagramItem.)
loadFromJson	Loads the link from a JSON object.
loadFromXml	Loads the link content from an XML element.
onAdd	DiagramItem.onAdd override.
onChangeFont	
onChangeTextPadding	(Inherited from DiagramItem.)
onChildModified	Called when a group child node has been modified. Override this method if you need to know when a node from the **SubordinateGroup** is modified. (Inherited from DiagramItem.)
onClick	Invoked when the user clicks this item. (Inherited from DiagramItem.)
onDoubleClick	Invoked when the user double-clicks this item. (Inherited from DiagramItem.)
onLoad	DiagramItem.onLoad override.
onMeasureUnitChanged	Called when the diagram's MeasureUnit changes. (Inherited from DiagramItem.)
onModify	Called when an item is modified
onRemove	Called when an item is removed from a Diagram, either by the user, programmatically or by undo / redo. (Inherited from DiagramItem.)

	onStyleChanged	Invoked when the associated style or theme have changed. (Inherited from DiagramItem.)
	onStyleFontChanged	Invoked when font property values of an associated style change. (Inherited from DiagramItem.)
	putSelected	(Inherited from DiagramItem.)
	repaint	Overloaded. (Inherited from DiagramItem.)
	restoreProperties	DiagramItem.restoreProperties override.
	restoreState	DiagramItem.restoreState override.
	saveProperties	DiagramItem.saveProperties override.
	saveState	DiagramItem.saveState override.
	saveToJson	Saves the link as a JSON object.
	saveToXml	Saves the link content into an XML element.
	setDiagramDirty	Marks the diagram as changed. (Inherited from DiagramItem.)
	shouldRender	Determines whether the item is rendered in the current context. (Inherited from DiagramItem.)
	startCreate	DiagramItem.startCreate override. Invoked once when the user starts drawing a new item interactively.
	startModify	DiagramItem.startModify override. Invoked when the user starts modifying this link interactively.
	updateCreate	DiagramItem.updateCreate override. Invoked during interactive creation of this item.
	updateModify	DiagramItem.updateModify override. Invoked during interactive modification of this item.

See Also

DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink Constructor

Overload List

Name	Description
DiagramLink ()	Used internally to implement serialization functionality.
DiagramLink (Diagram)	Initializes a new instance of the DiagramLink class by setting its properties to the default values defined in the specified diagram.
DiagramLink (Diagram, DiagramNode, DiagramNode)	Initializes a new instance of the **DiagramLink** class by setting its properties to the default values defined in the

	specified diagram, and setting the specified nodes as link's origin and destination.
DiagramLink (Diagram, DiagramNode, Point2D)	Initializes a new instance of the **DiagramLink** class by setting its properties to the default values defined in the specified diagram, and setting the specified nodes as link's origin and destination.
DiagramLink (Diagram, Point2D, DiagramNode)	Initializes a new instance of the DiagramLink class by setting its properties to the default values defined in the specified diagram, and setting the specified nodes as link's origin and destination.
DiagramLink (Diagram, Point2D, Point2D)	Initializes a new instance of the DiagramLink class by setting its properties to the default values defined in the specified diagram, and setting the specified points as link's origin and destination.
DiagramLink (DiagramLink, DiagramNode, DiagramNode)	Initializes a new instance of the DiagramLink class by copying its properties from another link, and setting the specified nodes as link's origin and destination.

See Also

DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink Constructor ()

Used internally to implement serialization functionality.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink ()
```

See Also

DiagramLink Constructor Overload List
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink Constructor (Diagram)

Initializes a new instance of the DiagramLink class by setting its properties to the default values defined in the specified diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink (
    Diagram parent
)
```

Parameters

parent
A Diagram instance whose default linkattributes are copied to this link.

See Also

DiagramLink Constructor Overload List
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink Constructor (Diagram, DiagramNode, DiagramNode)

Initializes a new instance of the DiagramLink class by setting its properties to the default values defined in the specified diagram, and setting the specified nodes as link's origin and destination.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink (
    Diagram parent,
    DiagramNode src,
    DiagramNode dest
)
```

Parameters

parent
A Diagram instance whose default linkattributes are copied to this link.

src
A DiagramNode -derived object representing thelink origin node.

dest
A **DiagramNode** -derived object representing thelink destination node.

See Also

DiagramLink Constructor Overload List
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink Constructor (Diagram, DiagramNode, Point2D)

Initializes a new instance of the DiagramLink class by setting its properties to the default values defined in the specified diagram, and setting the specified nodes as link's origin and destination.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink (
    Diagram parent,
    DiagramNode src,
    Point2D dest
)
```

Parameters

parent
A Diagram instance whose default linkattributes are copied to this link.

src
A DiagramNode -derived object representing thelink origin node.

dest
A **Point2D** object representing thelink destination point.

See Also

DiagramLink Constructor Overload List
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink Constructor (Diagram, Point2D, DiagramNode)

Initializes a new instance of the DiagramLink class by setting its properties to the default values defined in the specified diagram, and setting the specified nodes as link's origin and destination.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink (
    Diagram parent,
    Point2D src,
    DiagramNode dest
)
```

Parameters

parent
A Diagram instance whose default linkattributes are copied to this link.

src
A **Point2D** object representing thelink origin point.

dest
A DiagramNode -derived object representing thelink destination node.

See Also

DiagramLink Constructor Overload List
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink Constructor (Diagram, Point2D, Point2D)

Initializes a new instance of the DiagramLink class by setting its properties to the default values defined in the specified diagram, and setting the specified points as link's origin and destination.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink (
    Diagram parent,
    Point2D src,
    Point2D dest
)
```

Parameters

parent
A Diagram instance whose default linkattributes are copied to this link.

src
A **Point2D** object representing thelink origin point.

dest
A **Point2D** object representing thelink destination point.

See Also

DiagramLink Constructor Overload List
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink Constructor (DiagramLink, DiagramNode, DiagramNode)

Initializes a new instance of the DiagramLink class by copying its properties from another link, and setting the specified nodes as link's origin and destination.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink (
    DiagramLink prototype,
    DiagramNode src,
    DiagramNode dest
)
```

Parameters

prototype
An DiagramLink instance whose attributes arecopied to this link.

src
A DiagramNode -derived object representing thelink origin node.

dest
A **DiagramNode** -derived object representing thelink destination node.

See Also

DiagramLink Constructor Overload List
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink Methods

DiagramLink.addLabel Method

Adds a new label to this link.

Overload List

Name	Description
DiagramLink.addLabel (LinkLabel)	Adds a new label to this link.
DiagramLink.addLabel (String)	Adds a new label to this link.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.addLabel Method (LinkLabel)

Adds a new label to this link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addLabel (
    LinkLabel label
)
```

Parameters

label
A LinkLabel instance.

Remarks

The label can be associated with a specific segment or control point of the link, or its position can be specified as a point along the link's length. To set the position of a label, call setSegmentPosition, setControlPointPosition or setLinkLengthPosition. Each label can be rendered using different color and font, specified via the setTextColor and setFont methods.

See Also

addLabel Method Overload List
DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
setText Method
getLabels Method
removeLabel Method

DiagramLink.addLabel Method (String)

Adds a new label to this link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkLabel addLabel (
    String text
)
```

Parameters

text
The label's text.

Return Value

A LinkLabel instance.

Remarks

The label can be associated with a specific segment or control point of the link, or its position can be specified as a point along the link's length. To set the position of a label, call setSegmentPosition, setControlPointPosition or setLinkLengthPosition. Each label can be rendered using different color and font, specified via the setTextColor and setFont methods.

See Also

addLabel Method Overload List
DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
setText Method
getLabels Method
removeLabel Method

DiagramLink.allowCreate Method

DiagramItem.allowCreate override. Invoked while the user draws this item to test whether the operation can be completed in the current context.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean allowCreate (
    Point2D current,
    InteractionState ist
)
```

Parameters

current

A **Point2D** specifying the current pointer position.

ist

An InteractionState object containing more information about the current state of the operation.

Return Value

true to allow the creation of this link; otherwise, **false**.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.allowModify Method

DiagramItem.allowModify override. Invoked during interactive modification of items to test whether the operation can be completed in the current context.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean allowModify (
    Point2D current,
    InteractionState ist
)
```

Parameters

current

A **Point2D** specifying the current pointer position.

ist

An InteractionState object containing more information about the current state of the operation.

Return Value

true to allow the modification of this link; otherwise, **false**.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.applyRoute Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void applyRoute (
    ArrayList<Point> routePoints,
    RouteDescriptor routeDescriptor,
    PointList resultPoints
)
```

Parameters

routePoints

routeDescriptor

resultPoints

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.cancelModify Method

DiagramItem.cancelModify override. Invoked when the interactive modification of this link has been canceled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void cancelModify (
    InteractionState ist
)
```

Parameters

ist
An InteractionState object containing more information about the current state of the operation.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.clone Method

Creates a copy of this link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem clone (
    boolean clipboard
)
```

Parameters

clipboard
true if the copy will be stored in the Windows clipboard; otherwise, **false**.

Return Value

An instance of the DiagramLink class.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.completeCreate Method

DiagramItem.completeCreate override. Invoked when the user finishes drawing this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void completeCreate (
    Point2D end
)
```

Parameters

end
A **Point2D** specifying the pointer position.

See Also

DiagramLink.completeModify Method

DiagramItem.completeModify override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void completeModify (
    Point2D end,
    InteractionState ist
)
```

Parameters

end
A **Point2D** specifying the pointer position.

ist
An InteractionState object containing more information about the current state of the operation.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.containsPoint Method

Overload List

Name	Description
DiagramLink.containsPoint (Point2D)	DiagramItem.containsPoint override. Checks whether this link contains the specified point. This method is called during hit-testing to determine if the mouse is over the link.
DiagramLink.containsPoint (Point2D, float)	DiagramItem.containsPoint override.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.containsPoint Method (Point2D)

DiagramItem.containsPoint override. Checks whether this link contains the specified point. This method is called during hit-testing to determine if the mouse is over the link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean containsPoint (
    Point2D point
)
```

Parameters

point
The point to check.

Return Value

true it this link contains the specified point; otherwise, **false**.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
labelFromPoint Method

DiagramLink.containsPoint Method (Point2D, float)

DiagramItem.containsPoint override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean containsPoint (
    Point2D point,
    float threshold
)
```

Parameters

point
A **Point2D** value specifying the logical coordinates of a diagram point.

threshold
Specifies the size of the area around the item outlines where the point is still considered inside the item.

Return Value

true it this item contains the specified point; otherwise, **false**.

See Also

containsPoint Method Overload List
DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.createProperties Method

DiagramItem.createProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramItemProperties createProperties ()
```

Return Value

A DiagramItemProperties -derived object containing a snapshot of the item's properties.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.createRouteDescriptor Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RouteDescriptor createRouteDescriptor ()
```

Return Value

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.createState Method

DiagramItem.createState override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected DiagramItemState createState ()
```

Return Value

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.draw Method

Draws the link on the specified **Graphics2D** surface.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void draw (
    Graphics2D graphics,
    RenderOptions options
)
```

Parameters

graphics
An **Graphics2D** object where the link should be rendered.

options
Provides options for the drawing operation.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.drawArrowhead Method

Draws an arrowhead shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void drawArrowhead (
    Graphics2D graphics,
    Pen pen,
```

```
    Brush b,
    Shape shape,
    Point2D pivot,
    Point2D position,
    Point2D segmentStart,
    double size,
    boolean shadow
)
```

Parameters

graphics
The **Graphics2D** surface to draw the shape on.

pen
A Pen instance used to draw the shape outline.

b
A Brush instance used to fill the shape.

shape
A Shape instance that defines the arrowhead geometry.

pivot
A Point2D specified in percents that corresponds to the arrowhead tip position within the **Shape** geometry.

position
A point on the drawing surface where the arrowhead tip should be located.

segmentStart
A point specifying the arrowhead direction.

size
A double value that specifies the arrowhead size.

shadow

Remarks

This method lets you draw any Shape object at arbitrary position and angle, and is useful for rendering arrowhead shapes when custom-drawing links.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.drawShadow Method

DiagramItem.drawShadow override. Draws the link's shadow on the specified Graphics2D surface.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void drawShadow (
    Graphics2D graphics,
    RenderOptions options
)
```

Parameters

graphics
A **Graphics2D** instance.

options
Provides options for the drawing operation.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getAllowMoveEnd Method

Gets a value indicating whether users are allowed to move the last control point of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowMoveEnd ()
```

Return Value

true if the last control point can be moved, otherwise **false**.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getAllowMoveStart Method

Gets a value indicating whether users are allowed to move the first control point of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowMoveStart ()
```

Return Value

true if the first control point can be moved, otherwise **false**.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getAutoRoute Method

Gets a value indicating whether a link should avoid nodes by going the shortest path from its origin to its destination without crossing any other nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAutoRoute ()
```

Return Value

true to route this link, or **false** otherwise. Initialized with the value of RouteLinks.

Remarks

If **AutoRoute** is enabled, a link automatically finds the shortest possible path between its origin and destination that doesn't intersect Obstacle nodes. The number and orientation of the link's segments are updated when the nodes it links are moved around. The positions of end points of a routed link are not changed, unless the link is also set to Dynamic.

It is best to use AutoRoute with links of the Cascading style. Note that automatic routing overrides the RetainForm behavior.

Performance note

Links whose **AutoRoute** property is enabled are re-routed when they intersect with newly added nodes. Consequently, when constructing a large diagram programmatically, each link could be re-routed multiple times, once for each newly added node whose location arguments collide with link's bounding rectangle. That might slow down diagram generation a lot. To avoid that, create all nodes before adding the links; that requires a single calculation for each link's route. Alternatively, enclose batch creation operations within suspendLinkRouter and resumeLinkRouter calls.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
RoutingOptions Class
Dynamic Property
SegmentCount Property
LinkRouter Property

DiagramLink.getAutoSnapToNode Method

Gets a value indicating whether a link end point should automatically snap to the nearest diagram node while the user moves the point's adjustment handle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getAutoSnapToNode ()
```

Return Value

true to snap links to nearest node; otherwise, **false**.

Remarks

Only nodes at a distance smaller than AutoSnapDistance are considered. A link does not snap to its current origin or destination nodes if that would create a self-loop. If there is an AnchorPattern assigned to a node, the link snaps to an anchor point instead of a border point.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getBaseBrush Method

Gets the brush used to fill the arrowhead drawn at the link base.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getBaseBrush ()
```

Return Value

An instance of a Brush -derived class. The default value is null.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
setBaseBrush Method
getHeadBrush Method
getIntermediateBrush Method
getBaseShape Method

DiagramLink.getBaseShape Method

Gets the shape that is displayed at the origin of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Shape getBaseShape ()
```

Return Value

A Shape instance that represents an arrowhead shape. Initialized with the value of LinkBaseShape.

Remarks

The property specifies the shape that is displayed at the beginning of a link, that is, the point where it is connected with its Origin node. This shape is rotated simultaneously with the first segment of the link so that it follows the overall link direction.

The ArrowHeads class exposes several predefined shapes as static properties.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
getBaseBrush Method

DiagramLink.getBaseShapeSize Method

Gets the size of the shape displayed at the origin of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getBaseShapeSize ()
```

Return Value

A float value specifying the shape size.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getBounds Method

Gets the smallest rectangle that bounds all points of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D.Float getBounds ()
```

Return Value

A **Rectangle2D.Float** object representing the link's bounding rectangle.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getCascadeOrientation Method

Gets the orientation of the first segment of a cascading link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Orientation getCascadeOrientation ()
```

Return Value

A member of the Orientation enumeration. Initialized with the value of LinkCascadeOrientation.

Remarks

Use this property to specify the orientation of the first segment of a link whose Shape is set to Cascading. The first segment also defines the orientation of all subsequent segments in the cascade, because each next segment changes its orientation alternately to the previous one.

If the property is set to Auto, users may change the orientation of a cascading link interactively. That can be done by dragging the control point next to the first or last one to its opposite corner in the rectangle defined by its two adjacent segments. Depending on the value of AllowSplitLinks, the link orientation is changed by either inserting a new segment and changing only the orientation of the first or last segment (AllowSplitLinks is **true**), or by changing the orientation of all segments of the link (**AllowSplitLinks** is **false**).

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getControlPoints Method

Gets the list of control points of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public PointList getControlPoints ()`

Return Value

A PointList containing the link's control points.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getCustomDraw Method

Gets the type of custom drawing performed on this link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public CustomDraw getCustomDraw ()`

Return Value

A member of the CustomDraw enumeration.

Remarks

This property allows invoking custom painting code for a link. That code must execute in response to the drawLink event. There are several modes of custom painting, allowing the custom code to paint the link entirely, or do that in addition to what JDiagram paints by default. The following CustomDraw members can be assigned to this property to specify the custom painting mode:

Member name	Description
None	Do not perform custom drawing, let all painting be done by JDiagram.
Additional	The custom painting code executes after the link segments and arrowhead shapes are painted by JDiagram, but before text is rendered.
Full	The component does not do any standard drawing, the entire painting of the link is done by the application.

ShadowOnly	Only the shadow of the link is painted by custom code, the link itself is drawn by the component.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getDestination Method

Gets the destination node of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode getDestination ()
```

Return Value

The destination DiagramNode.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getDestinationAnchor Method

Gets the index of the anchor point to which a link is connected at its destination.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getDestinationAnchor ()
```

Return Value

An integer value specifying the anchor point index.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getDestinationConnection Method

Gets the ConnectionPoint object representing the link connection to its destination node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ConnectionPoint getDestinationConnection ()
```

Return Value

An instance of ConnectionPoint or a derived class.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
getDestination Method

DiagramLink.getDestinationIndex Method

Gets the index of the row of a table or the anchor point of a box to which a link is connected.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getDestinationIndex ()
```

Return Value

An integer value specifying the row or anchor point index.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getDynamic Method

Gets whether a link should automatically update the position of its end points while a node related to the link is moved, so that the link end segments always point to the center of the link's nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getDynamic ()
```

Return Value

true if the link updates its end points automatically, otherwise **false**.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getEditRect Method

Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getEditRect (
    DiagramItem item,
    Point2D mousePosition
)
```

Parameters

item
A reference to this link.

mousePosition
A **Point2D** instance specifying the current pointer position.

Return Value

A **Rectangle2D** specifying where the edit box should be placed.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getEffectiveHeadPen Method

Creates a Pen object representing the currently effective head pen of the link. This method returns a pen corresponding to the link's DiagramLink.getHeadPen if it is not null, or a pen with the DiagramLinkStyle.getHeadStroke and DiagramLinkStyle.getHeadStrokeThickness properties of the link's style.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Pen getEffectiveHeadPen ()
```

Return Value

A Pen instance.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getEndPoint Method

Gets the position of the last control point of this link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Point2D.Float getEndPoint ()
```

Return Value

A **Point2D.Float** instance.

Remarks

This method is a shortcut for getting the last element of ControlPoints.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getHandlesStyle Method

Gets the appearance of the link's selection handles.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public HandlesStyle getHandlesStyle ()
```

Return Value

A member of the HandlesStyle enumeration. Initialized with the value of LinkHandlesStyle.

Remarks

Specifies how link's selection status is indicated visually. You can choose between the following styles:

Member name	Description
SquareHandles	The selection is indicated by drawing square handles at the position of each control point.
DashFrame	The selection is indicated by drawing dashed line segments along the link's segments. In addition, there are square selection handles drawn at the location of each control point of the link.
Custom	JDiagram raises the drawAdjustmentHandles events to let your application perform custom drawing of link's selection handles.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getHeadBrush Method

Gets the brush used to fill the arrowhead drawn at the link's destination.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Brush getHeadBrush ()`

Return Value

An instance of a Brush -derived class. The default value is null.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
setHeadBrush Method
getBaseBrush Method
getIntermediateBrush Method
getHeadShape Method

DiagramLink.getHeadPen Method

Gets the pen used to draw the arrowhead shapes outlines.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Pen getHeadPen ()
```

Return Value

A Pen object.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getHeadShape Method

Gets the shape of this link's arrowhead.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Shape getHeadShape ()
```

Return Value

A Shape instance that represents an arrowhead shape. Initialized with the value of LinkHeadShape.

Remarks

The property specifies what shape is displayed as an arrowhead. This shape is rotated simultaneously with the last segment of the link so that it follows the overall link direction.

The ArrowHeads class exposes several predefined shapes as static properties.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
getHeadBrush Method

DiagramLink.getHeadShapeSize Method

Gets the size of the arrowhead shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getHeadShapeSize ()
```

Return Value

A float value specifying the shape size.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getIntermediateBrush Method

Gets the brush used to fill the arrowheads drawn at the middle of link segments.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getIntermediateBrush ()
```

Return Value

An instance of a Brush -derived class. The default value is null.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
setIntermediateBrush Method
getBaseBrush Method
getHeadBrush Method
getIntermediateShape Method

DiagramLink.getIntermediateShape Method

Gets the shape that is displayed at the middle of each segment of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public Shape getIntermediateShape ()
```

Return Value

A Shape instance that represents an arrowhead shape. Initialized with the value of LinkIntermediateShape.

Remarks

The property specifies what shape to display at the middle of each segment of a link. This could help users to see more easily the direction of long links. The ArrowHeads class exposes several predefined shapes as static properties.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
getIntermediateBrush Method

DiagramLink.getIntermediateShapeSize Method

Gets the size of the shape displayed at the middle of each segment of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getIntermediateShapeSize ()
```

Return Value

A float value specifying the shape size.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getLabels Method

Returns the list of all labels displayed by this link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ArrayList<LinkLabel> getLabels ()
```

Return Value

An ArrayList<LinkLabel> instance.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
getText Method
addLabel Method
removeLabel Method
labelFromPoint Method

DiagramLink.getLength Method

Gets the length of this link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getLength ()
```

Return Value

A float value specifying the link's length.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getLongestHSegment Method

Returns the index of the longest non-vertical segment of the link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getLongestHSegment ()
```

Return Value

An integer value specifying the index of the segment.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getOrigin Method

Gets the origin node of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramNode getOrigin ()
```

Return Value

The origin DiagramNode.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getOriginAnchor Method

Gets the index of the anchor point to which a link is connected at its origin.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getOriginAnchor ()
```

Return Value

An integer value specifying the anchor point index.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getOriginConnection Method

Gets the ConnectionPoint object representing the link connection to its origin node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ConnectionPoint getOriginConnection ()
```

Return Value

An instance of ConnectionPoint or derived class.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
getOrigin Method

DiagramLink.getOriginIndex Method

Gets the index of the row of a table or the anchor point of a box to which a link is connected.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getOriginIndex ()
```

Return Value

An integer value specifying the row or anchor point index.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getRepaintRect Method

DiagramItem.getRepaintRect override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected Rectangle2D getRepaintRect (
    boolean includeConnected
)
```

Parameters

includeConnected

Return Value

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getRetainForm Method

Gets a value indicating whether a link should preserve its original shape while the nodes related to that link are moved around.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getRetainForm ()
```

Return Value

true if the link should preserve its shape, otherwise **false**.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getSegmentCount Method

Gets the number of segments of this link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getSegmentCount ()
```

Return Value

An integer value specifying the number of segments in the link.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getShape Method

Gets the shape of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkShape getShape ()
```

Return Value

A member of the LinkShape enumeration. Initialized with the value of getLinkShape.

Remarks

This property specifies whether the segments of a link are straight lines or curves. Its value together with SegmentCount also specifies the number of ControlPoints. Each Bezier segment is defined by four control points, where the second and third ones do not lie on the segment but specify its curvature. All other **LinkShape** types are defined by two control points per segment. Adjacent segments share a control point, and when moved it will modify both of them.

Cascading links consist of straight lines whose orientation is constrained to strictly horizontal or vertical, where adjacent segments are orthogonal to each other. The orientation of the first segment of a cascading link depends on the value of CascadeOrientation. If that property is set to Auto, users may change the cascade orientation interactively.

Each control point of a **Spline** or **Polyline** link can be moved freely, independently from each other, and the link will pass through all control points drawn respectively as an interpolating spline curve or as a polygonal chain.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getStartPoint Method

Gets the position of the first control point of this link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D.Float getStartPoint ()
```

Return Value

A **Point2D.Float** instance.

Remarks

This method is a shortcut for getting the first element of ControlPoints.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getText Method

Gets the text of the link's label.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getText ()
```

Return Value

A **String** containing the label text.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getTextStyle Method

Gets the link's text placement and orientation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkTextStyle getTextStyle ()
```

Return Value

A member of the LinkTextStyle enumeration.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.getTextToEdit Method

Implements InplaceEditable.getTextToEdit. Returns the string that should be displayed initially when the link's text is edited in-place.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getTextToEdit ()
```

Return Value

A **String** that represents the initial contents of the in-place edit box.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.hitTestHandle Method

DiagramItem.hitTestHandle override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AdjustmentHandle hitTestHandle (
    Point2D point
)
```

Parameters

point
A **Point2D** instance specifying the location where to look for adjustment handles.

Return Value

Returns a LinkAdjustmentHandle instance representing the adjustment handle found at the specified location, or **null** if there is none.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.init Method

Returns a DiagramLinkBuilder object used to configure this DiagramLink instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public DiagramLinkBuilder init ()`

Return Value

A **DiagramLinkBuilder** instance.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.intersects Method

Overload List

Name	Description
DiagramLink.intersects (DiagramLink)	Checks whether this link intersects the specified link.
DiagramLink.intersects (DiagramNode)	Determines whether a link intersects the specified node.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.intersects Method (DiagramLink)

Checks whether this link intersects the specified link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public boolean intersects (`
`  DiagramLink link`
`)`

Parameters

link
The DiagramLink object to test intersection with.

Return Value

true if the links intersect; otherwise **false**.

See Also

intersects Method Overload List
DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.intersects Method (DiagramNode)

Determines whether a link intersects the specified node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean intersects (
    DiagramNode node
)
```

Parameters

node
The DiagramNode object to test intersection with.

Return Value

true if the link intersects the specified node,otherwise **false**.

See Also

intersects Method Overload List
DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.isConnected Method

Gets a value indicating whether a link is connected to any nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean isConnected ()
```

Return Value

true if the link is connected to any node, otherwise **false**.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.labelFromPoint Method

Returns the label whose layout rectangle contains the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ItemLabel labelFromPoint (
    Point2D point
)
```

Parameters

point
A **Point2D** instance.

Return Value

The LinkLabel that contains the specified point.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
getLabels Method
addLabel Method

DiagramLink.loadFromJson Method

Loads the link from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the link's data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.loadFromXml Method

Loads the link content from an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An **XmlElement** containing the link's data.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.onAdd Method

DiagramItem.onAdd override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onAdd ()
```

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.onChangeFont Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onChangeFont ()
```

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.onLoad Method

DiagramItem.onLoad override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onLoad (
    Diagram diagram
)
```

Parameters

diagram
The Diagram whose content is being loaded.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.onModify Method

Called when an item is modified

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void onModify (
    Point2D mousePosition,
    int adjustmentHandle
)
```

Parameters

mousePosition
Specifies the mouse position.

adjustmentHandle
The adjustment handle used to modify the node.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.reassignAnchorPoints Method

Chooses new anchor points for a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
```

Java

```
public void reassignAnchorPoints ()
```

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.removeLabel Method

Removes the specified label from this link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeLabel (
    LinkLabel label
)
```

Parameters

label
A LinkLabel instance.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
addLabel Method
getLabels Method

DiagramLink.restoreProperties Method

DiagramItem.restoreProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void restoreProperties (
    DiagramItemProperties props
)
```

Parameters

props
A DiagramItemProperties -derived object containing a snapshot of the item's properties.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.restoreState Method

DiagramItem.restoreState override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void restoreState (
    DiagramItemState state
)
```

Parameters

state

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.route Method

Sets the link control points so that a link goes between its related nodes without crossing other nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean route ()
```

Return Value

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.saveProperties Method

DiagramItem.saveProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveProperties (
    DiagramItemProperties props
)
```

Parameters

props
A DiagramItemProperties -derived object containing a snapshot of the item's properties.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.saveState Method

DiagramItem.saveState override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveState (
    DiagramItemState state
)
```

Parameters

state

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.saveToJson Method

Saves the link as a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject instance to contain the serialized data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.saveToXml Method

Saves the link content into an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An **XmlElement** the link's data should be stored into.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setAllowMoveEnd Method

Sets a value indicating whether users are allowed to move the last control point of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAllowMoveEnd (
    boolean value
)
```

Parameters

value
true if the last control point can be moved, otherwise **false**.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setAllowMoveStart Method

Sets a value indicating whether users are allowed to move the first control point of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAllowMoveStart (
    boolean value
)
```

Parameters

value
true if the first control point can be moved,otherwise **false**.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setAutoRoute Method

Sets a value indicating whether a link should avoid nodes by going the shortest path from its origin to its destination without crossing any other nodes.uld automatically find its way between nodes so that it will not cross other nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAutoRoute (
    boolean value
```

```
)
```

Parameters

value
true if the link should be routed automatically, otherwise **false**.

Remarks

If AutoRoute is enabled, a link automatically finds the shortest possible path between its origin and destination that doesn't intersect Obstacle nodes. The number and orientation of the link's segments are updated when the nodes it links are moved around. The positions of end points of a routed link are not changed, unless the link is also set to Dynamic.

It is best to use **AutoRoute** with links of the Cascading style. Note that automatic routing overrides the RetainForm behavior.

Performance note

Links whose **AutoRoute** property is enabled are re-routed when they intersect with newly added nodes. Consequently, when constructing a large diagram programmatically, each link could be re-routed multiple times, once for each newly added node whose location arguments collide with link's bounding rectangle. That might slow down diagram generation a lot. To avoid that, create all nodes before adding the links; that requires a single calculation for each link's route. Alternatively, enclose batch creation operations within suspendLinkRouter and resumeLinkRouter calls.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
RoutingOptions Class
Dynamic Property
SegmentCount Property
LinkRouter Property

DiagramLink.setAutoSnapToNode Method

Sets a value indicating whether a link end point should automatically snap to the nearest diagram node while the user moves the point's adjustment handle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAutoSnapToNode (
    boolean value
)
```

Parameters

value
true to snap links to nearest node; otherwise, **false**.

Remarks

Only nodes at a distance smaller than AutoSnapDistance are considered. A link does not snap to its current origin or destination nodes if that would create a self-loop. If there is an AnchorPattern assigned to a node, the link snaps to an anchor point instead of a border point.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setBaseBrush Method

Sets a brush used to fill the arrowhead drawn at the link base.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBaseBrush (
    Brush value
)
```

Parameters

value
An instance of a Brush -derived class. The default value is null.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
getBaseBrush Method
setHeadBrush Method
setIntermediateBrush Method

DiagramLink.setBaseShape Method

Sets the shape that is displayed at the origin of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBaseShape (
    Shape value
)
```

Parameters

value

A Shape instance that represents an arrowhead shape. Initialized with the value of LinkBaseShape.

Remarks

This property specifies the shape that is displayed at the beginning of a link, that is, the point where it is connected with its Origin node. This shape is rotated simultaneously with the first segment of the link so that it follows the overall link direction.

The ArrowHeads class exposes several predefined shapes as static properties.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setBaseShape Method

Overload List

Name	Description
DiagramLink.setBaseShape (String)	Sets the shape that is displayed at the origin of a link.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setBaseShape Method (String)

Sets the shape that is displayed at the origin of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBaseShape (
    String shapeId
)
```

Parameters

shapeId
A string specifying the Shape id.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setBaseShapeSize Method

Sets the size of the shape displayed at the origin of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBaseShapeSize (
    float value
)
```

Parameters

value
A float value specifying the shape size.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setCascadeOrientation Method

Sets the orientation of the first segment of a cascading link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCascadeOrientation (
    Orientation value
)
```

Parameters

value
A member of the Orientation enumeration.

Remarks

Use this property to specify the orientation of the first segment of a link whose Shape is set to Cascading. The first segment also defines the orientation of all subsequent segments in the cascade, because each next segment changes its orientation alternately to the previous one.

If the property is set to Auto, users may change the orientation of a cascading link interactively. That can be done by dragging the control point next to the first or last one to its opposite corner in the rectangle

defined by its two adjacent segments. Depending on the value of AllowSplitLinks, the link orientation is changed by either inserting a new segment and changing only the orientation of the first or last segment (AllowSplitLinks is **true**), or by changing the orientation of all segments of the link (**AllowSplitLinks** is **false**).

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setCustomDraw Method

Sets the type of custom drawing performed on this link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCustomDraw (
    CustomDraw value
)
```

Parameters

value
A member of the CustomDraw enumeration.

Remarks

This property allows invoking custom painting code for a link. That code must execute in response to the drawLink event. There are several modes of custom painting, allowing the custom code to paint the link entirely, or do that in addition to what JDiagram paints by default. The following CustomDraw members can be assigned to this property to specify the custom painting mode:

Member name	Description
None	Do not perform custom drawing, let all painting be done by JDiagram.
Additional	The custom painting code executes after the link segments and arrowhead shapes are painted by JDiagram, but before text is rendered.
Full	The component does not do any standard drawing, the entire painting of the link is done by the application.
ShadowOnly	Only the shadow of the link is painted by custom code, the link itself is drawn by the component.

See Also

DiagramLink.setDestination Method

Sets the destination node of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDestination (
    DiagramNode value
)
```

Parameters

value
A DiagramNode object representing the link destination.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setDestinationAnchor Method

Sets the anchor point to which a link is connected at its destination.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDestinationAnchor (
    int value
)
```

Parameters

value
An integer value specifying the index of the destination anchor point.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setDestinationConnection Method

Sets the ConnectionPoint object representing the link connection to its destination node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDestinationConnection (
    ConnectionPoint value
)
```

Parameters

value
An instance of ConnectionPoint or derived class.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setDestinationIndex Method

Sets the row of a table or the anchor point of a node to which a link is connected.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDestinationIndex (
    int value
)
```

Parameters

value
An integer value specifying the index of the destination anchor point.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setDynamic Method

Sets whether a link should automatically update the position of its end points while a node related to the link is moved, so that the link end segments always point to the center of the link's nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setDynamic (
    boolean value
)
```

Parameters

value
true if the link should update its end points positions automatically, otherwise **false**.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setEditedText Method

Implements InplaceEditable.setEditedText. Assigns the edited text to this link after in-place edit operation completes successfully.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setEditedText (
    String newText
)
```

Parameters

newText
The new text of this link.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setEndPoint Method

Sets the position of the last control point of this link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEndPoint (
    Point2D.Float value
)
```

Parameters

value
A **Point2D.Float** instance.

Remarks

This method is a shortcut for setting the last element of ControlPoints.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setHandlesStyle Method

Sets the appearance of the link's selection handles.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHandlesStyle (
    HandlesStyle value
)
```

Parameters

value
A member of the HandlesStyle enumeration.

Remarks

Specifies how link's selection status is indicated visually. You can choose between the following styles:

Member name	Description
SquareHandles	The selection is indicated by drawing square handles at the position of each control point.
DashFrame	The selection is indicated by drawing dashed line segments along the link's segments. In addition, there are square selection handles drawn at the location of each control point of the link.
Custom	JDiagram raises the drawAdjustmentHandles events to let your application perform custom drawing of link's selection handles.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setHeadBrush Method

Sets a brush used to fill the arrowhead drawn at the link's destination.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHeadBrush (
    Brush value
)
```

Parameters

value
An instance of a Brush -derived class. The default value is **null**.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
getHeadBrush Method
setBaseBrush Method
setIntermediateBrush Method

DiagramLink.setHeadPen Method

Sets the pen used to draw the arrowhead shapes outlines.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHeadPen (
    Pen value
)
```

Parameters

value
A Pen object representing the arrowhead pen.

See Also

DiagramLink.setHeadShape Method

Overload List

Name	Description
DiagramLink.setHeadShape (String)	Sets the shape of the arrowhead.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setHeadShape Method (String)

Sets the shape of the arrowhead.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHeadShape (
    String shapeId
)
```

Parameters

shapeId
A string specifying the Shape id.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setHeadShape Method

Sets the shape of the link's arrowhead.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHeadShape (
    Shape value
)
```

Parameters

value
A Shape instance that represents an arrowhead shape. Initialized with the value of LinkHeadShape.

Remarks

The property specifies what shape is displayed as an arrowhead. This shape is rotated simultaneously with the last segment of the link so that it follows the overall link direction.

The ArrowHeads class exposes several predefined shapes as static properties.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setHeadShapeSize Method

Sets the size of the arrowhead shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHeadShapeSize (
    float value
)
```

Parameters

value
A float value specifying the shape size.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setIntermediateBrush Method

Sets a brush used to fill the arrowheads drawn at the middle of link segments.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIntermediateBrush (
    Brush value
)
```

Parameters

value
An instance of a Brush -derived class. The default value is **null**.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
getIntermediateBrush Method
setHeadBrush Method
setBaseBrush Method

DiagramLink.setIntermediateShape Method

Sets the shape that is displayed at the middle of each segment of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIntermediateShape (
    Shape value
)
```

Parameters

value
A Shape instance that represents an arrowhead shape. Initialized with the value of LinkIntermediateShape.

Remarks

The property specifies what shape to display at the middle of each segment of a link. This could help users to see more easily the direction of long links. The ArrowHeads class exposes several predefined shapes as static properties.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setIntermediateShape Method

Overload List

Name	Description
DiagramLink.setIntermediateShape (String)	Sets the shape that is displayed at the middle of each segment of a link.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setIntermediateShape Method (String)

Sets the shape that is displayed at the middle of each segment of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIntermediateShape (
    String shapeId
)
```

Parameters

shapeId
A string specifying the Shape id.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setIntermediateShapeSize Method

Sets the size of the shape displayed at the middle of each segment of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIntermediateShapeSize (
    float value
)
```

Parameters

value
A float value specifying the shape size.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setOrigin Method

Sets the origin node of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOrigin (
    DiagramNode value
)
```

Parameters

value
A DiagramNode object representing the link origin.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setOriginAnchor Method

Sets the anchor point to which a link is connected at its origin.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOriginAnchor (
    int value
)
```

Parameters

value
An integer value specifying the index of the origin anchor point.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setOriginConnection Method

Sets the ConnectionPoint object representing the link connection to its origin node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOriginConnection (
    ConnectionPoint value
)
```

Parameters

value
An instance of ConnectionPoint or derived class.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setOriginIndex Method

Sets the row of a table or the anchor point of a box to which a link is connected.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOriginIndex (
    int value
)
```

Parameters

value
An integer value specifying the index of the origin anchor point.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setRetainForm Method

Sets a value indicating whether a link should preserve its original shape while the nodes related to that link are moved around.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRetainForm (
    boolean value
)
```

Parameters

value
true if the link should preserve its shape, otherwise **false**.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setSegmentCount Method

Sets the number of segments of this link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSegmentCount (
    int value
)
```

Parameters

value
An integer value specifying the number of segments in the link.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setShape Method

Sets the shape of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setShape (
    LinkShape value
)
```

Parameters

value
A member of the LinkShape enumeration.

Remarks

This property specifies whether the segments of a link are straight lines or curves. Its value together with SegmentCount also specifies the number of ControlPoints. Each Bezier segment is defined by four control points, where the second and third ones do not lie on the segment but specify its curvature. All other **LinkShape** types are defined by two control points per segment. Adjacent segments share a control point, and when moved it will modify both of them.

Cascading links consist of straight lines whose orientation is constrained to strictly horizontal or vertical, where adjacent segments are orthogonal to each other. The orientation of the first segment of a cascading link depends on the value of CascadeOrientation. If that property is set to Auto, users may change the cascade orientation interactively.

Each control point of a **Spline** or **Polyline** link can be moved freely, independently from each other, and the link will pass through all control points drawn respectively as an interpolating spline curve or as a polygonal chain.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setStartPoint Method

Sets the position of the first control point of this link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setStartPoint (
    Point2D.Float value
)
```

Parameters

value
A **Point2D.Float** instance.

Remarks

This method is a shortcut for setting the first element of ControlPoints.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.setText Method

Sets the text displayed over a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setText (
    String value
)
```

Parameters

value
A string containing the text

Remarks

Sets the text that should be drawn over a link. Use this to provide to end-users a short description of the relation's purpose. The text appearance can be customized through the TextBrush and TextStyle properties.

Apart from main text, it is possible to display multiple labels per link via the LinkLabel class. Labels can automatically avoid overlapping nodes or other labels when their AutoArrange property is set.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
ToolTip Property
addLabel Method

DiagramLink.setTextStyle Method

Sets the link's text placement and orientation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextStyle (
    LinkTextStyle value
)
```

Parameters

value
A member of the LinkTextStyle enumeration.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace
Text Property
TextBrush Property

DiagramLink.setVisible Method

Specifies whether the link should be drawn on the screen.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setVisible (
    boolean value
)
```

Parameters

value
true if the link should be visible, otherwise **false**.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.startCreate Method

DiagramItem.startCreate override. Invoked once when the user starts drawing a new item interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void startCreate (
    Point2D org
)
```

Parameters

org
A **Point2D** specifying the pointer position.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.startModify Method

DiagramItem.startModify override. Invoked when the user starts modifying this link interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void startModify (
    Point2D org,
    AdjustmentHandle handle,
    InteractionState ist
)
```

Parameters

org
The initial mouse position.

handle
The adjustment handle used to modify this item.

ist
An InteractionState object containing more information about the current state of the operation.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.updateCreate Method

DiagramItem.updateCreate override. Invoked during interactive creation of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void updateCreate (
    Point2D current
)
```

Parameters

current
A **Point2D** specifying the pointer position.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.updateFromPoints Method

Overload List

Name	Description
DiagramLink.updateFromPoints ()	Updates a link after its control point positions are changed programmatically.
DiagramLink.updateFromPoints (boolean)	Updates the link's internal state after the link's control points have been changed.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.updateFromPoints Method ()

Updates a link after its control point positions are changed programmatically.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void updateFromPoints ()`

See Also

updateFromPoints Method Overload List
DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.updateFromPoints Method (boolean)

Updates the link's internal state after the link's control points have been changed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void updateFromPoints (
    boolean updateGroups
)
```

Parameters

updateGroups
true to update the positions of nodes attached to the link; otherwise, **false**.

See Also

updateFromPoints Method Overload List
DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.updateModify Method

DiagramItem.updateModify override. Invoked during interactive modification of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void updateModify (
    Point2D current,
    InteractionState ist
)
```

Parameters

current
A **Point2D** specifying the pointer position.

ist
An InteractionState object containing more information about the current state of the operation.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.with Method

Returns a DiagramLinkBuilder object used to configure and create new DiagramLink instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static DiagramLinkBuilder with ()
```

Return Value

A **DiagramLinkBuilder** instance.

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLink.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

DiagramLink Members
DiagramLink Class
com.mindfusion.diagramming Namespace

DiagramLinkList Class

A strongly typed list of DiagramLink objects.

Syntax

```
Java
public class DiagramLinkList extends BaseList<E> implements Cloneable
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.BaseList(E)
        com.mindfusion.diagramming.DiagramLinkList

See Also

DiagramLinkList Members
com.mindfusion.diagramming Namespace

DiagramLinkList Members

A strongly typed list of DiagramLink objects.

The following tables list the members exposed by the DiagramLinkList type.

Public Constructors

	Name	Description
	DiagramLinkList	

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)
	listEvent	(Inherited from BaseList.)
	notifyParent	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	Adds a new element to the list. (Inherited from BaseList.)
	clear	Removes all elements from the list. (Inherited from BaseList.)
	clone	
	contains	Determines if this list contains the specified element. (Inherited from BaseList.)
	first	Gets the first element of this list. (Inherited from BaseList.)
	get	Gets the element at the specified position in this list. (Inherited from BaseList.)
	last	Gets the last element of this list. (Inherited from BaseList.)
	readExternal	Loads the list's contents. (Inherited from BaseList.)
	remove	Overloaded. (Inherited from BaseList.)
	removeRange	Removes a range of elements from this list. (Inherited from BaseList.)

	set	Sets the element at the specified position in this list. (Inherited from BaseList.)
	size	Gets the number of elements in this list. (Inherited from BaseList.)
	writeExternal	Saves the list's contents. (Inherited from BaseList.)

Protected Methods

	Name	Description
	raiseAdding	Raises the adding event. (Inherited from BaseList.)
	raiseClearing	Raises the clearing event. (Inherited from BaseList.)
	raiseRemoving	Raises the removing event. (Inherited from BaseList.)

See Also

DiagramLinkList Class
com.mindfusion.diagramming Namespace

DiagramLinkList Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public DiagramLinkList ()`

See Also

DiagramLinkList Class
com.mindfusion.diagramming Namespace

DiagramLinkList Methods

DiagramLinkList.clone Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Object clone ()`

Return Value

See Also

DiagramLinkList Members
DiagramLinkList Class
com.mindfusion.diagramming Namespace

DiagramLinkProperties Class

Stores the values of DiagramLink properties during undo / redo operations. If you need to implement undo support for the additional properties defined by a class derived from **DiagramLink**, do so by deriving from DiagramLinkProperties and overriding the DiagramLink.saveProperties, DiagramLink.restoreProperties, and DiagramLink.createProperties methods.

Syntax

Java
`public class DiagramLinkProperties extends DiagramItemProperties`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItemProperties
    com.mindfusion.diagramming.DiagramLinkProperties

See Also

DiagramLinkProperties Members
com.mindfusion.diagramming Namespace

DiagramLinkProperties Members

Stores the values of DiagramLink properties during undo / redo operations. If you need to implement undo support for the additional properties defined by a class derived from **DiagramLink**, do so by deriving from DiagramLinkProperties and overriding the DiagramLink.saveProperties, DiagramLink.restoreProperties, and DiagramLink.createProperties methods.

The following tables list the members exposed by the DiagramLinkProperties type.

Public Constructors

	Name	Description
	DiagramLinkProperties	

Public Fields

	Name	Description
	textPadding	(Inherited from DiagramItemProperties.)

See Also

DiagramLinkProperties Class
com.mindfusion.diagramming Namespace

DiagramLinkProperties Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLinkProperties ()
```

See Also

DiagramLinkProperties Class
com.mindfusion.diagramming Namespace

DiagramLinkState Class

Contains a snapshot of the internal state of a DiagramLink. Instances of this class are used to store the state of links for later undo or redo operations. If you derive from **DiagramLink** and need to implement undo support for the additional internal state defined by your class, do so by deriving from **DiagramLinkState** and overriding the createState, saveState and restoreState methods.

Syntax

Java

```
public class DiagramLinkState extends DiagramItemState
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItemState
    com.mindfusion.diagramming.DiagramLinkState

See Also

DiagramLinkState Members
com.mindfusion.diagramming Namespace

DiagramLinkState Members

Contains a snapshot of the internal state of a DiagramLink. Instances of this class are used to store the state of links for later undo or redo operations. If you derive from **DiagramLink** and need to implement undo support for the additional internal state defined by your class, do so by deriving from DiagramLinkState and overriding the createState, saveState and restoreState methods.

The following tables list the members exposed by the **DiagramLinkState** type.

Public Constructors

	Name	Description
	DiagramLinkState	

Protected Fields

	Name	Description
	item	(Inherited from DiagramItemState.)

See Also

DiagramLinkState Class
com.mindfusion.diagramming Namespace

DiagramLinkState Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramLinkState (
    DiagramLink link
)
```

Parameters

link

See Also

DiagramLinkState Class
com.mindfusion.diagramming Namespace

DiagramLinkStyle Class

Represents a reusable set of properties that define the appearance of diagram links.

Syntax

```
Java
public class DiagramLinkStyle extends DiagramItemStyle
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Style
    com.mindfusion.diagramming.DiagramItemStyle
      com.mindfusion.diagramming.DiagramLinkStyle

See Also

DiagramLinkStyle Members
com.mindfusion.diagramming Namespace

DiagramLinkStyle Members

Represents a reusable set of properties that define the appearance of diagram links.

The following tables list the members exposed by the DiagramLinkStyle type.

Public Constructors

	Name	Description
	DiagramLinkStyle	Initializes a new instance of the **DiagramLinkStyle** class.

Public Methods

	Name	Description
	addPropertyChangeListener	(Inherited from Style.)
	getBrush	Gets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	getFontFamily	Gets the font family of the item text. (Inherited from DiagramItemStyle.)
	getFontSize	Gets the font size of the item text. (Inherited from DiagramItemStyle.)
	getFontStyle	Gets the font style of the item text. (Inherited from DiagramItemStyle.)
	getFontUnit	Gets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	getHeadStroke	Gets the brush used to paint the arrowhead outlines of this brush.
	getHeadStrokeThickness	Gets the outline thickness of the arrowheads of this brush, expressed in the current units of measure.
	getShadowBrush	Gets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	getStroke	Gets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	getStrokeThickness	Gets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
	init	Returns a DiagramLinkStyleBuilder object used to configure this DiagramLinkStyle instance.

	readExternal	**Externalizable.readExternal** implementation. (Inherited from Style.)
S	registerType	Associates a type with an alias. The alias is used when saving and loading objects of the specified type during style serialization and deserialization. (Inherited from Style.)
	removePropertyChangeListener	(Inherited from Style.)
	setBrush	Sets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	setFontFamily	Sets the font family of the item text. (Inherited from DiagramItemStyle.)
	setFontSize	Sets the font size of the item text. (Inherited from DiagramItemStyle.)
	setFontStyle	Sets the font style of the item text. (Inherited from DiagramItemStyle.)
	setFontUnit	Sets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	setHeadStroke	Sets the brush used to paint the arrowhead outlines of this brush.
	setHeadStrokeThickness	Sets the outline thickness of the arrowheads of this brush, expressed in the current units of measure.
	setShadowBrush	Sets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	setStroke	Sets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	setStrokeThickness	Sets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
S	with	Returns a DiagramLinkStyleBuilder object used to configure and create new DiagramLinkStyle instances.
	writeExternal	**Externalizable.writeExternal** implementation. (Inherited from Style.)

Protected Methods

	Name	Description
	getValue	Gets the value of the specified property. (Inherited from Style.)
	isPropertySet	Checks whether the specified property has a value. (Inherited from Style.)
	loadFromJson	Loads the style content from a JsonObject.
	loadFromXml	Loads the style content from an XML element. (Inherited from Style.)

	registerProperty	Registers a new property with the specified name and type. (Inherited from Style.)
	saveToJson	Saves the style content into a JsonObject.
	saveToXml	Saves the style content into an XML element. (Inherited from Style.)
	setValue	Sets the value of the specified property. (Inherited from Style.)
	unsetValue	Clears the value of the specified property. (Inherited from Style.)

See Also

DiagramLinkStyle Class
com.mindfusion.diagramming Namespace

DiagramLinkStyle Constructor

Initializes a new instance of the DiagramLinkStyle class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLinkStyle ()
```

See Also

DiagramLinkStyle Class
com.mindfusion.diagramming Namespace

DiagramLinkStyle Methods

DiagramLinkStyle.getHeadStroke Method

Gets the brush used to paint the arrowhead outlines of this brush.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getHeadStroke ()
```

Return Value

A Brush instance.

See Also

DiagramLinkStyle Members
DiagramLinkStyle Class
com.mindfusion.diagramming Namespace

DiagramLinkStyle.getHeadStrokeThickness Method

Gets the outline thickness of the arrowheads of this brush, expressed in the current units of measure.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public double getHeadStrokeThickness ()
```

Return Value

A **double** value specifying the stroke thickness.

See Also

DiagramLinkStyle Members
DiagramLinkStyle Class
com.mindfusion.diagramming Namespace

DiagramLinkStyle.init Method

Returns a DiagramLinkStyleBuilder object used to configure this DiagramLinkStyle instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLinkStyleBuilder init ()
```

Return Value

A **DiagramLinkStyleBuilder** instance.

See Also

DiagramLinkStyle Members
DiagramLinkStyle Class
com.mindfusion.diagramming Namespace

DiagramLinkStyle.loadFromJson Method

Loads the style content from a JsonObject.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the style's data.

context
A JsonPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

DiagramLinkStyle Members
DiagramLinkStyle Class
com.mindfusion.diagramming Namespace

DiagramLinkStyle.saveToJson Method

Saves the style content into a JsonObject.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject the style's data should be stored into.

context
A JsonPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

DiagramLinkStyle Members
DiagramLinkStyle Class
com.mindfusion.diagramming Namespace

DiagramLinkStyle.setHeadStroke Method

Sets the brush used to paint the arrowhead outlines of this brush.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHeadStroke (
    Brush value
)
```

Parameters

value
A Brush instance.

See Also

DiagramLinkStyle Members
DiagramLinkStyle Class
com.mindfusion.diagramming Namespace

DiagramLinkStyle.setHeadStrokeThickness Method

Sets the outline thickness of the arrowheads of this brush, expressed in the current units of measure.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHeadStrokeThickness (
    double value
)
```

Parameters

value
A **double** value specifying the stroke thickness.

See Also

DiagramLinkStyle Members
DiagramLinkStyle Class
com.mindfusion.diagramming Namespace

DiagramLinkStyle.with Method

Returns a DiagramLinkStyleBuilder object used to configure and create new DiagramLinkStyle instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static DiagramLinkStyleBuilder with ()`

Return Value

A **DiagramLinkStyleBuilder** instance.

See Also

DiagramLinkStyle Members
DiagramLinkStyle Class
com.mindfusion.diagramming Namespace

DiagramListener Interface

Defines events raised by JDiagram in response to users actions.

Syntax

Java
`public interface DiagramListener extends EventListener`

Inheritors

com.mindfusion.diagramming.DiagramAdapter

See Also

DiagramListener Members
com.mindfusion.diagramming Namespace

DiagramListener Members

Defines events raised by JDiagram in response to users actions.

The following tables list the members exposed by the DiagramListener type.

Public Methods

	Name	Description
	actionRecorded	Raised when an action is recorded in the undo buffer.
	actionRecording	A validation event raised before an action is recorded in the undo buffer.
	actionRedone	Raised when an action is redone.
	actionUndone	Raised when an action is undone.
	activeLayerChanged	Raised when the diagram's active layer has changed.

	cellClicked	Called when a table cell is clicked.
	cellDoubleClicked	Raised when the user double-clicks a table's cell.
	cellTextEdited	Raised when the user edits the text of a table's cell.
	cellTextEditing	A validation event that lets you prevent users from editing the text of a table's cell.
	clicked	Raised when the user clicks the diagram at a point where no items are located.
	containerChildAdded	Raised when a node is added to a ContainerNode, either programmatically or by the user.
	containerChildRemoved	Raised when a node is removed from a **ContainerNode**, either programmatically or by the user.
	containerFolded	Raised when the user folds a container by clicking the arrow-up button in the container's caption bar.
	containerUnfolded	Raised when the user unfolds a container by clicking the arrow-down button in the container's caption bar.
	createEditControl	Called to let you create a custom in-place editor control.
	deserializeControl	Lets you load the attributes of controls hosted inside ControlNode objects.
	deserializeTag	Raised when the Diagram.setTag of a diagram item must be deserialized from XML format.
	destroyEditControl	Called to let you destroy a custom in-place editor control.
	doubleClicked	Raised when the user double-clicks the diagram at a point where no items are located.
	drawAdjustmentHandles	Raised when custom adjustment handles must be drawn.
	drawAnchorPoint	Raised when an anchor point must be custom drawn.
	drawBackground	Raised to let you custom draw the diagram background.
	drawCell	Raised when a table's cell must be custom drawn.
	drawForeground	Raised to let you custom draw the diagram foreground.
	drawLink	Raised when a diagram link must be custom drawn.
	drawNode	Raised when a diagram node must be custom drawn.
	enterInplaceEditMode	Called when entering in-place editing mode.
	expandButtonClicked	Raised when the user clicks the [+/-] button of a DiagramNode.setExpandable node.
	groupDestroyed	Raised when a Group object is destroyed.
	hitTestAdjustmentHandles	Raised to perform custom hit testing of item's adjustment handles.
	imageLoaded	Called when image download initiated with Diagram.setBackgroundImageUrl completes.

	initializeLasso	Raised when the user starts drawing a selection lasso, before it is rendered on screen.
	initializeLink	Raised when the user starts drawing a new link, just after the DiagramLink instance is created.
	initializeNode	Raised when the user starts drawing a new node, just after the DiagramNode instance is created.
	itemAdded	Raised when an item is added to the diagram, either programmatically or interactively.
	itemLoaded	Raised when an item is loaded from a file.
	itemRemoved	Raised when an item is removed from the diagram, either programmatically or interactively.
	jsonDeserializeTag	Raised when the Tag of a diagram item must be deserialized from JSON.
	jsonSerializeTag	Raised when the **Tag** of a diagram item must be serialized to JSON.
	lassoDrawn	Raised when the user completes drawing a selection lasso.
	leaveInplaceEditMode	Called when an in-place editing is accepted or rejected.
	linkActivated	Raised when a link becomes the Diagram.setActiveItem.
	linkClicked	Raised when the user clicks a link.
	linkCreated	Raised when the user draws a new link.
	linkCreating	A validation event raised while the user is drawing a new link.
	linkDeactivated	Raised when a link is no longer the **Diagram.setActiveItem**.
	linkDeleted	Raised when a link is deleted, either programmatically or by the user.
	linkDeleting	Raised when the user tries to delete a link, this event lets you cancel the operation.
	linkDeselected	Raised when a link is deselected, either programmatically or by the user.
	linkDoubleClicked	Raised when the user double-clicks a link.
	linkHovered	Fired when the mouse pointer hovers over a link. Call setTrackPointedItem to enable this event.
	linkModified	Raised when the user moves any control point of a link.
	linkModifying	A validation event raised while the user is modifying a link.
	linkPointerEnter	Fired when the mouse pointer enters the boundaries of a link. Call **setTrackPointedItem** to enable this event.
	linkPointerLeave	Fired when the mouse pointer leaves the boundaries of a link. Call **setTrackPointedItem** to enable this event.
	linkRouted	Raised when a link is routed by the auto-routing algorithm.

	linkSelected	Raised when a link is selected, either programmatically or by the user.
	linkSelecting	Raised when the user tries to select a link, this event lets you cancel the operation.
	linkSplit	Raised when the user splits a link segment interactively.
	linkStartModifying	A validation event raised when the user starts modifying a link.
	linkTextEdited	Raised when the user edits the text of a link.
	linkTextEditing	A validation event that lets you approve or reject changes made to the text of a link.
	nodeActivated	Raised when a node becomes the **Diagram.setActiveItem**.
	nodeClicked	Raised when the user clicks a node.
	nodeCreated	Raised when the user draws a new node.
	nodeCreating	A validation event raised while the user is drawing a new node.
	nodeDeactivated	Raised when a node is no longer the active item.
	nodeDeleted	Raised when a node is deleted, either programmatically or by the user.
	nodeDeleting	Raised when the user tries to delete a node, this event lets you cancel the operation.
	nodeDeselected	Raised when a node is deselected, either programmatically or by the user.
	nodeDoubleClicked	Raised when the user double-clicks a node.
	nodeHovered	Fired when the mouse pointer hovers over a node. Call **setTrackPointedItem** to enable this event.
	nodeModified	Raised when the user moves or resizes a node.
	nodeModifying	A validation event raised while the user is moving or resizing a node.
	nodePointerEnter	Fired when the mouse pointer enters the boundaries of a node. Call **setTrackPointedItem** to enable this event.
	nodePointerLeave	Fired when the mouse pointer leaves the boundaries of a node. Call **setTrackPointedItem** to enable this event.
	nodeSelected	Raised when a node is selected, either programmatically or by the user.
	nodeSelecting	Raised when the user tries to select a node, this event lets you cancel the operation.
	nodeStartModifying	A validation event raised when the user starts modifying a node.
	nodeTextEdited	Raised when the user edits the text of a node.
	nodeTextEditing	A validation event that lets you approve or reject changes made to the text of a node.

	repaint	Raised when the diagram views should be repainted.
	requestCacheReset	Raised when an object within the diagram requests a reset of the cached bitmap.
	selectionChanged	Called when an item is added to or removed from the selection.
	selectionModified	Called when multiple selected items are moved or resized.
	selectionModifying	Raised while the user is moving or resizing multiple selected items, this event lets you cancel the modification.
	serializeControl	Lets you save the attributes of controls hosted inside **ControlNode** objects.
	serializeTag	Raised when the tag of a diagram item must be serialized into an XML document.
	setSelfLoopShape	Raised when a link becomes a self-loop, giving you a chance to override the default look shape.
	tableColumnResized	Raised when the user finishes resizing a column in a table.
	tableColumnResizing	Raised when the user resizes a column in a table interactively.
	tableRowResized	Raised when the user finishes resizing a row in a table.
	tableRowResizing	Raised when the user resizes a row in a table interactively.
	tableSectionCollapsed	Called when a table section is collapsed
	tableSectionExpanded	Called when a table section is expanded
	treeCollapsed	Raised when a user collapses a tree branch by clicking the [-] button of a expandable node.
	treeExpanded	Raised when a user expands a tree branch by clicking the [+] button of a expandable node.
	treeItemTextEdited	Raised when the user edits the text of a tree item.
	validateAnchorPoint	A validation event that lets you approve or reject connecting a link to an anchor point.
	viewportChanged	
	viewRemoved	Raised when a DiagramView is detached from this diagram.

See Also

DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener Methods

DiagramListener.actionRecorded Method

Raised when an action is recorded in the undo buffer.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void actionRecorded (
    UndoEvent e
)
```

Parameters

e

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.actionRecording Method

A validation event raised before an action is recorded in the undo buffer.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void actionRecording (
    UndoValidationEvent e
)
```

Parameters

e

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.actionRedone Method

Raised when an action is redone.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public void actionRedone (
    UndoEvent e
)
```

Parameters

e

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.actionUndone Method

Raised when an action is undone.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void actionUndone (
    UndoEvent e
)
```

Parameters

e

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.activeLayerChanged Method

Raised when the diagram's active layer has changed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void activeLayerChanged (
    EventObject e
)
```

Parameters

e

An EventObject providing more information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.cellClicked Method

Called when a table cell is clicked.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void cellClicked (
    CellEvent e
)
```

Parameters

e
A CellEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.cellDoubleClicked Method

Raised when the user double-clicks a table's cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void cellDoubleClicked (
    CellEvent e
)
```

Parameters

e

See Also

DiagramListener Members
DiagramListener Interface

DiagramListener.cellTextEdited Method

Raised when the user edits the text of a table's cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void cellTextEdited (
    EditCellTextEvent e
)
```

Parameters

e
A EditCellTextEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.cellTextEditing Method

A validation event that lets you prevent users from editing the text of a table's cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void cellTextEditing (
    CellValidationEvent e
)
```

Parameters

e
A CellValidationEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.clicked Method

Raised when the user clicks the diagram at a point where no items are located.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void clicked (
    DiagramEvent e
)
```

Parameters

e
A DiagramEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.containerChildAdded Method

Raised when a node is added to a ContainerNode, either programmatically or by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void containerChildAdded (
    ContainerChildEvent e
)
```

Parameters

e
A ContainerChildEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.containerChildRemoved Method

Raised when a node is removed from a ContainerNode, either programmatically or by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void containerChildRemoved (
    ContainerChildEvent e
)
```

Parameters

e
A ContainerChildEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.containerFolded Method

Raised when the user folds a container by clicking the arrow-up button in the container's caption bar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

void containerFolded (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.containerUnfolded Method

Raised when the user unfolds a container by clicking the arrow-down button in the container's caption bar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
void containerUnfolded (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.createEditControl Method

Called to let you create a custom in-place editor control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void createEditControl (
    InPlaceEditEvent e
)
```

Parameters

e
An InPlaceEditEvent object providing information about the event.

Remarks

This event is raised if AllowInplaceEdit is enabled and the user double-clicks an item, or when the application invokes the beginEdit method of DiagramView. If the event is not handled, or if EditControl is set to **null**, MindFusion.Diagramming displays a **JTextArea** component to allow editing the item's text. If you prefer to use the built-in **JTextArea**, you can still customize it by handling the enterInplaceEditMode event.

Note that if you create a custom editor control, you must transfer the values entered into it to the respective properties of the edited diagram item. You could do that in response to the destroyEditControl event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.deserializeControl Method

Lets you load the attributes of controls hosted inside ControlNode objects.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void deserializeControl (
    ControlNodeEvent e
)
```

Parameters

e
A ControlNodeEvent instance providing more information about the event.

Remarks

Handle this event to load the content of nodes saved using serializeControl.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.deserializeTag Method

Raised when the Diagram.setTag of a diagram item must be deserialized from XML format.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void deserializeTag (
    SerializeTagEvent e
)
```

Parameters

e
A SerializeTagEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.destroyEditControl Method

Called to let you destroy a custom in-place editor control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

void destroyEditControl (
    InPlaceEditEvent e
)
```

Parameters

e
An InPlaceEditEvent object providing information about the event.

Remarks

This event is raised when the user clicks outside the editor, or when the endEdit method is invoked. Handle it to hide or destroy the edit control. You might also implement the copying of values from the editor to the diagram item's properties in this event handler.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.doubleClicked Method

Raised when the user double-clicks the diagram at a point where no items are located.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void doubleClicked (
    DiagramEvent e
)
```

Parameters

e
A DiagramEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.drawAdjustmentHandles Method

Raised when custom adjustment handles must be drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
void drawAdjustmentHandles (
    DrawItemEvent e
)
```

Parameters

e
A DrawItemEvent instance providing more information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.drawAnchorPoint Method

Raised when an anchor point must be custom drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void drawAnchorPoint (
    DrawAnchorPointEvent e
)
```

Parameters

e
A DrawAnchorPointEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.drawBackground Method

Raised to let you custom draw the diagram background.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void drawBackground (
    DiagramEvent e
)
```

Parameters

e

A DiagramEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.drawCell Method

Raised when a table's cell must be custom drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void drawCell (
    DrawCellEvent e
)
```

Parameters

e

A DrawCellEvent object providing information about the event.

Example

Java

```
table.setCellCustomDraw(CustomDraw.Additional);

@Override
public void drawCell(DrawCellEvent e)
{
    Graphics2D g = (Graphics2D)e.getGraphics().create();
    Rectangle2D.Float rect = new Rectangle2D.Float();
    rect.setFrame(e.getBounds());

    Ellipse2D el = new Ellipse2D.Float(rect.x + 1, rect.y + 1, 2, 2);
    g.setPaint(Color.cyan);
    g.draw(el);
}
```

See Also

DiagramListener Members
DiagramListener Interface

com.mindfusion.diagramming Namespace
CellCustomDraw Property

DiagramListener.drawForeground Method

Raised to let you custom draw the diagram foreground.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void drawForeground (
    DiagramEvent e
)
```

Parameters

e
An instance of the DiagramEvent class providing more information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.drawLink Method

Raised when a diagram link must be custom drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void drawLink (
    DrawLinkEvent e
)
```

Parameters

e
An DrawLinkEvent object that provides more information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.drawNode Method

Raised when a diagram node must be custom drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void drawNode (
    DrawNodeEvent e
)
```

Parameters

e
A DrawNodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.enterInplaceEditMode Method

Called when entering in-place editing mode.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void enterInplaceEditMode (
    InPlaceEditEvent e
)
```

Parameters

e
An InPlaceEditEvent object providing information about the event.

Remarks

This event allows setting properties of the **JTextArea** component used for in-place editing or attaching custom event handlers to that control. Note that you can use a custom control for in-place editing. This can be done by handling createEditControl and specifying what object should be used as an editor by assigning it to EditControl.

See Also

DiagramListener Members
DiagramListener Interface

DiagramListener.expandButtonClicked Method

Raised when the user clicks the [+/-] button of a DiagramNode.setExpandable node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void expandButtonClicked (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.groupDestroyed Method

Raised when a Group object is destroyed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void groupDestroyed (
    GroupEvent e
)
```

Parameters

e
A GroupEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.hitTestAdjustmentHandles Method

Raised to perform custom hit testing of item's adjustment handles.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void hitTestAdjustmentHandles (
    HitTestEvent e
)
```

Parameters

e
A HitTestEvent instance providing more information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.imageLoaded Method

Called when image download initiated with Diagram.setBackgroundImageUrl completes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void imageLoaded (
    ImageLoadedEvent e
)
```

Parameters

e
An ImageLoadedEvent object that provides more information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.initializeLasso Method

Raised when the user starts drawing a selection lasso, before it is rendered on screen.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
void initializeLasso (
    SelectionEvent e
)
```

Parameters

e
A SelectionEvent providing information about the event.

Remarks

This event is raised immediately after the user starts drawing the lasso tool.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace
lassoDrawn Event
selectionChanged Event

DiagramListener.initializeLink Method

Raised when the user starts drawing a new link, just after the DiagramLink instance is created.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void initializeLink (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.initializeNode Method

Raised when the user starts drawing a new node, just after the DiagramNode instance is created.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void initializeNode (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.itemAdded Method

Raised when an item is added to the diagram, either programmatically or interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void itemAdded (
    ItemEvent e
)
```

Parameters

e

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.itemLoaded Method

Raised when an item is loaded from a file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void itemLoaded (
    ItemEvent e
)
```

Parameters

e

An ItemEvent instance providing more information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.itemRemoved Method

Raised when an item is removed from the diagram, either programmatically or interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void itemRemoved (
    ItemEvent e
)
```

Parameters

e

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.jsonDeserializeTag Method

Raised when the Tag of a diagram item must be deserialized from JSON.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void jsonDeserializeTag (
    JsonSerializeTagEvent e
)
```

Parameters

e

Remarks

You can handle this event to deserialize non-primitive Id or Tag objects.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.jsonSerializeTag Method

Raised when the Tag of a diagram item must be serialized to JSON.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void jsonSerializeTag (
    JsonSerializeTagEvent e
)
```

Parameters

e

Remarks

You can handle this event to serialize non-primitive Id or Tag objects.

Example

The following code shows how to serialize a simple structure as a JsonObject. **JsonObject** derives from **HashMap<String, JsonValue>**, where JsonValue is a boxing class that can contain primitive values and **JsonObject** itself (so you could nest objects).

Java

```
diagram.addDiagramListener(new DiagramAdapter()
{
    @Override
    public void jsonSerializeTag(JsonSerializeTagEvent e)
    {
        if ("Tag".equals(e.getPropertyName()) && e.getTag() instanceof MyTag)
        {
            MyTag myTag = (MyTag) e.getTag();
            e.setRepresentation(myTag.writeJson());
            e.setHandled(true);
        }
    }

    @Override
    public void jsonDeserializeTag(JsonSerializeTagEvent e)
    {
        if ("Tag".equals(e.getPropertyName()) && e.getObject() instanceof DiagramItem)
        {
            MyTag myTag = new MyTag();
```

```
            myTag.readJson(e.getRepresentation());
            e.setTag(myTag);
            e.setHandled(true);
        }
    }
}

public class MyTag
{
    private String name;
    private double value;
    private boolean flag;

    public MyTag() {}

    public MyTag(String name, double value, boolean flag)
    {
        this.name = name;
        this.value = value;
        this.flag = flag;
    }

    public String getName() { return name; }
    public void setName(String name)
    {
        this.name = name;
    }

    public double getValue() { return value; }
    public void setValue(double value)
    {
        this.value = value;
    }

    public boolean getFlag() { return flag; }
    public void setFlag(boolean flag)
    {
        this.flag = flag;
    }

    public JsonObject writeJson()
    {
        JsonObject obj = new JsonObject();
        obj.put("Name", new JsonValue(name));
        obj.put("Value", new JsonValue(value));
        obj.put("Flag", new JsonValue(flag));
        return obj;
    }

    public void readJson(JsonObject json)
    {
        this.name = JsonValue.toString(json.getValue("Name"));
        this.value = JsonValue.toDouble(json.getValue("Value"));
        this.flag = JsonValue.toBoolean(json.getValue("Flag"));
    }
}
```

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.lassoDrawn Method

Raised when the user completes drawing a selection lasso.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void lassoDrawn (
    SelectionEvent e
)
```

Parameters

e
A SelectionEvent providing information about the event.

Remarks

This event is best used in conjunction with the DrawLasso behavior, which disables standard selection logic. Upon completing a lasso gesture, you might want to trigger immediate actions based on the lassoed area, such as:

- Opening a custom context menu or UI panel styled for bulk operations.
- Creating a visual screenshot / export of only that specific region.
- Implementing custom selection logic or filters (e.g. select nodes of a specific type, or select only links).
- Bookmarking the selected area (adding it to Bookmarks).

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace
Behavior Property
Behavior Enumeration
initializeLasso Event
selectionChanged Event

DiagramListener.leaveInplaceEditMode Method

Called when an in-place editing is accepted or rejected.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void leaveInplaceEditMode (
    InPlaceEditEvent e
)
```

Parameters

e
An InPlaceEditEvent object providing information about the event.

Remarks

This event is raised in all situations that lead to closing the inplace-edit control, for example, when the user accepts or cancels the changes made to an item's text, or when the endEdit method is called.

If you have created a custom edit control by handling the createEditControl event, EditControl refers to the custom editor. Otherwise, it is a **JTextArea** instance.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace
enterInplaceEditMode Event

DiagramListener.linkActivated Method

Raised when a link becomes the Diagram.setActiveItem.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkActivated (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkClicked Method

Raised when the user clicks a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkClicked (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkCreated Method

Raised when the user draws a new link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkCreated (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkCreating Method

A validation event raised while the user is drawing a new link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkCreating (
    LinkValidationEvent e
)
```

Parameters

e
A LinkValidationEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkDeactivated Method

Raised when a link is no longer the Diagram.setActiveItem.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkDeactivated (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkDeleted Method

Raised when a link is deleted, either programmatically or by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkDeleted (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkDeleting Method

Raised when the user tries to delete a link, this event lets you cancel the operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkDeleting (
    LinkValidationEvent e
)
```

Parameters

e
A LinkValidationEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkDeselected Method

Raised when a link is deselected, either programmatically or by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkDeselected (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkDoubleClicked Method

Raised when the user double-clicks a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void linkDoubleClicked (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkHovered Method

Fired when the mouse pointer hovers over a link. Call setTrackPointedItem to enable this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
void linkHovered (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

Remarks

This event fires when the mouse pointer rests over a link for HoverDelay milliseconds.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkModified Method

Raised when the user moves any control point of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void linkModified (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkModifying Method

A validation event raised while the user is modifying a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void linkModifying (
    LinkValidationEvent e
)
```

Parameters

e
A LinkValidationEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkPointerEnter Method

Fired when the mouse pointer enters the boundaries of a link. Call setTrackPointedItem to enable this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
void linkPointerEnter (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkPointerLeave Method

Fired when the mouse pointer leaves the boundaries of a link. Call setTrackPointedItem to enable this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void linkPointerLeave (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkRouted Method

Raised when a link is routed by the auto-routing algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkRouted (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace
DiagramLink.AutoRoute Property

DiagramListener.linkSelected Method

Raised when a link is selected, either programmatically or by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkSelected (
    LinkEvent e
)
```

Parameters

e
A LinkEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkSelecting Method

Raised when the user tries to select a link, this event lets you cancel the operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkSelecting (
    LinkValidationEvent e
)
```

Parameters

e
A LinkValidationEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface

DiagramListener.linkSplit Method

Raised when the user splits a link segment interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void linkSplit (
    LinkEvent e
)
```

Parameters

e

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkStartModifying Method

A validation event raised when the user starts modifying a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void linkStartModifying (
    LinkValidationEvent e
)
```

Parameters

e
A LinkValidationEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkTextEdited Method

Raised when the user edits the text of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void linkTextEdited (
    EditLinkTextEvent e
)
```

Parameters

e

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.linkTextEditing Method

A validation event that lets you approve or reject changes made to the text of a link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void linkTextEditing (
    LinkValidationEvent e
)
```

Parameters

e
A LinkValidationEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodeActivated Method

Raised when a node becomes the Diagram.setActiveItem.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public void nodeActivated (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodeClicked Method

Raised when the user clicks a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeClicked (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodeCreated Method

Raised when the user draws a new node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeCreated (
    NodeEvent e
)
```

Parameters

e

A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodeCreating Method

A validation event raised while the user is drawing a new node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeCreating (
    NodeValidationEvent e
)
```

Parameters

e

A NodeValidationEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodeDeactivated Method

Raised when a node is no longer the active item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeDeactivated (
    NodeEvent e
)
```

Parameters

e

A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace
Diagram.setActiveItem Method
Diagram.getActiveItem Method

DiagramListener.nodeDeleted Method

Raised when a node is deleted, either programmatically or by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeDeleted (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodeDeleting Method

Raised when the user tries to delete a node, this event lets you cancel the operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeDeleting (
    NodeValidationEvent e
)
```

Parameters

e
A NodeValidationEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodeDeselected Method

Raised when a node is deselected, either programmatically or by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeDeselected (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodeDoubleClicked Method

Raised when the user double-clicks a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeDoubleClicked (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodeHovered Method

Fired when the mouse pointer hovers over a node. Call setTrackPointedItem to enable this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

void nodeHovered (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

Remarks

This event fires when the mouse pointer rests over a node for HoverDelay milliseconds.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodeModified Method

Raised when the user moves or resizes a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void nodeModified (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodeModifying Method

A validation event raised while the user is moving or resizing a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeModifying (
    NodeValidationEvent e
)
```

Parameters

e

A NodeValidationEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodePointerEnter Method

Fired when the mouse pointer enters the boundaries of a node. Call setTrackPointedItem to enable this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void nodePointerEnter (
    NodeEvent e
)
```

Parameters

e

A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodePointerLeave Method

Fired when the mouse pointer leaves the boundaries of a node. Call setTrackPointedItem to enable this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void nodePointerLeave (
    NodeEvent e
```

```
)
```

Parameters

e
A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodeSelected Method

Raised when a node is selected, either programmatically or by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeSelected (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodeSelecting Method

Raised when the user tries to select a node, this event lets you cancel the operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeSelecting (
    NodeValidationEvent e
)
```

Parameters

e

A NodeValidationEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodeStartModifying Method

A validation event raised when the user starts modifying a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeStartModifying (
    NodeValidationEvent e
)
```

Parameters

e
A NodeValidationEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodeTextEdited Method

Raised when the user edits the text of a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeTextEdited (
    EditNodeTextEvent e
)
```

Parameters

e
A EditNodeTextEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.nodeTextEditing Method

A validation event that lets you approve or reject changes made to the text of a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeTextEditing (
    NodeValidationEvent e
)
```

Parameters

e
A NodeValidationEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.repaint Method

Raised when the diagram views should be repainted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void repaint (
    RepaintEvent e
)
```

Parameters

e
A RepaintEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.requestCacheReset Method

Raised when an object within the diagram requests a reset of the cached bitmap.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void requestCacheReset (
    EventObject e
)
```

Parameters

e
An EventObject providing more information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.selectionChanged Method

Called when an item is added to or removed from the selection.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void selectionChanged (
    EventObject e
)
```

Parameters

e
An **EventObject** providing information about the event.

Remarks

Use the Nodes and Links properties of the diagram's Selection to find out which items are currently selected.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace
lassoDrawn Event

DiagramListener.selectionModified Method

Called when multiple selected items are moved or resized.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void selectionModified (
    SelectionEvent e
)
```

Parameters

e
A SelectionEvent providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.selectionModifying Method

Raised while the user is moving or resizing multiple selected items, this event lets you cancel the modification.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void selectionModifying (
    SelectionValidationEvent e
)
```

Parameters

e
A SelectionValidationEvent instance providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.serializeControl Method

Lets you save the attributes of controls hosted inside ControlNode objects.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void serializeControl (
    ControlNodeEvent e
)
```

Parameters

e
A ControlNodeEvent instance providing more information about the event.

Remarks

By default, the diagram component saves and loads hosted controls by getting or setting their property values via the Java introspection API. If the default mechanism cannot serialize the content of nodes automatically, the **serializeControl** and deserializeControl events can be handled to implement custom serialization.

Example

Java

```
diagram.addDiagramListener(new DiagramAdapter() {
    @Override
    public void serializeControl(ControlNodeEvent e)
    {
        JButton button = (JButton)e.getNode().getControl();
        e.getContext().writeString(button.getText(), "Text", e.getXmlElement());
        e.setHandled(true);
    };

    @Override
    public void deserializeControl(ControlNodeEvent e)
    {
        JButton button = new JButton();
        try
        {
            button.setText(e.getContext().readString("Text", e.getXmlElement()));
        }
        catch (TransformerException ex)
        {
            ex.printStackTrace();
        }
        e.getNode().setControl(button);
        e.setHandled(true);
    };
}
```

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.serializeTag Method

Raised when the tag of a diagram item must be serialized into an XML document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void serializeTag (
    SerializeTagEvent e
)
```

Parameters

e
A SerializeTagEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace
Diagram.setTag Method
Diagram.getTag Method

DiagramListener.setSelfLoopShape Method

Raised when a link becomes a self-loop, giving you a chance to override the default look shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

void setSelfLoopShape (
    LinkShapeEvent e
)
```

Parameters

e
A LinkShapeEvent instance providing more information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.tableColumnResized Method

Raised when the user finishes resizing a column in a table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void tableColumnResized (
    CellEvent e
)
```

Parameters

e
A CellEvent object providing information about this event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.tableColumnResizing Method

Raised when the user resizes a column in a table interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void tableColumnResizing (
    CellValidationEvent e
)
```

Parameters

e
A CellValidationEvent object providing information about this event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.tableRowResized Method

Raised when the user finishes resizing a row in a table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void tableRowResized (
    CellEvent e
)
```

Parameters

e
A CellEvent object providing information about this event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.tableRowResizing Method

Raised when the user resizes a row in a table interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void tableRowResizing (
    CellValidationEvent e
)
```

Parameters

e
A CellValidationEvent object providing information about this event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.tableSectionCollapsed Method

Called when a table section is collapsed

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void tableSectionCollapsed (
    RowEvent e
)
```

Parameters

e
A RowEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.tableSectionExpanded Method

Called when a table section is expanded

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void tableSectionExpanded (
    RowEvent e
)
```

Parameters

e
A RowEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.treeCollapsed Method

Raised when a user collapses a tree branch by clicking the [-] button of a expandable node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void treeCollapsed (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.treeExpanded Method

Raised when a user expands a tree branch by clicking the [+] button of a expandable node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void treeExpanded (
    NodeEvent e
)
```

Parameters

e
A NodeEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.treeItemTextEdited Method

Raised when the user edits the text of a tree item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void treeItemTextEdited (
    EditTreeItemTextEvent e
)
```

Parameters

e
An instance of the EditTreeItemTextEvent class providing more information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.validateAnchorPoint Method

A validation event that lets you approve or reject connecting a link to an anchor point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void validateAnchorPoint (
    LinkValidationEvent e
)
```

Parameters

e
A LinkValidationEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.viewportChanged Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void viewportChanged ()
```

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramListener.viewRemoved Method

Raised when a DiagramView is detached from this diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void viewRemoved (
    ValidationEvent e
)
```

Parameters

e

A ValidationEvent object providing information about the event.

See Also

DiagramListener Members
DiagramListener Interface
com.mindfusion.diagramming Namespace

DiagramNode Class

DiagramNode is an abstract base class from which the ShapeNode, TableNode and ContainerNode classes derive. **DiagramNode** instances can represent graph vertices, nodes in organizational or flow diagrams, entities in ER diagrams, and so on.

Syntax

Java

```
public abstract class DiagramNode extends DiagramItem
```

Remarks

Use the setBounds method to set the location and size of a node. To move a node without changing its size, call the moveTo method. To change only the size of a node, invoke the resize method.

Constraints upon how users are allowed to modify a node can be set by the setConstraints and setEnabledHandles methods. The former specifies constraints on the allowed move direction and node size. The latter enables or disables specific manipulation handles of a node.

Relations between nodes are indicated by linking the nodes with DiagramLink objects. Links are directional links, so each node has two collections referring to links, which can be accessed by getIncomingLinks and getOutgoingLinks. setAnchorPattern lets you define to which points of a node incoming or outgoing links can be connected. You can specify whether a node accepts incoming links by the setAllowIncomingLinks method, and outgoing links by the setAllowOutgoingLinks method.

A user is allowed to expand or collapse the tree branch that starts from a node if setExpandable is called for that node. Use getExpanded to find out whether the branch starting from a node is expanded or not.

Nodes can be attached to other items, and be used as simple labels, image-holders or other kinds of UI elements. The attachTo method creates a Group instance if necessary, and calls the group's appropriate attachTo* method.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItem
    com.mindfusion.diagramming.DiagramNode
      com.mindfusion.diagramming.CompositeNode
      com.mindfusion.diagramming.ContainerNode
      com.mindfusion.diagramming.ControlNode
      com.mindfusion.diagramming.DummyNode
      com.mindfusion.diagramming.FreeFormNode

com.mindfusion.diagramming.ShapeNode
com.mindfusion.diagramming.TableNode
com.mindfusion.diagramming.TreeViewNode

See Also

DiagramNode Members
com.mindfusion.diagramming Namespace

DiagramNode Members

DiagramNode is an abstract base class from which the ShapeNode, TableNode and ContainerNode classes derive. **DiagramNode** instances can represent graph vertices, nodes in organizational or flow diagrams, entities in ER diagrams, and so on.

The following tables list the members exposed by the **DiagramNode** type.

Public Constructors

	Name	Description
	DiagramNode	Overloaded.

Protected Fields

	Name	Description
	allowIncomingLinks	
	allowOutgoingLinks	
	anchorPattern	
	AV_Cancel	
	AV_EndModIncoming	
	AV_EndModOutgoing	
	AV_StartModIncoming	
	AV_StartModOutgoing	
	AV_UpdateIncoming	
	AV_UpdateOutgoing	
	AV_UpdIntscIncoming	
	AV_UpdIntscOutgoing	
	AV_UpdPosIncoming	
	AV_UpdPosOutgoing	
	bounds	
	brush	(Inherited from DiagramItem.)
	cycleDetected	(Inherited from DiagramItem.)

	cycleProtect	(Inherited from DiagramItem.)
	enabledHandles	
	handlesStyle	
	incomingLinks	
	masterGroup	
	modifyDX	(Inherited from DiagramItem.)
	modifyDY	(Inherited from DiagramItem.)
	modifyHandle	(Inherited from DiagramItem.)
	modifying	(Inherited from DiagramItem.)
	obstacle	
	outgoingLinks	
	pen	(Inherited from DiagramItem.)
	ptEnd	(Inherited from DiagramItem.)
	ptMdfLast	(Inherited from DiagramItem.)
	ptOrg	(Inherited from DiagramItem.)
	ptSavedEnd	(Inherited from DiagramItem.)
	ptSavedOrg	(Inherited from DiagramItem.)
	savedBounds	
	subordinateGroup	(Inherited from DiagramItem.)

Public Methods

	Name	Description
	addLabel	Overloaded.
	as	Down-casts the item to specified type. (Inherited from DiagramItem.)
	attachTo	Overloaded.
	clone	Creates a copy of this item. (Inherited from DiagramItem.)
	containsPoint	Overloaded.
	detach	Detaches a node from its master group.
	getAllIncomingLinks	Gets a collection of all links entering this node.
	getAllLinks	Gets all links connected to this node.
	getAllOutgoingLinks	Gets a collection of all links going out of this node.
	getAllowIncomingLinks	Gets a value indicating whether users are allowed to draw links to this node.

	getAllowOutgoingLinks	Gets a value indicating whether users are allowed to draw links from this node.
	getAnchorPattern	Gets the anchor points to which link end points are aligned when links connect to this node.
	getBounds	Gets the node location and size.
	getBrush	Gets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	getCenter	Returns the center point of this node.
	getConstraints	Gets the movement and size constraints applied to a node.
	getContainer	Gets the parent **ContainerNode** containing this node.
	getEffectiveBrush	Gets the effective brush of the item. (Inherited from DiagramItem.)
	getEffectiveFont	Gets the currently effective font of the item. This property returns getFont if it is not null, or a font with the DiagramItemStyle.getFontFamily, DiagramItemStyle.getFontSize, and DiagramItemStyle.getFontStyle properties of the item's style. (Inherited from DiagramItem.)
	getEffectivePen	Gets the effective pen of the item. (Inherited from DiagramItem.)
	getEffectiveShadowBrush	Creates a Brush object representing the currently effective shadow brush of the item. This method returns a system brush corresponding to the item's getShadowBrush if the item's **getShadowBrush** is not null, or a system brush corresponding to the DiagramItemStyle.getShadowBrush property of the item's style. (Inherited from DiagramItem.)
	getEffectiveTextBrush	Gets the effective text brush of the item. (Inherited from DiagramItem.)
	getEffects	Gets a collection with all effects applied to this node.
	getEnabledHandles	Gets a combination of NodeHandleType members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node.
	getExpandable	Gets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node.
	getExpanded	Gets a value indicating whether the tree branch that starts from a node is expanded or collapsed.
	getFont	Gets the font used to draw the text of an item. (Inherited from DiagramItem.)
	getHandlesStyle	Gets a value indicating how the node adjustment handles behave and what do they look like.
	getHyperLink	Gets the hyperlink associated with an item. (Inherited from DiagramItem.)

	getId	Gets user-defined identifier associated with this item. (Inherited from DiagramItem.)
	getIgnoreLayout	Gets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	getIncomingLinks	Gets the links coming into a node.
	getLabels	Returns the list of supplementary labels displayed by this node.
	getLayerIndex	Gets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	getLayoutTraits	Returns a hashtable containing properties specific to layout algorithms. (Inherited from DiagramItem.)
	getLocalCenter	
	getLocked	Gets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	getMasterGroup	Gets the hierarchical group in which this node is a subordinate item.
	getMasterItem	Returns the node's **Container** or main item of **MasterGroup**.
	getNearestBorderPoint	Returns a point that lies on the outline of this node, at the shortest distance from the specified point.
	getObstacle	Gets a value indicating whether the link routing algorithm should consider this node an obstacle.
	getOpacity	Gets the opacity of this item. (Inherited from DiagramItem.)
	getOutgoingLinks	Gets the links going out from a node.
	getParent	Gets the diagram that contains this item. (Inherited from DiagramItem.)
	getPen	Gets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	getPrintable	Gets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
S	getRotatedBounds	Gets the bounding rectangle of this node, when it is rotated at the specified angle around the specified pivot.
	getRotationAngle	Gets the rotation angle of this node.
	getRuntimeIndex	For internal use. (Inherited from DiagramItem.)
	getSelected	Gets a value indicating whether this item is selected. (Inherited from DiagramItem.)
	getShadowBrush	Gets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	getShadowOffsetX	Gets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)

	getShadowOffsetY	Gets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getStyle	Gets the style associated with the item. (Inherited from DiagramItem.)
	getSubordinateGroup	Gets the group of subordinated items attached to this one. (Inherited from DiagramItem.)
	getTag	Gets user-defined data assigned to an item. (Inherited from DiagramItem.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	getTextPadding	Gets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	getToolTip	Gets the tooltip text displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	getVisible	Gets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	getWeight	Gets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	getZIndex	Gets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	hasSubordinates	Checks whether there are any nodes attached to this item. (Inherited from DiagramItem.)
	hitTest	Returns the diagram item that contains the specified point. (Inherited from DiagramItem.)
	hitTestHandle	DiagramItem.hitTestHandle override.
	labelFromPoint	Returns the label whose layout rectangle contains the specified point.
	moveTo	Moves a node to the specified location.
S	nodesIntersect	Determines whether two nodes intersect.
	onDragOut	Invoked when a diagram item is being dragged out of this node.
	onDragOver	Invoked when a diagram item is being dragged over this node.
	onDropOver	Invoked when a diagram item is dropped over this node.
	query	Returns the items that can be reached from this item by following the path specified in the given query expression. (Inherited from DiagramItem.)
	readExternal	Implements Externalizable.
	removeLabel	Removes the specified label from this node.
	resize	Sets the size of a node.
	setAllowIncomingLinks	Sets a value indicating whether users are allowed to draw links to this node.

	setAllowOutgoingLinks	Sets a value indicating whether users are allowed to draw links from this node.
	setAnchorPattern	Sets the anchor points to which link end points are aligned when links connect to this node.
	setBounds	Overloaded.
	setBoundsDirect	For internal use.
	setBrush	Sets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	setConstraints	Sets constraints to the node size and movement direction. The constraints are applied when a user modifies the node interactively. They are not checked when the position of a node is set programmatically.
	setEnabledHandles	Sets a combination of **NodeHandleType** members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node.
	setExpandable	Sets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node.
	setExpanded	Expands or collapses the tree branch that starts from a node.
	setExpandedFlag	Changes the "expanded" flag without actually expanding or collapsing the tree branch that starts from a node.
	setFont	Sets the font used to draw the text of an item. (Inherited from DiagramItem.)
	setHandlesStyle	Sets a value indicating how the node adjustment handles behave and what do they look like.
	setHyperLink	Sets the hyperlink associated with an item. (Inherited from DiagramItem.)
	setId	Assigns user-defined identifier to this item. (Inherited from DiagramItem.)
	setIgnoreLayout	Sets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	setLayerIndex	Sets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	setLocked	Sets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	setObstacle	Sets a value indicating whether the link routing algorithm should consider this node an obstacle.
	setOpacity	Sets the opacity of this item. (Inherited from DiagramItem.)
	setPen	Sets the pen used to draw the item frame lines. (Inherited from DiagramItem.)

	setPrintable	Sets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	setRotationAngle	Sets the rotation angle of a node.
	setSelected	Selects or deselects an item. (Inherited from DiagramItem.)
	setShadowBrush	Sets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	setShadowOffsetX	Sets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShadowOffsetY	Sets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setStyle	Sets the style associated with the item. (Inherited from DiagramItem.)
	setTag	Assigns user-defined data to an item. If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event. (Inherited from DiagramItem.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	setTextPadding	Sets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	setToolTip	Sets the tooltip text that should be displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	setVisible	Sets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	setWeight	Sets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	setZIndex	Sets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	writeExternal	Implements Externalizable.
	zBottom	Moves an item to the bottom of the Z order. (Inherited from DiagramItem.)
	zLevelDown	Moves an item down in the Z order. (Inherited from DiagramItem.)
	zLevelUp	Moves an item up in the Z order. (Inherited from DiagramItem.)
	zTop	Moves an item to the top of the Z order. (Inherited from DiagramItem.)

Protected Methods

	Name	Description
	allowCreate	DiagramItem.allowCreate override.

allowModify	
allowModifyImpl	
cancelModify	DiagramItem.cancelModify override. Invoked when the interactive modification of this node has been canceled.
completeCreate	DiagramItem.completeCreate override.
completeModify	
constraintsInfringed	
createConnectionPoint	
createProperties	DiagramItem.createProperties override.
createState	DiagramItem.createState override.
draw	DiagramItem.draw override.
drawLocal	Override in a derived class to provide implementation specific drawing for the node.
drawShadow	DiagramItem.drawShadow override.
drawShadowLocal	Override in a derived class to provide implementation specific drawing for the shadow of the node.
getLocalBounds	Gets this node's bounding rectangle in local coordinates.
getLocalBoundsD	Gets this node's bounding rectangle in local coordinates.
getMeasureUnit	(Inherited from DiagramItem.)
getRepaintRect	DiagramItem.getRepaintRect override.
getValue	Gets the effective value of the style property with the specified name. (Inherited from DiagramItem.)
groupContains	
loadFromJson	Loads the node from a JSON object.
loadFromXml	
move	
onAdd	Called when an item is added to a Diagram, either by the user, programmatically or by undo / redo. (Inherited from DiagramItem.)
onChangeFont	(Inherited from DiagramItem.)
onChangeTextPadding	(Inherited from DiagramItem.)
onChildModified	Called when a group child node has been modified. Override this method if you need to know when a node from the **SubordinateGroup** is modified. (Inherited from DiagramItem.)
onClick	Invoked when the user clicks this item. (Inherited from DiagramItem.)

	onDoubleClick	Invoked when the user double-clicks this item. (Inherited from DiagramItem.)
	onLoad	Called when this item is loaded from a file. (Inherited from DiagramItem.)
	onMeasureUnitChanged	Called when the diagram's MeasureUnit changes. (Inherited from DiagramItem.)
	onModify	Called when an item is modified
	onRemove	Called when an item is removed from a **Diagram**, either by the user, programmatically or by undo / redo.
	onRotationAngleChanged	Called when the node's rotation angle changes.
	onStyleChanged	Invoked when the associated style or theme have changed. (Inherited from DiagramItem.)
	onStyleFontChanged	Invoked when font property values of an associated style change. (Inherited from DiagramItem.)
	onUpdateBounds	Invoked when the bounding rectangle of this node has changed.
	parentConstraintsInfringed	
	putExpandable	
	putSelected	(Inherited from DiagramItem.)
	rectFromPoints	
	repaint	Overloaded. (Inherited from DiagramItem.)
	resizeToFitImage	
	restoreProperties	DiagramItem.restoreProperties override.
	restoreState	DiagramItem.restoreState override.
	saveProperties	DiagramItem.saveProperties override.
	saveState	DiagramItem.saveState override.
	saveToJson	Saves the node as a JSON object.
	saveToXml	
	scaleElements	Scales the node's elements by specified amount.
	setDiagramDirty	Marks the diagram as changed. (Inherited from DiagramItem.)
	setReflexive	Invoked to let a node set the shape of a reflexive link connected to it.
	shouldRender	Determines whether the item is rendered in the current context. (Inherited from DiagramItem.)
	shouldRenderAnchors	Determines whether the node should render its anchor points.
	startCreate	DiagramItem.startCreate override.

	startModify	DiagramItem.startModify override. Invoked when the user starts modifying this node interactively.
	updateCreate	DiagramItem.updateCreate override.
	updateLinkPositions	
	updateModify	DiagramItem.updateModify override. Invoked during interactive modification of this node.

See Also

DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode Fields

DiagramNode.allowIncomingLinks Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected boolean allowIncomingLinks
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.allowOutgoingLinks Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected boolean allowOutgoingLinks
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.anchorPattern Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected AnchorPattern anchorPattern
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.AV_Cancel Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected VisitorMethod AV_Cancel
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.AV_EndModIncoming Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected VisitorMethod AV_EndModIncoming
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.AV_EndModOutgoing Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected VisitorMethod AV_EndModOutgoing
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.AV_StartModIncoming Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected VisitorMethod AV_StartModIncoming
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.AV_StartModOutgoing Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected VisitorMethod AV_StartModOutgoing
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.AV_UpdateIncoming Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected VisitorMethod AV_UpdateIncoming
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.AV_UpdateOutgoing Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected VisitorMethod AV_UpdateOutgoing
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.AV_UpdIntscIncoming Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected VisitorMethod AV_UpdIntscIncoming
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.AV_UpdIntscOutgoing Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected VisitorMethod AV_UpdIntscOutgoing
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.AV_UpdPosIncoming Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected VisitorMethod AV_UpdPosIncoming
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.AV_UpdPosOutgoing Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected VisitorMethod AV_UpdPosOutgoing
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.bounds Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Rectangle2D bounds
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.enabledHandles Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected EnumSet<NodeHandleType> enabledHandles
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.handlesStyle Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected HandlesStyle handlesStyle
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.incomingLinks Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramLinkList incomingLinks
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.masterGroup Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Group masterGroup
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.obstacle Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean obstacle
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.outgoingLinks Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`protected DiagramLinkList outgoingLinks`

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.savedBounds Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`protected Rectangle2D savedBounds`

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode Constructor

Overload List

Name	Description
DiagramNode ()	Initializes a new instance of the DiagramNode class.
DiagramNode (Diagram)	Initializes a new **DiagramNode** instance by setting its properties to the default values defined in the specified Diagram.
DiagramNode (DiagramNode)	Initializes a new **DiagramNode** instance by copying its properties from the specified prototype node.

See Also

DiagramNode Constructor ()

Initializes a new instance of the DiagramNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode ()
```

See Also

DiagramNode Constructor Overload List
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode Constructor (Diagram)

Initializes a new DiagramNode instance by setting its properties to the default values defined in the specified Diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode (
    Diagram parent
)
```

Parameters

parent
A Diagram instance whose default nodeattributes are copied to this node.

See Also

DiagramNode Constructor Overload List
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode Constructor (DiagramNode)

Initializes a new DiagramNode instance by copying its properties from the specified prototype node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public DiagramNode (`
`  DiagramNode prototype`
`)`

Parameters

prototype
A DiagramNode instance whose attributes arecopied to this node.

See Also

DiagramNode Constructor Overload List
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode Methods

DiagramNode.addLabel Method

Overload List

Name	Description
DiagramNode.addLabel (NodeLabel)	Adds the specified label to this node.
DiagramNode.addLabel (String)	Adds a new label to this node.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.addLabel Method (NodeLabel)

Adds the specified label to this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public void addLabel (`
`  NodeLabel label`
`)`

Parameters

label
A NodeLabel instance.

Remarks

An item's main text content is specified via its Text property. Call addLabel if you need to display additional text labels, such as identifiers or hints to the user.

Position of labels can be specified by calling methods such as setCornerPosition. You can let users move labels interactively by setting the Behavior property of DiagramView to MoveLabels.

See Also

addLabel Method Overload List
DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace
removeLabel Method

DiagramNode.addLabel Method (String)

Adds a new label to this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeLabel addLabel (
    String text
)
```

Parameters

text
The label's text.

Return Value

A NodeLabel instance.

Remarks

An item's main text content is specified via its Text property. Call addLabel if you need to display additional text labels, such as identifiers or hints to the user.

Position of labels can be specified by calling methods such as setCornerPosition. You can let users move labels interactively by setting the Behavior property of DiagramView to MoveLabels.

See Also

addLabel Method Overload List
DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace
removeLabel Method

DiagramNode.allowCreate Method

DiagramItem.allowCreate override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean allowCreate (
    Point2D current,
    InteractionState ist
)
```

Parameters

current
The current mouse position.

ist
An InteractionState object containing more information about the current state of the operation.

Return Value

true to allow the creation of this item, or **false** otherwise.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.allowModify Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean allowModify (
    Point2D current,
    InteractionState ist
)
```

Parameters

current

ist

Return Value

See Also

DiagramNode.allowModifyImpl Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean allowModifyImpl (
    Point2D current,
    InteractionState ist
)
```

Parameters

current

ist

Return Value

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.attachTo Method

Overload List

Name	Description
DiagramNode.attachTo (DiagramLink, AttachToLink, int)	Attaches a node to a segment or point of the specified link.
DiagramNode.attachTo (DiagramNode, AttachToNode)	Attaches a node to a corner or side of another node.
DiagramNode.attachTo (DiagramNode, float, float, float, float)	Attaches a node to another node, so that the attached node will always cover a proportional part of the master node, specified in percents.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.attachTo Method (DiagramLink, AttachToLink, int)

Attaches a node to a segment or point of the specified link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void attachTo (
    DiagramLink link,
    AttachToLink attType,
    int index
)
```

Parameters

link
An DiagramLink to which to attach this node.

attType
A member of the AttachToLink enumeration specifying whether to attach the node to a segment or to a control point of the link.

index
An index of link's control point or segment, depending on the attType value.

Remarks

This method attaches the node to a control point or segment of the specified link. If there isn't a Group instance already associated with the master item, one is created automatically by this method. The group is then accessible through the master's SubordinateGroup property, or this node's MasterGroup property.

The node is attached by calling the attachToLinkPoint or attachToLinkSegment methods of **Group**, depending on the value of the *attType* argument. The attached node then maintains its original offset from a link's point or segment when link's shape changes.

See Also

attachTo Method Overload List
DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace
detach Method

DiagramNode.attachTo Method (DiagramNode, AttachToNode)

Attaches a node to a corner or side of another node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void attachTo (
    DiagramNode node,
```

```
    AttachToNode attType
)
```

Parameters

node
A DiagramNode to which to attach this node.

attType
A member of the AttachToNode enumeration.

Remarks

This method attaches the current node to the corner of another node. If there isn't a Group instance already associated with the master item, one is created automatically by this method. The group is then accessible by the master's SubordinateGroup property, or this node's MasterGroup property.

The node is attached by calling the attachToCorner method of **Group**. The attached node then maintains its original offset from another node's corner point.

See Also

attachTo Method Overload List
DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace
detach Method

DiagramNode.attachTo Method (DiagramNode, float, float, float, float)

Attaches a node to another node, so that the attached node will always cover a proportional part of the master node, specified in percents.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void attachTo (
    DiagramNode node,
    float percentX1,
    float percentY1,
    float percentX2,
    float percentY2
)
```

Parameters

node
A DiagramNode to which to attach this node.

percentX1
A float percent value specifying to what X position in the master node to attach the left side of this node.

percentY1
A float percent value specifying to what Y position in the master node to attach the top side of this node.

percentX2

A float percent value specifying to what X position in the master node to attach the right side of this node.

percentY2
A float percent value specifying to what Y position in the master node to attach the bottom side of this node.

See Also

attachTo Method Overload List
DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.cancelModify Method

DiagramItem.cancelModify override. Invoked when the interactive modification of this node has been canceled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void cancelModify (
    InteractionState ist
)
```

Parameters

ist
An InteractionState object containing more information about the current state of the operation.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.completeCreate Method

DiagramItem.completeCreate override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void completeCreate (
    Point2D end
)
```

Parameters

end
The final mouse position.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.completeModify Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void completeModify (
    Point2D end,
    InteractionState ist
)
```

Parameters

end

ist

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.constraintsInfringed Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean constraintsInfringed ()
```

Return Value

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.containsPoint Method

Overload List

Name	Description
DiagramNode.containsPoint (Point2D)	DiagramItem.containsPoint override. Checks whether this node contains the specified point. This method is called during hit-testing to determine if the mouse is over the node.
DiagramNode.containsPoint (Point2D, float)	DiagramItem.containsPoint override. Checks whether this node contains the specified point. This method is called during hit-testing to determine if the mouse is over the node.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.containsPoint Method (Point2D)

DiagramItem.containsPoint override. Checks whether this node contains the specified point. This method is called during hit-testing to determine if the mouse is over the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean containsPoint (
    Point2D point
)
```

Parameters

point
The point to check.

Return Value

true it this node contains the specified point, or **false** otherwise.

See Also

containsPoint Method Overload List
DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.containsPoint Method (Point2D, float)

DiagramItem.containsPoint override. Checks whether this node contains the specified point. This method is called during hit-testing to determine if the mouse is over the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean containsPoint (
    Point2D point,
    float threshold
)
```

Parameters

point
The point to check.

threshold
Specifies the size of the area around the node outlines where the point is still considered inside.

Return Value

true it this node contains the specified point, or **false** otherwise.

See Also

containsPoint Method Overload List
DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.createConnectionPoint Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected ConnectionPoint createConnectionPoint (
    DiagramLink link,
    Point2D point,
    boolean incoming
)
```

Parameters

link

point

incoming

Return Value

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.createProperties Method

DiagramItem.createProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramItemProperties createProperties ()
```

Return Value

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.createState Method

DiagramItem.createState override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramItemState createState ()
```

Return Value

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.detach Method

Detaches a node from its master group.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void detach ()
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.draw Method

DiagramItem.draw override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void draw (
    Graphics2D g,
    RenderOptions options
)
```

Parameters

g
The **Graphics2D** surface to draw the item on.

options
A RenderOptions object specifying options for the drawing operation.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.drawLocal Method

Override in a derived class to provide implementation specific drawing for the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void drawLocal (
    Graphics2D g,
    RenderOptions options
)
```

Parameters

g
The **Graphics2D** surface to draw the item on.

options
Provides options for the drawing operation.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.drawShadow Method

DiagramItem.drawShadow override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void drawShadow (
    Graphics2D g,
    RenderOptions options
)
```

Parameters

g
A **Graphics2D** instance.

options
Provides options for the drawing operation.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.drawShadowLocal Method

Override in a derived class to provide implementation specific drawing for the shadow of the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void drawShadowLocal (
    Graphics2D graphics,
    RenderOptions options
)
```

Parameters

graphics
The **Graphics2D** object where the shadow should be rendered.

options
Provides options for the drawing operation.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getAllIncomingLinks Method

Gets a collection of all links entering this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramLinkList getAllIncomingLinks ()
```

Return Value

A DiagramLinkList containing all incoming links.

Remarks

This method returns IncomingLinks when the node does not contain constituent parts that can be related by links, such as TableNode rows or TreeViewNode items. Otherwise, the method also collects all links that enter the child items.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace
getAllLinks Method
getAllOutgoingLinks Method

DiagramNode.getAllLinks Method

Gets all links connected to this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramLinkList getAllLinks ()
```

Return Value

A DiagramLinkList containing the links connected to this node.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getAllOutgoingLinks Method

Gets a collection of all links going out of this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLinkList getAllOutgoingLinks ()
```

Return Value

A DiagramLinkList containing all outgoing links.

Remarks

This method returns OutgoingLinks when the node does not contain constituent parts that can be related by links, such as TableNode rows or TreeViewNode items. Otherwise, the method also collects all links that go out of the child items.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace
getAllLinks Method
getAllIncomingLinks Method

DiagramNode.getAllowIncomingLinks Method

Gets a value indicating whether users are allowed to draw links to this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowIncomingLinks ()
```

Return Value

true if incoming links can be drawn to this node, otherwise **false**.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getAllowOutgoingLinks Method

Gets a value indicating whether users are allowed to draw links from this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowOutgoingLinks ()
```

Return Value

true if outgoing links can be drawn from this node, otherwise **false**.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getAnchorPattern Method

Gets the anchor points to which link end points are aligned when links connect to this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPattern getAnchorPattern ()
```

Return Value

An AnchorPattern object that defines the anchor points for this node.

Remarks

If this property is not set for a ShapeNode, the control will use the points defined in the node's associated Shape.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getBounds Method

Gets the node location and size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Rectangle2D.Float getBounds ()
```

Return Value

A **Rectangle2D.Float** object representing the node bounds.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getCenter Method

Returns the center point of this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Point2D getCenter ()
```

Return Value

A **Point2D** instance specifying the node center.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getConstraints Method

Gets the movement and size constraints applied to a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public NodeConstraints getConstraints ()
```

Return Value

A NodeConstraints object.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getContainer Method

Gets the parent ContainerNode containing this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ContainerNode getContainer ()
```

Return Value

The parent ContainerNode of this node.

Remarks

Call the add method of ContainerNode to add a child node to the container. Call remove to remove a child node.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace
getMasterItem Method
ContainerNode.getChildren Method

DiagramNode.getEffects Method

Gets a collection with all effects applied to this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public List<NodeEffect> getEffects ()
```

Return Value

A list of NodeEffect objects.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getEnabledHandles Method

Gets a combination of NodeHandleType members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public EnumSet<NodeHandleType> getEnabledHandles ()
```

Return Value

A set of NodeHandleType members. The default value is AdjustmentHandles.DisableRotation.

Remarks

Disabling some selection handles allows restricting the types of modifications that users can perform on a node. Each manipulation handle can be enabled or disabled by adding or removing its corresponding enum element from the set.

For example, to make a node resizable only horizontally, set this property to a combination of the Move, **ResizeMiddleLeft** and **ResizeMiddleRight** flags. That will disable all manipulation handles, except the left and right ones, which allow horizontal resizing, and the central one allowing movement of the node.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getExpandable Method

Gets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getExpandable ()
```

Return Value

true if the tree branch that starts from this node, can be expanded or collapsed by users, otherwise **false**.

Remarks

This property is useful mostly when nodes form a tree-like hierarchical structure. If it is enabled, a small [±] button is drawn beside the node. Clicking that button either shows or hides all children of this node in the tree. It depends on the diagram's ExpandOnIncoming property which items connected to a node are considered its children. The tree expansion continues recursively down the child nodes if the RecursiveExpand property is enabled.

The appearance of the collapse / expand icon can be customized by setting Renderers.ExpandIconRenderer.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getExpanded Method

Gets a value indicating whether the tree branch that starts from a node is expanded or collapsed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getExpanded ()
```

Return Value

true if the tree branch that starts from this node is currently expanded, otherwise **false**.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getHandlesStyle Method

Gets a value indicating how the node adjustment handles behave and what do they look like.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public HandlesStyle getHandlesStyle ()
```

Return Value

A member of the HandlesStyle enumeration.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getIncomingLinks Method

Gets the links coming into a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramLinkList getIncomingLinks ()
```

Return Value

A DiagramLinkList containing the incoming links.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getLabels Method

Returns the list of supplementary labels displayed by this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ArrayList<NodeLabel> getLabels ()
```

Return Value

An ArrayList<NodeLabel> instance.

Remarks

Call the addLabel and removeLabel methods to add or remove labels.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace
Text Property
Caption Property

DiagramNode.getLocalBounds Method

Gets this node's bounding rectangle in local coordinates.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Rectangle2D.Float getLocalBounds ()
```

Return Value

A **Rectangle2D** object representing the bounding rectangle of this node.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getLocalBoundsD Method

Gets this node's bounding rectangle in local coordinates.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Rectangle2D.Double getLocalBoundsD ()
```

Return Value

A **Rectangle2D** object representing the bounding rectangle of this node.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getLocalCenter Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D getLocalCenter ()
```

Return Value

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getMasterGroup Method

Gets the hierarchical group in which this node is a subordinate item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Group getMasterGroup ()
```

Return Value

A Group to which this node is attached.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getMasterItem Method

Returns the node's Container or main item of MasterGroup.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem getMasterItem ()
```

Return Value

DiagramItem reference to parent ContainerNode or master group's MainItem.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace
Group Class
ContainerNode Class

DiagramNode.getNearestBorderPoint Method

Returns a point that lies on the outline of this node, at the shortest distance from the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D getNearestBorderPoint (
    Point2D point
)
```

Parameters

point
A **Point2D** instance.

Return Value

A **Point2D** instance representing the border point at shortest distance from the specified point.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getObstacle Method

Gets a value indicating whether the link routing algorithm should consider this node an obstacle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getObstacle ()
```

Return Value

true if auto-routed links should go around this node, otherwise **false**.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getOutgoingLinks Method

Gets the links going out from a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLinkList getOutgoingLinks ()
```

Return Value

An DiagramLinkList containing the outgoing links.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getRepaintRect Method

DiagramItem.getRepaintRect override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Rectangle2D getRepaintRect (
    boolean includeConnected
)
```

Parameters

includeConnected

Return Value

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getRotatedBounds Method

Gets the bounding rectangle of this node, when it is rotated at the specified angle around the specified pivot.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Rectangle2D getRotatedBounds (
    Rectangle2D rect,
    Point2D center,
    double angle
)
```

Parameters

rect

center

angle

Return Value

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.getRotationAngle Method

Gets the rotation angle of this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getRotationAngle ()
```

Return Value

A float value specifying the node rotation angle.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.groupContains Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

protected boolean groupContains (
    DiagramNode node
)
```

Parameters

node
A DiagramNode instance.

Return Value

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.hitTestHandle Method

DiagramItem.hitTestHandle override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public AdjustmentHandle hitTestHandle (
    Point2D point
)
```

Parameters

point
A **Point2D** instance specifying the location where to look for adjustment handles.

Return Value

Returns a NodeAdjustmentHandle instance representing the adjustment handle found at the specified location, or **null** if there is none.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.labelFromPoint Method

Returns the label whose layout rectangle contains the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ItemLabel labelFromPoint (
    Point2D point
)
```

Parameters

point
A **Point2D** instance.

Return Value

The NodeLabel that contains the specified point.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.loadFromJson Method

Loads the node from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the node's data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

Remarks

This method is invoked when an item is being deserialized from a diagram file saved in JSON format.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.loadFromXml Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

An **XmlElement** containing the DiagramNode's data.

context

An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.move Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void move (
    double x,
    double y
)
```

Parameters

x

y

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.moveTo Method

Moves a node to the specified location.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void moveTo (
    float x,
    float y
)
```

Parameters

x
The new horizontal position of the node.

y
The new vertical position of the node.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.nodesIntersect Method

Determines whether two nodes intersect.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static boolean nodesIntersect (
    DiagramNode node1,
    DiagramNode node2
)
```

Parameters

node1
The first node.

node2
The second node.

Return Value

true if the nodes intersect, otherwise **false**.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.onDragOut Method

Invoked when a diagram item is being dragged out of this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onDragOut (
    DiagramItem item
)
```

Parameters

item
The DiagramItem that is dragged out of the node.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.onDragOver Method

Invoked when a diagram item is being dragged over this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean onDragOver (
    DiagramItem item
)
```

Parameters

item
The DiagramItem that is dragged over the node.

Return Value

false if the diagram should notify nodes below this one; otherwise, **true**.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.onDropOver Method

Invoked when a diagram item is dropped over this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean onDropOver (
    DiagramItem item
)
```

Parameters

item
The DiagramItem that is dropped over the node.

Return Value

false if the diagram should notify nodes below this one; otherwise, **true**.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.onModify Method

Called when an item is modified

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onModify (
    Point2D mousePosition,
    NodeHandleType adjustmentHandle
)
```

Parameters

mousePosition
Specifies the mouse position.

adjustmentHandle

The adjustment handle used to modify the node.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.onRemove Method

Called when an item is removed from a Diagram, either by the user, programmatically or by undo / redo.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onRemove ()
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.onRotationAngleChanged Method

Called when the node's rotation angle changes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onRotationAngleChanged ()
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.onUpdateBounds Method

Invoked when the bounding rectangle of this node has changed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onUpdateBounds (
    Rectangle2D oldBounds
)
```

Parameters

oldBounds

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.parentConstraintsInfringed Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean parentConstraintsInfringed ()
```

Return Value

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.putExpandable Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void putExpandable (
    boolean exp
)
```

Parameters

exp

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.rectFromPoints Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void rectFromPoints ()
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.removeLabel Method

Removes the specified label from this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeLabel (
    NodeLabel label
)
```

Parameters

label
A NodeLabel instance.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace
addLabel Method

DiagramNode.resize Method

Sets the size of a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void resize (
    float width,
    float height
)
```

Parameters

width
The new width of this node.

height
The new height of this node.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.resizeToFitImage Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void resizeToFitImage (
    Image image
)
```

Parameters

image

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.restoreProperties Method

DiagramItem.restoreProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void restoreProperties (
    DiagramItemProperties props
)
```

Parameters

props

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.restoreState Method

DiagramItem.restoreState override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void restoreState (
    DiagramItemState state
)
```

Parameters

state

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.saveProperties Method

DiagramItem.saveProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveProperties (
    DiagramItemProperties props
)
```

Parameters

props

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.saveState Method

DiagramItem.saveState override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveState (
    DiagramItemState state
)
```

Parameters

state

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.saveToJson Method

Saves the node as a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject instance to contain the serialized data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

Remarks

This method is invoked when an item is being serialized into a JSON-format diagram file.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.saveToXml Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An **XmlElement** the node's data are stored.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.scaleElements Method

Scales the node's elements by specified amount.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void scaleElements (
    float scale
)
```

Parameters

scale
The value by which to multiply node elements' sizes.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.setAllowIncomingLinks Method

Sets a value indicating whether users are allowed to draw links to this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAllowIncomingLinks (
    boolean value
)
```

Parameters

value
true if incoming links can be drawn to this node, otherwise **false**.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.setAllowOutgoingLinks Method

Sets a value indicating whether users are allowed to draw links from this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowOutgoingLinks (
    boolean value
)
```

Parameters

value
true if outgoing links can be drawn from this node, otherwise **false**.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.setAnchorPattern Method

Sets the anchor points to which link end points are aligned when links connect to this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAnchorPattern (
    AnchorPattern value
)
```

Parameters

value
An AnchorPattern object that definesthe anchor points for this node.

Remarks

If this property is not set for a ShapeNode, the control will use the points defined in the node's associated Shape.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.setBounds Method

Overload List

Name	Description
DiagramNode.setBounds (Rectangle2D)	Sets the node location and size.
DiagramNode.setBounds (Rectangle2D, boolean, boolean)	Sets the location and size of this node.
DiagramNode.setBounds (float, float, float, float)	Sets the node location and size.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.setBounds Method (Rectangle2D)

Sets the node location and size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBounds (
    Rectangle2D value
)
```

Parameters

value
A **Rectangle2D.Float** object representing the node bounds.

See Also

setBounds Method Overload List
DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.setBounds Method (Rectangle2D, boolean, boolean)

Sets the location and size of this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBounds (
    Rectangle2D rect,
    boolean updateGroups,
    boolean updateLinks
)
```

Parameters

rect
A Rectangle2D specifying the node position.

updateGroups
Specifies whether the position of child nodes attached to this one should be updated too.

updateLinks
Specifies whether the position of links connected to this node should be updated too.

See Also

setBounds Method Overload List
DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace
resize Method
getBounds Method

DiagramNode.setBounds Method (float, float, float, float)

Sets the node location and size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBounds (
    float x,
    float y,
    float w,
    float h
)
```

Parameters

x
The new horizontal position of the node.

y
The new vertical position of the node.

w
The new width of the node.

h
The new height of the node.

See Also

setBounds Method Overload List
DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.setBoundsDirect Method

For internal use.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBoundsDirect (
    Rectangle2D rc
)
```

Parameters

rc

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.setConstraints Method

Sets constraints to the node size and movement direction. The constraints are applied when a user modifies the node interactively. They are not checked when the position of a node is set programmatically.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setConstraints (
    NodeConstraints value
)
```

Parameters

value
A NodeConstraints object.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.setEnabledHandles Method

Sets a combination of NodeHandleType members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnabledHandles (
    EnumSet<NodeHandleType> value
)
```

Parameters

value
A set of NodeHandleType members.

Remarks

Disabling some selection handles allows restricting the types of modifications that users can perform on a node. Each manipulation handle can be enabled or disabled by adding or removing its corresponding enum element from the set.

For example, to make a node resizable only horizontally, set this property to a combination of the Move, **ResizeMiddleLeft** and **ResizeMiddleRight** flags. That will disable all manipulation handles, except the left and right ones, which allow horizontal resizing, and the central one allowing movement of the node.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace
ModificationStart Property
ShowDisabledHandles Property

DiagramNode.setExpandable Method

Sets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setExpandable (
    boolean value
)
```

Parameters

value

true if the tree branch that starts from this node can be expanded or collapsed by users, otherwise **false**.

Remarks

This property is useful mostly when nodes form a tree-like hierarchical structure. If it is enabled, a small [±] button is drawn beside the node. Clicking that button either shows or hides all children of this node in the tree. It depends on the diagram's ExpandOnIncoming property which items connected to a node are considered its children. The tree expansion continues recursively down the child nodes if the RecursiveExpand property is enabled.

The appearance of the collapse / expand icon can be customized by setting Renderers.ExpandIconRenderer.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.setExpanded Method

Expands or collapses the tree branch that starts from a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setExpanded (
    boolean value
)
```

Parameters

value
true if the tree branch that starts from this node should be expanded, otherwise **false**.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.setExpandedFlag Method

Changes the "expanded" flag without actually expanding or collapsing the tree branch that starts from a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setExpandedFlag (
    boolean expanded
)
```

Parameters

expanded
The new value of the flag.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.setHandlesStyle Method

Sets a value indicating how the node adjustment handles behave and what do they look like.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHandlesStyle (
    HandlesStyle value
)
```

Parameters

value
A member of the HandlesStyle enumeration.

Remarks

Specifies how node selection status is indicated visually. In addition, this property defines how manipulation of the node can be done, that is, how to move it, resize it or link it to other nodes. You can assign any of the HandlesStyle enum elements to this property.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.setObstacle Method

Sets a value indicating whether the link routing algorithm should consider this node an obstacle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setObstacle (
    boolean value
)
```

Parameters

value
true if auto-routed links should go around this node, otherwise **false**.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.setReflexive Method

Invoked to let a node set the shape of a reflexive link connected to it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void setReflexive (
    DiagramLink link
)
```

Parameters

link
Reference to the link.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.setRotationAngle Method

Sets the rotation angle of a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setRotationAngle (
    float value
)
```

Parameters

value
A float value specifying the node rotation angle.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.shouldRenderAnchors Method

Determines whether the node should render its anchor points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean shouldRenderAnchors (
    RenderOptions options
)
```

Parameters

options

Return Value

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.startCreate Method

DiagramItem.startCreate override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void startCreate (
    Point2D org
)
```

Parameters

org
The initial mouse position.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.startModify Method

DiagramItem.startModify override. Invoked when the user starts modifying this node interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void startModify (
    Point2D org,
    AdjustmentHandle handle,
    InteractionState ist
)
```

Parameters

org
The initial mouse position.

handle
The adjustment handle used to modify this item.

ist
An InteractionState object containing more information about the current state of the operation.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.updateCreate Method

DiagramItem.updateCreate override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void updateCreate (
    Point2D current
)
```

Parameters

current
The current mouse position.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.updateLinkPositions Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void updateLinkPositions ()
```

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.updateModify Method

DiagramItem.updateModify override. Invoked during interactive modification of this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void updateModify (
    Point2D current,
    InteractionState ist
)
```

Parameters

current
The current mouse position.

ist
An InteractionState object containing more information about the current state of the operation.

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNode.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

DiagramNode Members
DiagramNode Class
com.mindfusion.diagramming Namespace

DiagramNodeList Class

A strongly typed list of DiagramNode objects.

Syntax

Java

```
public class DiagramNodeList extends BaseList<E> implements Cloneable
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.BaseList(E)
        com.mindfusion.diagramming.DiagramNodeList

See Also

DiagramNodeList Members
com.mindfusion.diagramming Namespace

DiagramNodeList Members

A strongly typed list of DiagramNode objects.

The following tables list the members exposed by the DiagramNodeList type.

Public Constructors

	Name	Description
	DiagramNodeList	

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)
	listEvent	(Inherited from BaseList.)
	notifyParent	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	Adds a new element to the list. (Inherited from BaseList.)
	clear	Removes all elements from the list. (Inherited from BaseList.)
	clone	
	contains	Determines if this list contains the specified element. (Inherited from BaseList.)
	first	Gets the first element of this list. (Inherited from BaseList.)
	get	Gets the element at the specified position in this list. (Inherited from BaseList.)
	last	Gets the last element of this list. (Inherited from BaseList.)
	readExternal	Loads the list's contents. (Inherited from BaseList.)
	remove	Overloaded. (Inherited from BaseList.)
	removeRange	Removes a range of elements from this list. (Inherited from BaseList.)
	set	Sets the element at the specified position in this list. (Inherited from BaseList.)
	size	Gets the number of elements in this list. (Inherited from BaseList.)
	writeExternal	Saves the list's contents. (Inherited from BaseList.)

Protected Methods

	Name	Description
	raiseAdding	Raises the adding event. (Inherited from BaseList.)
	raiseClearing	Raises the clearing event. (Inherited from BaseList.)
	raiseRemoving	Raises the removing event. (Inherited from BaseList.)

See Also

DiagramNodeList Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public DiagramNodeList ()`

See Also

DiagramNodeList Class
com.mindfusion.diagramming Namespace

DiagramNodeList Methods

DiagramNodeList.clone Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Object clone ()`

Return Value

See Also

DiagramNodeList Members
DiagramNodeList Class
com.mindfusion.diagramming Namespace

DiagramNodeProperties Class

Stores the values of DiagramNode properties during undo / redo operations. If you need to implement undo support for the additional properties defined by a class derived from **DiagramNode**, do so by deriving from DiagramNodeProperties and overriding the DiagramNode.saveProperties, DiagramNode.restoreProperties, and DiagramNode.createProperties methods.

Syntax

Java

```
public class DiagramNodeProperties extends DiagramItemProperties
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItemProperties
    com.mindfusion.diagramming.DiagramNodeProperties
      com.mindfusion.diagramming.ContainerNodeProperties
      com.mindfusion.diagramming.ControlNodeProperties
      com.mindfusion.diagramming.ShapeNodeProperties
      com.mindfusion.diagramming.TableNodeProperties

See Also

DiagramNodeProperties Members
com.mindfusion.diagramming Namespace

DiagramNodeProperties Members

Stores the values of DiagramNode properties during undo / redo operations. If you need to implement undo support for the additional properties defined by a class derived from **DiagramNode**, do so by deriving from DiagramNodeProperties and overriding the DiagramNode.saveProperties, DiagramNode.restoreProperties, and DiagramNode.createProperties methods.

The following tables list the members exposed by the DiagramNodeProperties type.

Public Constructors

	Name	Description
	DiagramNodeProperties	

Public Fields

	Name	Description
	textPadding	(Inherited from DiagramItemProperties.)

See Also

DiagramNodeProperties Class
com.mindfusion.diagramming Namespace

DiagramNodeProperties Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public DiagramNodeProperties ()`

See Also

DiagramNodeProperties Class
com.mindfusion.diagramming Namespace

DiagramNodeState Class

Contains a snapshot of the internal state of a DiagramNode. Instances of this class are used to store the state of nodes for later undo or redo operations. If you derive from **DiagramNode** and need to implement undo support for the additional internal state defined by your class, do so by deriving from DiagramNodeState and overriding the DiagramNode.createState, DiagramNode.saveState and DiagramNode.restoreState methods.

Syntax

Java
`public class DiagramNodeState extends DiagramItemState`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItemState
    com.mindfusion.diagramming.DiagramNodeState
      com.mindfusion.diagramming.ShapeNodeState

See Also

DiagramNodeState Members
com.mindfusion.diagramming Namespace

DiagramNodeState Members

Contains a snapshot of the internal state of a DiagramNode. Instances of this class are used to store the state of nodes for later undo or redo operations. If you derive from **DiagramNode** and need to implement undo support for the additional internal state defined by your class, do so by deriving from DiagramNodeState and overriding the DiagramNode.createState, DiagramNode.saveState and DiagramNode.restoreState methods.

The following tables list the members exposed by the DiagramNodeState type.

Public Constructors

	Name	Description
	DiagramNodeState	

Protected Fields

	Name	Description
	item	(Inherited from DiagramItemState.)

See Also

DiagramNodeState Class
com.mindfusion.diagramming Namespace

DiagramNodeState Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNodeState (
    DiagramNode node
)
```

Parameters

node

See Also

DiagramNodeState Class
com.mindfusion.diagramming Namespace

DiagramNodeStyle Class

Represents a reusable set of properties that define the appearance of diagram nodes.

Syntax

Java

```
public class DiagramNodeStyle extends DiagramItemStyle
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Style
    com.mindfusion.diagramming.DiagramItemStyle
      com.mindfusion.diagramming.DiagramNodeStyle
        com.mindfusion.diagramming.CompositeNodeStyle
        com.mindfusion.diagramming.ContainerNodeStyle
        com.mindfusion.diagramming.FreeFormNodeStyle
        com.mindfusion.diagramming.ShapeNodeStyle
        com.mindfusion.diagramming.SvgNodeStyle
        com.mindfusion.diagramming.TableNodeStyle
        com.mindfusion.diagramming.TreeViewNodeStyle

See Also

DiagramNodeStyle Members
com.mindfusion.diagramming Namespace

DiagramNodeStyle Members

Represents a reusable set of properties that define the appearance of diagram nodes.

The following tables list the members exposed by the DiagramNodeStyle type.

Protected Constructors

	Name	Description
	DiagramNodeStyle	Initializes a new instance of the **DiagramNodeStyle** class.

Public Methods

	Name	Description
	addPropertyChangeListener	(Inherited from Style.)
	getBrush	Gets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	getEffects	Gets a list of the effects applied to the node.
	getFontFamily	Gets the font family of the item text. (Inherited from DiagramItemStyle.)
	getFontSize	Gets the font size of the item text. (Inherited from DiagramItemStyle.)
	getFontStyle	Gets the font style of the item text. (Inherited from DiagramItemStyle.)
	getFontUnit	Gets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	getShadowBrush	Gets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	getStroke	Gets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	getStrokeThickness	Gets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
	readExternal	**Externalizable.readExternal** implementation. (Inherited from Style.)
S	registerType	Associates a type with an alias. The alias is used when saving and loading objects of the specified type during style serialization and deserialization. (Inherited from Style.)
	removePropertyChangeListener	(Inherited from Style.)
	setBrush	Sets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	setFontFamily	Sets the font family of the item text. (Inherited from DiagramItemStyle.)

	setFontSize	Sets the font size of the item text. (Inherited from DiagramItemStyle.)
	setFontStyle	Sets the font style of the item text. (Inherited from DiagramItemStyle.)
	setFontUnit	Sets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	setShadowBrush	Sets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	setStroke	Sets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	setStrokeThickness	Sets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
	writeExternal	**Externalizable.writeExternal** implementation. (Inherited from Style.)

Protected Methods

	Name	Description
	getValue	Gets the value of the specified property. (Inherited from Style.)
	isPropertySet	Checks whether the specified property has a value. (Inherited from Style.)
	loadFromJson	Loads the style content from a JsonObject.
	loadFromXml	Loads the style content from an XML element. (Inherited from Style.)
	registerProperty	Registers a new property with the specified name and type. (Inherited from Style.)
	saveToJson	Saves the style content into a JsonObject.
	saveToXml	Saves the style content into an XML element. (Inherited from Style.)
	setValue	Sets the value of the specified property. (Inherited from Style.)
	unsetValue	Clears the value of the specified property. (Inherited from Style.)

See Also

DiagramNodeStyle Class
com.mindfusion.diagramming Namespace

DiagramNodeStyle Constructor

Initializes a new instance of the DiagramNodeStyle class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramNodeStyle ()
```

See Also

DiagramNodeStyle Class
com.mindfusion.diagramming Namespace

DiagramNodeStyle Methods

DiagramNodeStyle.getEffects Method

Gets a list of the effects applied to the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public List<NodeEffect> getEffects ()
```

Return Value

A list of NodeEffect objects.

See Also

DiagramNodeStyle Members
DiagramNodeStyle Class
com.mindfusion.diagramming Namespace

DiagramNodeStyle.loadFromJson Method

Loads the style content from a JsonObject.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
```

```
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the style's data.

context
A JsonPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

DiagramNodeStyle Members
DiagramNodeStyle Class
com.mindfusion.diagramming Namespace

DiagramNodeStyle.saveToJson Method

Saves the style content into a JsonObject.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject the style's data should be stored into.

context
A JsonPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

DiagramNodeStyle Members
DiagramNodeStyle Class
com.mindfusion.diagramming Namespace

DiagramPage Class

Represents a single page in a DiagramDocument object.

Syntax

Java

```
public class DiagramPage extends Diagram implements NotifyPropertyChanged
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramBase
    com.mindfusion.diagramming.Diagram
      com.mindfusion.diagramming.DiagramPage

See Also

DiagramPage Members
com.mindfusion.diagramming Namespace

DiagramPage Members

Represents a single page in a DiagramDocument object.

The following tables list the members exposed by the DiagramPage type.

Public Constructors

	Name	Description
	DiagramPage	Initializes a new instance of the **DiagramPage** class.

Public Methods

	Name	Description
	addDiagramListener	Registers listener so that it will receive events when users create, modify or delete diagram items. (Inherited from Diagram.)
	addPropertyChangeListener	
	alignPointToGrid	Aligns a point to the alignment grid. (Inherited from Diagram.)
	arrange	Arranges the diagram using the specified graph layout algorithm. (Inherited from Diagram.)
	arrangeLinkLabels	Rearranges link labels whose AutoArrange property is enabled. (Inherited from Diagram.)
	changeUnit	Sets new MeasureUnit value and scales the coordinates of diagram items so that their absolute size remains unchanged. (Inherited from Diagram.)
	clearAll	Deletes all items from the diagram. (Inherited from Diagram.)
	copySelection	Creates a copy of the currently selected objects and groups. (Inherited from Diagram.)
	createImage	Overloaded. Creates a bitmap image representing the diagram contents. (Inherited from Diagram.)

	createItem	Implements the IItemFactory interface. (Inherited from Diagram.)
	createStyledText	Creates a styled text object for the specified text string. (Inherited from Diagram.)
	createThemeFromDefaults	Creates a Theme object representing the default properties of the diagram. This method is only for compatibility with files saved with versions earlier than 4.0. (Inherited from Diagram.)
	destroyGroup	Destroys the specified group. The group items are not deleted, unless its setAutoDeleteItems method is calles. (Inherited from Diagram.)
	draw	Renders the diagram on the specified **Graphics2D** object. (Inherited from Diagram.)
	drawAlignmentGuides	Draws the current alignment guides. (Inherited from Diagram.)
	drawLayer	Renders all items of a layer to the specified graphics. (Inherited from Diagram.)
	drawString	(Inherited from Diagram.)
	drawStyledText	(Inherited from Diagram.)
	drawTextObject	(Inherited from Diagram.)
	enumByReverseZ	Overloaded. Hit-tests diagram items in reverse Z order. (Inherited from Diagram.)
	enumTopLevelByReverseZ	Overloaded. Hit-tests diagram top-level items in reverse Z order. (Inherited from Diagram.)
	executeCommand	Executes a command and saves it in the undo/redo history. (Inherited from Diagram.)
	findGroup	Finds the group that has the specified tag. (Inherited from Diagram.)
	findLink	Finds the link that has the specified tag. (Inherited from Diagram.)
	findLinkById	Finds the link that has the specified id value. (Inherited from Diagram.)
	findNode	Finds the node that has the specified tag. (Inherited from Diagram.)
	findNodeById	Finds the node that has the specified id value. (Inherited from Diagram.)
	getActiveItem	Gets the active item. (Inherited from Diagram.)
	getActiveItemHandlesStyle	Gets the visual style of the manipulation handles displayed around the active item. (Inherited from Diagram.)
	getActiveLayer	Gets the zero-based index of the active layer. (Inherited from Diagram.)
	getAdjustmentHandlesSize	Gets the size of selection handles. (Inherited from Diagram.)

	getAlignmentGuidePen	Gets the pen used to draw alignment guides. (Inherited from Diagram.)
	getAlignToGrid	Gets a value indicating whether items are aligned to the alignment grid while users draw them. (Inherited from Diagram.)
	getAllowLinksRepeat	Gets a value indicating whether users are allowed to draw more than one links between the same nodes. (Inherited from Diagram.)
	getAllowMultipleResize	Gets whether multiple selected nodes can be resized simultaneously. (Inherited from Diagram.)
	getAllowSelfLoops	Gets whether users are allowed to draw reflexive links. (Inherited from Diagram.)
	getAllowSplitLinks	Gets whether link segments can be added and removed interactively. (Inherited from Diagram.)
	getAllowUnanchoredLinks	Gets a value indicating whether users are allowed to attach links to nodes that do not have any anchor points. (Inherited from Diagram.)
	getAllowUnconnectedLinks	Gets a value indicating whether users are allowed to draw unconnected links. (Inherited from Diagram.)
	getAutoAlignDistance	Gets the maximal horizontal or vertical distance at which a node aligns to the borders of other nodes. (Inherited from Diagram.)
	getAutoAlignNodes	Gets whether nodes should automatically align to the borders of other nodes during user interaction. (Inherited from Diagram.)
	getAutoCloseDistance	Gets the maximum distance between first and last points of a FreeFormNode for which the node's outline is closed automatically. (Inherited from Diagram.)
	getAutoDeleteLinks	Gets whether links are deleted automatically when their Origin or Destination is deleted. (Inherited from Diagram.)
	getAutoResize	Gets a value specifying whether the document scrollable area is resized automatically when users draw items near the edges of the diagram. (Inherited from Diagram.)
	getAutoSnapDistance	Specifies the maximum distance at which links auto-snap to nodes. (Inherited from Diagram.)
	getAutoSnapLinks	Gets the default value for the AutoSnapToNode property of new links. (Inherited from Diagram.)
	getBackBrush	Gets the diagram's background brush. (Inherited from Diagram.)
	getBackgroundImage	Gets the background image. (Inherited from Diagram.)
	getBackgroundImageAlign	Gets how the background image is positioned relatively to the scrollable area of the diagram. (Inherited from Diagram.)
	getBackgroundImageUrl	Gets the URL of the background image. (Inherited from Diagram.)

	getBookmarks	Gets a collection of all saved bookmarks / areas of interest defined in this diagram. (Inherited from Diagram.)
	getBounds	Gets the bounds of the scrollable area of the diagram. (Inherited from Diagram.)
	getBoundsPen	Gets the pen with which the diagram bounds are drawn. (Inherited from Diagram.)
	getCellCustomDraw	Gets the default type of custom painting applied to cells of new tables. (Inherited from Diagram.)
	getCellFrameStyle	Gets the default style of the cell frames of new tables. (Inherited from Diagram.)
	getClsidTable	Gets the table of registered item identifiers. (Inherited from Diagram.)
	getContainerCaption	Gets the default value for the Caption attribute of containers. (Inherited from Diagram.)
	getContainerCaptionHeight	Gets the default value for the CaptionHeight attribute of containers. (Inherited from Diagram.)
	getContainerHighlightPen	Gets the default value for the HighlightPen attribute of containers. (Inherited from Diagram.)
	getContainerMargin	Gets the default value for the Margin attribute of containers. (Inherited from Diagram.)
	getContainerMinimumSize	Gets the default value for the MinimumSize attribute of containers. (Inherited from Diagram.)
	getContainerNodeStyle	Gets the theme-level style for container nodes. (Inherited from Diagram.)
	getContainersFoldable	Gets the default value for the Foldable attribute of containers. (Inherited from Diagram.)
	getContentBounds	Returns the smallest rectangle that bounds all diagram items. (Inherited from Diagram.)
	getCrossingRadius	Gets the radius of the shapes drawn at link crossing points. (Inherited from Diagram.)
	getDefaultControlType	Gets the type of components that will be hosted by default in newly created ControlNode objects. (Inherited from Diagram.)
	getDefaultShape	Gets the default shape of nodes. (Inherited from Diagram.)
	getDiagramLinkStyle	Gets the theme-level style for diagram links. (Inherited from Diagram.)
	getDiagramListeners	Gets the list of currently registered event listeners. (Inherited from Diagram.)
	getDiagramStyle	Gets the theme-level style for the diagram. (Inherited from Diagram.)
	getDirty	Indicates whether the diagram has changed since the last save. (Inherited from Diagram.)

	getDisabledHandlesStyle	Gets the visual style of disabled manipulation handles. (Inherited from Diagram.)
	getDummy	(Inherited from Diagram.)
	getDynamicLinks	Gets a value indicating whether links automatically update their end points positions so that they will always point towards the node centers. (Inherited from Diagram.)
	getEffectiveBackBrush	Gets the currently effective background brush of the diagram. This property returns the BackBrush if it is not null, or the brush from the associated style or theme otherwise. (Inherited from Diagram.)
	getEnableLanes	Gets whether lanes are enabled. (Inherited from Diagram.)
	getEnableSpatialIndex	Gets whether to index item positions for faster hit-testing and viewport clipping queries. (Inherited from Diagram.)
	getEnableStyledText	Gets a value indicating whether new nodes display richly formatted text. (Inherited from Diagram.)
	getExpandButtonAction	Gets what should happen when a user clicks the +/- button that is displayed near expandable nodes. (Inherited from Diagram.)
	getExpandButtonPosition	Gets where expand/collapse buttons are located relatively to their nodes. (Inherited from Diagram.)
	getExpandOnIncoming	Gets which direction of links is considered the tree direction when expanding or collapsing diagram branches. (Inherited from Diagram.)
	getFactory	Gets a Factory instance that lets you add programmatically new items to the diagram. (Inherited from Diagram.)
	getFocusedComponent	Gets the component within this diagram which is currently holding the input focus. (Inherited from Diagram.)
	getFocusedManipulator	Gets the manipulator currently holding the input focus. (Inherited from Diagram.)
	getFoldedContainerSize	Gets the size of folded containers. (Inherited from Diagram.)
	getFont	Gets the default font for new diagram items. (Inherited from Diagram.)
S	getFormatBeingLoaded	Returns the file format id of the file currently being loaded. (Inherited from Diagram.)
	getFreeFormAttractDistance	Gets the radius around dragged free-form adjustment handle in which other points of **FreeFormNode** are modified too. (Inherited from Diagram.)
	getFreeFormTargets	Gets an array of Shape objects used to replace **FreeFormNode** instances with ShapeNode ones when Behavior is set to LinkFreeShapes or DrawFreeShapes. (Inherited from Diagram.)
	getGridColor	Gets the color of the alignment grid. (Inherited from Diagram.)

	getGridOffsetX	Gets the horizontal offset of the first point of the alignment grid. (Inherited from Diagram.)
	getGridOffsetY	Gets the vertical offset of the first point of the alignment grid. (Inherited from Diagram.)
	getGridSizeX	Gets the horizontal distance between grid points. (Inherited from Diagram.)
	getGridSizeY	Gets the vertical distance between grid points. (Inherited from Diagram.)
	getGridStyle	Gets the appearance style of the alignment grid. (Inherited from Diagram.)
	getGroups	Gets a collection of all groups in the diagram. (Inherited from Diagram.)
	getHitTestPriority	Gets a value indicating the order in which items are hit-tested. (Inherited from Diagram.)
	getHoverDelay	Gets the time in milliseconds that mouse pointer should remain stationary before reporting hover events. (Inherited from Diagram.)
	getIcon	Gets an image associated with the page.
	getIconUrl	Gets the URL of the image associated with the page.
	getImageDpiX	Specifies the default resolution of images. (Inherited from Diagram.)
	getImageDpiY	(Inherited from Diagram.)
	getInteraction	Gets an InteractionState instance representing the current action being carried out by the user. (Inherited from Diagram.)
	getItemAt	Overloaded. (Inherited from Diagram.)
	getItems	Gets a collection of all items in the diagram. (Inherited from Diagram.)
	getLaneGrid	Gets the Grid instance that represents the lane grid. (Inherited from Diagram.)
	getLayers	Gets a list of the layers in the current diagram. (Inherited from Diagram.)
	getLinkAt	Overloaded. (Inherited from Diagram.)
	getLinkBaseShape	Gets the default shape displayed at the origin of new links. (Inherited from Diagram.)
	getLinkBaseShapeSize	Gets the default size of the shape displayed at the origin of new links. (Inherited from Diagram.)
	getLinkBranchIndicator	(Inherited from Diagram.)
	getLinkBrush	Gets the default brush assigned to new links. (Inherited from Diagram.)
	getLinkCascadeOrientation	Gets the default orientation of the first segments of cascading links. (Inherited from Diagram.)

	getLinkCrossings	Gets what shapes are drawn at link crossing points. (Inherited from Diagram.)
	getLinkCustomDraw	Gets the default type of custom painting done on links. (Inherited from Diagram.)
	getLinkEndsMovable	Gets a value indicating that users are allowed to move the end points of a link after the link is created. (Inherited from Diagram.)
	getLinkHandlesStyle	Gets the default style of link selection handles. (Inherited from Diagram.)
	getLinkHeadShape	Gets the default shape displayed as head of new links. (Inherited from Diagram.)
	getLinkHeadShapeSize	Gets the default size of the shape displayed as arrowhead of new links. (Inherited from Diagram.)
	getLinkIntermediateShape	Gets the default shape displayed at the middle of links segments. (Inherited from Diagram.)
	getLinkIntermediateShapeSize	Gets the default size of the shape displayed at the middle of links segments. (Inherited from Diagram.)
	getLinkPen	Gets the default pen assigned to new links. (Inherited from Diagram.)
	getLinkRouter	Gets the component used to find paths for auto-routed links when diagram nodes are added or their positions change. (Inherited from Diagram.)
	getLinks	Gets a collection of all links in the diagram. (Inherited from Diagram.)
	getLinksAt	Returns the links that contain the specified point. (Inherited from Diagram.)
	getLinkSegments	Gets the default number of link segments. (Inherited from Diagram.)
	getLinkShape	Gets the default shape of links. (Inherited from Diagram.)
	getLinksRetainForm	Gets a value indicating whether new links are set to maintain their shapes while the nodes they connect are moved around. (Inherited from Diagram.)
	getLinkText	Gets the default text assigned to new links. (Inherited from Diagram.)
	getLinkTextStyle	Gets the default placement and orientation of links' text. (Inherited from Diagram.)
	getMeasureUnit	Gets the current unit of measure. (Inherited from Diagram.)
	getMergeThreshold	Gets the maximum distance between adjacent control points of a link at which the respective segments can be merged. (Inherited from Diagram.)
	getNearestNode	Returns the nearest node whose bounding rectangle is intersected by the circle, defined by origin point and radius. (Inherited from Diagram.)
	getNodeAt	Overloaded. (Inherited from Diagram.)

	getNodeEffects	Gets a collection with all effects applied to the nodes of this diagram. (Inherited from Diagram.)
	getNodes	Gets a collection of all nodes in the diagram. (Inherited from Diagram.)
	getNodesAt	Returns the nodes that contain the specified point. (Inherited from Diagram.)
	getNodesExpandable	Gets whether the tree branches that start from new nodes are expandable by default. (Inherited from Diagram.)
	getRecursiveExpand	Gets whether tree branches are expanded recursively. (Inherited from Diagram.)
	getRenderOptions	(Inherited from Diagram.)
	getRestrictItemsToBounds	Gets a value indicating whether users are allowed to move items outside the currently defined document bounds. (Inherited from Diagram.)
	getRoundedLinks	Gets if the joins between segments of Polyline and Cascading links should be rounded. (Inherited from Diagram.)
	getRoundedLinksRadius	Gets the radius of arc joins of rounded links' segments. (Inherited from Diagram.)
	getRouteLinks	Gets a value indicating whether links should avoid nodes by going the shortest path from their origin to their destination without crossing any other nodes. (Inherited from Diagram.)
	getRoutingOptions	Gets a RoutingOptions instance that lets you set various attributes of link routing algorithms. (Inherited from Diagram.)
	getSelectAfterCreate	Gets a value indicating whether newly created items are selected automatically. (Inherited from Diagram.)
	getSelectedItemHandlesStyle	Gets the visual style of the manipulation handles displayed around selected items. (Inherited from Diagram.)
	getSelection	Gets a Selection instance representing the current selection. (Inherited from Diagram.)
	getSelectionOnTop	Gets a value indicating whether selected items are drawn on top of the non-selected ones. (Inherited from Diagram.)
	getShadowBrush	Gets .the default brush used to paint the shadows cast by diagram items. (Inherited from Diagram.)
	getShadowOffsetX	Gets the default horizontal distance between shadows and the items that cast them. (Inherited from Diagram.)
	getShadowOffsetY	Gets the default vertical distance between shadows and the items that cast them. (Inherited from Diagram.)
	getShadowsStyle	Gets the style of shadows. (Inherited from Diagram.)
	getShapeBrush	Gets the default brush assigned to new nodes. (Inherited from Diagram.)
	getShapeCustomDraw	Gets whether new nodes should be custom drawn and what type of custom drawing will be performed on them.

		(Inherited from Diagram.)
	getShapeHandlesStyle	Gets the default value for the HandlesStyle property of new shape nodes. (Inherited from Diagram.)
	getShapeNodeStyle	Gets the theme-level style for shape nodes. (Inherited from Diagram.)
	getShapeOrientation	Gets the default shape definition orientation angle assigned to new nodes. (Inherited from Diagram.)
	getShapePen	Gets the default pen assigned to new nodes. (Inherited from Diagram.)
	getShapeText	Gets the default text assigned to new nodes. (Inherited from Diagram.)
	getShowAnchors	Gets a value indicating whether anchor points should be shown on screen. (Inherited from Diagram.)
	getShowDisabledHandles	Gets whether disabled manipulation handles are displayed. (Inherited from Diagram.)
	getShowGrid	Gets a value indicating whether the alignment grid is displayed. (Inherited from Diagram.)
	getShowHandlesOnDrag	Gets whether selection handles of objects under the pointer are displayed while another object is being modified. (Inherited from Diagram.)
	getSnapToAnchor	Gets a value indicating when links should snap to anchor points. (Inherited from Diagram.)
	getStyle	Gets the style associated with the diagram. (Inherited from Diagram.)
	getSvgNodeStyle	Gets the theme-level style for SVG nodes. (Inherited from Diagram.)
	getTableBrush	Gets the default brush assigned to new tables. (Inherited from Diagram.)
	getTableCaption	Gets the default caption text assigned to new tables. (Inherited from Diagram.)
	getTableCaptionHeight	Gets the default height of the caption bar of new tables. (Inherited from Diagram.)
	getTableColumnCount	Gets how many columns new tables have by default. (Inherited from Diagram.)
	getTableColumnWidth	Gets the default width of the columns of new tables. (Inherited from Diagram.)
	getTableConnectionStyle	Gets how users are allowed to link tables to each other - as integral entities, by rows, or both. (Inherited from Diagram.)
	getTableCustomDraw	Gets the default type of custom painting applied to new tables. (Inherited from Diagram.)
	getTableHandlesStyle	Gets the default style of table selection handles. (Inherited from Diagram.)

	getTableNodeStyle	Gets the theme-level style for table nodes. (Inherited from Diagram.)
	getTablePen	Gets the default pen assigned to new tables. (Inherited from Diagram.)
	getTableRowCount	Gets how many rows new tables have by default. (Inherited from Diagram.)
	getTableRowHeight	Gets the default height of the row of new tables. (Inherited from Diagram.)
	getTableShape	Gets the default value of the Shape property of new tables. (Inherited from Diagram.)
	getTablesScrollable	Gets a value indicating whether users are allowed to scroll new tables. (Inherited from Diagram.)
	getTag	Gets the custom data associated with this diagram. (Inherited from Diagram.)
	getTextColor	Gets the default text color that is assigned to new items. (Inherited from Diagram.)
	getTextFormat	Gets the default format and alignment of the text of new items. (Inherited from Diagram.)
	getTheme	Gets the theme associated with the diagram. (Inherited from Diagram.)
	getTitle	Gets the page title.
	getTitleColor	Gets the color of the title when the title is displayed.
	getToolTip	Gets the tooltip text. (Inherited from Diagram.)
	getTreeViewNodeStyle	Gets the theme-level style for tree view nodes. (Inherited from Diagram.)
	getTypeTable	Gets the table of registered item types. (Inherited from Diagram.)
	getUndoManager	Gets the diagram's UndoManager. (Inherited from Diagram.)
	getValidityChecks	(Inherited from Diagram.)
	handleKeyDown	Propagates keyboard input to interested manipulators and components. (Inherited from Diagram.)
	handleKeyPress	Propagates keyboard input to interested manipulators. (Inherited from Diagram.)
	handleKeyUp	Propagates keyboard input to interested components. (Inherited from Diagram.)
	handlePointerMove	Propagates mouse input to interested manipulators. (Inherited from Diagram.)
	hitTestComponents	(Inherited from Diagram.)
	hitTestLabels	Returns the item label located at specified position. (Inherited from Diagram.)

	imageToDoc	Transforms points from the image coordinate space to the document coordinate space. (Inherited from Diagram.)
	imageToDocX	Converts from image coordinates to document coordinates. (Inherited from Diagram.)
	imageToDocY	Converts from image coordinates to document coordinates. (Inherited from Diagram.)
	imageUpdate	(Inherited from Diagram.)
	init	Returns a DiagramBuilder object used to configure this Diagram instance. (Inherited from Diagram.)
S	isClassRegistered	(Inherited from Diagram.)
S	isClientClassRegistered	(Inherited from Diagram.)
	isItemInteractive	Checks if the specified item can be modified interactively. (Inherited from Diagram.)
	isItemLocked	Checks if the specified item is locked. (Inherited from Diagram.)
	isItemVisible	Checks if the specified item is currently visible. (Inherited from Diagram.)
	items	Iterates over diagram items of the desired type (Inherited from Diagram.)
	loadFromJson	Overloaded. (Inherited from Diagram.)
	loadFromJsonString	Loads the diagram from a JSON-formatted string. (Inherited from Diagram.)
	loadFromString	Decodes diagram contents from a string previously created by saveToString. (Inherited from Diagram.)
	loadFromXml	Overloaded. (Inherited from Diagram.)
	measureString	Measures a text taking into consideration the current affine transform of the diagram. (Inherited from Diagram.)
	pasteSelection	Adds the specified items and groups to the specified diagram document. (Inherited from Diagram.)
	raiseActionRedone	Raises the actionRedone event. (Inherited from Diagram.)
	raiseActionUndone	Raises the actionUndone event. (Inherited from Diagram.)
	raiseCellTextEdited	Raises the DiagramListener.cellTextEdited event. (Inherited from Diagram.)
	raiseCellTextEditing	Raises the cellTextEditing event to validate entering in-place editing mode. (Inherited from Diagram.)
	raiseClicked	Overloaded. (Inherited from Diagram.)
	raiseDeleting	Raises the appropriate *Deleting (linkDeleting or nodeDeleting) event. (Inherited from Diagram.)
	raiseDoubleClicked	Overloaded. (Inherited from Diagram.)
	raiseLinkTextEdited	Raises the linkTextEdited event. (Inherited from Diagram.)

	raiseLinkTextEditing	Raises the linkTextEditing event to validate entering in-place editing mode. (Inherited from Diagram.)
	raiseNodeTextEdited	Raises the nodeTextEdited event. (Inherited from Diagram.)
	raiseNodeTextEditing	Raises the nodeTextEditing event to validate entering inplace edit mode. (Inherited from Diagram.)
	raiseTreeCollapsed	Raises the treeCollapsed event. (Inherited from Diagram.)
	raiseTreeExpanded	Raises the treeExpanded event. (Inherited from Diagram.)
	raiseTreeItemTextEdited	Raises the DiagramListener.treeItemTextEdited event. (Inherited from Diagram.)
	raiseViewRemoved	Raises the DiagramListener.viewRemoved event. (Inherited from Diagram.)
S	registerClass	Overloaded. (Inherited from Diagram.)
S	registerItemClass	Overloaded. (Inherited from Diagram.)
	removeDiagramListener	Unregisters listener so that it will no longer receive diagram events. (Inherited from Diagram.)
	removePropertyChangeListener	
	repaint	Overloaded. (Inherited from Diagram.)
	resizeToFitItems	Overloaded. (Inherited from Diagram.)
	resumeLinkRouter	Called when the control ends a batch update operation that might affect many links. (Inherited from Diagram.)
	routeAllLinks	Overloaded. (Inherited from Diagram.)
	saveTo	Overloaded. (Inherited from Diagram.)
	saveToJson	Overloaded. (Inherited from Diagram.)
	saveToJsonString	Saves the diagram to a JSON-formatted string. (Inherited from Diagram.)
	saveToString	Overloaded. Saves the diagram contents into a string. (Inherited from Diagram.)
	saveToXml	Overloaded. (Inherited from Diagram.)
	setActiveItem	Sets the active item. (Inherited from Diagram.)
	setActiveLayer	Sets the zero-based index of the active layer. (Inherited from Diagram.)
	setAdjustmentHandlesSize	Sets the size of selection handles. (Inherited from Diagram.)
	setAlignmentGuidePen	Sets the pen used to draw alignment guides. (Inherited from Diagram.)
	setAlignToGrid	Sets a value indicating whether items should be aligned to the alignment grid while users draw them. (Inherited from Diagram.)
	setAllowLinksRepeat	Sets a value indicating whether users are allowed to draw more than one links between the same nodes. (Inherited

		from Diagram.)
	setAllowMultipleResize	Sets whether multiple selected nodes can be resized simultaneously. (Inherited from Diagram.)
	setAllowSelfLoops	Sets whether users are allowed to draw reflexive links. (Inherited from Diagram.)
	setAllowSplitLinks	Sets whether link segments can be added and removed interactively. (Inherited from Diagram.)
	setAllowUnanchoredLinks	Sets a value indicating whether users are allowed to attach links to nodes that do not have any anchor points. (Inherited from Diagram.)
	setAllowUnconnectedLinks	Sets a value indicating whether users are allowed to draw unconnected links. (Inherited from Diagram.)
	setAutoAlignDistance	Sets the maximal horizontal or vertical distance at which a node aligns to the borders of other nodes. (Inherited from Diagram.)
	setAutoAlignNodes	Sets whether nodes should automatically align to the borders of other nodes during user interaction. (Inherited from Diagram.)
	setAutoCloseDistance	Sets the maximum distance between first and last points of a **FreeFormNode** for which the node's outline is closed automatically. (Inherited from Diagram.)
	setAutoDeleteLinks	Sets whether links are deleted automatically when their **Origin** or **Destination** is deleted. (Inherited from Diagram.)
	setAutoResize	Sets a value specifying whether the document scrollable area should be resized automatically when users draw items near the edges of the diagram. (Inherited from Diagram.)
	setAutoSnapDistance	Specifies the maximum distance at which links auto-snap to nodes. (Inherited from Diagram.)
	setAutoSnapLinks	Sets the default value for the **AutoSnapToNode** property of new links. (Inherited from Diagram.)
	setBackBrush	Sets the diagram's background brush. (Inherited from Diagram.)
	setBackgroundImage	Overloaded. (Inherited from Diagram.)
	setBackgroundImageAlign	Sets how the background image should be positioned relatively to the scrollable area of the diagram. (Inherited from Diagram.)
	setBackgroundImageUrl	Sets the URL of the background image. (Inherited from Diagram.)
	setBounds	Overloaded. (Inherited from Diagram.)
	setBoundsPen	Sets the pen with which document bounds are drawn. (Inherited from Diagram.)
	setCellCustomDraw	Sets the default type of custom painting applied to cells of new tables. (Inherited from Diagram.)

	setCellFrameStyle	Sets the default style of the cell frames of new tables. (Inherited from Diagram.)
	setContainerCaption	Sets the default value for the caption of containers. (Inherited from Diagram.)
	setContainerCaptionHeight	Sets the default value for the caption height of containers. (Inherited from Diagram.)
	setContainerHighlightPen	Sets the default value for the HighlightPen of containers. (Inherited from Diagram.)
	setContainerMargin	Sets the default value for the Margin attribute of containers. (Inherited from Diagram.)
	setContainerMinimumSize	Sets the default value for the minimum size of containers. (Inherited from Diagram.)
	setContainersFoldable	Sets the default value for the Foldable property of containers. (Inherited from Diagram.)
	setCrossingRadius	Sets the radius of the shapes drawn at link crossing points. (Inherited from Diagram.)
	setDefaultControlType	Sets the type of components that will be hosted by default in newly created **ControlNode** objects. (Inherited from Diagram.)
	setDefaultShape	Sets the default shape that should be assigned to new nodes. The shape of individual nodes can be set by calling their ShapeNode.setShape method. (Inherited from Diagram.)
	setDirty	Overloaded. Lets you set or clear the diagram's modification flag. (Inherited from Diagram.)
	setDynamicLinks	Sets a value indicating whether links should automatically update their end points positions so that they will always point towards the node centers. (Inherited from Diagram.)
	setEnableLanes	Sets whether lanes are enabled. (Inherited from Diagram.)
	setEnableSpatialIndex	Sets whether to index item positions for faster hit-testing and viewport clipping queries. (Inherited from Diagram.)
	setEnableStyledText	Sets a value indicating whether newly created nodes should display richly formatted text. (Inherited from Diagram.)
	setExpandButtonAction	Sets what should happen when a user clicks the +/- button that is displayed near expandable nodes. (Inherited from Diagram.)
	setExpandButtonPosition	Sets where expand/collapse buttons are located relatively to their nodes. (Inherited from Diagram.)
	setExpandOnIncoming	Sets which direction of links is considered the tree direction when expanding or collapsing diagram branches. (Inherited from Diagram.)
	setFocusedComponent	Sets the component within this diagram which is currently holding the input focus. (Inherited from Diagram.)

	setFocusedManipulator	Sets the manipulator currently holding the input focus. (Inherited from Diagram.)
	setFoldedContainerSize	Sets the size of folded containers. (Inherited from Diagram.)
	setFont	Sets the default font for new diagram items. (Inherited from Diagram.)
	setFreeFormAttractDistance	Sets the radius around dragged free-form adjustment handle in which other points of **FreeFormNode** are modified too. (Inherited from Diagram.)
	setFreeFormTargets	Sets an array of **Shape** objects used to replace **FreeFormNode** instances with **ShapeNode** ones when Behavior is set to LinkFreeShapes or DrawFreeShapes. (Inherited from Diagram.)
	setGridColor	Sets the color of the alignment grid. (Inherited from Diagram.)
	setGridOffsetX	Sets the horizontal offset of the first point of the alignment grid. (Inherited from Diagram.)
	setGridOffsetY	Sets the vertical offset of the first point of the alignment grid. (Inherited from Diagram.)
	setGridSizeX	Sets the horizontal distance between grid points. (Inherited from Diagram.)
	setGridSizeY	Sets the vertical distance between grid points. (Inherited from Diagram.)
	setGridStyle	Sets the appearance style of the alignment grid. (Inherited from Diagram.)
	setHitTestPriority	Sets a value indicating the order in which items are hit-tested. (Inherited from Diagram.)
	setHoverDelay	Sets the time in milliseconds that mouse pointer should remain stationary before reporting hover events. (Inherited from Diagram.)
	setIcon	Sets an image associated with the page.
	setIconUrl	Sets the URL of the image associated with the page.
	setImageDpiX	Sets the default resolution of images. (Inherited from Diagram.)
	setImageDpiY	(Inherited from Diagram.)
	setLinkBaseShape	Sets what shape should be displayed at the origin of new links. (Inherited from Diagram.)
	setLinkBaseShapeSize	Sets the default size of the shape displayed at the origin of new links. (Inherited from Diagram.)
	setLinkBranchIndicator	(Inherited from Diagram.)
	setLinkBrush	Sets the default brush that should be assigned to new links. (Inherited from Diagram.)

	setLinkCascadeOrientation	Sets the default orientation of the first segments of cascading links. (Inherited from Diagram.)
	setLinkCrossings	Sets what shapes should be drawn at the points where links cross. (Inherited from Diagram.)
	setLinkCustomDraw	Sets the default type of custom painting done on links. (Inherited from Diagram.)
	setLinkEndsMovable	Sets a value indicating users are allowed to move the end points of a link after the link is created. (Inherited from Diagram.)
	setLinkHandlesStyle	Sets the style of selection handles that should be assigned to new links. (Inherited from Diagram.)
	setLinkHeadShape	Sets what shape should be displayed as arrowhead of new links. (Inherited from Diagram.)
	setLinkHeadShapeSize	Sets the default size of the shape displayed as arrowhead of new links. (Inherited from Diagram.)
	setLinkIntermediateShape	Sets what shape should be displayed at the middle of links segments. (Inherited from Diagram.)
	setLinkIntermediateShapeSize	Sets the default size of the shape displayed at the middle of links segments. (Inherited from Diagram.)
	setLinkPen	Sets the default pen that should be assigned to new links. (Inherited from Diagram.)
	setLinkRouter	Sets the component used to find paths for auto-routed links when diagram nodes are added or their positions change. (Inherited from Diagram.)
	setLinkSegments	Sets the default number of link segments. (Inherited from Diagram.)
	setLinkShape	Sets the style that should be assigned to new links. (Inherited from Diagram.)
	setLinksRetainForm	Sets a value indicating whether new links are set to maintain their shapes while the nodes they connect are moved around. (Inherited from Diagram.)
	setLinkText	Sets the default text that should be assigned to new links. (Inherited from Diagram.)
	setLinkTextStyle	Sets the default placement and orientation of the links labels. (Inherited from Diagram.)
	setMeasureUnit	Sets the units for measuring of lengths and sizes. (Inherited from Diagram.)
	setMergeThreshold	Sets the maximum distance between adjacent control points of a link at which the respective segments can be merged. (Inherited from Diagram.)
	setNodesExpandable	Sets whether the tree branches that start from new nodes should be expandable by default. (Inherited from Diagram.)
	setRecursiveExpand	Sets whether tree branches should be expanded recursively. (Inherited from Diagram.)

	setRestrictItemsToBounds	Sets a value indicating whether users are allowed to move items outside the currently define document bounds. (Inherited from Diagram.)
	setRoundedLinks	Sets if the joins between segments of Polyline and Cascading links should be rounded. (Inherited from Diagram.)
	setRoundedLinksRadius	Sets the radius of arc joins of rounded links' segments. (Inherited from Diagram.)
	setRouteLinks	Sets a value indicating whether links should avoid nodes by going the shortest path from their origin to their destination without crossing any other nodes. (Inherited from Diagram.)
	setSelectAfterCreate	Sets a value indicating whether newly created items should be selected automatically. (Inherited from Diagram.)
	setSelectionOnTop	Sets a value indicating whether selected items should be drawn on top of the non-selected ones. (Inherited from Diagram.)
	setShadowBrush	Sets the default brush used to paint the shadows cast by diagram items. (Inherited from Diagram.)
	setShadowOffset	Sets the distance at which shadows are offset from the items that cast them. (Inherited from Diagram.)
	setShadowOffsetX	Sets the default horizontal distance between shadows and the items that cast them. (Inherited from Diagram.)
	setShadowOffsetY	Sets the default vertical distance between shadows and the items that cast them. (Inherited from Diagram.)
	setShadowsStyle	Sets the style of shadows. (Inherited from Diagram.)
	setShapeBrush	Sets the default brush that should be assigned to new nodes. (Inherited from Diagram.)
	setShapeCustomDraw	Sets whether new nodes should be custom drawn and what type of custom drawing will be performed on them. (Inherited from Diagram.)
	setShapeHandlesStyle	Sets the default value for the HandlesStyle property of new shape nodes. (Inherited from Diagram.)
	setShapeOrientation	Sets the default shape definition orientation angle assigned to new nodes. (Inherited from Diagram.)
	setShapePen	Sets the default pen that should be assigned to new nodes. (Inherited from Diagram.)
	setShapeText	Sets the default text to new nodes. (Inherited from Diagram.)
	setShowAnchors	Sets a value indicating whether anchor points should be shown on screen. (Inherited from Diagram.)
	setShowDisabledHandles	Sets whether disabled manipulation handles will be displayed. (Inherited from Diagram.)
	setShowGrid	Sets a value indicating whether the alignment grid is displayed. (Inherited from Diagram.)

	setShowHandlesOnDrag	Sets whether selection handles of objects under the pointer are displayed while another object is being modified. (Inherited from Diagram.)
	setSnapToAnchor	Sets a value indicating when links should snap to anchor points. (Inherited from Diagram.)
	setStyle	Sets the style associated with the diagram. (Inherited from Diagram.)
	setTableBrush	Sets the default brush that is assigned to new tables. (Inherited from Diagram.)
	setTableCaption	Sets the default caption text that should be assigned to new tables. (Inherited from Diagram.)
	setTableCaptionHeight	Sets the default height of the caption bar of new tables. (Inherited from Diagram.)
	setTableColumnCount	Sets how many columns should be allocated to new tables. (Inherited from Diagram.)
	setTableColumnWidth	Sets the default width of columns in newly created tables. (Inherited from Diagram.)
	setTableConnectionStyle	Sets how users are allowed to link tables to each other - as integral entities, by rows, or both. (Inherited from Diagram.)
	setTableCustomDraw	Sets the default type of custom painting applied to new tables. (Inherited from Diagram.)
	setTableHandlesStyle	Sets the style of selection handles that should be assigned to new tables. (Inherited from Diagram.)
	setTablePen	Sets the default pen that should be assigned to new tables. (Inherited from Diagram.)
	setTableRowCount	Sets how many rows should be allocated to new tables. (Inherited from Diagram.)
	setTableRowHeight	Sets the default height of rows in newly created tables. (Inherited from Diagram.)
	setTableShape	Sets the default value of the **Shape** property of new tables. (Inherited from Diagram.)
	setTablesScrollable	Sets a value indicating whether users are allowed to scroll new tables. (Inherited from Diagram.)
	setTag	Associates a custom data with this diagram. (Inherited from Diagram.)
	setTextColor	Sets the default text color to be assigned to new items. (Inherited from Diagram.)
	setTextFormat	Sets the default format and alignment of the text of new items. (Inherited from Diagram.)
	setTheme	Sets the theme associated with the diagram. (Inherited from Diagram.)
	setTitle	Sets the page title.

	setTitleColor	Gets the color of the title when the title is displayed.
	setToolTip	Sets the tooltip text that is displayed when the pointer hovers over an unoccupied area of the diagram. (Inherited from Diagram.)
	setValidityChecks	(Inherited from Diagram.)
	suspendLinkRouter	Called when the control starts a batch update operation that might affect many links. The diagram collects links specified through route and routeAllLinks calls and defers finding their paths to when **resumeLinkRouter** is called. (Inherited from Diagram.)
	updateRuntimeIndices	Assigns consecutive values to the RuntimeIndex property of items. (Inherited from Diagram.)
	with	Returns a DiagramBuilder object used to configure and create new Diagram instances. (Inherited from Diagram.)

Protected Methods

	Name	Description
	getValue	Gets the effective value of the style property with the specified name. (Inherited from Diagram.)

See Also

DiagramPage Class
com.mindfusion.diagramming Namespace

DiagramPage Constructor

Initializes a new instance of the DiagramPage class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramPage ()
```

See Also

DiagramPage Class
com.mindfusion.diagramming Namespace

DiagramPage Methods

DiagramPage.addPropertyChangeListener Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void addPropertyChangeListener (
    PropertyChangeListener listener
)
```

Parameters

listener

See Also

DiagramPage Members
DiagramPage Class
com.mindfusion.diagramming Namespace

DiagramPage.getIcon Method

Gets an image associated with the page.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Image getIcon ()
```

Return Value

An instance of the **java.awt.Image** class.

See Also

DiagramPage Members
DiagramPage Class
com.mindfusion.diagramming Namespace

DiagramPage.getIconUrl Method

Gets the URL of the image associated with the page.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getIconUrl ()
```

Return Value

A {@code String} value.

See Also

DiagramPage Members
DiagramPage Class
com.mindfusion.diagramming Namespace

DiagramPage.getTitle Method

Gets the page title.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getTitle ()
```

Return Value

A String value.

See Also

DiagramPage Members
DiagramPage Class
com.mindfusion.diagramming Namespace

DiagramPage.getTitleColor Method

Gets the color of the title when the title is displayed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getTitleColor ()
```

Return Value

A Color object.

See Also

DiagramPage Members
DiagramPage Class
com.mindfusion.diagramming Namespace

DiagramPage.removePropertyChangeListener Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removePropertyChangeListener (
    PropertyChangeListener listener
)
```

Parameters

listener

See Also

DiagramPage Members
DiagramPage Class
com.mindfusion.diagramming Namespace

DiagramPage.setIcon Method

Sets an image associated with the page.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIcon (
    Image value
)
```

Parameters

value
An instance of the **java.awt.Image** class.

See Also

DiagramPage Members
DiagramPage Class
com.mindfusion.diagramming Namespace

DiagramPage.setIconUrl Method

Sets the URL of the image associated with the page.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIconUrl (
    String value
)
```

Parameters

value
A {@code String} value.

See Also

DiagramPage Members
DiagramPage Class
com.mindfusion.diagramming Namespace

DiagramPage.setTitle Method

Sets the page title.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTitle (
    String value
)
```

Parameters

value
A String value.

See Also

DiagramPage Members
DiagramPage Class
com.mindfusion.diagramming Namespace

DiagramPage.setTitleColor Method

Gets the color of the title when the title is displayed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTitleColor (
    Color value
)
```

Parameters

value
A Color object.

See Also

DiagramPage Members
DiagramPage Class
com.mindfusion.diagramming Namespace

DiagramPageEvent Class

Contains the arguments passed to DiagramPage-related events.

Syntax

Java
`public class DiagramPageEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.DiagramPageEvent
      com.mindfusion.diagramming.DiagramPageValidationEvent

See Also

DiagramPageEvent Members
com.mindfusion.diagramming Namespace

DiagramPageEvent Members

Contains the arguments passed to DiagramPage-related events.

The following tables list the members exposed by the DiagramPageEvent type.

Public Constructors

	Name	Description
	DiagramPageEvent	Initializes a new instance of the **DiagramPageEvent** class.

Public Methods

	Name	Description
	getDiagramPage	Gets the **DiagramPage** related to the event.

See Also

DiagramPageEvent Constructor

Initializes a new instance of the DiagramPageEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramPageEvent (
    Object source,
    DiagramPage diagramPage
)
```

Parameters

source
The object on which the event initially occurred.

diagramPage
The DiagramPage related to the event.

See Also

DiagramPageEvent Class
com.mindfusion.diagramming Namespace

DiagramPageEvent Methods

DiagramPageEvent.getDiagramPage Method

Gets the DiagramPage related to the event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramPage getDiagramPage ()
```

Return Value

See Also

DiagramPageEvent Members
DiagramPageEvent Class
com.mindfusion.diagramming Namespace

DiagramPageValidationEvent Class

Contains the arguments passed to handlers of DiagramPage validation events. @author Meppy

Syntax

Java
`public class DiagramPageValidationEvent extends DiagramPageEvent`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.DiagramPageEvent
      com.mindfusion.diagramming.DiagramPageValidationEvent

See Also

DiagramPageValidationEvent Members
com.mindfusion.diagramming Namespace

DiagramPageValidationEvent Members

Contains the arguments passed to handlers of DiagramPage validation events. @author Meppy

The following tables list the members exposed by the DiagramPageValidationEvent type.

Public Constructors

	Name	Description
	DiagramPageValidationEvent	Initializes a new instance of the **DiagramPageValidationEvent** class.

Public Methods

	Name	Description
	getCancel	Gets a value indicating whether to cancel the current operation.
	getDiagramPage	Gets the DiagramPage related to the event. (Inherited from DiagramPageEvent.)
	setCancel	Gets a value indicating whether to cancel the current operation. Set this property to {@code true} to prevent the user from completing the operation.

See Also

DiagramPageValidationEvent Class
com.mindfusion.diagramming Namespace

DiagramPageValidationEvent Constructor

Initializes a new instance of the DiagramPageValidationEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramPageValidationEvent (
    Object source,
    DiagramPage diagramPage
)
```

Parameters

source
The object on which the event initially occurred.

diagramPage
The DiagramPage related to the event.

See Also

DiagramPageValidationEvent Class
com.mindfusion.diagramming Namespace

DiagramPageValidationEvent Methods

DiagramPageValidationEvent.getCancel Method

Gets a value indicating whether to cancel the current operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getCancel ()
```

Return Value

See Also

DiagramPageValidationEvent Members
DiagramPageValidationEvent Class
com.mindfusion.diagramming Namespace

DiagramPageValidationEvent.setCancel Method

Gets a value indicating whether to cancel the current operation. Set this property to {@code true} to prevent the user from completing the operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setCancel (
    boolean value
)
```

Parameters

value

See Also

DiagramPageValidationEvent Members
DiagramPageValidationEvent Class
com.mindfusion.diagramming Namespace

DiagramStyle Class

Represents a reusable set of properties that define the appearance of diagrams.

Syntax

```
Java
public class DiagramStyle extends Style
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Style
    com.mindfusion.diagramming.DiagramStyle

See Also

DiagramStyle Members
com.mindfusion.diagramming Namespace

DiagramStyle Members

Represents a reusable set of properties that define the appearance of diagrams.

The following tables list the members exposed by the DiagramStyle type.

Public Constructors

	Name	Description
	DiagramStyle	Initializes a new instance of the **DiagramStyle** class.

Public Methods

	Name	Description
	addPropertyChangeListener	(Inherited from Style.)
	getBackBrush	Gets the brush used for painting the diagram background.
	getBrush	Gets the brush used to fill the interior of items.
	getFontFamily	Gets the font family of the item texts.
	getFontSize	Gets the font size of the item texts.
	getFontStyle	Gets the font style of the item texts.
	getFontUnit	Gets the measure unit used to specify font size.
	getNodeEffects	Gets a list with all effects applied to the nodes of this diagram.
	getShadowBrush	Gets the brush used to paint the shadow of the items.
	getStroke	Gets the brush used to paint the outline of the items.
	getStrokeThickness	Gets the thickness of the items' outline, expressed in the current units of measure.
	getTextBrush	Gets the brush used to paint texts inside the items.
	readExternal	**Externalizable.readExternal** implementation. (Inherited from Style.)
S	registerType	Associates a type with an alias. The alias is used when saving and loading objects of the specified type during style serialization and deserialization. (Inherited from Style.)
	removePropertyChangeListener	(Inherited from Style.)
	setBackBrush	Sets the brush used for painting the diagram background.
	setBrush	Sets the brush used to fill the interior of items.
	setFontFamily	Sets the font family of the item texts.
	setFontSize	Sets the font size of the item texts.
	setFontStyle	Gets the font style of the item texts.
	setFontUnit	Sets the measure unit used to specify font size.
	setShadowBrush	Sets the brush used to paint the shadow of the items.
	setStroke	Sets the brush used to paint the outline of the items.
	setStrokeThickness	Sets the thickness of the items' outline, expressed in the current units of measure.
	setTextBrush	Sets the brush used to paint texts inside the items.
	writeExternal	**Externalizable.writeExternal** implementation. (Inherited from Style.)

Protected Methods

	Name	Description

	getValue	Gets the value of the specified property. (Inherited from Style.)
	isPropertySet	Checks whether the specified property has a value. (Inherited from Style.)
	loadFromJson	Loads the style content from a JSON object.
	loadFromXml	Loads the style content from an XML element. (Inherited from Style.)
	registerProperty	Registers a new property with the specified name and type. (Inherited from Style.)
	saveToJson	Saves the style content into a JsonObject.
	saveToXml	Saves the style content into an XML element. (Inherited from Style.)
	setValue	Sets the value of the specified property. (Inherited from Style.)
	unsetValue	Clears the value of the specified property. (Inherited from Style.)

See Also

DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle Constructor

Initializes a new instance of the DiagramStyle class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramStyle ()
```

See Also

DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle Methods

DiagramStyle.getBackBrush Method

Gets the brush used for painting the diagram background.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getBackBrush ()
```

Return Value

A Brush instance.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.getBrush Method

Gets the brush used to fill the interior of items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getBrush ()
```

Return Value

A Brush instance.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.getFontFamily Method

Gets the font family of the item texts.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getFontFamily ()
```

Return Value

A string specifying the font name.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.getFontSize Method

Gets the font size of the item texts.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getFontSize ()
```

Return Value

A **float** value specifying the font size.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.getFontStyle Method

Gets the font style of the item texts.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getFontStyle ()
```

Return Value

A combination of the style constants defined in the **Font** class.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.getFontUnit Method

Gets the measure unit used to specify font size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public GraphicsUnit getFontUnit ()
```

Return Value

A member of the GraphicsUnit enumeration.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace
setFontUnit Method
getFontSize Method

DiagramStyle.getNodeEffects Method

Gets a list with all effects applied to the nodes of this diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public List<NodeEffect> getNodeEffects ()
```

Return Value

A list of NodeEffect objects.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.getShadowBrush Method

Gets the brush used to paint the shadow of the items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getShadowBrush ()
```

Return Value

A Brush instance.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.getStroke Method

Gets the brush used to paint the outline of the items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getStroke ()
```

Return Value

A Brush instance.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.getStrokeThickness Method

Gets the thickness of the items' outline, expressed in the current units of measure.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public double getStrokeThickness ()
```

Return Value

A **double** value specifying the stroke thickness.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.getTextBrush Method

Gets the brush used to paint texts inside the items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getTextBrush ()
```

Return Value

A Brush instance.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.loadFromJson Method

Loads the style content from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the style's data.

context
A JsonPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.saveToJson Method

Saves the style content into a JsonObject.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject the style's data should be stored into.

context
A JsonPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.setBackBrush Method

Sets the brush used for painting the diagram background.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBackBrush (
    Brush value
)
```

Parameters

value
A Brush instance.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.setBrush Method

Sets the brush used to fill the interior of items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setBrush (
    Brush value
)
```

Parameters

value
A Brush instance.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.setFontFamily Method

Sets the font family of the item texts.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setFontFamily (
    String value
)
```

Parameters

value
A string specifying the font name.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.setFontSize Method

Sets the font size of the item texts.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFontSize (
    float value
)
```

Parameters

value
A **float** value specifying the font size.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.setFontStyle Method

Gets the font style of the item texts.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFontStyle (
    int value
)
```

Parameters

value
A combination of the style constants defined in the **Font** class.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.setFontUnit Method

Sets the measure unit used to specify font size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFontUnit (
    GraphicsUnit value
)
```

Parameters

value
A member of the GraphicsUnit enumeration.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.setShadowBrush Method

Sets the brush used to paint the shadow of the items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShadowBrush (
    Brush value
)
```

Parameters

value
A Brush instance.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.setStroke Method

Sets the brush used to paint the outline of the items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setStroke (
    Brush value
)
```

Parameters

value
A Brush instance.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.setStrokeThickness Method

Sets the thickness of the items' outline, expressed in the current units of measure.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setStrokeThickness (
    double value
)
```

Parameters

value
A **double** value specifying the stroke thickness.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramStyle.setTextBrush Method

Sets the brush used to paint texts inside the items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextBrush (
    Brush value
)
```

Parameters

value
A Brush instance.

See Also

DiagramStyle Members
DiagramStyle Class
com.mindfusion.diagramming Namespace

DiagramTransferHandler Class

Provides support for drag and drop to DiagramView.

Syntax

Java
`public class DiagramTransferHandler extends TransferHandler`

Inheritance Hierarchy

java.lang.Object
  javax.swing.TransferHandler
    com.mindfusion.diagramming.DiagramTransferHandler

See Also

DiagramTransferHandler Members
com.mindfusion.diagramming Namespace

DiagramTransferHandler Members

Provides support for drag and drop to DiagramView.

The following tables list the members exposed by the DiagramTransferHandler type.

Public Constructors

	Name	Description
	DiagramTransferHandler	

Public Methods

	Name	Description
	canImport	Overloaded.
	importData	TransferHandler.importData override.

See Also

DiagramTransferHandler Class
com.mindfusion.diagramming Namespace

DiagramTransferHandler Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramTransferHandler ()
```

See Also

DiagramTransferHandler Class
com.mindfusion.diagramming Namespace

DiagramTransferHandler Methods

DiagramTransferHandler.canImport Method

Overload List

Name	Description
DiagramTransferHandler.canImport (JComponent, DataFlavor[])	TransferHandler.canImport override.
DiagramTransferHandler.canImport (TransferHandler.TransferSupport)	TransferHandler.canImport override.

See Also

DiagramTransferHandler Members
DiagramTransferHandler Class
com.mindfusion.diagramming Namespace

DiagramTransferHandler.canImport Method (JComponent, DataFlavor[])

TransferHandler.canImport override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean canImport (
    JComponent comp,
    DataFlavor[] transferFlavors
)
```

Parameters

comp

transferFlavors

Return Value

See Also

canImport Method Overload List
DiagramTransferHandler Members
DiagramTransferHandler Class
com.mindfusion.diagramming Namespace

DiagramTransferHandler.canImport Method (TransferHandler.TransferSupport)

TransferHandler.canImport override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean canImport (
    TransferHandler.TransferSupport support
)
```

Parameters

support

Return Value

See Also

canImport Method Overload List
DiagramTransferHandler Members
DiagramTransferHandler Class
com.mindfusion.diagramming Namespace

DiagramTransferHandler.importData Method

TransferHandler.importData override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean importData (
    JComponent component,
    Transferable t
)
```

Parameters

component

t

Return Value

See Also

DiagramTransferHandler Members
DiagramTransferHandler Class
com.mindfusion.diagramming Namespace

DiagramView Class

DiagramView is a Swing component that displays the content of a Diagram object.

Syntax

Java
`public class DiagramView extends JComponent implements Printable, Scrollable, AncestorListener, ClipboardOwner, DropTargetListener`

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        com.mindfusion.diagramming.DiagramView
          com.mindfusion.diagramming.DocumentView

See Also

DiagramView Members
com.mindfusion.diagramming Namespace

DiagramView Members

DiagramView is a Swing component that displays the content of a Diagram object.

The following tables list the members exposed by the **DiagramView** type.

Public Constructors

	Name	Description
	DiagramView	Overloaded.

Public Methods

	Name	Description
	adoptHostedControls	Adopts controls hosted in other views and moves them to this view.

	ancestorAdded	Implements **AncestorListener**. Call the base method if you inherit the **Diagram** class and need to override this method.
	ancestorMoved	Implements **AncestorListener**. Call the base method if you inherit the **Diagram** class and need to override this method.
	ancestorRemoved	Implements **AncestorListener**. Call the base method if you inherit the **Diagram** class and need to override this method.
	beginEdit	Overloaded.
	bringIntoView	Overloaded. Scrolls the view to make the specified item or rectangular area visible.
	cancelDrag	Cancels the modification of the selected items.
	copyToClipboard	Overloaded.
	cutToClipboard	Overloaded.
	deviceToDoc	Overloaded.
	disableInteractionBuffer	For internal use.
	docToDevice	Overloaded.
	dragEnter	
	dragExit	
	dragOver	
	drop	
	dropActionChanged	
	endEdit	Exits in-place editing mode and either accepts or rejects the changes made to the item's text.
	getAllowInplaceEdit	Gets a value indicating whether users are allowed to edit the text of diagram items.
	getAllowLinkCursor	Gets the cursor shown when the currently drawn link can be attached to the item at the current mouse pointer location.
	getAntiAlias	Gets the current anti-aliasing mode for non text objects.
	getAutoScroll	Gets a value indicating whether the diagram will scroll automatically when the pointer is dragged towards the edge of the view.
	getBehavior	Gets a value indicating how the control responds to users actions.
	getCounterDiagonalResizeCursor	Gets the cursor shown when dragging from the current mouse pointer location would start resizing an item along its secondary diagonal.
	getCustomBehavior	Gets custom behavior object specifying how the control responds to mouse input.

	getCustomLinkType	Gets a custom type of DiagramLink-derived objects that will be created when the users starts drawing with the mouse.
	getCustomNodeType	Gets the type of a DiagramNode-derived class whose instance should be created when a user starts drawing.
	getDelKeyAction	Gets a value that specifies what action should be carried out when the user hits the Del key.
	getDiagonalResizeCursor	Gets the cursor shown when dragging from the current mouse pointer location would start resizing an item along its main diagonal.
	getDiagram	Gets the diagram displayed by this view.
	getDisallowCursor	Gets the cursor shown when an item cannot be created at the current mouse pointer location.
	getDisallowLinkCursor	Gets the cursor shown when the currently created link cannot be attached to the item at the current mouse pointer location.
	getDragIndicatorOpacity	Gets the opacity of ghost image displayed during drag-and-drop from NodeListView.
	getDragThreshold	Gets the minimum distance the pointer should be dragged, measured in pixels, that would cause a drag event instead of click.
	getDrawLinkCursor	Gets the cursor shown when a link can be drawn from the current mouse pointer location.
	getEditTextCursor	Gets the mouse cursor shown to the user when the mouse is positioned over an edit component.
	getFont	
	getGlassPane	For internal use.
	getHorizontalDropAlignment	Gets the horizontal placement of nodes created by drag-and-drop operations, relatively to mouse cursor.
	getHorizontalResizeCursor	Gets the cursor shown when dragging from the current mouse pointer location would start resizing an item horizontally.
	getInplaceEditAcceptOnEnter	Gets a value indicating whether pressing the ENTER key ends in-place editing and accepts changes.
	getInplaceEditCancelOnEsc	Gets a value indicating whether pressing the ESC key ends in-place editing and cancels changes.
	getInplaceEditFont	Gets the font used to display text in the in-place editing text control.
	getLaneColumnResizeCursor	Gets the mouse cursor shown to the user when dragging would resize a lane column header.
	getLaneRowResizeCursor	Gets the mouse cursor shown to the user when dragging would resize a lane row header.
	getMagnifierEnabled	Gets a value indicating whether the magnifier tool is currently enabled.

	getMagnifierFactor	Gets the zoom factor of the magnifier tool.
	getMagnifierFrameColor	Gets the color of the magnifier frame.
	getMagnifierFrameThickness	Gets the thickness of the magnifier frame, expressed in pixels.
	getMagnifierHeight	Gets the height of the magnifier tool, expressed in pixels.
	getMagnifierSecondaryFrameColor	Gets the secondary color of the magnifier frame.
	getMagnifierShading	Gets a value indicating whether to enhance the effect of a magnifier lense by using a gradient shading.
	getMagnifierShape	Gets the shape of the magnifier tool.
	getMagnifierWidth	Gets the width of the magnifier tool, expressed in pixels.
	getMiddleButtonActions	Gets what actions are performed via the middle mouse button.
	getModificationStart	Gets a value indicating how users can start modifying items in the diagram.
	getModifierKeyActions	Gets an object that allows changing the function of keyboard modifier keys such as CTRL and ALT.
	getMoveCursor	Gets the cursor shown when the item under the mouse pointer can be modified.
	getPanCursor	Gets the cursor shown when panning the diagram view.
	getPointerCursor	Gets the mouse cursor shown when no modification is performed.
	getPreferredScrollableViewportSize	Provides support for scrolling when the diagram in placed inside a scroll pane.
	getPreferredSize	Returns the size of the diagram in pixels, based on the currently set document size and zoom level.
	getPrintOptions	Returns a PrintOptions instance that allows customizing various aspects of printing and print-preview.
	getRightButtonActions	Gets what actions are performed via the right mouse button.
	getRotateCursor	Gets the cursor shown when dragging from the current mouse pointer location would start rotating a box.
	getScrollableBlockIncrement	Provides support for scrolling when the diagram in placed inside a scroll pane.
	getScrollableTracksViewportHeight	Provides support for scrolling when the diagram in placed inside a scroll pane.
	getScrollableTracksViewportWidth	Provides support for scrolling when the diagram in placed inside a scroll pane.
	getScrollableUnitIncrement	Provides support for scrolling when the diagram in placed inside a scroll pane.
	getScrollX	Gets the horizontal scroll position.
	getScrollY	Gets the vertical scroll position.

	getScrollZoneSize	Gets the size of the auto scroll zone near the edges of the control.
	getShowToolTips	Gets a value indicating whether an item's ToolTip is shown when the pointer hovers over the item.
	getTextAntiAlias	Gets the current anti-aliasing mode for text.
	getToolTipText	Returns the string to be used as the tooltip for event.
	getTrackPointedItem	Gets a value indicating whether the control will raise mouse hover events.
	getVerticalDropAlignment	Gets the vertical placement of nodes created by drag-and-drop operations, relatively to mouse cursor.
	getVerticalResizeCursor	Gets the cursor shown when dragging from the current mouse pointer location would start resizing an item vertically.
	getXmlClipboard	Gets a value that specifies whether XML serialization will be used when saving/loading the selection to/from clipboard.
	getZoomFactor	Gets the current zoom level.
	loadFrom	Overloaded.
	loadFromJson	Overloaded.
	loadFromJsonString	Loads the specified JSON data.
	loadFromString	Loads the diagram contents from a string.
	lostOwnership	
	pasteFromClipboard	Overloaded.
	print	Overloaded.
	printPreview	Overloaded.
	recreateCacheImage	Recreates the off-screen cache bitmap used for fast drawing while modifying items.
	repaint	Overloaded.
	resumeRepaint	Resumes repainting the control after a suspendRepaint call.
	saveTo	Overloaded.
	saveToJson	Overloaded.
	saveToJsonString	Serializes the DiagramView's data to JSON.
	saveToString	Overloaded.
	saveToXml	Overloaded.
	scrollTo	Scrolls the diagram to the specified position. The **Diagram** component must be contained within a JScrollPane in order to use this method.

	setAllowInplaceEdit	Sets a value indicating whether users are allowed to edit the text of diagram items.
	setAllowLinkCursor	Sets the cursor shown when the currently drawn link can be attached to the item at the current mouse pointer location.
	setAntiAlias	Sets the current anti-aliasing mode for non text objects.
	setAutoScroll	Sets a value indicating whether the diagram should scroll automatically when the pointer is dragged towards the edge of the view.
	setBehavior	Sets a value indicating how the control should respond to users actions.
	setCounterDiagonalResizeCursor	Sets the cursor shown when dragging from the current mouse pointer location would start resizing an item along its secondary diagonal.
	setCustomBehavior	Sets a custom behavior object specifying how the control responds to mouse input.
	setCustomLinkType	Sets a custom type of **DiagramLink**-derived objects that will be created when the users starts drawing with the mouse.
	setCustomNodeType	Sets the type of a DiagramNode-derived class whose instance should be created when a user starts drawing.
	setDelKeyAction	Sets a value that specifies what action should be carried out when the user hits the Del key.
	setDiagonalResizeCursor	Sets the cursor shown when dragging from the current mouse pointer location would start resizing an item along its main diagonal.
	setDiagram	Sets the diagram displayed by this view.
	setDisallowCursor	Sets the cursor shown when an item cannot be created at the current mouse pointer location.
	setDisallowLinkCursor	Sets the cursor shown when the currently created link can be attached to the item at the current mouse pointer location.
	setDragIndicatorOpacity	Sets the opacity of ghost image displayed during drag-and-drop from **NodeListView**.
	setDragThreshold	Sets the minimum distance the pointer should be dragged, measured in pixels, that would cause a drag event instead of click.
	setDrawLinkCursor	Sets the cursor shown when a link can be drawn from the current mouse pointer location.
	setEditTextCursor	Gets the mouse cursor shown to the user when the mouse is positioned over an edit component.
	setHorizontalDropAlignment	Sets the horizontal placement of nodes created by drag-and-drop operations, relatively to mouse cursor.

	setHorizontalResizeCursor	Sets the cursor shown when dragging from the current mouse pointer location would start resizing an item horizontally.
	setInplaceEditAcceptOnEnter	Sets a value indicating whether pressing the ENTER key ends in-place editing and accepts changes.
	setInplaceEditCancelOnEsc	Sets a value indicating whether pressing the ESC key ends in-place editing and cancels changes.
	setInplaceEditFont	Sets the font used to display text in the in-place editing text control.
	setLaneColumnResizeCursor	Sets the mouse cursor shown to the user when dragging would resize a lane column header.
	setLaneRowResizeCursor	Sets the mouse cursor shown to the user when dragging would resize a lane row header.
	setLicenseKey	Sets the component's license key string, disabling evaluation mode.
	setMagnifierEnabled	Sets a value indicating whether the magnifier tool is currently enabled.
	setMagnifierFactor	Gets the zoom factor of the magnifier tool.
	setMagnifierFrameColor	Sets the color of the magnifier frame.
	setMagnifierFrameThickness	Sets the thickness of the magnifier frame, expressed in pixels.
	setMagnifierHeight	Sets the height of the magnifier tool, expressed in pixels.
	setMagnifierSecondaryFrameColor	Sets the secondary color of the magnifier frame.
	setMagnifierShading	Sets a value indicating whether to enhance the effect of a magnifier lense by using a gradient shading.
	setMagnifierShape	Sets the shape of the magnifier tool.
	setMagnifierWidth	Sets the width of the magnifier tool, expressed in pixels.
	setMiddleButtonActions	Sets what actions are performed via the middle mouse button.
	setModificationStart	Sets a value indicating how users can start modifying items in the diagram.
	setMoveCursor	Sets the cursor shown when the item under the mouse pointer can be modified.
	setPanCursor	Sets the cursor shown when panning the diagram view
	setPointerCursor	Sets the mouse cursor that should be shown when no modification is performed.
	setRightButtonActions	Sets what actions are performed via the right mouse button.
	setRotateCursor	Sets the cursor shown when dragging from the current mouse pointer location would start rotating a box.
	setScrollX	Sets the horizontal scroll position. The **Diagram** component must be contained within a JScrollPane in

		order to use this method.
	setScrollY	Sets the vertical scroll position. The **Diagram** component must be contained within a JScrollPane in order to use this method.
	setScrollZoneSize	Sets the size of the auto scroll zone near the edges of the control.
	setShowToolTips	Sets a value indicating whether an item's **ToolTip** is shown when the pointer hovers over the item.
	setTextAntiAlias	Sets the current anti-aliasing mode for text.
	setTrackPointedItem	Sets a value indicating whether the control should raise mouse hover events.
	setVerticalDropAlignment	Sets the vertical placement of nodes created by drag-and-drop operations, relatively to mouse cursor.
	setVerticalResizeCursor	Sets the cursor shown when dragging from the current mouse pointer location would start resizing an item vertically.
	setXmlClipboard	Sets a value that specifies whether XML serialization will be used when saving/loading the selection to/from clipboard.
	setZoomFactor	Sets the zoom level.
	startInteraction	Starts the specified interactive operation. Subsequent pointer movements will modify or create the item specified through the InteractionState instance.
	suspendRepaint	Stops repainting the control. This is useful when using the JDiagram API from JavaScript, where the control would be repainted after each script line executes.
S	toJson	Serializes the DiagramView's data to JSON.
	zoomToFit	Overloaded.
	zoomToRect	Overloaded.

Protected Methods

	Name	Description
	paintComponent	
	processKeyEvent	

See Also

DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView Constructor

Overload List

Name	Description
DiagramView ()	Initializes a new instance of the DiagramView class.
DiagramView (Diagram)	Initializes a new instance of the **DiagramView** class.

See Also

DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView Constructor ()

Initializes a new instance of the DiagramView class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramView ()
```

See Also

DiagramView Constructor Overload List
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView Constructor (Diagram)

Initializes a new instance of the DiagramView class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramView (
    Diagram diagram
)
```

Parameters

diagram

See Also

DiagramView Constructor Overload List
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView Methods

DiagramView.adoptHostedControls Method

Adopts controls hosted in other views and moves them to this view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void adoptHostedControls (
    boolean onlyUnparented
)
```

Parameters

onlyUnparented
true if only controls that currently do not have a parent view are adopted; **false** to adopt all controls.

Remarks

This method is useful when displaying ControlNode objects in multiple views. For example, you might want to invoke it when a view becomes the topmost window in a MDI application.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.ancestorAdded Method

Implements **AncestorListener**. Call the base method if you inherit the Diagram class and need to override this method.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void ancestorAdded (
    AncestorEvent event
)
```

Parameters

event

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.ancestorMoved Method

Implements **AncestorListener**. Call the base method if you inherit the Diagram class and need to override this method.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void ancestorMoved (
    AncestorEvent event
)
```

Parameters

event

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.ancestorRemoved Method

Implements **AncestorListener**. Call the base method if you inherit the Diagram class and need to override this method.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void ancestorRemoved (
    AncestorEvent event
)
```

Parameters

event

See Also

DiagramView.beginEdit Method

Overload List

Name	Description
DiagramView.beginEdit (DiagramItem, InplaceEditable, Point2D)	Enters inplace-edit mode, letting the user edit the text of the specified item.
DiagramView.beginEdit (InplaceEditable)	Enters in-place editing mode, letting the user edit the text of the specified item.
DiagramView.beginEdit (InplaceEditable, Point2D)	Enters in-place editing mode, letting the user edit the text of the specified item.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.beginEdit Method (DiagramItem, InplaceEditable, Point2D)

Enters inplace-edit mode, letting the user edit the text of the specified item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void beginEdit (
    DiagramItem diagItem,
    InplaceEditable item,
    Point2D mousePosition
)
```

Parameters

diagItem

item

The diagram item or table's cell whose text should be edited.

mousePosition

See Also

beginEdit Method Overload List
DiagramView Members

DiagramView.beginEdit Method (InplaceEditable)

Enters in-place editing mode, letting the user edit the text of the specified item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void beginEdit (
    InplaceEditable item
)
```

Parameters

item
The diagram item or table's cell whose text is edited.

See Also

beginEdit Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.beginEdit Method (InplaceEditable, Point2D)

Enters in-place editing mode, letting the user edit the text of the specified item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void beginEdit (
    InplaceEditable item,
    Point2D pointerPosition
)
```

Parameters

item

mousePosition

See Also

beginEdit Method Overload List
DiagramView Members

DiagramView.bringIntoView Method

Scrolls the view to make the specified item or rectangular area visible.

Overload List

Name	Description
DiagramView.bringIntoView (DiagramItem)	Scrolls the viewport so that the specified item will be visible. This works only when the diagram is contained within a JScrollPane.
DiagramView.bringIntoView (Rectangle2D)	Scrolls the view to make the specified rectangular area visible.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.bringIntoView Method (DiagramItem)

Scrolls the viewport so that the specified item will be visible. This works only when the diagram is contained within a JScrollPane.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void bringIntoView (
    DiagramItem item
)
```

Parameters

item
The DiagramItem to bring into view.

See Also

bringIntoView Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.bringIntoView Method (Rectangle2D)

Scrolls the view to make the specified rectangular area visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public void bringIntoView (`
`  Rectangle2D rect`
`)`

Parameters

rect
A **Rectangle2D** specifying the diagram region to show in the viewport.

See Also

bringIntoView Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.cancelDrag Method

Cancels the modification of the selected items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void cancelDrag ()`

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.copyToClipboard Method

Overload List

Name	Description
DiagramView.copyToClipboard ()	Copies the current selection of items to the system clipboard.
DiagramView.copyToClipboard (boolean)	Copies the current selection of items to the system clipboard.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.copyToClipboard Method ()

Copies the current selection of items to the system clipboard.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean copyToClipboard ()
```

Return Value

true if items were successfully copied; otherwise, **false**.

Remarks

Call this method when writing message handler for the Copy command from the Edit menu of your application. MindFusion.Diagramming does not provide keyboard interface for clipboard operations, so you might assign a CTRL+C shortcut to this command.

See Also

copyToClipboard Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.copyToClipboard Method (boolean)

Copies the current selection of items to the system clipboard.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean copyToClipboard (
    boolean groups
)
```

Parameters

groups
true to copy item groups; otherwise, false.

Return Value

true if items were successfully copied; otherwise, **false**.

Remarks

Call this method when writing message handler for the Copy command from the Edit menu of your application. MindFusion.Diagramming does not provide keyboard interface for clipboard operations, so you might assign a CTRL+C shortcut to this command.

See Also

copyToClipboard Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.cutToClipboard Method

Overload List

Name	Description
DiagramView.cutToClipboard ()	Cuts the currently selected items to the system clipboard.
DiagramView.cutToClipboard (boolean)	Cuts the currently selected items to the system clipboard.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.cutToClipboard Method ()

Cuts the currently selected items to the system clipboard.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public boolean cutToClipboard ()`

Return Value

true if items are successfully copied to clipboard; otherwise, **false**.

Remarks

Call this method when writing message handler for the Cut command from the Edit menu of your application. MindFusion.Diagramming does not provide keyboard interface for clipboard operations, so you might assign a CTRL+X shortcut to this command.

The method deletes all selected items after copying them to clipboard. That operation can be undone in the sense that deleted items are restored by calling UndoManager.undo; however the clipboard data is not restored and the items remain in the clipboard available for further pasting.

See Also

cutToClipboard Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.cutToClipboard Method (boolean)

Cuts the currently selected items to the system clipboard.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean cutToClipboard (
    boolean groups
)
```

Parameters

groups
true to cut item groups; otherwise, false.

Return Value

true if items are successfully copied to clipboard; otherwise, **false**.

Remarks

Call this method when writing message handler for the Cut command from the Edit menu of your application. MindFusion.Diagramming does not provide keyboard interface for clipboard operations, so you might assign a CTRL+X shortcut to this command.

The method deletes all selected items after copying them to clipboard. That operation can be undone in the sense that deleted items are restored by calling UndoManager.undo; however the clipboard data is not restored and the items remain in the clipboard available for further pasting.

See Also

cutToClipboard Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.deviceToDoc Method

Overload List

Name	Description
DiagramView.deviceToDoc (int, int)	Transforms points from the device coordinate space to the document coordinate space.

DiagramView.deviceToDoc (Point)	Transforms points from the device coordinate space to the document coordinate space.
DiagramView.deviceToDoc (Rectangle)	Transforms points from the device coordinate space to the document coordinate space.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.deviceToDoc Method (int, int)

Transforms points from the device coordinate space to the document coordinate space.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D.Float deviceToDoc (
    int x,
    int y
)
```

Parameters

x

y

Return Value

A **Point2D.Float** object, which represents the document coordinates of device point (x, y).

See Also

deviceToDoc Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.deviceToDoc Method (Point)

Transforms points from the device coordinate space to the document coordinate space.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D.Float deviceToDoc (
    Point devPoint
```

```
)
```

Parameters

devPoint
An instance of the Point object, whose coordinates should be transformed and returned.

Return Value

A Point2D.Float object, which represents the document coordinates of devPoint.

See Also

deviceToDoc Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.deviceToDoc Method (Rectangle)

Transforms points from the device coordinate space to the document coordinate space.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D.Float deviceToDoc (
    Rectangle devRect
)
```

Parameters

devRect
An instance of the **Rectangle** class, whose coordinates should be transformed and returned.

Return Value

A **Rectangle2D.Float** object, which represents the document coordinates of *devRect*

See Also

deviceToDoc Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.disableInteractionBuffer Method

For internal use.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void disableInteractionBuffer ()`

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.docToDevice Method

Overload List

Name	Description
DiagramView.docToDevice (Point2D)	Transforms points from the document coordinate space to the device coordinate space.
DiagramView.docToDevice (Rectangle2D)	Transforms points from the document coordinate space to the device coordinate space.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.docToDevice Method (Point2D)

Transforms points from the document coordinate space to the device coordinate space.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public Point docToDevice (`
`  Point2D docPoint`
`)`

Parameters

docPoint
A **Point2D** object, whose coordinates should be transformed and returned.

Return Value

A **Point** instance, which represents the device coordinates of docPoint.

See Also

docToDevice Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.docToDevice Method (Rectangle2D)

Transforms points from the document coordinate space to the device coordinate space.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle docToDevice (
    Rectangle2D docRect
)
```

Parameters

docRect
A **Rectangle2D** object, whose coordinates should be transformed and returned.

Return Value

A **Rectangle** instance, which represents the device coordinates of docRect.

See Also

docToDevice Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.dragEnter Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void dragEnter (
    DropTargetDragEvent e
)
```

Parameters

e

See Also

DiagramView Members
DiagramView Class

DiagramView.dragExit Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void dragExit (
    DropTargetEvent dte
)
```

Parameters

dte

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.dragOver Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void dragOver (
    DropTargetDragEvent e
)
```

Parameters

e

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.drop Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void drop (
    DropTargetDropEvent e
)
```

Parameters

e

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.dropActionChanged Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void dropActionChanged (
    DropTargetDragEvent dtde
)
```

Parameters

dtde

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.endEdit Method

Exits in-place editing mode and either accepts or rejects the changes made to the item's text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void endEdit (
    boolean accept
)
```

Parameters

accept
true to accept changes made to text; **false** to reject them.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getAllowInplaceEdit Method

Gets a value indicating whether users are allowed to edit the text of diagram items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getAllowInplaceEdit ()
```

Return Value

true if users are allowed to edit the text of diagram items, otherwise **false**.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getAllowLinkCursor Method

Gets the cursor shown when the currently drawn link can be attached to the item at the current mouse pointer location.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Cursor getAllowLinkCursor ()
```

Return Value

A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getAntiAlias Method

Gets the current anti-aliasing mode for non text objects.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public SmoothingMode getAntiAlias ()
```

Return Value

A SmoothingMode object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getAutoScroll Method

Gets a value indicating whether the diagram will scroll automatically when the pointer is dragged towards the edge of the view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getAutoScroll ()
```

Return Value

true if the diagram will scroll automatically, otherwise **false**.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getBehavior Method

Gets a value indicating how the control responds to users actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Behavior getBehavior ()
```

Return Value

A member of the Behavior enumeration. The default is **LinkShapes**.

Remarks

The property specifies how the control responds to user actions with the mouse. The default value, LinkShapes, facilitates drawing of flowchart diagrams. **LinkTables** makes JDiagram create table nodes and links while the user draws with the mouse, allowing creation of entity-relationship or class-hierarchy diagrams.

Modes such as **Modify**, **PanAndModify**, **MoveNodes**, **SelectOnly** allow users to interact with existing items, but not draw new ones on the canvas. Note that controls such as NodeListView and ShapeListBox can be used to create new nodes regardless of DiagramView's current behavior mode.

There are several more values that can be assigned to the property, that make the control draw specific types of items, for example only shape nodes, only control hosts, only links, and so on. These are useful when implementing the ability to select specific drawing tools in applications.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getCounterDiagonalResizeCursor Method

Gets the cursor shown when dragging from the current mouse pointer location would start resizing an item along its secondary diagonal.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Cursor getCounterDiagonalResizeCursor ()
```

Return Value

A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getCustomBehavior Method

Gets custom behavior object specifying how the control responds to mouse input.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public BehaviorBase getCustomBehavior ()
```

Return Value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getCustomLinkType Method

Gets a custom type of DiagramLink-derived objects that will be created when the users starts drawing with the mouse.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Class<? extends DiagramLink> getCustomLinkType ()
```

Return Value

The custom link class.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getCustomNodeType Method

Gets the type of a DiagramNode-derived class whose instance should be created when a user starts drawing.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Class<? extends DiagramNode> getCustomNodeType ()
```

Return Value

the custom node object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getDelKeyAction Method

Gets a value that specifies what action should be carried out when the user hits the Del key.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DelKeyAction getDelKeyAction ()
```

Return Value

A member of the DelKeyAction enumeration. The default value is **DeleteSelectedItems**.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
nodeDeleting Event
linkDeleting Event
AutoDeleteLinks Property

DiagramView.getDiagonalResizeCursor Method

Gets the cursor shown when dragging from the current mouse pointer location would start resizing an item along its main diagonal.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Cursor getDiagonalResizeCursor ()
```

Return Value

A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getDiagram Method

Gets the diagram displayed by this view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Diagram getDiagram ()
```

Return Value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getDisallowCursor Method

Gets the cursor shown when an item cannot be created at the current mouse pointer location.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Cursor getDisallowCursor ()
```

Return Value

A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getDisallowLinkCursor Method

Gets the cursor shown when the currently created link cannot be attached to the item at the current mouse pointer location.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Cursor getDisallowLinkCursor ()
```

Return Value

A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getDragIndicatorOpacity Method

Gets the opacity of ghost image displayed during drag-and-drop from NodeListView.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getDragIndicatorOpacity ()
```

Return Value

A value in 0 - 1 range specifying opacity. The default is **0.4**.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getDragThreshold Method

Gets the minimum distance the pointer should be dragged, measured in pixels, that would cause a drag event instead of click.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getDragThreshold ()
```

Return Value

The minimal distance to move the pointer before starting a drag operation.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getDrawLinkCursor Method

Gets the cursor shown when a link can be drawn from the current mouse pointer location.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Cursor getDrawLinkCursor ()
```

Return Value

A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getEditTextCursor Method

Gets the mouse cursor shown to the user when the mouse is positioned over an edit component.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Cursor getEditTextCursor ()
```

Return Value

A java.awt.Cursor object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getFont Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Font getFont ()
```

Return Value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getGlassPane Method

For internal use.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GlassPane getGlassPane ()
```

Return Value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getHorizontalDropAlignment Method

Gets the horizontal placement of nodes created by drag-and-drop operations, relatively to mouse cursor.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public HorizontalAlignment getHorizontalDropAlignment ()
```

Return Value

A member of the HorizontalAlignment enumeration.

Remarks

This property lets you center the new node or align specified edge to the mouse pointer position when drag-and-drop ends.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getHorizontalResizeCursor Method

Gets the cursor shown when dragging from the current mouse pointer location would start resizing an item horizontally.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Cursor getHorizontalResizeCursor ()
```

Return Value

A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getInplaceEditAcceptOnEnter Method

Gets a value indicating whether pressing the ENTER key ends in-place editing and accepts changes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getInplaceEditAcceptOnEnter ()
```

Return Value

true if ENTER ends in-place editing, otherwise **false**

See Also

DiagramView Members
DiagramView Class

DiagramView.getInplaceEditCancelOnEsc Method

Gets a value indicating whether pressing the ESC key ends in-place editing and cancels changes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getInplaceEditCancelOnEsc ()
```

Return Value

true if ESC should end in-place editing, otherwise **false**

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getInplaceEditFont Method

Gets the font used to display text in the in-place editing text control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Font getInplaceEditFont ()
```

Return Value

A **java.awt.Font** object representing the font of the in-place editing control.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getLaneColumnResizeCursor Method

Gets the mouse cursor shown to the user when dragging would resize a lane column header.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Cursor getLaneColumnResizeCursor ()
```

Return Value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getLaneRowResizeCursor Method

Gets the mouse cursor shown to the user when dragging would resize a lane row header.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Cursor getLaneRowResizeCursor ()
```

Return Value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getMagnifierEnabled Method

Gets a value indicating whether the magnifier tool is currently enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getMagnifierEnabled ()
```

Return Value

Remarks

The magnifier tool can be alternatively enabled on-demand through a modifier key or a mouse button.

See Also

DiagramView Members
DiagramView Class

DiagramView.getMagnifierFactor Method

Gets the zoom factor of the magnifier tool.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getMagnifierFactor ()
```

Return Value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getMagnifierFrameColor Method

Gets the color of the magnifier frame.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getMagnifierFrameColor ()
```

Return Value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getMagnifierFrameThickness Method

Gets the thickness of the magnifier frame, expressed in pixels.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getMagnifierFrameThickness ()
```

Return Value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getMagnifierHeight Method

Gets the height of the magnifier tool, expressed in pixels.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getMagnifierHeight ()
```

Return Value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getMagnifierSecondaryFrameColor Method

Gets the secondary color of the magnifier frame.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getMagnifierSecondaryFrameColor ()
```

Return Value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getMagnifierShading Method

Gets a value indicating whether to enhance the effect of a magnifier lense by using a gradient shading.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public boolean getMagnifierShading ()`

Return Value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getMagnifierShape Method

Gets the shape of the magnifier tool.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Shape getMagnifierShape ()`

Return Value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getMagnifierWidth Method

Gets the width of the magnifier tool, expressed in pixels.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public int getMagnifierWidth ()`

Return Value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getMiddleButtonActions Method

Gets what actions are performed via the middle mouse button.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public EnumSet<MouseButtonAction> getMiddleButtonActions ()
```

Return Value

An enumset of MouseButtonAction values.

Remarks

This property allows the following actions to be assigned to the middle mouse button: panning the diagram view, canceling the current drawing operation, or starting a multiple selection operation.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
getRightButtonActions Method

DiagramView.getModificationStart Method

Gets a value indicating how users can start modifying items in the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ModificationStart getModificationStart ()
```

Return Value

A member of the ModificationStart enumeration.

See Also

DiagramView Members
DiagramView Class

DiagramView.getModifierKeyActions Method

Gets an object that allows changing the function of keyboard modifier keys such as CTRL and ALT.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ModifierKeyActions getModifierKeyActions ()
```

Return Value

An instance of the ModifierKeyActions class.

Remarks

Use the Alt, Control and Shift properties of this ModifierKeyActions instance to specify the functions of the ALT, CTRL and SHIFT keys. These properties can be set to values of the ModifierKeyAction enumeration.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getMoveCursor Method

Gets the cursor shown when the item under the mouse pointer can be modified.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Cursor getMoveCursor ()
```

Return Value

A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getPanCursor Method

Gets the cursor shown when panning the diagram view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Cursor getPanCursor ()
```

Return Value

A java.awt.Cursor object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getPointerCursor Method

Gets the mouse cursor shown when no modification is performed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Cursor getPointerCursor ()
```

Return Value

A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getPreferredScrollableViewportSize Method

Provides support for scrolling when the diagram in placed inside a scroll pane.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension getPreferredScrollableViewportSize ()
```

Return Value

A **Dimension** object representing the preferred size.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getPreferredSize Method

Returns the size of the diagram in pixels, based on the currently set document size and zoom level.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension getPreferredSize ()
```

Return Value

A **Dimension** object representing the preferred size.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getPrintOptions Method

Returns a PrintOptions instance that allows customizing various aspects of printing and print-preview.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PrintOptions getPrintOptions ()
```

Return Value

A PrintOptions object.

See Also

DiagramView Members
DiagramView Class

DiagramView.getRightButtonActions Method

Gets what actions are performed via the right mouse button.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public EnumSet<MouseButtonAction> getRightButtonActions ()
```

Return Value

An enumset of MouseButtonAction values.

Remarks

This property allows the following actions to be assigned to the right mouse button: panning the diagram view, canceling the current drawing operation, or starting a multiple selection operation.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
getMiddleButtonActions Method

DiagramView.getRotateCursor Method

Gets the cursor shown when dragging from the current mouse pointer location would start rotating a box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Cursor getRotateCursor ()
```

Return Value

A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getScrollableBlockIncrement Method

Provides support for scrolling when the diagram in placed inside a scroll pane.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getScrollableBlockIncrement (
    Rectangle visibleRect,
    int orientation,
    int direction
)
```

Parameters

visibleRect

orientation

direction

Return Value

The "block" increment for scrolling in the specified direction.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getScrollableTracksViewportHeight Method

Provides support for scrolling when the diagram in placed inside a scroll pane.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getScrollableTracksViewportHeight ()
```

Return Value

false

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getScrollableTracksViewportWidth Method

Provides support for scrolling when the diagram in placed inside a scroll pane.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getScrollableTracksViewportWidth ()
```

Return Value

false

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getScrollableUnitIncrement Method

Provides support for scrolling when the diagram in placed inside a scroll pane.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getScrollableUnitIncrement (
    Rectangle visibleRect,
    int orientation,
    int direction
)
```

Parameters

visibleRect

orientation

direction

Return Value

The "unit" increment for scrolling in the specified direction.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getScrollX Method

Gets the horizontal scroll position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getScrollX ()
```

Return Value

A float value specifying the current horizontal scroll position.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getScrollY Method

Gets the vertical scroll position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getScrollY ()
```

Return Value

A float value specifying the current vertical scroll position.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getScrollZoneSize Method

Gets the size of the auto scroll zone near the edges of the control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getScrollZoneSize ()
```

Return Value

An integer value specifying the scroll zone size.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
getAutoScroll Method

DiagramView.getShowToolTips Method

Gets a value indicating whether an item's ToolTip is shown when the pointer hovers over the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getShowToolTips ()
```

Return Value

true if tooltips are shown for the diagramitems that have them, otherwise **false**.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getTextAntiAlias Method

Gets the current anti-aliasing mode for text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SmoothingMode getTextAntiAlias ()
```

Return Value

A member of the SmoothingMode enumeration.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getToolTipText Method

Returns the string to be used as the tooltip for event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getToolTipText (
    MouseEvent event
)
```

Parameters

event

Return Value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getTrackPointedItem Method

Gets a value indicating whether the control will raise mouse hover events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getTrackPointedItem ()
```

Return Value

true if mouse hover events are raised when the pointer enters or leaves the boundaries of an item, or **false** otherwise.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
HoverDelay Property
nodePointerEnter Event
nodePointerLeave Event

nodeHovered Event
linkPointerEnter Event
linkPointerLeave Event
linkHovered Event

DiagramView.getVerticalDropAlignment Method

Gets the vertical placement of nodes created by drag-and-drop operations, relatively to mouse cursor.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public VerticalAlignment getVerticalDropAlignment ()
```

Return Value

A member of the VerticalAlignment enumeration.

Remarks

This property lets you center the new node or align specified edge to the mouse pointer position when drag-and-drop ends.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getVerticalResizeCursor Method

Gets the cursor shown when dragging from the current mouse pointer location would start resizing an item vertically.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Cursor getVerticalResizeCursor ()
```

Return Value

A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getXmlClipboard Method

Gets a value that specifies whether XML serialization will be used when saving/loading the selection to/from clipboard.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public boolean getXmlClipboard ()`

Return Value

true if XML serialization will be used; otherwise **false**.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.getZoomFactor Method

Gets the current zoom level.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public float getZoomFactor ()`

Return Value

A float value specifying the current zoom factor.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.loadFrom Method

Overload List

Name	Description
DiagramView.loadFrom (InputStream)	Loads the diagram contents from a stream.

DiagramView.loadFrom (String)	Loads the diagram contents from a file.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.loadFrom Method (InputStream)

Loads the diagram contents from a stream.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFrom (
    InputStream in
)
```

Parameters

in
A **java.io.InputStream** from which to load the diagram contents.

See Also

loadFrom Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.loadFrom Method (String)

Loads the diagram contents from a file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFrom (
    String fileName
)
```

Parameters

fileName
The name of the file from which the diagram contents should be loaded.

See Also

loadFrom Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.loadFromJson Method

Overload List

Name	Description
DiagramView.loadFromJson (InputStream)	Loads the diagram from a JSON stream.
DiagramView.loadFromJson (String)	Loads the diagram from a JSON file.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.loadFromJson Method (InputStream)

Loads the diagram from a JSON stream.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromJson (
    InputStream stream
)
```

Parameters

stream
A **java.io.InputStream** instance from which to load diagram data in JSON format.

See Also

loadFromJson Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
saveToJson Method

DiagramView.loadFromJson Method (String)

Loads the diagram from a JSON file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void loadFromJson (
    String fileName
)
```

Parameters

fileName
A string specifying the file name or full path.

See Also

loadFromJson Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
saveToJson Method

DiagramView.loadFromJsonString Method

Loads the specified JSON data.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void loadFromJsonString (
    String json
)
```

Parameters

json
The JSON string

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
saveToJsonString Method

DiagramView.loadFromString Method

Loads the diagram contents from a string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public void loadFromString (`
`  String chartData`
`)`

Parameters

chartData
A **String** from which to load the diagram contents.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.loadFromXml Method

Overload List

Name	Description
DiagramView.loadFromXml (Document, boolean)	Loads the contents of the XML diagram document.
DiagramView.loadFromXml (InputSource)	Loads the contents of the XML diagram document.
DiagramView.loadFromXml (InputStream)	Loads the contents of the XML diagram document.
DiagramView.loadFromXml (String)	Loads the contents of the XML diagram document.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.loadFromXml Method (Document, boolean)

Loads the contents of the XML diagram document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void loadFromXml (` `  Document document,`

```
    boolean freeProcessedXml
)
```

Parameters

document
A DOM **Document** object from which to load the diagram data.

freeProcessedXml

See Also

loadFromXml Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.loadFromXml Method (InputSource)

Loads the contents of the XML diagram document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromXml (
    InputSource source
)
```

Parameters

source
An **InputSource** where the XML markup should be read from.

See Also

loadFromXml Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.loadFromXml Method (InputStream)

Loads the contents of the XML diagram document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromXml (
    InputStream stream
)
```

Parameters

stream
A **java.io.InputStream** where the XML markup should be read from.

See Also

loadFromXml Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.loadFromXml Method (String)

Loads the contents of the XML diagram document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromXml (
    String fileName
)
```

Parameters

fileName
The name of the XML file the data should be read from.

See Also

loadFromXml Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.lostOwnership Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void lostOwnership (
    Clipboard arg0,
    Transferable arg1
)
```

Parameters

arg0

arg1

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.paintComponent Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void paintComponent (
    Graphics g
)
```

Parameters

g

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.pasteFromClipboard Method

Overload List

Name	Description
DiagramView.pasteFromClipboard (float, float)	Pastes diagram items from the system clipboard.
DiagramView.pasteFromClipboard (float, float, boolean)	Pastes diagram items from the system clipboard.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.pasteFromClipboard Method (float, float)

Pastes diagram items from the system clipboard.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean pasteFromClipboard (
    float dx,
    float dy
)
```

Parameters

dx
Horizontal offset of pasted items from their original positions.

dy
Vertical offset of pasted items from their original positions.

Return Value

Remarks

If MindFusion.Diagramming items are available in the clipboard, this method clones them and adds them to the current diagram. Non-zero dx / dy offset is useful when pasting items several times consecutively, so the pasted items don't overlay the original ones completely.

See Also

pasteFromClipboard Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.pasteFromClipboard Method (float, float, boolean)

Pastes diagram items from the system clipboard.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean pasteFromClipboard (
    float dx,
    float dy,
    boolean unconnectedLinks
)
```

Parameters

dx
Horizontal offset of pasted items from their original positions.

dy
Vertical offset of pasted items from their original positions.

unconnectedLinks
true to allow pasting links whose origin or destination node has not been copied; otherwise, **false**. Default is **false**.

Return Value

Remarks

If MindFusion.Diagramming items are available in the clipboard, this method clones them and adds them to the current diagram. Non-zero dx / dy offset is useful when pasting items several times consecutively, so the pasted items don't overlay the original ones completely.

See Also

pasteFromClipboard Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.print Method

Overload List

Name	Description
DiagramView.print ()	Prints the current diagram using the default page format.
DiagramView.print (Graphics, PageFormat, int)	Implements the Printable interface.
DiagramView.print (PageFormat, String)	Prints the current diagram using the specified page format.
DiagramView.print (String)	Prints the current diagram using the default page format.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.print Method ()

Prints the current diagram using the default page format.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void print ()`

See Also

print Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.print Method (Graphics, PageFormat, int)

Implements the Printable interface.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int print (
    Graphics graphics,
    PageFormat pageFormat,
    int pageIndex
)
```

Parameters

graphics

pageFormat
The size and orientation of each page to be printed.

pageIndex

Return Value

See Also

print Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.print Method (PageFormat, String)

Prints the current diagram using the specified page format.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void print (
    PageFormat pageFormat,
    String printer
)
```

Parameters

pageFormat

The size and orientation of each page to be printed.

printer
Specifies the destination printer.

See Also

print Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.print Method (String)

Prints the current diagram using the default page format.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void print (
    String printer
)
```

Parameters

printer
Specifies the destination printer.

See Also

print Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.printPreview Method

Overload List

Name	Description
DiagramView.printPreview ()	Displays a print preview window, that shows how the diagram would look when printed on paper. The preview is rendered with the same settings that are used for printing, assigned through getPrintOptions. That ensures uniform output of the printed document both on paper and in the preview window. Print job settings include document title and several flags that control whether images, shadows, headers, and so on are printed.
DiagramView.printPreview (PageFormat)	Displays a print preview window, that shows how the diagram would look when printed on paper. The preview is rendered with the same settings that are used for printing,

	assigned via **getPrintOptions**. That ensures uniform output of the printed document both on paper and in the preview window. Print job settings include document title and several flags that control whether images, shadows, headers, etc. are printed.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.printPreview Method ()

Displays a print preview window, that shows how the diagram would look when printed on paper. The preview is rendered with the same settings that are used for printing, assigned through getPrintOptions. That ensures uniform output of the printed document both on paper and in the preview window. Print job settings include document title and several flags that control whether images, shadows, headers, and so on are printed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void printPreview ()
```

See Also

printPreview Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.printPreview Method (PageFormat)

Displays a print preview window, that shows how the diagram would look when printed on paper. The preview is rendered with the same settings that are used for printing, assigned via getPrintOptions. That ensures uniform output of the printed document both on paper and in the preview window. Print job settings include document title and several flags that control whether images, shadows, headers, etc. are printed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void printPreview (
    PageFormat pageFormat
)
```

Parameters

pageFormat

See Also

printPreview Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.processKeyEvent Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void processKeyEvent (
    KeyEvent e
)
```

Parameters

e

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.recreateCacheImage Method

Recreates the off-screen cache bitmap used for fast drawing while modifying items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void recreateCacheImage ()
```

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.repaint Method

Overload List

Name	Description
DiagramView.repaint ()	Repaints the whole diagram.
DiagramView.repaint (Rectangle2D)	Repaints the specified region of the diagram.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.repaint Method ()

Repaints the whole diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void repaint ()`

See Also

repaint Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.repaint Method (Rectangle2D)

Repaints the specified region of the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public void repaint (`
`  Rectangle2D docRect`
`)`

Parameters

docRect
A **Rectangle2D** object representing the region of the diagram that should be repainted.

See Also

repaint Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.resumeRepaint Method

Resumes repainting the control after a suspendRepaint call.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void resumeRepaint ()
```

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.saveTo Method

Overload List

Name	Description
DiagramView.saveTo (OutputStream)	Saves the diagram contents into a stream.
DiagramView.saveTo (String)	Saves the diagram contents into a file.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.saveTo Method (OutputStream)

Saves the diagram contents into a stream.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveTo (
    OutputStream out
)
```

Parameters

out
A **java.io.OutputStream** where the diagram contents should be saved.

See Also

saveTo Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.saveTo Method (String)

Saves the diagram contents into a file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveTo (
    String fileName
)
```

Parameters

fileName
The name of the file into which the diagram contents should be saved.

See Also

saveTo Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.saveToJson Method

Overload List

Name	Description
DiagramView.saveToJson (OutputStream)	Saves the diagram into a JSON stream.
DiagramView.saveToJson (String)	Saves the diagram into a JSON file.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.saveToJson Method (OutputStream)

Saves the diagram into a JSON stream.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToJson (
    OutputStream stream
)
```

Parameters

stream
A **java.io.OutputStream** instance to which to write the diagram data in JSON format.

Remarks

This method adds view state information (scroll position, zoom level, Behavior property value) to the JSON dictionary created by the Diagram object's saveToJson method.

See Also

saveToJson Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
loadFromJson Method

DiagramView.saveToJson Method (String)

Saves the diagram into a JSON file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToJson (
    String fileName
)
```

Parameters

fileName
A string specifying the file name or full path.

Remarks

This method adds view state information (scroll position, zoom level, Behavior property value) to the JSON dictionary created by the Diagram object's saveToJson method.

See Also

saveToJson Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
loadFromJson Method

DiagramView.saveToJsonString Method

Serializes the DiagramView's data to JSON.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public String saveToJsonString ()`

Return Value

The JSON string.

Remarks

This method adds view state information (scroll position, zoom level, Behavior property value) to the JSON dictionary created by the Diagram object's saveToJsonString method.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
loadFromJsonString Method
loadFromString Method

DiagramView.saveToString Method

Overload List

Name	Description
DiagramView.saveToString ()	Saves the diagram contents into a string.
DiagramView.saveToString (SaveToStringFormat, boolean)	Saves the diagram contents into a string.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.saveToString Method ()

Saves the diagram contents into a string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String saveToString ()
```

Return Value

A **String** containing the base64 encoded diagram contents.

See Also

saveToString Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.saveToString Method (SaveToStringFormat, boolean)

Saves the diagram contents into a string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String saveToString (
    SaveToStringFormat format,
    boolean includeUnalteredProperties
)
```

Parameters

format
A member of the SaveToStringFormat enumeration that indicates the desired serialized string format.

includeUnalteredProperties
true to serialize all properties; **false** to serialize only properties different from their default value.

Return Value

A String containing the serialized diagram.

See Also

saveToString Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.saveToXml Method

Overload List

Name	Description
DiagramView.saveToXml (Document)	Saves the diagram to the specified XML document.
DiagramView.saveToXml (Document, boolean)	Saves the diagram to the specified XML document.
DiagramView.saveToXml (OutputStream, boolean)	Saves the diagram to the specified XML document.
DiagramView.saveToXml (String)	Saves the diagram to the specified XML document.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.saveToXml Method (Document)

Saves the diagram to the specified XML document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToXml (
    Document document
)
```

Parameters

document
A DOM **Document** object where the diagram should be saved.

See Also

saveToXml Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.saveToXml Method (Document, boolean)

Saves the diagram to the specified XML document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToXml (
    Document document,
    boolean includeUnalteredProperties
)
```

Parameters

document
A DOM **Document** object where the diagram should be saved.

includeUnalteredProperties

See Also

saveToXml Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.saveToXml Method (OutputStream, boolean)

Saves the diagram to the specified XML document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToXml (
    OutputStream stream,
    boolean includeUnalteredProperties
)
```

Parameters

stream
A **java.io.OutputStream** where the XML markup should be serialized.

includeUnalteredProperties

See Also

saveToXml Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.saveToXml Method (String)

Saves the diagram to the specified XML document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToXml (
    String fileName
)
```

Parameters

fileName
The full path and name of the disk file where the diagram should be saved.

See Also

saveToXml Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.scrollTo Method

Scrolls the diagram to the specified position. The Diagram component must be contained within a JScrollPane in order to use this method.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void scrollTo (
    float x,
    float y
)
```

Parameters

x
A float value specifying the horizontal scroll position.

y
A float value specifying the vertical scroll position.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
setScrollX Method
setScrollY Method

bringIntoView Method
zoomToRect Method

DiagramView.setAllowInplaceEdit Method

Sets a value indicating whether users are allowed to edit the text of diagram items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowInplaceEdit (
    boolean value
)
```

Parameters

value
true if users are allowed to edit the text of diagram items, otherwise **false**.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setAllowLinkCursor Method

Sets the cursor shown when the currently drawn link can be attached to the item at the current mouse pointer location.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowLinkCursor (
    Cursor value
)
```

Parameters

value
A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setAntiAlias Method

Sets the current anti-aliasing mode for non text objects.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAntiAlias (
    SmoothingMode antiAlias
)
```

Parameters

antiAlias
A SmoothingMode object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setAutoScroll Method

Sets a value indicating whether the diagram should scroll automatically when the pointer is dragged towards the edge of the view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAutoScroll (
    boolean value
)
```

Parameters

value
true if the diagram should scroll automatically, otherwise **false**.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setBehavior Method

Sets a value indicating how the control should respond to users actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setBehavior (
    Behavior value
)
```

Parameters

value
A member of the Behavior enumeration.

Remarks

The property specifies how the control responds to user actions with the mouse. The default value, LinkShapes, facilitates drawing of flowchart diagrams. **LinkTables** makes JDiagram create table nodes and links while the user draws with the mouse, allowing creation of entity-relationship or class-hierarchy diagrams.

Modes such as **Modify**, **PanAndModify**, **MoveNodes**, **SelectOnly** allow users to interact with existing items, but not draw new ones on the canvas. Note that controls such as NodeListView and ShapeListBox can be used to create new nodes regardless of DiagramView's current behavior mode.

There are several more values that can be assigned to the property, that make the control draw specific types of items, for example only shape nodes, only control hosts, only links, and so on. These are useful when implementing the ability to select specific drawing tools in applications.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setCounterDiagonalResizeCursor Method

Sets the cursor shown when dragging from the current mouse pointer location would start resizing an item along its secondary diagonal.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setCounterDiagonalResizeCursor (
    Cursor value
)
```

Parameters

value
A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setCustomBehavior Method

Sets a custom behavior object specifying how the control responds to mouse input.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCustomBehavior (
    BehaviorBase value
)
```

Parameters

value
A BehaviorBase value.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setCustomLinkType Method

Sets a custom type of DiagramLink-derived objects that will be created when the users starts drawing with the mouse.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCustomLinkType (
    Class<? extends DiagramLink> value
)
```

Parameters

value
The custom link class.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setCustomNodeType Method

Sets the type of a DiagramNode-derived class whose instance should be created when a user starts drawing.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCustomNodeType (
    Class<? extends DiagramNode> value
)
```

Parameters

value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setDelKeyAction Method

Sets a value that specifies what action should be carried out when the user hits the Del key.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDelKeyAction (
    DelKeyAction delKeyAction
)
```

Parameters

delKeyAction
A member of the DelKeyAction enumeration.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
nodeDeleting Event
linkDeleting Event
AutoDeleteLinks Property

DiagramView.setDiagonalResizeCursor Method

Sets the cursor shown when dragging from the current mouse pointer location would start resizing an item along its main diagonal.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDiagonalResizeCursor (
    Cursor value
)
```

Parameters

value
A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setDiagram Method

Sets the diagram displayed by this view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDiagram (
    Diagram value
)
```

Parameters

value
A Diagram object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setDisallowCursor Method

Sets the cursor shown when an item cannot be created at the current mouse pointer location.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setDisallowCursor (
    Cursor value
)
```

Parameters

value
A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setDisallowLinkCursor Method

Sets the cursor shown when the currently created link can be attached to the item at the current mouse pointer location.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setDisallowLinkCursor (
    Cursor value
)
```

Parameters

value
A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setDragIndicatorOpacity Method

Sets the opacity of ghost image displayed during drag-and-drop from NodeListView.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDragIndicatorOpacity (
    float value
)
```

Parameters

value
A value in 0 - 1 range specifying opacity.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setDragThreshold Method

Sets the minimum distance the pointer should be dragged, measured in pixels, that would cause a drag event instead of click.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDragThreshold (
    int dragThreshold
)
```

Parameters

dragThreshold
The minimal distance to move the pointer before starting a drag operation.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setDrawLinkCursor Method

Sets the cursor shown when a link can be drawn from the current mouse pointer location.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDrawLinkCursor (
    Cursor value
)
```

Parameters

value
A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setEditTextCursor Method

Gets the mouse cursor shown to the user when the mouse is positioned over an edit component.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEditTextCursor (
    Cursor value
)
```

Parameters

value
A java.awt.Cursor object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setHorizontalDropAlignment Method

Sets the horizontal placement of nodes created by drag-and-drop operations, relatively to mouse cursor.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHorizontalDropAlignment (
    HorizontalAlignment value
)
```

Parameters

value
A member of the HorizontalAlignment enumeration.

Remarks

This property lets you center the new node or align specified edge to the mouse pointer position when drag-and-drop ends.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setHorizontalResizeCursor Method

Sets the cursor shown when dragging from the current mouse pointer location would start resizing an item horizontally.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHorizontalResizeCursor (
    Cursor value
)
```

Parameters

value
A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setInplaceEditAcceptOnEnter Method

Sets a value indicating whether pressing the ENTER key ends in-place editing and accepts changes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setInplaceEditAcceptOnEnter (
    boolean inplaceEditAcceptOnEnter
)
```

Parameters

inplaceEditAcceptOnEnter

true if ENTER ends in-place editing, otherwise **false.**

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setInplaceEditCancelOnEsc Method

Sets a value indicating whether pressing the ESC key ends in-place editing and cancels changes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setInplaceEditCancelOnEsc (
    boolean inplaceEditCancelOnEsc
)
```

Parameters

inplaceEditCancelOnEsc

true if ESC ends in-place editing, otherwise **false**.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setInplaceEditFont Method

Sets the font used to display text in the in-place editing text control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setInplaceEditFont (
    Font value
)
```

Parameters

value

A **java.awt.Font** object representing the font of the in-place editing control.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setLaneColumnResizeCursor Method

Sets the mouse cursor shown to the user when dragging would resize a lane column header.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLaneColumnResizeCursor (
    Cursor value
)
```

Parameters

value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setLaneRowResizeCursor Method

Sets the mouse cursor shown to the user when dragging would resize a lane row header.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLaneRowResizeCursor (
    Cursor value
)
```

Parameters

value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setLicenseKey Method

Sets the component's license key string, disabling evaluation mode.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void setLicenseKey (
    String licenseKey
)
```

Parameters

licenseKey
A string value containing encoded MindFusion.Diagramming license information.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setMagnifierEnabled Method

Sets a value indicating whether the magnifier tool is currently enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMagnifierEnabled (
    boolean value
)
```

Parameters

value

Remarks

The magnifier tool can be alternatively enabled on-demand through a modifier key or a mouse button.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setMagnifierFactor Method

Gets the zoom factor of the magnifier tool.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMagnifierFactor (
    float value
)
```

Parameters

value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setMagnifierFrameColor Method

Sets the color of the magnifier frame.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMagnifierFrameColor (
    Color value
)
```

Parameters

value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setMagnifierFrameThickness Method

Sets the thickness of the magnifier frame, expressed in pixels.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMagnifierFrameThickness (
    int value
)
```

Parameters

value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setMagnifierHeight Method

Sets the height of the magnifier tool, expressed in pixels.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMagnifierHeight (
    int value
)
```

Parameters

value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setMagnifierSecondaryFrameColor Method

Sets the secondary color of the magnifier frame.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMagnifierSecondaryFrameColor (
    Color value
)
```

Parameters

value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setMagnifierShading Method

Sets a value indicating whether to enhance the effect of a magnifier lense by using a gradient shading.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMagnifierShading (
    boolean value
)
```

Parameters

value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setMagnifierShape Method

Sets the shape of the magnifier tool.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMagnifierShape (
    Shape value
)
```

Parameters

value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setMagnifierWidth Method

Sets the width of the magnifier tool, expressed in pixels.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMagnifierWidth (
    int value
)
```

Parameters

value

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setMiddleButtonActions Method

Sets what actions are performed via the middle mouse button.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMiddleButtonActions (
    EnumSet<MouseButtonAction> value
)
```

Parameters

value
An enumset of MouseButtonAction values.

Remarks

This property allows the following actions to be assigned to the middle mouse button: panning the diagram view, canceling the current drawing operation, or starting a multiple selection operation.

See Also

DiagramView.setModificationStart Method

Sets a value indicating how users can start modifying items in the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setModificationStart (
    ModificationStart value
)
```

Parameters

value
A member of the ModificationStart enumeration.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setMoveCursor Method

Sets the cursor shown when the item under the mouse pointer can be modified.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMoveCursor (
    Cursor value
)
```

Parameters

value
A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setPanCursor Method

Sets the cursor shown when panning the diagram view

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPanCursor (
    Cursor value
)
```

Parameters

value
A java.awt.Cursor object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setPointerCursor Method

Sets the mouse cursor that should be shown when no modification is performed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPointerCursor (
    Cursor value
)
```

Parameters

value
A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setRightButtonActions Method

Sets what actions are performed via the right mouse button.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRightButtonActions (
    EnumSet<MouseButtonAction> value
)
```

Parameters

value
An enumset of MouseButtonAction values.

Remarks

This property allows the following actions to be assigned to the right mouse button: panning the diagram view, canceling the current drawing operation, or starting a multiple selection operation.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
setMiddleButtonActions Method

DiagramView.setRotateCursor Method

Sets the cursor shown when dragging from the current mouse pointer location would start rotating a box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRotateCursor (
    Cursor value
)
```

Parameters

value
A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setScrollX Method

Sets the horizontal scroll position. The Diagram component must be contained within a JScrollPane in order to use this method.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setScrollX (
    float value
)
```

Parameters

value
A float value specifying the horizontal scroll position.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
setScrollY Method
scrollTo Method

DiagramView.setScrollY Method

Sets the vertical scroll position. The Diagram component must be contained within a JScrollPane in order to use this method.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setScrollY (
    float value
)
```

Parameters

value
A float value specifying the vertical scroll position.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
setScrollX Method
scrollTo Method

DiagramView.setScrollZoneSize Method

Sets the size of the auto scroll zone near the edges of the control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setScrollZoneSize (
    int value
)
```

Parameters

value
An integer value specifying the scroll zone size.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
setAutoScroll Method

DiagramView.setShowToolTips Method

Sets a value indicating whether an item's ToolTip is shown when the pointer hovers over the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setShowToolTips (
    boolean value
)
```

Parameters

value
true if tooltips are shown for the diagram items that have them, otherwise **false**.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setTextAntiAlias Method

Sets the current anti-aliasing mode for text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextAntiAlias (
    SmoothingMode antiAlias
)
```

Parameters

antiAlias
A member of the SmoothingMode enumeration.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setTrackPointedItem Method

Sets a value indicating whether the control should raise mouse hover events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTrackPointedItem (
    boolean value
)
```

Parameters

value
true if mouse hover events should be raised when the pointer enters or leaves the boundaries of an item, or **false** otherwise.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
HoverDelay Property
nodePointerEnter Event
nodePointerLeave Event
nodeHovered Event
linkPointerEnter Event
linkPointerLeave Event
linkHovered Event

DiagramView.setVerticalDropAlignment Method

Sets the vertical placement of nodes created by drag-and-drop operations, relatively to mouse cursor.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setVerticalDropAlignment (
    VerticalAlignment value
)
```

Parameters

value
A member of the VerticalAlignment enumeration.

Remarks

This property lets you center the new node or align specified edge to the mouse pointer position when drag-and-drop ends.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setVerticalResizeCursor Method

Sets the cursor shown when dragging from the current mouse pointer location would start resizing an item vertically.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setVerticalResizeCursor (
    Cursor value
)
```

Parameters

value
A **java.awt.Cursor** object.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setXmlClipboard Method

Sets a value that specifies whether XML serialization will be used when saving/loading the selection to/from clipboard.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setXmlClipboard (
    boolean xmlClipboard
)
```

Parameters

xmlClipboard
true if XML serialization will be used; otherwise **false**.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.setZoomFactor Method

Sets the zoom level.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setZoomFactor (
    float value
)
```

Parameters

value
A float value specifying the zoom factor as percents of the original view size.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
zoomToRect Method

DiagramView.startInteraction Method

Starts the specified interactive operation. Subsequent pointer movements will modify or create the item specified through the InteractionState instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void startInteraction (
    InteractionState interactionState,
    Point2D.Float point
)
```

Parameters

interactionState

point

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.suspendRepaint Method

Stops repainting the control. This is useful when using the JDiagram API from JavaScript, where the control would be repainted after each script line executes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void suspendRepaint ()
```

Remarks

The DiagramView is repainted automatically when properties of DiagramItems change. Call this method to stop repainting the view, and resumeRepaint to start repainting again.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.toJson Method

Serializes the DiagramView's data to JSON.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static String toJson (
    DiagramView view
)
```

Parameters

view
A DiagramView Object

Return Value

The JSON string.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.zoomToFit Method

Overload List

Name	Description
DiagramView.zoomToFit ()	Zooms the diagram so that all its contents becomes visible.
DiagramView.zoomToFit (Rectangle2D)	Zooms and scrolls the diagram so that the specified rectangular area becomes visible. The DiagramView component must be contained within a JScrollPane in order to use this method.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.zoomToFit Method ()

Zooms the diagram so that all its contents becomes visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void zoomToFit ()`

See Also

zoomToFit Method Overload List
DiagramView Members

DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.zoomToFit Method (Rectangle2D)

Zooms and scrolls the diagram so that the specified rectangular area becomes visible. The DiagramView component must be contained within a JScrollPane in order to use this method.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void zoomToFit (
    Rectangle2D rect
)
```

Parameters

rect
A **Rectangle2D** object representing the region to which the view should be fitted.

See Also

zoomToFit Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.zoomToRect Method

Overload List

Name	Description
DiagramView.zoomToRect (Rectangle2D)	Zooms and scrolls the view to fit the specified document rectangle in the viewport.
DiagramView.zoomToRect (Rectangle2D, boolean)	Zooms and scrolls the view to fit the specified document rectangle in the viewport.

See Also

DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace

DiagramView.zoomToRect Method (Rectangle2D)

Zooms and scrolls the view to fit the specified document rectangle in the viewport.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void zoomToRect (
    Rectangle2D rect
)
```

Parameters

rect
A Rectangle2D instance specifying the desired viewport's position and size.

See Also

zoomToRect Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
scrollTo Method
setZoomFactor Method

DiagramView.zoomToRect Method (Rectangle2D, boolean)

Zooms and scrolls the view to fit the specified document rectangle in the viewport.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void zoomToRect (
    Rectangle2D rect,
    boolean centered
)
```

Parameters

rect
A **Rectangle2D** instance specifying the desired viewport's position and size.

centered
true to center the rectangle in viewport, or **false** to align it to top-left corner.

See Also

zoomToRect Method Overload List
DiagramView Members
DiagramView Class
com.mindfusion.diagramming Namespace
scrollTo Method
bringIntoView Method
setZoomFactor Method

DirectionConstraint Enumeration

The members of these enumeration specify in what direction to constrain the movement of a node. These constants can be used as parameters of the setMoveDirection method of the NodeConstraints class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public enum DirectionConstraint
```

Members

	Member name	Description
	Horizontal	Users are allowed to move the node horizontally.
	None	Specifies no restrictions.
	Vertical	Users are allowed to move the node vertically.

See Also

com.mindfusion.diagramming Namespace

DisconnectLinkCmd Class

Disconnects links from a deleted node.

Syntax

```
Java
public class DisconnectLinkCmd extends Command
```

Remarks

Instances of this class are created implicitly when a node is deleted and AutoDeleteLinks is set to **false**.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.DisconnectLinkCmd

See Also

DisconnectLinkCmd Members
com.mindfusion.diagramming Namespace

DisconnectLinkCmd Members

Disconnects links from a deleted node.

The following tables list the members exposed by the DisconnectLinkCmd type.

Public Constructors

	Name	Description
	DisconnectLinkCmd	Initializes a new instance of the **DisconnectLinkCmd** class.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	Carries out the command's action.
	getLink	Gets a reference to the modified link.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	This method is called by the UndoManager when redoing actions.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	This method is called by the **UndoManager** when undoing actions.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

DisconnectLinkCmd Class
com.mindfusion.diagramming Namespace

DisconnectLinkCmd Constructor

Initializes a new instance of the DisconnectLinkCmd class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DisconnectLinkCmd (
    DiagramLink link,
    boolean disconnectOrigin
)
```

Parameters

link

disconnectOrigin

See Also

DisconnectLinkCmd Class
com.mindfusion.diagramming Namespace

DisconnectLinkCmd Methods

DisconnectLinkCmd.execute Method

Carries out the command's action.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled
true if the undo manager is enabled at this time, or **false** otherwise.

See Also

DisconnectLinkCmd Members
DisconnectLinkCmd Class
com.mindfusion.diagramming Namespace

DisconnectLinkCmd.getLink Method

Gets a reference to the modified link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public DiagramLink getLink ()`

Return Value

See Also

DisconnectLinkCmd Members
DisconnectLinkCmd Class
com.mindfusion.diagramming Namespace

DisconnectLinkCmd.redo Method

This method is called by the UndoManager when redoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void redo ()`

See Also

DisconnectLinkCmd Members
DisconnectLinkCmd Class
com.mindfusion.diagramming Namespace

DisconnectLinkCmd.undo Method

This method is called by the UndoManager when undoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void undo ()`

See Also

DisconnectLinkCmd Members
DisconnectLinkCmd Class
com.mindfusion.diagramming Namespace

DocumentView Class

Represents an extended DiagramView for DiagramDocument objects.

Syntax

Java
`public class DocumentView extends DiagramView`

Remarks

The class raises the **java.beans.PropertyChangeListener.propertyChange** event for the following properties:

- document
- currentPage

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        com.mindfusion.diagramming.DiagramView
          com.mindfusion.diagramming.DocumentView

See Also

DocumentView Members
com.mindfusion.diagramming Namespace

DocumentView Members

Represents an extended DiagramView for DiagramDocument objects.

The following tables list the members exposed by the DocumentView type.

Public Constructors

	Name	Description
	DocumentView	Initializes a new instance of the **DocumentView** class.

Public Methods

	Name	Description
	adoptHostedControls	Adopts controls hosted in other views and moves them to this view. (Inherited from DiagramView.)
	ancestorAdded	Implements **AncestorListener**. Call the base method if you inherit the Diagram class and need to override this method. (Inherited from DiagramView.)
	ancestorMoved	Implements **AncestorListener**. Call the base method if you inherit the **Diagram** class and need to override this

		method. (Inherited from DiagramView.)
	ancestorRemoved	Implements **AncestorListener**. Call the base method if you inherit the **Diagram** class and need to override this method. (Inherited from DiagramView.)
	beginEdit	Overloaded. (Inherited from DiagramView.)
	bringIntoView	Overloaded. Scrolls the view to make the specified item or rectangular area visible. (Inherited from DiagramView.)
	cancelDrag	Cancels the modification of the selected items. (Inherited from DiagramView.)
	copyToClipboard	Overloaded. (Inherited from DiagramView.)
	cutToClipboard	Overloaded. (Inherited from DiagramView.)
	deviceToDoc	Overloaded. (Inherited from DiagramView.)
	disableInteractionBuffer	For internal use. (Inherited from DiagramView.)
	docToDevice	Overloaded. (Inherited from DiagramView.)
	dragEnter	(Inherited from DiagramView.)
	dragExit	(Inherited from DiagramView.)
	dragOver	(Inherited from DiagramView.)
	drop	(Inherited from DiagramView.)
	dropActionChanged	(Inherited from DiagramView.)
	endEdit	Exits in-place editing mode and either accepts or rejects the changes made to the item's text. (Inherited from DiagramView.)
	getAllowInplaceEdit	Gets a value indicating whether users are allowed to edit the text of diagram items. (Inherited from DiagramView.)
	getAllowLinkCursor	Gets the cursor shown when the currently drawn link can be attached to the item at the current mouse pointer location. (Inherited from DiagramView.)
	getAntiAlias	Gets the current anti-aliasing mode for non text objects. (Inherited from DiagramView.)
	getAutoScroll	Gets a value indicating whether the diagram will scroll automatically when the pointer is dragged towards the edge of the view. (Inherited from DiagramView.)
	getBehavior	Gets a value indicating how the control responds to users actions. (Inherited from DiagramView.)
	getCounterDiagonalResizeCursor	Gets the cursor shown when dragging from the current mouse pointer location would start resizing an item along its secondary diagonal. (Inherited from DiagramView.)
	getCurrentPage	Gets the currently active page.
	getCustomBehavior	Gets custom behavior object specifying how the control responds to mouse input. (Inherited from DiagramView.)
	getCustomLinkType	Gets a custom type of DiagramLink-derived objects that will be created when the users starts drawing with the

		mouse. (Inherited from DiagramView.)
	getCustomNodeType	Gets the type of a DiagramNode-derived class whose instance should be created when a user starts drawing. (Inherited from DiagramView.)
	getDelKeyAction	Gets a value that specifies what action should be carried out when the user hits the Del key. (Inherited from DiagramView.)
	getDiagonalResizeCursor	Gets the cursor shown when dragging from the current mouse pointer location would start resizing an item along its main diagonal. (Inherited from DiagramView.)
	getDiagram	Gets the diagram displayed by this view. (Inherited from DiagramView.)
	getDisallowCursor	Gets the cursor shown when an item cannot be created at the current mouse pointer location. (Inherited from DiagramView.)
	getDisallowLinkCursor	Gets the cursor shown when the currently created link cannot be attached to the item at the current mouse pointer location. (Inherited from DiagramView.)
	getDocument	Gets the displayed diagram document.
	getDragIndicatorOpacity	Gets the opacity of ghost image displayed during drag-and-drop from NodeListView. (Inherited from DiagramView.)
	getDragThreshold	Gets the minimum distance the pointer should be dragged, measured in pixels, that would cause a drag event instead of click. (Inherited from DiagramView.)
	getDrawLinkCursor	Gets the cursor shown when a link can be drawn from the current mouse pointer location. (Inherited from DiagramView.)
	getEditTextCursor	Gets the mouse cursor shown to the user when the mouse is positioned over an edit component. (Inherited from DiagramView.)
	getFont	(Inherited from DiagramView.)
	getGlassPane	For internal use. (Inherited from DiagramView.)
	getHorizontalDropAlignment	Gets the horizontal placement of nodes created by drag-and-drop operations, relatively to mouse cursor. (Inherited from DiagramView.)
	getHorizontalResizeCursor	Gets the cursor shown when dragging from the current mouse pointer location would start resizing an item horizontally. (Inherited from DiagramView.)
	getInplaceEditAcceptOnEnter	Gets a value indicating whether pressing the ENTER key ends in-place editing and accepts changes. (Inherited from DiagramView.)
	getInplaceEditCancelOnEsc	Gets a value indicating whether pressing the ESC key ends in-place editing and cancels changes. (Inherited from DiagramView.)

	getInplaceEditFont	Gets the font used to display text in the in-place editing text control. (Inherited from DiagramView.)
	getLaneColumnResizeCursor	Gets the mouse cursor shown to the user when dragging would resize a lane column header. (Inherited from DiagramView.)
	getLaneRowResizeCursor	Gets the mouse cursor shown to the user when dragging would resize a lane row header. (Inherited from DiagramView.)
	getMagnifierEnabled	Gets a value indicating whether the magnifier tool is currently enabled. (Inherited from DiagramView.)
	getMagnifierFactor	Gets the zoom factor of the magnifier tool. (Inherited from DiagramView.)
	getMagnifierFrameColor	Gets the color of the magnifier frame. (Inherited from DiagramView.)
	getMagnifierFrameThickness	Gets the thickness of the magnifier frame, expressed in pixels. (Inherited from DiagramView.)
	getMagnifierHeight	Gets the height of the magnifier tool, expressed in pixels. (Inherited from DiagramView.)
	getMagnifierSecondaryFrameColor	Gets the secondary color of the magnifier frame. (Inherited from DiagramView.)
	getMagnifierShading	Gets a value indicating whether to enhance the effect of a magnifier lense by using a gradient shading. (Inherited from DiagramView.)
	getMagnifierShape	Gets the shape of the magnifier tool. (Inherited from DiagramView.)
	getMagnifierWidth	Gets the width of the magnifier tool, expressed in pixels. (Inherited from DiagramView.)
	getMiddleButtonActions	Gets what actions are performed via the middle mouse button. (Inherited from DiagramView.)
	getModificationStart	Gets a value indicating how users can start modifying items in the diagram. (Inherited from DiagramView.)
	getModifierKeyActions	Gets an object that allows changing the function of keyboard modifier keys such as CTRL and ALT. (Inherited from DiagramView.)
	getMoveCursor	Gets the cursor shown when the item under the mouse pointer can be modified. (Inherited from DiagramView.)
	getPanCursor	Gets the cursor shown when panning the diagram view. (Inherited from DiagramView.)
	getPointerCursor	Gets the mouse cursor shown when no modification is performed. (Inherited from DiagramView.)
	getPreferredScrollableViewportSize	Provides support for scrolling when the diagram in placed inside a scroll pane. (Inherited from DiagramView.)
	getPreferredSize	Returns the size of the diagram in pixels, based on the currently set document size and zoom level. (Inherited from DiagramView.)

	getPrintOptions	Returns a PrintOptions instance that allows customizing various aspects of printing and print-preview. (Inherited from DiagramView.)
	getRightButtonActions	Gets what actions are performed via the right mouse button. (Inherited from DiagramView.)
	getRotateCursor	Gets the cursor shown when dragging from the current mouse pointer location would start rotating a box. (Inherited from DiagramView.)
	getScrollableBlockIncrement	Provides support for scrolling when the diagram in placed inside a scroll pane. (Inherited from DiagramView.)
	getScrollableTracksViewportHeight	Provides support for scrolling when the diagram in placed inside a scroll pane. (Inherited from DiagramView.)
	getScrollableTracksViewportWidth	Provides support for scrolling when the diagram in placed inside a scroll pane. (Inherited from DiagramView.)
	getScrollableUnitIncrement	Provides support for scrolling when the diagram in placed inside a scroll pane. (Inherited from DiagramView.)
	getScrollX	Gets the horizontal scroll position. (Inherited from DiagramView.)
	getScrollY	Gets the vertical scroll position. (Inherited from DiagramView.)
	getScrollZoneSize	Gets the size of the auto scroll zone near the edges of the control. (Inherited from DiagramView.)
	getShowToolTips	Gets a value indicating whether an item's ToolTip is shown when the pointer hovers over the item. (Inherited from DiagramView.)
	getTextAntiAlias	Gets the current anti-aliasing mode for text. (Inherited from DiagramView.)
	getToolTipText	Returns the string to be used as the tooltip for event. (Inherited from DiagramView.)
	getTrackPointedItem	Gets a value indicating whether the control will raise mouse hover events. (Inherited from DiagramView.)
	getVerticalDropAlignment	Gets the vertical placement of nodes created by drag-and-drop operations, relatively to mouse cursor. (Inherited from DiagramView.)
	getVerticalResizeCursor	Gets the cursor shown when dragging from the current mouse pointer location would start resizing an item vertically. (Inherited from DiagramView.)
	getXmlClipboard	Gets a value that specifies whether XML serialization will be used when saving/loading the selection to/from clipboard. (Inherited from DiagramView.)
	getZoomFactor	Gets the current zoom level. (Inherited from DiagramView.)
	loadFrom	Loads the document from the specified stream.
	loadFromJson	Overloaded. (Inherited from DiagramView.)

	loadFromJsonString	Loads the specified JSON data. (Inherited from DiagramView.)
	loadFromString	Loads the diagram contents from a string. (Inherited from DiagramView.)
	loadFromXml	Loads the diagram document from the specified XML Document.
	lostOwnership	(Inherited from DiagramView.)
	pasteFromClipboard	Overloaded. (Inherited from DiagramView.)
	print	Overloaded. (Inherited from DiagramView.)
	printPreview	Overloaded. (Inherited from DiagramView.)
	recreateCacheImage	Recreates the off-screen cache bitmap used for fast drawing while modifying items. (Inherited from DiagramView.)
	repaint	Overloaded. (Inherited from DiagramView.)
	resumeRepaint	Resumes repainting the control after a suspendRepaint call. (Inherited from DiagramView.)
	saveTo	Saves the document into the specified stream.
	saveToJson	Overloaded. (Inherited from DiagramView.)
	saveToJsonString	Serializes the DiagramView's data to JSON. (Inherited from DiagramView.)
	saveToString	Overloaded. (Inherited from DiagramView.)
	saveToXml	Saves the diagram document into the specified XML Document.
	scrollTo	Scrolls the diagram to the specified position. The **Diagram** component must be contained within a JScrollPane in order to use this method. (Inherited from DiagramView.)
	setAllowInplaceEdit	Sets a value indicating whether users are allowed to edit the text of diagram items. (Inherited from DiagramView.)
	setAllowLinkCursor	Sets the cursor shown when the currently drawn link can be attached to the item at the current mouse pointer location. (Inherited from DiagramView.)
	setAntiAlias	Sets the current anti-aliasing mode for non text objects. (Inherited from DiagramView.)
	setAutoScroll	Sets a value indicating whether the diagram should scroll automatically when the pointer is dragged towards the edge of the view. (Inherited from DiagramView.)
	setBehavior	Sets a value indicating how the control should respond to users actions. (Inherited from DiagramView.)
	setCounterDiagonalResizeCursor	Sets the cursor shown when dragging from the current mouse pointer location would start resizing an item along its secondary diagonal. (Inherited from DiagramView.)

	setCurrentPage	Sets the currently active page.
	setCustomBehavior	Sets a custom behavior object specifying how the control responds to mouse input. (Inherited from DiagramView.)
	setCustomLinkType	Sets a custom type of **DiagramLink**-derived objects that will be created when the users starts drawing with the mouse. (Inherited from DiagramView.)
	setCustomNodeType	Sets the type of a DiagramNode-derived class whose instance should be created when a user starts drawing. (Inherited from DiagramView.)
	setDelKeyAction	Sets a value that specifies what action should be carried out when the user hits the Del key. (Inherited from DiagramView.)
	setDiagonalResizeCursor	Sets the cursor shown when dragging from the current mouse pointer location would start resizing an item along its main diagonal. (Inherited from DiagramView.)
	setDiagram	Sets the diagram displayed by this view. (Inherited from DiagramView.)
	setDisallowCursor	Sets the cursor shown when an item cannot be created at the current mouse pointer location. (Inherited from DiagramView.)
	setDisallowLinkCursor	Sets the cursor shown when the currently created link can be attached to the item at the current mouse pointer location. (Inherited from DiagramView.)
	setDocument	Sets the displayed diagram document.
	setDragIndicatorOpacity	Sets the opacity of ghost image displayed during drag-and-drop from **NodeListView**. (Inherited from DiagramView.)
	setDragThreshold	Sets the minimum distance the pointer should be dragged, measured in pixels, that would cause a drag event instead of click. (Inherited from DiagramView.)
	setDrawLinkCursor	Sets the cursor shown when a link can be drawn from the current mouse pointer location. (Inherited from DiagramView.)
	setEditTextCursor	Gets the mouse cursor shown to the user when the mouse is positioned over an edit component. (Inherited from DiagramView.)
	setHorizontalDropAlignment	Sets the horizontal placement of nodes created by drag-and-drop operations, relatively to mouse cursor. (Inherited from DiagramView.)
	setHorizontalResizeCursor	Sets the cursor shown when dragging from the current mouse pointer location would start resizing an item horizontally. (Inherited from DiagramView.)
	setInplaceEditAcceptOnEnter	Sets a value indicating whether pressing the ENTER key ends in-place editing and accepts changes. (Inherited from DiagramView.)
	setInplaceEditCancelOnEsc	Sets a value indicating whether pressing the ESC key ends in-place editing and cancels changes. (Inherited from

		DiagramView.)
	setInplaceEditFont	Sets the font used to display text in the in-place editing text control. (Inherited from DiagramView.)
	setLaneColumnResizeCursor	Sets the mouse cursor shown to the user when dragging would resize a lane column header. (Inherited from DiagramView.)
	setLaneRowResizeCursor	Sets the mouse cursor shown to the user when dragging would resize a lane row header. (Inherited from DiagramView.)
	setLicenseKey	Sets the component's license key string, disabling evaluation mode. (Inherited from DiagramView.)
	setMagnifierEnabled	Sets a value indicating whether the magnifier tool is currently enabled. (Inherited from DiagramView.)
	setMagnifierFactor	Gets the zoom factor of the magnifier tool. (Inherited from DiagramView.)
	setMagnifierFrameColor	Sets the color of the magnifier frame. (Inherited from DiagramView.)
	setMagnifierFrameThickness	Sets the thickness of the magnifier frame, expressed in pixels. (Inherited from DiagramView.)
	setMagnifierHeight	Sets the height of the magnifier tool, expressed in pixels. (Inherited from DiagramView.)
	setMagnifierSecondaryFrameColor	Sets the secondary color of the magnifier frame. (Inherited from DiagramView.)
	setMagnifierShading	Sets a value indicating whether to enhance the effect of a magnifier lense by using a gradient shading. (Inherited from DiagramView.)
	setMagnifierShape	Sets the shape of the magnifier tool. (Inherited from DiagramView.)
	setMagnifierWidth	Sets the width of the magnifier tool, expressed in pixels. (Inherited from DiagramView.)
	setMiddleButtonActions	Sets what actions are performed via the middle mouse button. (Inherited from DiagramView.)
	setModificationStart	Sets a value indicating how users can start modifying items in the diagram. (Inherited from DiagramView.)
	setMoveCursor	Sets the cursor shown when the item under the mouse pointer can be modified. (Inherited from DiagramView.)
	setPanCursor	Sets the cursor shown when panning the diagram view (Inherited from DiagramView.)
	setPointerCursor	Sets the mouse cursor that should be shown when no modification is performed. (Inherited from DiagramView.)
	setRightButtonActions	Sets what actions are performed via the right mouse button. (Inherited from DiagramView.)
	setRotateCursor	Sets the cursor shown when dragging from the current mouse pointer location would start rotating a box. (Inherited from DiagramView.)

	setScrollX	Sets the horizontal scroll position. The **Diagram** component must be contained within a JScrollPane in order to use this method. (Inherited from DiagramView.)
	setScrollY	Sets the vertical scroll position. The **Diagram** component must be contained within a JScrollPane in order to use this method. (Inherited from DiagramView.)
	setScrollZoneSize	Sets the size of the auto scroll zone near the edges of the control. (Inherited from DiagramView.)
	setShowToolTips	Sets a value indicating whether an item's **ToolTip** is shown when the pointer hovers over the item. (Inherited from DiagramView.)
	setTextAntiAlias	Sets the current anti-aliasing mode for text. (Inherited from DiagramView.)
	setTrackPointedItem	Sets a value indicating whether the control should raise mouse hover events. (Inherited from DiagramView.)
	setVerticalDropAlignment	Sets the vertical placement of nodes created by drag-and-drop operations, relatively to mouse cursor. (Inherited from DiagramView.)
	setVerticalResizeCursor	Sets the cursor shown when dragging from the current mouse pointer location would start resizing an item vertically. (Inherited from DiagramView.)
	setXmlClipboard	Sets a value that specifies whether XML serialization will be used when saving/loading the selection to/from clipboard. (Inherited from DiagramView.)
	setZoomFactor	Sets the zoom level. (Inherited from DiagramView.)
	startInteraction	Starts the specified interactive operation. Subsequent pointer movements will modify or create the item specified through the InteractionState instance. (Inherited from DiagramView.)
	suspendRepaint	Stops repainting the control. This is useful when using the JDiagram API from JavaScript, where the control would be repainted after each script line executes. (Inherited from DiagramView.)
	toJson	Serializes the DiagramView's data to JSON. (Inherited from DiagramView.)
	zoomToFit	Overloaded. (Inherited from DiagramView.)
	zoomToRect	Overloaded. (Inherited from DiagramView.)

Protected Methods

	Name	Description
	paintComponent	(Inherited from DiagramView.)
	processKeyEvent	(Inherited from DiagramView.)

See Also

DocumentView Class
com.mindfusion.diagramming Namespace

DocumentView Constructor

Initializes a new instance of the DocumentView class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DocumentView ()
```

See Also

DocumentView Class
com.mindfusion.diagramming Namespace

DocumentView Methods

DocumentView.getCurrentPage Method

Gets the currently active page.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramPage getCurrentPage ()
```

Return Value

The current DiagramPage object.

See Also

DocumentView Members
DocumentView Class
com.mindfusion.diagramming Namespace

DocumentView.getDocument Method

Gets the displayed diagram document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramDocument getDocument ()
```

Return Value

A DiagramDocument instance.

See Also

DocumentView Members
DocumentView Class
com.mindfusion.diagramming Namespace

DocumentView.loadFrom Method

Loads the document from the specified stream.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFrom (
    InputStream stream
)
```

Parameters

stream
A **java.io.InputStream** instance.

See Also

DocumentView Members
DocumentView Class
com.mindfusion.diagramming Namespace

DocumentView.loadFromXml Method

Loads the diagram document from the specified XML Document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromXml (
    Document document,
    boolean freeProcessedXml
)
```

Parameters

document

freeProcessedXml

See Also

DocumentView Members
DocumentView Class
com.mindfusion.diagramming Namespace

DocumentView.saveTo Method

Saves the document into the specified stream.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveTo (
    OutputStream stream
)
```

Parameters

stream

A **java.io.OutputStream** instance.

See Also

DocumentView Members
DocumentView Class
com.mindfusion.diagramming Namespace

DocumentView.saveToXml Method

Saves the diagram document into the specified XML Document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToXml (
    Document document,
    boolean includeUnalteredProperties
)
```

Parameters

document

includeUnalteredProperties

See Also

DocumentView Members
DocumentView Class
com.mindfusion.diagramming Namespace

DocumentView.setCurrentPage Method

Sets the currently active page.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCurrentPage (
    DiagramPage value
)
```

Parameters

value

See Also

DocumentView Members
DocumentView Class
com.mindfusion.diagramming Namespace

DocumentView.setDocument Method

Sets the displayed diagram document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDocument (
    DiagramDocument value
)
```

Parameters

value
A DiagramDocument instance.

See Also

DocumentView Members
DocumentView Class
com.mindfusion.diagramming Namespace

Double Class

Syntax

Java
`public class Double extends Dimension2D implements Externalizable`

Inheritance Hierarchy

java.lang.Object
  java.awt.geom.Dimension2D
    com.mindfusion.diagramming.XDimension2D.Double

See Also

Double Members
com.mindfusion.diagramming Namespace

Double Members

The following tables list the members exposed by the Double type.

Public Constructors

	Name	Description
	Double	Overloaded.

Public Fields

	Name	Description
	height	
	width	

Public Methods

	Name	Description
	clone	
	getHeight	
	getWidth	
	readExternal	
	setSize	
	writeExternal	

See Also

Double Fields

Double.height Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public double height`

See Also

Double Members
Double Class
com.mindfusion.diagramming Namespace

Double.width Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public double width`

See Also

Double Members
Double Class
com.mindfusion.diagramming Namespace

Double Constructor

Overload List

Name	Description
Double ()	
Double (Dimension2D)	
Double (double, double)	

See Also

Double Class
com.mindfusion.diagramming Namespace

Double Constructor ()

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Double ()
```

See Also

Double Constructor Overload List
Double Class
com.mindfusion.diagramming Namespace

Double Constructor (Dimension2D)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Double (
    Dimension2D dimension
)
```

Parameters

dimension

See Also

Double Constructor Overload List
Double Class
com.mindfusion.diagramming Namespace

Double Constructor (double, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Double (
    double width,
    double height
)
```

Parameters

width

height

See Also

Double Constructor Overload List
Double Class
com.mindfusion.diagramming Namespace

Double Methods

Double.clone Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object clone ()
```

Return Value

See Also

Double Members
Double Class
com.mindfusion.diagramming Namespace

Double.getHeight Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public double getHeight ()
```

Return Value

See Also

Double Members
Double Class
com.mindfusion.diagramming Namespace

Double.getWidth Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public double getWidth ()
```

Return Value

See Also

Double Members
Double Class
com.mindfusion.diagramming Namespace

Double.readExternal Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

Double Members
Double Class
com.mindfusion.diagramming Namespace

Double.setSize Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSize (
    double width,
    double height
)
```

Parameters

width

height

See Also

Double Members
Double Class
com.mindfusion.diagramming Namespace

Double.writeExternal Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

Double Members
Double Class
com.mindfusion.diagramming Namespace

DraggedItem Class

Class used to hold a DiagramItem reference during drag and drop.

Syntax

Java

```
public class DraggedItem
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.DraggedItem

See Also

DraggedItem Members
com.mindfusion.diagramming Namespace

DraggedItem Members

Class used to hold a DiagramItem reference during drag and drop.

The following tables list the members exposed by the DraggedItem type.

Public Constructors

	Name	Description
	DraggedItem	Overloaded.

Public Methods

	Name	Description
	getAutoConnectDistance	Gets the maximum distance within which a link will attempt to auto-connect to a nearby node.
	getAutoConnectLinks	Gets a value indicating whether links should be automatically connected to nearby nodes when dropped.
	getItem	Gets the item that holds the dragged DiagramItem.
	getLabel	Gets the text displayed for the item.
	getNode	Gets the node that holds the dragged DiagramNode.
	getSize	Get the size of the item.
	setAutoConnectDistance	Sets the maximum distance within which a link will attempt to auto-connect to a nearby node.
	setAutoConnectLinks	Sets a value indicating whether links should be automatically connected to nearby nodes when dropped.
	setItem	Sets the item that holds the dragged DiagramItem.
	setLabel	Sets the text displayed for the item.
	setNode	Sets the node that holds the dragged DiagramNode.
	setSize	Set the size of the item.

See Also

DraggedItem Class
com.mindfusion.diagramming Namespace

DraggedItem Constructor

Overload List

Name	Description
DraggedItem (DiagramNode, Dimension2D)	Initializes a new instance of the DraggedNode class.
DraggedItem (DiagramNode, Dimension2D, String)	Initializes a new instance of the DraggedNode class.

See Also

DraggedItem Class
com.mindfusion.diagramming Namespace

DraggedItem Constructor (DiagramNode, Dimension2D)

Initializes a new instance of the DraggedNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DraggedItem (
    DiagramNode node,
    Dimension2D size
)
```

Parameters

node
The dragged DiagramNode.

size
The size of the node.

See Also

DraggedItem Constructor Overload List
DraggedItem Class
com.mindfusion.diagramming Namespace

DraggedItem Constructor (DiagramNode, Dimension2D, String)

Initializes a new instance of the DraggedNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DraggedItem (
    DiagramNode node,
    Dimension2D size,
    String label
)
```

Parameters

node
The dragged DiagramNode.

size
The size of the node.

label
The text to be displayed for the node.

See Also

DraggedItem Constructor Overload List
DraggedItem Class
com.mindfusion.diagramming Namespace

DraggedItem Methods

DraggedItem.getAutoConnectDistance Method

Gets the maximum distance within which a link will attempt to auto-connect to a nearby node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getAutoConnectDistance ()
```

Return Value

The auto-connect distance.

See Also

DraggedItem Members
DraggedItem Class
com.mindfusion.diagramming Namespace

DraggedItem.getAutoConnectLinks Method

Gets a value indicating whether links should be automatically connected to nearby nodes when dropped.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAutoConnectLinks ()
```

Return Value

true to auto-connect links, otherwise false.

See Also

DraggedItem Members
DraggedItem Class
com.mindfusion.diagramming Namespace

DraggedItem.getItem Method

Gets the item that holds the dragged DiagramItem.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem getItem ()
```

Return Value

See Also

DraggedItem Members
DraggedItem Class
com.mindfusion.diagramming Namespace

DraggedItem.getLabel Method

Gets the text displayed for the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getLabel ()
```

Return Value

See Also

DraggedItem Members
DraggedItem Class
com.mindfusion.diagramming Namespace

DraggedItem.getNode Method

Gets the node that holds the dragged DiagramNode.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode getNode ()
```

Return Value

See Also

DraggedItem Members
DraggedItem Class
com.mindfusion.diagramming Namespace

DraggedItem.getSize Method

Get the size of the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension2D getSize ()
```

Return Value

See Also

DraggedItem Members
DraggedItem Class
com.mindfusion.diagramming Namespace

DraggedItem.setAutoConnectDistance Method

Sets the maximum distance within which a link will attempt to auto-connect to a nearby node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAutoConnectDistance (
    float value
)
```

Parameters

value
The auto-connect distance.

See Also

DraggedItem Members
DraggedItem Class
com.mindfusion.diagramming Namespace

DraggedItem.setAutoConnectLinks Method

Sets a value indicating whether links should be automatically connected to nearby nodes when dropped.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAutoConnectLinks (
    boolean value
)
```

Parameters

value
true to auto-connect links, otherwise false.

See Also

DraggedItem Members
DraggedItem Class
com.mindfusion.diagramming Namespace

DraggedItem.setItem Method

Sets the item that holds the dragged DiagramItem.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setItem (
    DiagramItem value
)
```

Parameters

value

See Also

DraggedItem Members
DraggedItem Class
com.mindfusion.diagramming Namespace

DraggedItem.setLabel Method

Sets the text displayed for the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLabel (
    String value
)
```

Parameters

value

See Also

DraggedItem Members
DraggedItem Class
com.mindfusion.diagramming Namespace

DraggedItem.setNode Method

Sets the node that holds the dragged DiagramNode.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setNode (
    DiagramNode value
)
```

Parameters

value

See Also

DraggedItem Members
DraggedItem Class
com.mindfusion.diagramming Namespace

DraggedItem.setSize Method

Set the size of the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSize (
    Dimension2D value
)
```

Parameters

value

See Also

DraggedItem Members
DraggedItem Class
com.mindfusion.diagramming Namespace

DraggedItemTransferable Class

Implements drag-and-drop transfers from ItemListView.

Syntax

Java

```
public class DraggedItemTransferable implements Transferable
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.DraggedItemTransferable

See Also

DraggedItemTransferable Members
com.mindfusion.diagramming Namespace

DraggedItemTransferable Members

Implements drag-and-drop transfers from ItemListView.

The following tables list the members exposed by the DraggedItemTransferable type.

Public Constructors

	Name	Description

	DraggedItemTransferable	Initializes a new instance of the DraggedItemTransferable class.

Public Methods

	Name	Description
	getTransferData	Implements Transferable.getTransferData.
	getTransferDataFlavors	Implements Transferable.getTransferDataFlavors.
	isDataFlavorSupported	Implements Transferable.isDataFlavorSupported.

See Also

DraggedItemTransferable Class
com.mindfusion.diagramming Namespace

DraggedItemTransferable Constructor

Initializes a new instance of the DraggedItemTransferable class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DraggedItemTransferable (
    DraggedItem item
)
```

Parameters

item
A representation of the DiagramItem to transfer.

See Also

DraggedItemTransferable Class
com.mindfusion.diagramming Namespace

DraggedItemTransferable Methods

DraggedItemTransferable.getTransferData Method

Implements Transferable.getTransferData.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object getTransferData (
    DataFlavor flavor
)
```

Parameters

flavor

Return Value

See Also

DraggedItemTransferable Members
DraggedItemTransferable Class
com.mindfusion.diagramming Namespace

DraggedItemTransferable.getTransferDataFlavors Method

Implements Transferable.getTransferDataFlavors.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DataFlavor[] getTransferDataFlavors ()
```

Return Value

See Also

DraggedItemTransferable Members
DraggedItemTransferable Class
com.mindfusion.diagramming Namespace

DraggedItemTransferable.isDataFlavorSupported Method

Implements Transferable.isDataFlavorSupported.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean isDataFlavorSupported (
    DataFlavor flavor
)
```

Parameters

flavor

Return Value

See Also

DraggedItemTransferable Members
DraggedItemTransferable Class
com.mindfusion.diagramming Namespace

DraggedShape Class

Class that holds shape id and size during drag and drop operation.

Syntax

Java
`public class DraggedShape implements Serializable`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DraggedShape

See Also

DraggedShape Members
com.mindfusion.diagramming Namespace

DraggedShape Members

Class that holds shape id and size during drag and drop operation.

The following tables list the members exposed by the DraggedShape type.

Public Constructors

	Name	Description
	DraggedShape	

Public Methods

	Name	Description
	getDefaultShapeHeight	
	getDefaultShapeWidth	
	getId	

See Also

DraggedShape Class
com.mindfusion.diagramming Namespace

DraggedShape Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DraggedShape (
    String id,
    float defaultShapeWidth,
    float defaultShapeHeight
)
```

Parameters

id

defaultShapeWidth

defaultShapeHeight

See Also

DraggedShape Class
com.mindfusion.diagramming Namespace

DraggedShape Methods

DraggedShape.getDefaultShapeHeight Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getDefaultShapeHeight ()
```

Return Value

See Also

DraggedShape Members
DraggedShape Class
com.mindfusion.diagramming Namespace

DraggedShape.getDefaultShapeWidth Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getDefaultShapeWidth ()
```

Return Value

See Also

DraggedShape Members
DraggedShape Class
com.mindfusion.diagramming Namespace

DraggedShape.getId Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getId ()
```

Return Value

See Also

DraggedShape Members
DraggedShape Class
com.mindfusion.diagramming Namespace

DrawAnchorPointEvent Class

Contains the arguments passed to the DrawAnchorPoint event handlers.

Syntax

```
Java
public class DrawAnchorPointEvent extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.DrawAnchorPointEvent

See Also

DrawAnchorPointEvent Members
com.mindfusion.diagramming Namespace

DrawAnchorPointEvent Members

Contains the arguments passed to the DrawAnchorPoint event handlers.

The following tables list the members exposed by the DrawAnchorPointEvent type.

Public Constructors

	Name	Description
	DrawAnchorPointEvent	Initializes a new instance of the DrawAnchorPointEvent class.

Public Methods

	Name	Description
	getAnchorIndex	Gets the index of the anchor point within its containing pattern.
	getAnchorPattern	Gets the anchor pattern containing the anchor point being drawn.
	getGraphics	Gets a **Graphics2D** object whose methods should be used to draw the anchor point mark.
	getLocation	Gets the location of the anchor point being drawn.
	getNode	Gets the node whose anchor point is being drawn.

See Also

DrawAnchorPointEvent Class
com.mindfusion.diagramming Namespace

DrawAnchorPointEvent Constructor

Initializes a new instance of the DrawAnchorPointEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DrawAnchorPointEvent (
    Object source,
    Graphics2D graphics,
    Point2D location,
    DiagramNode node,
    AnchorPattern anchorPattern,
    int anchorIndex
)
```

Parameters

source
The source of the event.

graphics

The **Graphics2D** object that represents the target of the drawing operation.

location
The position of the anchor point, expressed in document coordinates.

node
The DiagramNode related to the event.

anchorPattern
The AnchorPattern object whose point is being drawn.

anchorIndex
The zero-based index of the anchor point being drawn within its anchor pattern.

See Also

DrawAnchorPointEvent Class
com.mindfusion.diagramming Namespace

DrawAnchorPointEvent Methods

DrawAnchorPointEvent.getAnchorIndex Method

Gets the index of the anchor point within its containing pattern.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getAnchorIndex ()
```

Return Value

An integer value specifying the zero-based index of the anchor point within its AnchorPattern.

See Also

DrawAnchorPointEvent Members
DrawAnchorPointEvent Class
com.mindfusion.diagramming Namespace

DrawAnchorPointEvent.getAnchorPattern Method

Gets the anchor pattern containing the anchor point being drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public AnchorPattern getAnchorPattern ()
```

Return Value

An instance of the AnchorPattern class.

See Also

DrawAnchorPointEvent Members
DrawAnchorPointEvent Class
com.mindfusion.diagramming Namespace

DrawAnchorPointEvent.getGraphics Method

Gets a **Graphics2D** object whose methods should be used to draw the anchor point mark.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Graphics2D getGraphics ()
```

Return Value

A **Graphics2D** instance.

See Also

DrawAnchorPointEvent Members
DrawAnchorPointEvent Class
com.mindfusion.diagramming Namespace

DrawAnchorPointEvent.getLocation Method

Gets the location of the anchor point being drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D getLocation ()
```

Return Value

A **Point2D** specifying the location of the anchor point.

See Also

DrawAnchorPointEvent Members
DrawAnchorPointEvent Class
com.mindfusion.diagramming Namespace

DrawAnchorPointEvent.getNode Method

Gets the node whose anchor point is being drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public DiagramNode getNode ()`

Return Value

An instance of the DiagramNode class.

See Also

DrawAnchorPointEvent Members
DrawAnchorPointEvent Class
com.mindfusion.diagramming Namespace

DrawCellEvent Class

Contains the arguments passed to the DrawCell event handlers.

Syntax

Java
`public class DrawCellEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.DrawCellEvent

See Also

DrawCellEvent Members
com.mindfusion.diagramming Namespace

DrawCellEvent Members

Contains the arguments passed to the DrawCell event handlers.

The following tables list the members exposed by the DrawCellEvent type.

Public Constructors

	Name	Description
	DrawCellEvent	

Public Methods

	Name	Description
	getBounds	Gets the bounding rectangle of the cell being drawn.
	getCell	Gets the cell that should be custom drawn.
	getColumn	Gets the index of the table's column that contains Cell.
	getGraphics	A **Graphics2D** object whose methods should be used to draw the cell.
	getRow	Gets the index of the table's row that contains Cell.
	getTable	Get the table that contains Cell.

See Also

DrawCellEvent Class
com.mindfusion.diagramming Namespace

DrawCellEvent Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DrawCellEvent (
    Object source,
    Graphics2D graphics,
    TableNode table,
    int column,
    int row,
    Rectangle2D bounds
)
```

Parameters

source

graphics

table

column

row

bounds

See Also

DrawCellEvent Class
com.mindfusion.diagramming Namespace

DrawCellEvent Methods

DrawCellEvent.getBounds Method

Gets the bounding rectangle of the cell being drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Rectangle2D getBounds ()
```

Return Value

A **Rectangle2D** specifying the bounding rectangle of the cell.

See Also

DrawCellEvent Members
DrawCellEvent Class
com.mindfusion.diagramming Namespace

DrawCellEvent.getCell Method

Gets the cell that should be custom drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Cell getCell ()
```

Return Value

An instance of the cell class.

See Also

DrawCellEvent Members
DrawCellEvent Class
com.mindfusion.diagramming Namespace

DrawCellEvent.getColumn Method

Gets the index of the table's column that contains Cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getColumn ()
```

Return Value

An integer value specifying the zero-based index of the column.

See Also

DrawCellEvent Members
DrawCellEvent Class
com.mindfusion.diagramming Namespace

DrawCellEvent.getGraphics Method

A **Graphics2D** object whose methods should be used to draw the cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Graphics2D getGraphics ()
```

Return Value

An instance of a class implementing the **Graphics2D** interface.

See Also

DrawCellEvent Members
DrawCellEvent Class
com.mindfusion.diagramming Namespace

DrawCellEvent.getRow Method

Gets the index of the table's row that contains Cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getRow ()
```

Return Value

An integer value specifying the zero-based index of the row.

See Also

DrawCellEvent Members
DrawCellEvent Class
com.mindfusion.diagramming Namespace

DrawCellEvent.getTable Method

Get the table that contains Cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public TableNode getTable ()
```

Return Value

An instance of the TableNode class

See Also

DrawCellEvent Members
DrawCellEvent Class
com.mindfusion.diagramming Namespace

DrawContainersBehavior Class

Implements the Behavior.DrawContainers behavior.

Syntax

```
Java
public class DrawContainersBehavior extends DrawNodesBehavior
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.DrawNodesBehavior
        com.mindfusion.diagramming.DrawContainersBehavior

See Also

DrawContainersBehavior Members
com.mindfusion.diagramming Namespace

DrawContainersBehavior Members

Implements the Behavior.DrawContainers behavior.

The following tables list the members exposed by the DrawContainersBehavior type.

Public Constructors

	Name	Description
	DrawContainersBehavior	Initializes a new instance of the DrawContainersBehavior class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	createNode	
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override. (Inherited from DrawNodesBehavior.)
	startDraw	(Inherited from DrawNodesBehavior.)
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

DrawContainersBehavior Class
com.mindfusion.diagramming Namespace

DrawContainersBehavior Constructor

Initializes a new instance of the DrawContainersBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DrawContainersBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
A DiagramView instance.

See Also

DrawContainersBehavior Class
com.mindfusion.diagramming Namespace

DrawContainersBehavior Methods

DrawContainersBehavior.createNode Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramNode createNode ()
```

Return Value

See Also

DrawContainersBehavior Members
DrawContainersBehavior Class
com.mindfusion.diagramming Namespace

DrawControlsBehavior Class

Implements the Behavior.DrawControls behavior.

Syntax

Java
`public class DrawControlsBehavior extends DrawNodesBehavior`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.DrawNodesBehavior
        com.mindfusion.diagramming.DrawControlsBehavior

See Also

DrawControlsBehavior Members
com.mindfusion.diagramming Namespace

DrawControlsBehavior Members

Implements the Behavior.DrawControls behavior.

The following tables list the members exposed by the DrawControlsBehavior type.

Public Constructors

	Name	Description
	DrawControlsBehavior	Initializes a new instance of the DrawControlsBehavior class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	createNode	DrawNodesBehavior.createNode override.
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override. (Inherited from DrawNodesBehavior.)
	startDraw	(Inherited from DrawNodesBehavior.)
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

DrawControlsBehavior Class
com.mindfusion.diagramming Namespace

DrawControlsBehavior Constructor

Initializes a new instance of the DrawControlsBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DrawControlsBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
The DiagramView this behavior will be associated with.

See Also

DrawControlsBehavior Class
com.mindfusion.diagramming Namespace

DrawControlsBehavior Methods

DrawControlsBehavior.createNode Method

DrawNodesBehavior.createNode override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected DiagramNode createNode ()
```

Return Value

A ControlNode instance.

See Also

DrawControlsBehavior Members
DrawControlsBehavior Class
com.mindfusion.diagramming Namespace

DrawFreeFormsBehavior Class

This class is used when Behavior is set to DrawFreeForms or DrawFreeShapes.

Syntax

```
Java
public class DrawFreeFormsBehavior extends DrawNodesBehavior
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.DrawNodesBehavior
        com.mindfusion.diagramming.DrawFreeFormsBehavior

See Also

DrawFreeFormsBehavior Members
com.mindfusion.diagramming Namespace

DrawFreeFormsBehavior Members

This class is used when Behavior is set to DrawFreeForms or DrawFreeShapes.

The following tables list the members exposed by the DrawFreeFormsBehavior type.

Public Constructors

	Name	Description
	DrawFreeFormsBehavior	Initializes a new instance of the **DrawFreeFormsBehavior** class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	createNode	DrawNodesBehavior.createNode override.
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override. (Inherited from DrawNodesBehavior.)
	startDraw	(Inherited from DrawNodesBehavior.)
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

DrawFreeFormsBehavior Class
com.mindfusion.diagramming Namespace

DrawFreeFormsBehavior Constructor

Initializes a new instance of the DrawFreeFormsBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DrawFreeFormsBehavior (
    DiagramView diagramView,
    boolean convertToShape
)
```

Parameters

diagramView
The DiagramView this behavior will be associated with.

convertToShape
true to convert the FreeFormNode to a ShapeNode once user finishes drawing it, or **false** otherwise.

See Also

DrawFreeFormsBehavior Class
com.mindfusion.diagramming Namespace

DrawFreeFormsBehavior Methods

DrawFreeFormsBehavior.createNode Method

DrawNodesBehavior.createNode override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected DiagramNode createNode ()
```

Return Value

An instance of the FreeFormNode class.

See Also

DrawFreeFormsBehavior Members
DrawFreeFormsBehavior Class
com.mindfusion.diagramming Namespace

DrawItemEvent Class

Contains information passed to the custom-draw events defined in DiagramListener.

Syntax

Java
`public class DrawItemEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.DrawItemEvent

See Also

DrawItemEvent Members
com.mindfusion.diagramming Namespace

DrawItemEvent Members

Contains information passed to the custom-draw events defined in DiagramListener.

The following tables list the members exposed by the DrawItemEvent type.

Public Constructors

	Name	Description
	DrawItemEvent	Initializes a new **DrawItemEvent** instance.

Public Methods

	Name	Description
	getGraphics	Gets a reference to the destination graphics object.
	getItem	Gets a reference to the item related to the event.

See Also

DrawItemEvent Class
com.mindfusion.diagramming Namespace

DrawItemEvent Constructor

Initializes a new DrawItemEvent instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DrawItemEvent (
    Object source,
    Graphics2D graphics,
    DiagramItem item
)
```

Parameters

source
The sender of this event.

graphics
The destination graphics surface.

item
The item that should be drawn.

See Also

DrawItemEvent Class
com.mindfusion.diagramming Namespace

DrawItemEvent Methods

DrawItemEvent.getGraphics Method

Gets a reference to the destination graphics object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Graphics2D getGraphics ()
```

Return Value

A reference to a **Graphics2D** object through which the custom drawing should be performed.

See Also

DrawItemEvent Members
DrawItemEvent Class
com.mindfusion.diagramming Namespace

DrawItemEvent.getItem Method

Gets a reference to the item related to the event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem getItem ()
```

Return Value

A reference to an DiagramItem -derived object.

See Also

DrawItemEvent Members
DrawItemEvent Class
com.mindfusion.diagramming Namespace

DrawLinkEvent Class

Contains the arguments passed to the drawLink event handlers.

Syntax

Java
`public class DrawLinkEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.DrawLinkEvent

See Also

DrawLinkEvent Members
com.mindfusion.diagramming Namespace

DrawLinkEvent Members

Contains the arguments passed to the drawLink event handlers.

The following tables list the members exposed by the DrawLinkEvent type.

Public Constructors

	Name	Description
	DrawLinkEvent	

Public Methods

	Name	Description
	getGraphics	Gets a **Graphics2D** object whose methods should be used to draw the link.
	getLink	Gets the DiagramLink object that should be custom drawn.
	getPoints	Gets a collection of the link's control points.
	getShadow	Gets a value indicating whether the event is raised to draw the link's shadow.

See Also

DrawLinkEvent Class
com.mindfusion.diagramming Namespace

DrawLinkEvent Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DrawLinkEvent (
    Object source,
    Graphics2D graphics,
    DiagramLink link,
    boolean shadow,
    PointList points
)
```

Parameters

source

graphics

link

shadow

points

See Also

DrawLinkEvent Class
com.mindfusion.diagramming Namespace

DrawLinkEvent Methods

DrawLinkEvent.getGraphics Method

Gets a **Graphics2D** object whose methods should be used to draw the link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Graphics2D getGraphics ()
```

Return Value

A **Graphics2D** instance.

See Also

DrawLinkEvent Members
DrawLinkEvent Class
com.mindfusion.diagramming Namespace

DrawLinkEvent.getLink Method

Gets the DiagramLink object that should be custom drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramLink getLink ()
```

Return Value

An instance of the DiagramLink class.

See Also

DrawLinkEvent Members
DrawLinkEvent Class
com.mindfusion.diagramming Namespace

DrawLinkEvent.getPoints Method

Gets a collection of the link's control points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public PointList getPoints ()
```

Return Value

An instance of the PointList class.

See Also

DrawLinkEvent Members
DrawLinkEvent Class
com.mindfusion.diagramming Namespace

DrawLinkEvent.getShadow Method

Gets a value indicating whether the event is raised to draw the link's shadow.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public boolean getShadow ()`

Return Value

true if now drawing the link's shadow; otherwise, false.

See Also

DrawLinkEvent Members
DrawLinkEvent Class
com.mindfusion.diagramming Namespace

DrawLinksBehavior Class

Implements the Behavior.DrawLinks behavior.

Syntax

Java
`public class DrawLinksBehavior extends BehaviorBase`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.DrawLinksBehavior

See Also

DrawLinksBehavior Members
com.mindfusion.diagramming Namespace

DrawLinksBehavior Members

Implements the Behavior.DrawLinks behavior.

The following tables list the members exposed by the DrawLinksBehavior type.

Public Constructors

	Name	Description
	DrawLinksBehavior	Initializes a new instance of the DrawLinksBehavior class.

Protected Fields

	Name	Description

	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override.
	startDraw	
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

DrawLinksBehavior Class
com.mindfusion.diagramming Namespace

DrawLinksBehavior Constructor

Initializes a new instance of the DrawLinksBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DrawLinksBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
A DiagramView instance.

See Also

DrawLinksBehavior Class
com.mindfusion.diagramming Namespace

DrawLinksBehavior Methods

DrawLinksBehavior.setMouseCursor Method

BehaviorBase.setMouseCursor override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected CursorHint setMouseCursor (
    Point2D point,
    ByRef<Boolean> startInteraction
)
```

Parameters

point
A Point2D instance that specifies the position of the mouse cursor.

startInteraction
true if the user is going to create, delete, modify or select a DiagramItem; **false** if mouse behavior is not considered; in this case the mouse pointer is set to a default cursor according to the background LaneGrid.

Return Value

A member of the CursorHint enumeration.

See Also

DrawLinksBehavior Members
DrawLinksBehavior Class
com.mindfusion.diagramming Namespace

DrawLinksBehavior.startDraw Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected InteractionState startDraw (
    Point2D point,
    MouseEvent e
)
```

Parameters

point

e

Return Value

See Also

DrawLinksBehavior Members
DrawLinksBehavior Class
com.mindfusion.diagramming Namespace

DrawNodeEvent Class

Contains the arguments passed to the drawNode event handlers.

Syntax

```
Java
public class DrawNodeEvent extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.DrawNodeEvent

See Also

DrawNodeEvent Members
com.mindfusion.diagramming Namespace

DrawNodeEvent Members

Contains the arguments passed to the drawNode event handlers.

The following tables list the members exposed by the DrawNodeEvent type.

Public Constructors

	Name	Description
	DrawNodeEvent	

Public Methods

	Name	Description
	getBounds	Gets the bounding rectangle of the node being drawn.
	getGraphics	Gets a **Graphics2D** object whose methods should be used to draw the node.
	getNode	Gets the DiagramNode object that should be custom drawn.
	getShadow	Gets a value indicating whether the event is raised to draw the node's shadow.

See Also

DrawNodeEvent Class
com.mindfusion.diagramming Namespace

DrawNodeEvent Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DrawNodeEvent (
    Object source,
    Graphics2D graphics,
    DiagramNode node,
    boolean shadow,
    Rectangle2D bounds
)
```

Parameters

source

graphics

node

shadow

bounds

See Also

DrawNodeEvent Class
com.mindfusion.diagramming Namespace

DrawNodeEvent Methods

DrawNodeEvent.getBounds Method

Gets the bounding rectangle of the node being drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Rectangle2D getBounds ()
```

Return Value

A **Rectangle2D** specifying the bounding rectangle of the node.

See Also

DrawNodeEvent Members
DrawNodeEvent Class
com.mindfusion.diagramming Namespace

DrawNodeEvent.getGraphics Method

Gets a **Graphics2D** object whose methods should be used to draw the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Graphics2D getGraphics ()
```

Return Value

A **Graphics2D** instance.

See Also

DrawNodeEvent Members
DrawNodeEvent Class
com.mindfusion.diagramming Namespace

DrawNodeEvent.getNode Method

Gets the DiagramNode object that should be custom drawn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramNode getNode ()
```

Return Value

An instance of the DiagramNode class.

See Also

DrawNodeEvent Members
DrawNodeEvent Class
com.mindfusion.diagramming Namespace

DrawNodeEvent.getShadow Method

Gets a value indicating whether the event is raised to draw the node's shadow.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getShadow ()
```

Return Value

true if now drawing the node's shadow; otherwise, **false**.

See Also

DrawNodeEvent Members
DrawNodeEvent Class
com.mindfusion.diagramming Namespace

DrawNodesBehavior Class

The base class for behavior types that allow drawing of nodes, but not links.

Syntax

Java

```
public abstract class DrawNodesBehavior extends BehaviorBase
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.DrawNodesBehavior
        com.mindfusion.diagramming.DrawContainersBehavior
        com.mindfusion.diagramming.DrawControlsBehavior
        com.mindfusion.diagramming.DrawFreeFormsBehavior
        com.mindfusion.diagramming.DrawShapesBehavior
        com.mindfusion.diagramming.DrawTablesBehavior
        com.mindfusion.diagramming.DrawTreeViewsBehavior

See Also

DrawNodesBehavior Members

The base class for behavior types that allow drawing of nodes, but not links.

The following tables list the members exposed by the DrawNodesBehavior type.

Protected Constructors

	Name	Description
	DrawNodesBehavior	Initializes a new instance of the DrawNodesBehavior class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	createNode	
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override.

	startDraw	
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

DrawNodesBehavior Class
com.mindfusion.diagramming Namespace

DrawNodesBehavior Constructor

Initializes a new instance of the DrawNodesBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DrawNodesBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
A DiagramView instance.

See Also

DrawNodesBehavior Class
com.mindfusion.diagramming Namespace

DrawNodesBehavior Methods

DrawNodesBehavior.createNode Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected abstract DiagramNode createNode ()
```

Return Value

See Also

DrawNodesBehavior Members
DrawNodesBehavior Class
com.mindfusion.diagramming Namespace

DrawNodesBehavior.setMouseCursor Method

BehaviorBase.setMouseCursor override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected CursorHint setMouseCursor (
    Point2D point,
    ByRef<Boolean> startInteraction
)
```

Parameters

point
A Point2D instance that specifies the position of the mouse cursor.

startInteraction
true if the user is going to create, delete, modify or select a DiagramItem; **false** if mouse behavior is not considered; in this case the mouse pointer is set to a default cursor according to the background LaneGrid.

Return Value

A member of the CursorHint enumeration.

See Also

DrawNodesBehavior Members
DrawNodesBehavior Class
com.mindfusion.diagramming Namespace

DrawNodesBehavior.startDraw Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected InteractionState startDraw (
    Point2D point,
    MouseEvent e
)
```

Parameters

point

e

Return Value

See Also

DrawNodesBehavior Members
DrawNodesBehavior Class
com.mindfusion.diagramming Namespace

DrawParams Class

Syntax

Java
`public class DrawParams`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.DrawParams

See Also

DrawParams Members
com.mindfusion.diagramming Namespace

DrawParams Members

The following tables list the members exposed by the DrawParams type.

Public Constructors

	Name	Description
	DrawParams	

Public Methods

	Name	Description
	getBrush	
	getBrushBounds	
	getGraphics	
	getIsEllipse	
	getOptions	
	getOriginalBounds	

	getPath	
	getPathDirect	
	getPen	
	getRotatedBounds	
	getRotatedPath	
	getShadow	
	getSkipDefaultDrawing	
	setBrush	
	setBrushBounds	
	setEllipse	
	setGraphics	
	setOptions	
	setOriginalBounds	
	setPath	
	setPen	
	setRotatedBounds	
	setShadow	
	setSkipDefaultDrawing	

See Also

DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DrawParams (
    DiagramNode node
)
```

Parameters

node

See Also

DrawParams Methods

DrawParams.getBrush Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Brush getBrush ()`

Return Value

the brush

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.getBrushBounds Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Rectangle2D getBrushBounds ()`

Return Value

the brushBounds

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.getGraphics Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Graphics2D getGraphics ()
```

Return Value

the graphics

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.getIsEllipse Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getIsEllipse ()
```

Return Value

the isEllipse

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.getOptions Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public RenderOptions getOptions ()
```

Return Value

the options

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.getOriginalBounds Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getOriginalBounds ()
```

Return Value

the originalBounds

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.getPath Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GeneralPath getPath ()
```

Return Value

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.getPathDirect Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GeneralPath getPathDirect ()
```

Return Value

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.getPen Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Pen getPen ()
```

Return Value

the pen

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.getRotatedBounds Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getRotatedBounds ()
```

Return Value

the rotatedBounds

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.getRotatedPath Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GeneralPath getRotatedPath ()
```

Return Value

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.getShadow Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getShadow ()
```

Return Value

the shadow

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.getSkipDefaultDrawing Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getSkipDefaultDrawing ()
```

Return Value

the skipDefaultDrawing

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.setBrush Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBrush (
    Brush brush
)
```

Parameters

brush
the brush to set

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.setBrushBounds Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBrushBounds (
    Rectangle2D brushBounds
)
```

Parameters

brushBounds
the brushBounds to set

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.setEllipse Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEllipse (
    boolean isEllipse
)
```

Parameters

isEllipse
the isEllipse to set

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.setGraphics Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setGraphics (
    Graphics2D graphics
)
```

Parameters

graphics
the graphics to set

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.setOptions Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOptions (
    RenderOptions options
)
```

Parameters

options
the options to set

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.setOriginalBounds Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOriginalBounds (
    Rectangle2D originalBounds
)
```

Parameters

originalBounds
the originalBounds to set

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.setPath Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPath (
    GeneralPath path
)
```

Parameters

path
the path to set

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.setPen Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPen (
    Pen pen
)
```

Parameters

pen
the pen to set

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.setRotatedBounds Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRotatedBounds (
    Rectangle2D rotatedBounds
)
```

Parameters

rotatedBounds
the rotatedBounds to set

See Also

DrawParams Members
DrawParams Class

DrawParams.setShadow Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShadow (
    boolean shadow
)
```

Parameters

shadow
the shadow to set

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawParams.setSkipDefaultDrawing Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSkipDefaultDrawing (
    boolean skipDefaultDrawing
)
```

Parameters

skipDefaultDrawing
the skipDefaultDrawing to set

See Also

DrawParams Members
DrawParams Class
com.mindfusion.diagramming Namespace

DrawShapesBehavior Class

Implements the Behavior.DrawShapes behavior.

Syntax

Java
`public class DrawShapesBehavior extends DrawNodesBehavior`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.DrawNodesBehavior
        com.mindfusion.diagramming.DrawShapesBehavior

See Also

DrawShapesBehavior Members
com.mindfusion.diagramming Namespace

DrawShapesBehavior Members

Implements the Behavior.DrawShapes behavior.

The following tables list the members exposed by the DrawShapesBehavior type.

Public Constructors

	Name	Description
	DrawShapesBehavior	Initializes a new instance of the DrawShapesBehavior class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	createNode	
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override. (Inherited from DrawNodesBehavior.)
	startDraw	(Inherited from DrawNodesBehavior.)
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

DrawShapesBehavior Class
com.mindfusion.diagramming Namespace

DrawShapesBehavior Constructor

Initializes a new instance of the DrawShapesBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DrawShapesBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
A DiagramView instance.

See Also

DrawShapesBehavior Class
com.mindfusion.diagramming Namespace

DrawShapesBehavior Methods

DrawShapesBehavior.createNode Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected DiagramNode createNode ()
```

Return Value

See Also

DrawShapesBehavior Members
DrawShapesBehavior Class
com.mindfusion.diagramming Namespace

DrawTablesBehavior Class

Implements the Behavior.DrawTables behavior.

Syntax

```
Java
public class DrawTablesBehavior extends DrawNodesBehavior
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.DrawNodesBehavior
        com.mindfusion.diagramming.DrawTablesBehavior

See Also

DrawTablesBehavior Members
com.mindfusion.diagramming Namespace

DrawTablesBehavior Members

Implements the Behavior.DrawTables behavior.

The following tables list the members exposed by the DrawTablesBehavior type.

Public Constructors

	Name	Description
	DrawTablesBehavior	Initializes a new instance of the DrawTablesBehavior class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	createNode	
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override. (Inherited from DrawNodesBehavior.)
	startDraw	(Inherited from DrawNodesBehavior.)
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

DrawTablesBehavior Class
com.mindfusion.diagramming Namespace

DrawTablesBehavior Constructor

Initializes a new instance of the DrawTablesBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DrawTablesBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
A DiagramView instance.

See Also

DrawTablesBehavior Class
com.mindfusion.diagramming Namespace

DrawTablesBehavior Methods

DrawTablesBehavior.createNode Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected DiagramNode createNode ()
```

Return Value

See Also

DrawTablesBehavior Members
DrawTablesBehavior Class
com.mindfusion.diagramming Namespace

DrawTreeViewsBehavior Class

Implements the Behavior.DrawTreeViews behavior.

Syntax

```
Java
public class DrawTreeViewsBehavior extends DrawNodesBehavior
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction

com.mindfusion.diagramming.BehaviorBase
com.mindfusion.diagramming.DrawNodesBehavior
com.mindfusion.diagramming.DrawTreeViewsBehavior

See Also

DrawTreeViewsBehavior Members
com.mindfusion.diagramming Namespace

DrawTreeViewsBehavior Members

Implements the Behavior.DrawTreeViews behavior.

The following tables list the members exposed by the DrawTreeViewsBehavior type.

Public Constructors

	Name	Description
	DrawTreeViewsBehavior	Initializes a new instance of the DrawTreeViewsBehavior class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	createNode	An instance of the DiagramNode class.

	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override. (Inherited from DrawNodesBehavior.)
	startDraw	(Inherited from DrawNodesBehavior.)
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

DrawTreeViewsBehavior Class
com.mindfusion.diagramming Namespace

DrawTreeViewsBehavior Constructor

Initializes a new instance of the DrawTreeViewsBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DrawTreeViewsBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
The DiagramView this behavior will be associated with.

See Also

DrawTreeViewsBehavior Class
com.mindfusion.diagramming Namespace

DrawTreeViewsBehavior Methods

DrawTreeViewsBehavior.createNode Method

An instance of the DiagramNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramNode createNode ()
```

Return Value

See Also

DrawTreeViewsBehavior Members
DrawTreeViewsBehavior Class
com.mindfusion.diagramming Namespace

DummyNode Class

Represents the origin and/or destination of an unconnected DiagramLink.

Syntax

Java
`public class DummyNode extends DiagramNode`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItem
    com.mindfusion.diagramming.DiagramNode
      com.mindfusion.diagramming.DummyNode

See Also

DummyNode Members
com.mindfusion.diagramming Namespace

DummyNode Members

Represents the origin and/or destination of an unconnected DiagramLink.

The following tables list the members exposed by the DummyNode type.

Public Constructors

	Name	Description
	DummyNode	

Protected Fields

	Name	Description
	allowIncomingLinks	(Inherited from DiagramNode.)
	allowOutgoingLinks	(Inherited from DiagramNode.)
	anchorPattern	(Inherited from DiagramNode.)

	AV_Cancel	(Inherited from DiagramNode.)
	AV_EndModIncoming	(Inherited from DiagramNode.)
	AV_EndModOutgoing	(Inherited from DiagramNode.)
	AV_StartModIncoming	(Inherited from DiagramNode.)
	AV_StartModOutgoing	(Inherited from DiagramNode.)
	AV_UpdateIncoming	(Inherited from DiagramNode.)
	AV_UpdateOutgoing	(Inherited from DiagramNode.)
	AV_UpdIntscIncoming	(Inherited from DiagramNode.)
	AV_UpdIntscOutgoing	(Inherited from DiagramNode.)
	AV_UpdPosIncoming	(Inherited from DiagramNode.)
	AV_UpdPosOutgoing	(Inherited from DiagramNode.)
	bounds	(Inherited from DiagramNode.)
	brush	(Inherited from DiagramItem.)
	cycleDetected	(Inherited from DiagramItem.)
	cycleProtect	(Inherited from DiagramItem.)
	enabledHandles	(Inherited from DiagramNode.)
	handlesStyle	(Inherited from DiagramNode.)
	incomingLinks	(Inherited from DiagramNode.)
	masterGroup	(Inherited from DiagramNode.)
	modifyDX	(Inherited from DiagramItem.)
	modifyDY	(Inherited from DiagramItem.)
	modifyHandle	(Inherited from DiagramItem.)
	modifying	(Inherited from DiagramItem.)
	obstacle	(Inherited from DiagramNode.)
	outgoingLinks	(Inherited from DiagramNode.)
	pen	(Inherited from DiagramItem.)
	ptEnd	(Inherited from DiagramItem.)
	ptMdfLast	(Inherited from DiagramItem.)
	ptOrg	(Inherited from DiagramItem.)
	ptSavedEnd	(Inherited from DiagramItem.)
	ptSavedOrg	(Inherited from DiagramItem.)
	savedBounds	(Inherited from DiagramNode.)
	subordinateGroup	(Inherited from DiagramItem.)

Public Methods

	Name	Description
	addLabel	Overloaded. (Inherited from DiagramNode.)
	as	Down-casts the item to specified type. (Inherited from DiagramItem.)
	attachTo	Overloaded. (Inherited from DiagramNode.)
	clone	Creates a copy of this item. (Inherited from DiagramItem.)
	containsPoint	
	createConnectionPoint	
	detach	Detaches a node from its master group. (Inherited from DiagramNode.)
	getAllIncomingLinks	Gets a collection of all links entering this node. (Inherited from DiagramNode.)
	getAllLinks	Gets all links connected to this node. (Inherited from DiagramNode.)
	getAllOutgoingLinks	Gets a collection of all links going out of this node. (Inherited from DiagramNode.)
	getAllowIncomingLinks	Gets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	getAllowOutgoingLinks	Gets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	getAnchorPattern	Gets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)
	getBounds	Gets the node location and size. (Inherited from DiagramNode.)
	getBrush	Gets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	getCenter	Returns the center point of this node. (Inherited from DiagramNode.)
	getConstraints	Gets the movement and size constraints applied to a node. (Inherited from DiagramNode.)
	getContainer	Gets the parent ContainerNode containing this node. (Inherited from DiagramNode.)
	getEffectiveBrush	Gets the effective brush of the item. (Inherited from DiagramItem.)
	getEffectiveFont	Gets the currently effective font of the item. This property returns getFont if it is not null, or a font with the DiagramItemStyle.getFontFamily, DiagramItemStyle.getFontSize, and DiagramItemStyle.getFontStyle properties of the item's style. (Inherited from DiagramItem.)

	getEffectivePen	Gets the effective pen of the item. (Inherited from DiagramItem.)
	getEffectiveShadowBrush	Creates a Brush object representing the currently effective shadow brush of the item. This method returns a system brush corresponding to the item's getShadowBrush if the item's **getShadowBrush** is not null, or a system brush corresponding to the DiagramItemStyle.getShadowBrush property of the item's style. (Inherited from DiagramItem.)
	getEffectiveTextBrush	Gets the effective text brush of the item. (Inherited from DiagramItem.)
	getEffects	Gets a collection with all effects applied to this node. (Inherited from DiagramNode.)
	getEnabledHandles	Gets a combination of NodeHandleType members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	getExpandable	Gets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	getExpanded	Gets a value indicating whether the tree branch that starts from a node is expanded or collapsed. (Inherited from DiagramNode.)
	getFont	Gets the font used to draw the text of an item. (Inherited from DiagramItem.)
	getHandlesStyle	Gets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	getHyperLink	Gets the hyperlink associated with an item. (Inherited from DiagramItem.)
	getId	Gets user-defined identifier associated with this item. (Inherited from DiagramItem.)
	getIgnoreLayout	Gets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	getIncomingLinks	Gets the links coming into a node. (Inherited from DiagramNode.)
	getIntersection	
	getLabels	Returns the list of supplementary labels displayed by this node. (Inherited from DiagramNode.)
	getLayerIndex	Gets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	getLayoutTraits	Returns a hashtable containing properties specific to layout algorithms. (Inherited from DiagramItem.)
	getLocalCenter	(Inherited from DiagramNode.)

	getLocked	Gets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	getMasterGroup	Gets the hierarchical group in which this node is a subordinate item. (Inherited from DiagramNode.)
	getMasterItem	Returns the node's **Container** or main item of **MasterGroup**. (Inherited from DiagramNode.)
	getNearestBorderPoint	DiagramNode.getNearestBorderPoint override.
	getObstacle	Gets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	getOpacity	Gets the opacity of this item. (Inherited from DiagramItem.)
	getOutgoingLinks	Gets the links going out from a node. (Inherited from DiagramNode.)
	getParent	Gets the diagram that contains this item. (Inherited from DiagramItem.)
	getPen	Gets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	getPrintable	Gets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
S	getRotatedBounds	Gets the bounding rectangle of this node, when it is rotated at the specified angle around the specified pivot. (Inherited from DiagramNode.)
	getRotationAngle	Gets the rotation angle of this node. (Inherited from DiagramNode.)
	getRuntimeIndex	For internal use. (Inherited from DiagramItem.)
	getSelected	Gets a value indicating whether this item is selected. (Inherited from DiagramItem.)
	getShadowBrush	Gets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	getShadowOffsetX	Gets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getShadowOffsetY	Gets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getStyle	Gets the style associated with the item. (Inherited from DiagramItem.)
	getSubordinateGroup	Gets the group of subordinated items attached to this one. (Inherited from DiagramItem.)
	getTag	Gets user-defined data assigned to an item. (Inherited from DiagramItem.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	getTextPadding	Gets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)

	getToolTip	Gets the tooltip text displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	getVisible	Gets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	getWeight	Gets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	getZIndex	Gets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	hasSubordinates	Checks whether there are any nodes attached to this item. (Inherited from DiagramItem.)
	hitTest	Returns the diagram item that contains the specified point. (Inherited from DiagramItem.)
	hitTestHandle	DiagramItem.hitTestHandle override.
	labelFromPoint	Returns the label whose layout rectangle contains the specified point. (Inherited from DiagramNode.)
	moveTo	Moves a node to the specified location. (Inherited from DiagramNode.)
S	nodesIntersect	Determines whether two nodes intersect. (Inherited from DiagramNode.)
	onDragOut	Invoked when a diagram item is being dragged out of this node. (Inherited from DiagramNode.)
	onDragOver	Invoked when a diagram item is being dragged over this node. (Inherited from DiagramNode.)
	onDropOver	Invoked when a diagram item is dropped over this node. (Inherited from DiagramNode.)
	query	Returns the items that can be reached from this item by following the path specified in the given query expression. (Inherited from DiagramItem.)
	readExternal	Implements Externalizable. (Inherited from DiagramNode.)
	removeLabel	Removes the specified label from this node. (Inherited from DiagramNode.)
	resize	Sets the size of a node. (Inherited from DiagramNode.)
	setAllowIncomingLinks	Sets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	setAllowOutgoingLinks	Sets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	setAnchorPattern	Sets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)
	setBounds	Overloaded. (Inherited from DiagramNode.)
	setBoundsDirect	For internal use. (Inherited from DiagramNode.)

	setBrush	Sets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	setConstraints	Sets constraints to the node size and movement direction. The constraints are applied when a user modifies the node interactively. They are not checked when the position of a node is set programmatically. (Inherited from DiagramNode.)
	setEnabledHandles	Sets a combination of **NodeHandleType** members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	setExpandable	Sets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	setExpanded	Expands or collapses the tree branch that starts from a node. (Inherited from DiagramNode.)
	setExpandedFlag	Changes the "expanded" flag without actually expanding or collapsing the tree branch that starts from a node. (Inherited from DiagramNode.)
	setFont	Sets the font used to draw the text of an item. (Inherited from DiagramItem.)
	setHandlesStyle	Sets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	setHyperLink	Sets the hyperlink associated with an item. (Inherited from DiagramItem.)
	setId	Assigns user-defined identifier to this item. (Inherited from DiagramItem.)
	setIgnoreLayout	Sets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	setLayerIndex	Sets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	setLocked	Sets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	setObstacle	Sets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	setOpacity	Sets the opacity of this item. (Inherited from DiagramItem.)
	setPen	Sets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	setPrintable	Sets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	setRotationAngle	Sets the rotation angle of a node. (Inherited from DiagramNode.)

	setSelected	Selects or deselects an item. (Inherited from DiagramItem.)
	setShadowBrush	Sets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	setShadowOffsetX	Sets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShadowOffsetY	Sets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setStyle	Sets the style associated with the item. (Inherited from DiagramItem.)
	setTag	Assigns user-defined data to an item. If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event. (Inherited from DiagramItem.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	setTextPadding	Sets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	setToolTip	Sets the tooltip text that should be displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	setVisible	Sets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	setWeight	Sets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	setZIndex	Sets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	writeExternal	Implements Externalizable. (Inherited from DiagramNode.)
	zBottom	Moves an item to the bottom of the Z order. (Inherited from DiagramItem.)
	zLevelDown	Moves an item down in the Z order. (Inherited from DiagramItem.)
	zLevelUp	Moves an item up in the Z order. (Inherited from DiagramItem.)
	zTop	Moves an item to the top of the Z order. (Inherited from DiagramItem.)

Protected Methods

	Name	Description
	allowCreate	DiagramItem.allowCreate override. (Inherited from DiagramNode.)
	allowModify	(Inherited from DiagramNode.)
	allowModifyImpl	(Inherited from DiagramNode.)

	cancelModify	DiagramItem.cancelModify override. Invoked when the interactive modification of this node has been canceled. (Inherited from DiagramNode.)
	completeCreate	DiagramItem.completeCreate override. (Inherited from DiagramNode.)
	completeModify	(Inherited from DiagramNode.)
	constraintsInfringed	(Inherited from DiagramNode.)
	createProperties	DiagramItem.createProperties override. (Inherited from DiagramNode.)
	createState	DiagramItem.createState override. (Inherited from DiagramNode.)
	draw	
	drawLocal	Override in a derived class to provide implementation specific drawing for the node. (Inherited from DiagramNode.)
	drawShadow	
	drawShadowLocal	Override in a derived class to provide implementation specific drawing for the shadow of the node. (Inherited from DiagramNode.)
	getLocalBounds	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getLocalBoundsD	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getMeasureUnit	(Inherited from DiagramItem.)
	getRepaintRect	DiagramItem.getRepaintRect override. (Inherited from DiagramNode.)
	getValue	Gets the effective value of the style property with the specified name. (Inherited from DiagramItem.)
	groupContains	(Inherited from DiagramNode.)
	loadFromJson	Loads the node from a JSON object. (Inherited from DiagramNode.)
	loadFromXml	(Inherited from DiagramNode.)
	move	(Inherited from DiagramNode.)
	onAdd	Called when an item is added to a Diagram, either by the user, programmatically or by undo / redo. (Inherited from DiagramItem.)
	onChangeFont	(Inherited from DiagramItem.)
	onChangeTextPadding	(Inherited from DiagramItem.)
	onChildModified	Called when a group child node has been modified. Override this method if you need to know when a node from the **SubordinateGroup** is modified. (Inherited from DiagramItem.)

	onClick	Invoked when the user clicks this item. (Inherited from DiagramItem.)
	onDoubleClick	Invoked when the user double-clicks this item. (Inherited from DiagramItem.)
	onLoad	Called when this item is loaded from a file. (Inherited from DiagramItem.)
	onMeasureUnitChanged	Called when the diagram's MeasureUnit changes. (Inherited from DiagramItem.)
	onModify	Called when an item is modified (Inherited from DiagramNode.)
	onRemove	Called when an item is removed from a **Diagram**, either by the user, programmatically or by undo / redo. (Inherited from DiagramNode.)
	onRotationAngleChanged	Called when the node's rotation angle changes. (Inherited from DiagramNode.)
	onStyleChanged	Invoked when the associated style or theme have changed. (Inherited from DiagramItem.)
	onStyleFontChanged	Invoked when font property values of an associated style change. (Inherited from DiagramItem.)
	onUpdateBounds	
	parentConstraintsInfringed	(Inherited from DiagramNode.)
	putExpandable	(Inherited from DiagramNode.)
	putSelected	(Inherited from DiagramItem.)
	rectFromPoints	(Inherited from DiagramNode.)
	repaint	Overloaded. (Inherited from DiagramItem.)
	resizeToFitImage	(Inherited from DiagramNode.)
	restoreProperties	DiagramItem.restoreProperties override. (Inherited from DiagramNode.)
	restoreState	DiagramItem.restoreState override. (Inherited from DiagramNode.)
	saveProperties	DiagramItem.saveProperties override. (Inherited from DiagramNode.)
	saveState	DiagramItem.saveState override. (Inherited from DiagramNode.)
	saveToJson	Saves the node as a JSON object. (Inherited from DiagramNode.)
	saveToXml	(Inherited from DiagramNode.)
	scaleElements	Scales the node's elements by specified amount. (Inherited from DiagramNode.)
	setDiagramDirty	Marks the diagram as changed. (Inherited from DiagramItem.)

	setReflexive	Invoked to let a node set the shape of a reflexive link connected to it. (Inherited from DiagramNode.)
	shouldRender	Determines whether the item is rendered in the current context. (Inherited from DiagramItem.)
	shouldRenderAnchors	Determines whether the node should render its anchor points. (Inherited from DiagramNode.)
	startCreate	DiagramItem.startCreate override. (Inherited from DiagramNode.)
	startModify	DiagramItem.startModify override. Invoked when the user starts modifying this node interactively. (Inherited from DiagramNode.)
	updateCreate	DiagramItem.updateCreate override. (Inherited from DiagramNode.)
	updateLinkPositions	(Inherited from DiagramNode.)
	updateModify	DiagramItem.updateModify override. Invoked during interactive modification of this node. (Inherited from DiagramNode.)

See Also

DummyNode Class
com.mindfusion.diagramming Namespace

DummyNode Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DummyNode (
    Diagram flowChart
)
```

Parameters

flowChart

See Also

DummyNode Class
com.mindfusion.diagramming Namespace

DummyNode Methods

DummyNode.containsPoint Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean containsPoint (
    Point2D point
)
```

Parameters

point

Return Value

See Also

DummyNode Members
DummyNode Class
com.mindfusion.diagramming Namespace

DummyNode.createConnectionPoint Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ConnectionPoint createConnectionPoint (
    DiagramLink link,
    Point2D point,
    boolean incoming
)
```

Parameters

link

point

incoming

Return Value

See Also

DummyNode Members
DummyNode Class
com.mindfusion.diagramming Namespace

DummyNode.draw Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void draw (
    Graphics2D g,
    RenderOptions options
)
```

Parameters

g

options

See Also

DummyNode Members
DummyNode Class
com.mindfusion.diagramming Namespace

DummyNode.drawShadow Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void drawShadow (
    Graphics2D g,
    RenderOptions options
)
```

Parameters

g

options

See Also

DummyNode Members
DummyNode Class
com.mindfusion.diagramming Namespace

DummyNode.getIntersection Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D getIntersection (
    Point2D ptOrg,
    Point2D ptEnd
)
```

Parameters

ptOrg

ptEnd

Return Value

See Also

DummyNode Members
DummyNode Class
com.mindfusion.diagramming Namespace

DummyNode.getNearestBorderPoint Method

DiagramNode.getNearestBorderPoint override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D getNearestBorderPoint (
    Point2D point
)
```

Parameters

point
A **Point2D** instance.

Return Value

DummyNode returns the same point as the one specified as argument.

See Also

DummyNode Members
DummyNode Class
com.mindfusion.diagramming Namespace

DummyNode.hitTestHandle Method

DiagramItem.hitTestHandle override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public AdjustmentHandle hitTestHandle (
    Point2D point
)
```

Parameters

point

Return Value

See Also

DummyNode Members
DummyNode Class
com.mindfusion.diagramming Namespace

DummyNode.onUpdateBounds Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void onUpdateBounds (
    Rectangle2D oldBounds
)
```

Parameters

oldBounds

See Also

DummyNode Members
DummyNode Class
com.mindfusion.diagramming Namespace

EditCellTextEvent Class

Contains the arguments passed to the cellTextEdited event handlers.

Syntax

```
Java
public class EditCellTextEvent extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.EditCellTextEvent

See Also

EditCellTextEvent Members
com.mindfusion.diagramming Namespace

EditCellTextEvent Members

Contains the arguments passed to the cellTextEdited event handlers.

The following tables list the members exposed by the EditCellTextEvent type.

Public Constructors

	Name	Description
	EditCellTextEvent	Initializes a new instance of the EditCellTextEvent class.

Public Methods

	Name	Description
	getCell	Gets the cell whose text has been edited.
	getColumn	Gets the index of the table's column that contains the Cell object.
	getNewText	Gets the text that has just been entered by the user.
	getOldText	Gets the text that had been displayed in the cell before the user edited it.
	getRow	Gets the index of the table's row that contains the **Cell** object.

See Also

EditCellTextEvent Class
com.mindfusion.diagramming Namespace

EditCellTextEvent Constructor

Initializes a new instance of the EditCellTextEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public EditCellTextEvent (
    Object source,
    Cell cell,
    string oldText,
```

```
    string newText,
    int column,
    int row
)
```

Parameters

source
The source of the event.

cell
The cell related to the event.

oldText
The old text of the cell.

newText
The new text of the cell.

column
The zero-based index of the table column related to the event.

row
The zero-based index of the table row related to the event.

See Also

EditCellTextEvent Class
com.mindfusion.diagramming Namespace
TableNode.setCell Method
TableNode.getCell Method

EditCellTextEvent Methods

EditCellTextEvent.getCell Method

Gets the cell whose text has been edited.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Cell getCell ()
```

Return Value

A Cell object.

See Also

EditCellTextEvent Members
EditCellTextEvent Class
com.mindfusion.diagramming Namespace

EditCellTextEvent.getColumn Method

Gets the index of the table's column that contains the Cell object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getColumn ()
```

Return Value

An integer value specifying the zero-based index of the column.

See Also

EditCellTextEvent Members
EditCellTextEvent Class
com.mindfusion.diagramming Namespace

EditCellTextEvent.getNewText Method

Gets the text that has just been entered by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getNewText ()
```

Return Value

A string specifying the new text of the cell.

See Also

EditCellTextEvent Members
EditCellTextEvent Class
com.mindfusion.diagramming Namespace

EditCellTextEvent.getOldText Method

Gets the text that had been displayed in the cell before the user edited it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getOldText ()
```

Return Value

A string specifying the old text of the cell.

See Also

EditCellTextEvent Members
EditCellTextEvent Class
com.mindfusion.diagramming Namespace

EditCellTextEvent.getRow Method

Gets the index of the table's row that contains the Cell object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getRow ()
```

Return Value

An integer value specifying the zero-based index of the row.

See Also

EditCellTextEvent Members
EditCellTextEvent Class
com.mindfusion.diagramming Namespace

EditLinkTextEvent Class

Contains the arguments passed to DiagramListener.linkTextEdited handlers.

Syntax

Java

```
public class EditLinkTextEvent extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.EditLinkTextEvent

See Also

EditLinkTextEvent Members

Contains the arguments passed to DiagramListener.linkTextEdited handlers.

The following tables list the members exposed by the EditLinkTextEvent type.

Public Constructors

	Name	Description
	EditLinkTextEvent	Initializes a new instance of the **EditLinkTextEvent** class.

Public Methods

	Name	Description
	getLabel	Gets a LinkLabel related to this event.
	getLink	Gets the link whose text has been edited.
	getNewText	Gets the text that has just been entered by the user.
	getOldText	Gets the text of the link that had been displayed before the user edited it.

See Also

EditLinkTextEvent Class
com.mindfusion.diagramming Namespace

EditLinkTextEvent Constructor

Initializes a new instance of the EditLinkTextEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public EditLinkTextEvent (
    Object source,
    DiagramLink link,
    string oldText,
    string newText
)
```

Parameters

source

link
The link whose text is edited.

oldText

The old value of the link's label.

newText
The new value of the link's label.

See Also

EditLinkTextEvent Class
com.mindfusion.diagramming Namespace

EditLinkTextEvent Methods

EditLinkTextEvent.getLabel Method

Gets a LinkLabel related to this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkLabel getLabel ()
```

Return Value

A LinkLabel reference.

See Also

EditLinkTextEvent Members
EditLinkTextEvent Class
com.mindfusion.diagramming Namespace

EditLinkTextEvent.getLink Method

Gets the link whose text has been edited.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink getLink ()
```

Return Value

A DiagramLink object.

See Also

EditLinkTextEvent Members
EditLinkTextEvent Class
com.mindfusion.diagramming Namespace

EditLinkTextEvent.getNewText Method

Gets the text that has just been entered by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getNewText ()
```

Return Value

A string specifying the new text.

See Also

EditLinkTextEvent Members
EditLinkTextEvent Class
com.mindfusion.diagramming Namespace

EditLinkTextEvent.getOldText Method

Gets the text of the link that had been displayed before the user edited it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getOldText ()
```

Return Value

A string specifying the old text of the link.

See Also

EditLinkTextEvent Members
EditLinkTextEvent Class
com.mindfusion.diagramming Namespace

EditNodeTextEvent Class

Contains the arguments passed to the nodeTextEdited event handlers.

Syntax

Java
`public class EditNodeTextEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.EditNodeTextEvent

See Also

EditNodeTextEvent Members
com.mindfusion.diagramming Namespace

EditNodeTextEvent Members

Contains the arguments passed to the nodeTextEdited event handlers.

The following tables list the members exposed by the EditNodeTextEvent type.

Public Constructors

	Name	Description
	EditNodeTextEvent	Initializes a new instance of the EditNodeTextEvent class.

Public Methods

	Name	Description
	getLabel	Gets a NodeLabel related to this event.
	getNewText	Gets the text that has just been entered by the user.
	getNode	Gets the node whose text has been edited.
	getOldText	Gets the text that had been displayed in the node before the user edited it.

See Also

EditNodeTextEvent Class
com.mindfusion.diagramming Namespace

EditNodeTextEvent Constructor

Initializes a new instance of the EditNodeTextEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public EditNodeTextEvent (
    Object source,
    DiagramNode node,
    string oldText,
    string newText
)
```

Parameters

source
The source of the event.

node
The DiagramNode related to the event.

oldText
The old text of the node.

newText
The new text of the node.

See Also

EditNodeTextEvent Class
com.mindfusion.diagramming Namespace

EditNodeTextEvent Methods

EditNodeTextEvent.getLabel Method

Gets a NodeLabel related to this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeLabel getLabel ()
```

Return Value

A NodeLabel instance.

Remarks

This property is set to **null** when the user edits node's main Text. It has a value only if user edits a supplementary node label.

See Also

EditNodeTextEvent Members
EditNodeTextEvent Class
com.mindfusion.diagramming Namespace
DiagramNode.addLabel Method

EditNodeTextEvent.getNewText Method

Gets the text that has just been entered by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getNewText ()
```

Return Value

A string specifying the new text of the node.

See Also

EditNodeTextEvent Members
EditNodeTextEvent Class
com.mindfusion.diagramming Namespace

EditNodeTextEvent.getNode Method

Gets the node whose text has been edited.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode getNode ()
```

Return Value

An instance of the DiagramNode class.

See Also

EditNodeTextEvent Members
EditNodeTextEvent Class
com.mindfusion.diagramming Namespace

EditNodeTextEvent.getOldText Method

Gets the text that had been displayed in the node before the user edited it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getOldText ()
```

Return Value

A string specifying the old text of the node.

See Also

EditNodeTextEvent Members
EditNodeTextEvent Class
com.mindfusion.diagramming Namespace

EditTextCmd Class

Changes the text of a DiagramItem.

Syntax

Java
`public class EditTextCmd extends Command`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.EditTextCmd

See Also

EditTextCmd Members
com.mindfusion.diagramming Namespace

EditTextCmd Members

Changes the text of a DiagramItem.

The following tables list the members exposed by the EditTextCmd type.

Public Constructors

	Name	Description
	EditTextCmd	Initializes a new instance of the EditTextCmd class.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	Carries out the command action.

	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	Redoes the command action.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	Undoes the command.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

EditTextCmd Class
com.mindfusion.diagramming Namespace

EditTextCmd Constructor

Initializes a new instance of the EditTextCmd class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public EditTextCmd (
    InplaceEditable item,
    String newText
)
```

Parameters

item
The DiagramItem whose text to change.

newText
A string specifying the new text.

See Also

EditTextCmd Class
com.mindfusion.diagramming Namespace

EditTextCmd Methods

EditTextCmd.execute Method

Carries out the command action.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled

See Also

EditTextCmd Members
EditTextCmd Class
com.mindfusion.diagramming Namespace

EditTextCmd.redo Method

Redoes the command action.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void redo ()
```

See Also

EditTextCmd Members
EditTextCmd Class
com.mindfusion.diagramming Namespace

EditTextCmd.undo Method

Undoes the command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public void undo ()
```

See Also

EditTextCmd Members
EditTextCmd Class
com.mindfusion.diagramming Namespace

EditTreeItemTextEvent Class

Contains the arguments passed to DiagramListener.treeItemTextEdited handlers.

Syntax

Java
`public class EditTreeItemTextEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.EditTreeItemTextEvent

See Also

EditTreeItemTextEvent Members
com.mindfusion.diagramming Namespace

EditTreeItemTextEvent Members

Contains the arguments passed to DiagramListener.treeItemTextEdited handlers.

The following tables list the members exposed by the EditTreeItemTextEvent type.

Public Constructors

	Name	Description
	EditTreeItemTextEvent	

Public Methods

	Name	Description
	getItem	
	getNewText	
	getOldText	

See Also

EditTreeItemTextEvent Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public EditTreeItemTextEvent (
    Object source,
    TreeViewItem item,
    String oldText,
    String newText
)
```

Parameters

source

item

oldText

newText

See Also

EditTreeItemTextEvent Class
com.mindfusion.diagramming Namespace

EditTreeItemTextEvent Methods

EditTreeItemTextEvent.getItem Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeViewItem getItem ()
```

Return Value

See Also

EditTreeItemTextEvent Members
EditTreeItemTextEvent Class
com.mindfusion.diagramming Namespace

EditTreeItemTextEvent.getNewText Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getNewText ()
```

Return Value

See Also

EditTreeItemTextEvent Members
EditTreeItemTextEvent Class
com.mindfusion.diagramming Namespace

EditTreeItemTextEvent.getOldText Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getOldText ()
```

Return Value

See Also

EditTreeItemTextEvent Members
EditTreeItemTextEvent Class
com.mindfusion.diagramming Namespace

EffectPhase Enumeration

The members of this enumeration specify the rendering phase during which an effect application is requested.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public enum EffectPhase
```

Members

	Member name	Description
	AfterFill	Indicates that the **NodeEffect.apply** method is invoked after the target node is filled.
	AfterOutline	Indicates that the **NodeEffect.apply** method is invoked after the target node is stroked.
	BeforeFill	Indicates that the **NodeEffect.apply** method is invoked before the target node is filled.

See Also

com.mindfusion.diagramming Namespace

ElementTemplate Class

This is the base class for the elements that can be used in Shape definitions. You will use its descendants - LineTemplate, ArcTemplate and BezierTemplate - when defining custom shapes.

Syntax

Java
`public abstract class ElementTemplate`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ElementTemplate
    com.mindfusion.diagramming.ArcTemplate
    com.mindfusion.diagramming.BezierTemplate
    com.mindfusion.diagramming.LineTemplate
    com.mindfusion.diagramming.RoundRectangleTemplate

See Also

ElementTemplate Members
com.mindfusion.diagramming Namespace

ElementTemplate Members

This is the base class for the elements that can be used in Shape definitions. You will use its descendants - LineTemplate, ArcTemplate and BezierTemplate - when defining custom shapes.

The following tables list the members exposed by the ElementTemplate type.

Public Constructors

	Name	Description
	ElementTemplate	

Public Methods

	Name	Description
	getColor	Gets the color of this element.
	getDashStyle	
	getWidth	
	setColor	
	setDashStyle	
	setWidth	

Protected Methods

	Name	Description
	getElementPen	Gets a pen used to render the element. If no pen properties are explicitly specified for this element, returns the pen passed as an argument.

See Also

ElementTemplate Class
com.mindfusion.diagramming Namespace

ElementTemplate Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public ElementTemplate ()`

See Also

ElementTemplate Class
com.mindfusion.diagramming Namespace

ElementTemplate Methods

ElementTemplate.getColor Method

Gets the color of this element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getColor ()
```

Return Value

A **java.awt.Color** instance.

Remarks

If this value is **null**, the element is drawn using the color assigned to the ShapeNode's Pen.

See Also

ElementTemplate Members
ElementTemplate Class
com.mindfusion.diagramming Namespace

ElementTemplate.getDashStyle Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DashStyle getDashStyle ()
```

Return Value

See Also

ElementTemplate Members
ElementTemplate Class
com.mindfusion.diagramming Namespace

ElementTemplate.getElementPen Method

Gets a pen used to render the element. If no pen properties are explicitly specified for this element, returns the pen passed as an argument.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Pen getElementPen (
    Pen pen
)
```

Parameters

pen

The Pen object specifying the base pen.

Return Value

See Also

ElementTemplate Members
ElementTemplate Class
com.mindfusion.diagramming Namespace

ElementTemplate.getWidth Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getWidth ()
```

Return Value

See Also

ElementTemplate Members
ElementTemplate Class
com.mindfusion.diagramming Namespace

ElementTemplate.setColor Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setColor (
    Color color
)
```

Parameters

color
A **java.awt.Color** instance.

Remarks

If this value is null, the element is drawn using the color assigned to the ShapeNode's Pen.

See Also

ElementTemplate Members
ElementTemplate Class

ElementTemplate.setDashStyle Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDashStyle (
    DashStyle dashStyle
)
```

Parameters

dashStyle

See Also

ElementTemplate Members
ElementTemplate Class
com.mindfusion.diagramming Namespace

ElementTemplate.setWidth Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setWidth (
    float width
)
```

Parameters

width

See Also

ElementTemplate Members
ElementTemplate Class
com.mindfusion.diagramming Namespace

ElementTemplate.toDOM Method

Overload List

Name	Description
ElementTemplate.toDOM (Document)	
ElementTemplate.toDOM (Document, ElementTemplate[], String)	

See Also

ElementTemplate Members
ElementTemplate Class
com.mindfusion.diagramming Namespace

ElementTemplate.toDOM Method (Document)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element toDOM (
    Document owner
)
```

Parameters

owner

Return Value

See Also

toDOM Method Overload List
ElementTemplate Members
ElementTemplate Class
com.mindfusion.diagramming Namespace

ElementTemplate.toDOM Method (Document, ElementTemplate[], String)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Element toDOM (
    Document owner,
    ElementTemplate[] outline,
    string name
)
```

Parameters

owner

outline

name

Return Value

See Also

toDOM Method Overload List
ElementTemplate Members
ElementTemplate Class
com.mindfusion.diagramming Namespace

ExpandButtonAction Enumeration

The members of this enumeration specify what action is triggered by the +/- buttons that are displayed near expandable nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum ExpandButtonAction`

Members

	Member name	Description
	ExpandTreeBranch	Expands or collapses the children of a node in a tree-like diagram and raises the treeExpanded or treeCollapsed event.
	RaiseEvents	Raises the expandButtonClicked event.

See Also

com.mindfusion.diagramming Namespace

ExpandButtonPosition Enumeration

The members of this enumeration specify possible locations for expand/collapse buttons.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum ExpandButtonPosition`

Members

	Member name	Description
	OuterBottom	Place expand/collapse buttons at the bottom side of their nodes.
	OuterLeft	Place expand/collapse buttons at the left-hand side of their nodes.
	OuterLowerLeft	Place expand/collapse buttons at the lower-left corner of their nodes.
	OuterLowerRight	Place expand/collapse buttons at the lower-right corner of their nodes.
	OuterRight	Place expand/collapse buttons at the right-hand side of their nodes.
	OuterTop	Place expand/collapse buttons at the top side of their nodes.
	OuterUpperLeft	Place expand/collapse buttons at the upper-left corner of their nodes.
	OuterUpperRight	Place expand/collapse buttons at the upper-right corner of their nodes.

See Also

com.mindfusion.diagramming Namespace

ExpandHeaderRowCmd Class

Implements undo and redo of collapsing or expanding the header row of a table section.

Syntax

Java
`public class ExpandHeaderRowCmd extends Command`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.ExpandHeaderRowCmd

See Also

ExpandHeaderRowCmd Members
com.mindfusion.diagramming Namespace

ExpandHeaderRowCmd Members

Implements undo and redo of collapsing or expanding the header row of a table section.

The following tables list the members exposed by the ExpandHeaderRowCmd type.

Public Constructors

	Name	Description
	ExpandHeaderRowCmd	Initializes a new **ExpandHeaderRowCmd** instance.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	This method is called internally by JDiagram when performing the action.
	getRowIndex	Gets the index of the header row that defines which rows are collapsed or defined.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTable	Gets the table whose rows are expanded or collapsed by this command.
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	This method is called by the UndoManager when redoing actions.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	This method is called by the **UndoManager** when undoing actions.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

ExpandHeaderRowCmd Class
com.mindfusion.diagramming Namespace

ExpandHeaderRowCmd Constructor

Initializes a new ExpandHeaderRowCmd instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ExpandHeaderRowCmd (
    TableNode table,
    int rowIndex
)
```

Parameters

table
The TableNode whose rows are expanded or collapsedthrough this command.

rowIndex
The index of the header row that defines the tablesection to be expanded or collapsed.

See Also

ExpandHeaderRowCmd Class
com.mindfusion.diagramming Namespace

ExpandHeaderRowCmd Methods

ExpandHeaderRowCmd.execute Method

This method is called internally by JDiagram when performing the action.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled
true if the undo manager is enabled at this time, otherwise **false**.

See Also

ExpandHeaderRowCmd Members
ExpandHeaderRowCmd Class
com.mindfusion.diagramming Namespace

ExpandHeaderRowCmd.getRowIndex Method

Gets the index of the header row that defines which rows are collapsed or defined.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getRowIndex ()
```

Return Value

An integer value specifying the header row index.

See Also

ExpandHeaderRowCmd Members
ExpandHeaderRowCmd Class
com.mindfusion.diagramming Namespace

ExpandHeaderRowCmd.getTable Method

Gets the table whose rows are expanded or collapsed by this command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public TableNode getTable ()
```

Return Value

A TableNode object.

See Also

ExpandHeaderRowCmd Members
ExpandHeaderRowCmd Class
com.mindfusion.diagramming Namespace

ExpandHeaderRowCmd.redo Method

This method is called by the UndoManager when redoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void redo ()
```

See Also

ExpandHeaderRowCmd Members
ExpandHeaderRowCmd Class

com.mindfusion.diagramming Namespace

ExpandHeaderRowCmd.undo Method

This method is called by the UndoManager when undoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void undo ()
```

See Also

ExpandHeaderRowCmd Members
ExpandHeaderRowCmd Class
com.mindfusion.diagramming Namespace

ExpandIconRenderer Class

Draws expand and collapse buttons of Expandable nodes.

Syntax

Java

```
public class ExpandIconRenderer
```

Remarks

You can assign an instance of this class to Renderers.ExpandIconRenderer to override the default appearance of collapse / expand icons.

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.ExpandIconRenderer

See Also

ExpandIconRenderer Members
com.mindfusion.diagramming Namespace

ExpandIconRenderer Members

Draws expand and collapse buttons of Expandable nodes.

The following tables list the members exposed by the ExpandIconRenderer type.

Public Constructors

	Name	Description
	ExpandIconRenderer	Overloaded.

Public Methods

	Name	Description
	getSize	Gets a float value specifying icon size in diagram's MeasureUnit.
	setSize	Sets a float value specifying icon size in diagram's **MeasureUnit**.

See Also

ExpandIconRenderer Class
com.mindfusion.diagramming Namespace

ExpandIconRenderer Constructor

Overload List

Name	Description
ExpandIconRenderer (Image, Image)	Initializes a new instance of the ExpandIconRenderer class that renders collapse / expand icons provided as bitmaps.
ExpandIconRenderer (RenderCallback)	Initializes a new instance of the **ExpandIconRenderer** class.
ExpandIconRenderer (SvgContent, SvgContent)	Initializes a new instance of the **ExpandIconRenderer** class that renders collapse / expand icons provided as SVG drawings.

See Also

ExpandIconRenderer Class
com.mindfusion.diagramming Namespace

ExpandIconRenderer Constructor (Image, Image)

Initializes a new instance of the ExpandIconRenderer class that renders collapse / expand icons provided as bitmaps.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ExpandIconRenderer (
    Image collapseIcon,
    Image expandIcon
)
```

Parameters

collapseIcon
A **java.awt.Image** representing the collapse icon.

expandIcon
A **java.awt.Image** representing the expand icon.

See Also

ExpandIconRenderer Constructor Overload List
ExpandIconRenderer Class
com.mindfusion.diagramming Namespace

ExpandIconRenderer Constructor (RenderCallback<DiagramNode>)

Initializes a new instance of the ExpandIconRenderer class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ExpandIconRenderer (
    RenderCallback<DiagramNode> renderCallback
)
```

Parameters

renderCallback
A callback function that draws the icon using Graphics2D API.

See Also

ExpandIconRenderer Constructor Overload List
ExpandIconRenderer Class
com.mindfusion.diagramming Namespace

ExpandIconRenderer Constructor (SvgContent, SvgContent)

Initializes a new instance of the ExpandIconRenderer class that renders collapse / expand icons provided as SVG drawings.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ExpandIconRenderer (
    SvgContent collapseIcon,
    SvgContent expandIcon
)
```

Parameters

collapseIcon
An SvgContent representing the collapse icon.

expandIcon
An **SvgContent** representing the expand icon.

See Also

ExpandIconRenderer Constructor Overload List
ExpandIconRenderer Class
com.mindfusion.diagramming Namespace

ExpandIconRenderer Methods

ExpandIconRenderer.getSize Method

Gets a float value specifying icon size in diagram's MeasureUnit.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Float getSize ()
```

Return Value

A **Float** value that lets you override the icon size. The default value is **null**.

Remarks

If this property is not set, icons are rendered using default unit-independent size.

See Also

ExpandIconRenderer Members
ExpandIconRenderer Class
com.mindfusion.diagramming Namespace

ExpandIconRenderer.setSize Method

Sets a float value specifying icon size in diagram's MeasureUnit.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSize (
    Float value
)
```

Parameters

value
A **Float** value that lets you override the icon size. The default value is **null**.

Remarks

If this property is not set, icons are rendered using default unit-independent size.

See Also

ExpandIconRenderer Members
ExpandIconRenderer Class
com.mindfusion.diagramming Namespace

ExpandItemCmd Class

Implements expanding/collapsing branched of items in a tree.

Syntax

Java
`public class ExpandItemCmd extends Command`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.ExpandItemCmd

See Also

ExpandItemCmd Members
com.mindfusion.diagramming Namespace

ExpandItemCmd Members

Implements expanding/collapsing branched of items in a tree.

The following tables list the members exposed by the ExpandItemCmd type.

Public Constructors

	Name	Description
	ExpandItemCmd	Initializes a new **ExpandItemCmd** instance.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)

	execute	This method is called internally by JDiagram when performing the action.
	getItem	Gets the root of the tree branch related to this command.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	This method is called by the UndoManager when redoing actions.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	This method is called by the **UndoManager** when undoing actions.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

ExpandItemCmd Class
com.mindfusion.diagramming Namespace

ExpandItemCmd Constructor

Initializes a new ExpandItemCmd instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ExpandItemCmd (
    DiagramItem item
)
```

Parameters

item
The DiagramItem that will be expanded or collapsed through this command.

See Also

ExpandItemCmd Methods

ExpandItemCmd.execute Method

This method is called internally by JDiagram when performing the action.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled
true if the undo manager is enabled at this time, otherwise **false**.

See Also

ExpandItemCmd Members
ExpandItemCmd Class
com.mindfusion.diagramming Namespace

ExpandItemCmd.getItem Method

Gets the root of the tree branch related to this command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramItem getItem ()
```

Return Value

A reference to an DiagramItem -derived object.

See Also

ExpandItemCmd Members
ExpandItemCmd Class
com.mindfusion.diagramming Namespace

ExpandItemCmd.redo Method

This method is called by the UndoManager when redoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void redo ()
```

See Also

ExpandItemCmd Members
ExpandItemCmd Class
com.mindfusion.diagramming Namespace

ExpandItemCmd.undo Method

This method is called by the UndoManager when undoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void undo ()
```

See Also

ExpandItemCmd Members
ExpandItemCmd Class
com.mindfusion.diagramming Namespace

ExpandTreeViewItemCmd Class

Implements support for undo of TreeViewItem collapse/expand operations.

Syntax

Java

```
public class ExpandTreeViewItemCmd extends Command
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.ExpandTreeViewItemCmd

See Also

ExpandTreeViewItemCmd Members

Implements support for undo of TreeViewItem collapse/expand operations.

The following tables list the members exposed by the ExpandTreeViewItemCmd type.

Public Constructors

	Name	Description
	ExpandTreeViewItemCmd	Initializes a new instance of the **ExpandTreeViewItemCmd** class.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	Command.execute override.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	item	Gets the **TreeViewItem** that has been collapsed or expanded.
	redo	Command.redo override.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	Command.undo override.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

ExpandTreeViewItemCmd Class
com.mindfusion.diagramming Namespace

ExpandTreeViewItemCmd Constructor

Initializes a new instance of the ExpandTreeViewItemCmd class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ExpandTreeViewItemCmd (
    TreeViewNode node,
    TreeViewItem item
)
```

Parameters

node
The parent TreeViewNode.

item
The TreeViewItem that has been collapsed or expanded.

See Also

ExpandTreeViewItemCmd Class
com.mindfusion.diagramming Namespace

ExpandTreeViewItemCmd Methods

ExpandTreeViewItemCmd.execute Method

Command.execute override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled
Specifies whether undo/redo is enabled. If undo is disabled, the command won't be saved in undo history and will never be called to undo or redo itself. In such case you might choose to skip some housekeeping operations such as saving state variables for later undo/redo.

See Also

ExpandTreeViewItemCmd Members
ExpandTreeViewItemCmd Class
com.mindfusion.diagramming Namespace

ExpandTreeViewItemCmd.item Method

Gets the TreeViewItem that has been collapsed or expanded.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public TreeViewItem item ()
```

Return Value

See Also

ExpandTreeViewItemCmd Members
ExpandTreeViewItemCmd Class
com.mindfusion.diagramming Namespace

ExpandTreeViewItemCmd.redo Method

Command.redo override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void redo ()
```

See Also

ExpandTreeViewItemCmd Members
ExpandTreeViewItemCmd Class
com.mindfusion.diagramming Namespace

ExpandTreeViewItemCmd.undo Method

Command.undo override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void undo ()
```

See Also

ExpandTreeViewItemCmd Members
ExpandTreeViewItemCmd Class
com.mindfusion.diagramming Namespace

Factory Class

Provides shortcut methods for creating and adding instances of the standard item types. Call the class methods through the Diagram.getFactory property of the Diagram class.

Syntax

Java
`public class Factory`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Factory

See Also

Factory Members
com.mindfusion.diagramming Namespace

Factory Members

Provides shortcut methods for creating and adding instances of the standard item types. Call the class methods through the Diagram.getFactory property of the Diagram class.

The following tables list the members exposed by the Factory type.

Public Constructors

	Name	Description
	Factory	Initializes a new instance of the **Factory** class over the specified **Diagram**.

Public Methods

	Name	Description
	createContainerNode	Overloaded.
	createDiagramLink	Overloaded.
	createGroup	Creates a new hierarchical Group with the specified main item.
	createShapeNode	Overloaded. Creates a new ShapeNode instance and adds it to the Nodes collection of the underlying diagram.
	createSvgNode	Overloaded.

	createTableNode	Overloaded. Creates a new TableNode instance and adds it to the Nodes collection of the underlying diagram.
	createTreeViewNode	Overloaded.

See Also

Factory Class
com.mindfusion.diagramming Namespace

Factory Constructor

Initializes a new instance of the Factory class over the specified Diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Factory (
    Diagram diagram
)
```

Parameters

diagram
The Diagram object for which to create the new factory.

See Also

Factory Class
com.mindfusion.diagramming Namespace

Factory Methods

Factory.createContainerNode Method

Overload List

Name	Description
Factory.createContainerNode (double, double, double, double)	Creates a new ContainerNode instance at the specified position with the specified size.
Factory.createContainerNode (double, double, double, double, boolean)	Creates a new **ContainerNode** instance at the specified location with the specified size, optionally foldable.
Factory.createContainerNode (Point2D, Dimension2D)	Creates a new **ContainerNode** instance at the specified location with the specified size.
Factory.createContainerNode (Point2D, Dimension2D, boolean)	Creates a new **ContainerNode** instance at the specified location with the specified size, optionally foldable.

Factory.createContainerNode (Rectangle2D)	Creates a new **ContainerNode** instance with the specified dimensions.
Factory.createContainerNode (Rectangle2D, boolean)	Creates a new **ContainerNode** instance with the specified dimensions, optionally foldable, and adds it to the Nodes collection of the underlying diagram.

See Also

Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createContainerNode Method (double, double, double, double)

Creates a new ContainerNode instance at the specified position with the specified size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ContainerNode createContainerNode (
    double x,
    double y,
    double width,
    double height
)
```

Parameters

x
The x-coordinate of the upper-left corner of the new node.

y
The y-coordinate of the upper-left corner of the new node.

width
The width of the new node.

height
The height of the new node.

Return Value

The newly created ContainerNode instance.

Remarks

The method creates a container node at the position specified by x and y. The size of the node is set by *width* and *height*. For further customization of the node, use the methods of the ContainerNode class.

See Also

createContainerNode Method Overload List
Factory Members

Factory.createContainerNode Method (double, double, double, double, boolean)

Creates a new ContainerNode instance at the specified location with the specified size, optionally foldable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ContainerNode createContainerNode (
    double x,
    double y,
    double width,
    double height,
    boolean foldable
)
```

Parameters

x
The x-coordinate of the upper-left corner of the new node.

y
The y-coordinate of the upper-left corner of the new node.

width
The width of the new node.

height
The height of the new node.

foldable
true if the container can be folded; otherwise, **false**.

Return Value

The newly created ContainerNode instance.

Remarks

The method creates a container node at the position specified by x and y. The size of the container is set by *width* and *height*. The parameter *foldable* specifies whether the container node is initially foldable. For further customization of the node, use the methods of the ContainerNode class.

See Also

createContainerNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createContainerNode Method (Point2D, Dimension2D)

Creates a new ContainerNode instance at the specified location with the specified size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ContainerNode createContainerNode (
    Point2D location,
    Dimension2D size
)
```

Parameters

location
The position of the new node.

size
The size of the new node.

Return Value

The newly created ContainerNode instance.

Remarks

The method creates a container node at the position specified by *location*. The size of the node is set by *size*. For further customization of the node, use the methods of the ContainerNode class.

See Also

createContainerNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createContainerNode Method (Point2D, Dimension2D, boolean)

Creates a new ContainerNode instance at the specified location with the specified size, optionally foldable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ContainerNode createContainerNode (
    Point2D location,
    Dimension2D size,
    boolean foldable
)
```

Parameters

location
The position of the new node.

size
The size of the new node.

foldable
true if the container can be folded; otherwise, **false**.

Return Value

The newly created ContainerNode instance.

Remarks

The method creates a container node at the position specified by *location*. The size of the container is set by *size*. The parameter *foldable* specifies whether the container node is initially foldable. For further customization of the node, use the methods of the ContainerNode class.

See Also

createContainerNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createContainerNode Method (Rectangle2D)

Creates a new ContainerNode instance with the specified dimensions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ContainerNode createContainerNode (
    Rectangle2D bounds
)
```

Parameters

bounds
The bounding rectangle of the new node.

Return Value

The newly created ContainerNode instance.

Remarks

The method creates a container node with dimensions specified by *bounds*.

See Also

createContainerNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createContainerNode Method (Rectangle2D, boolean)

Creates a new ContainerNode instance with the specified dimensions, optionally foldable, and adds it to the Nodes collection of the underlying diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ContainerNode createContainerNode (
    Rectangle2D bounds,
    boolean foldable
)
```

Parameters

bounds
The bounding rectangle of the new node.

foldable
true if the container can be folded; otherwise, **false**.

Return Value

The newly created ContainerNode instance.

Remarks

The method creates a container node with the position and size specified by *bounds*. The parameter foldable specifies whether the container node is initially *foldable*.

See Also

createContainerNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createDiagramLink Method

Overload List

Name	Description
Factory.createDiagramLink (DiagramNode, DiagramNode)	Creates a new DiagramLink instance between the specified nodes and adds it to the Links collection of the underlying diagram. The method creates a link connecting the nodes specified by origin and destination.
Factory.createDiagramLink (DiagramNode, Point2D)	Creates a new **DiagramLink** instance between the specified node and the specified point, and adds it to the Links collection of the underlying diagram.

Factory.createDiagramLink (DiagramNode, TableNode, int)	Creates a new **DiagramLink** instance between the specified nodes and the specified table, and adds it to the Links collection of the underlying diagram.
Factory.createDiagramLink (Point2D, DiagramNode)	Creates a new **DiagramLink** instance between the specified point and the specified node, and adds it to the Links collection of the underlying diagram.
Factory.createDiagramLink (Point2D, Point2D)	Creates a new **DiagramLink** instance between the specified points and adds it to the Links collection of the underlying diagram.
Factory.createDiagramLink (ShapeNode, int, ShapeNode, int)	Creates a new **DiagramLink** instance between the specified nodes and adds it to the Links collection of the underlying diagram.
Factory.createDiagramLink (TableNode, int, DiagramNode)	Creates a new **DiagramLink** instance between the specified table and the specified node, and adds it to the Links collection of the underlying diagram.
Factory.createDiagramLink (TableNode, int, TableNode, int)	Creates a new **DiagramLink** instance between the specified tables and adds it to the Links collection of the underlying diagram.
Factory.createDiagramLink (TableNode, TableNode)	Creates a new **DiagramLink** instance between the specified tables and adds it to the Links collection of the underlying diagram.
Factory.createDiagramLink (TreeViewNode, TreeViewItem, TreeViewNode, TreeViewItem)	Creates a new **DiagramLink** instance between the specified tree items and adds it to the Diagram.getLinks collection of the underlying diagram.

See Also

Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createDiagramLink Method (DiagramNode, DiagramNode)

Creates a new DiagramLink instance between the specified nodes and adds it to the Links collection of the underlying diagram. The method creates a link connecting the nodes specified by origin and destination.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink createDiagramLink (
    DiagramNode origin,
    DiagramNode destination
)
```

Parameters

origin
The origin node.

destination

The destination node.

Return Value

The newly created DiagramLink instance.

See Also

createDiagramLink Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createDiagramLink Method (DiagramNode, Point2D)

Creates a new DiagramLink instance between the specified node and the specified point, and adds it to the Links collection of the underlying diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink createDiagramLink (
    DiagramNode origin,
    Point2D destination
)
```

Parameters

origin
The origin node.

destination
The destination point.

Return Value

The newly created DiagramLink instance.

Remarks

The method creates a link connecting the node specified by *origin* and the point specified by *destination*. For further customization of the link, use the methods of the DiagramLink class.

See Also

createDiagramLink Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createDiagramLink Method (DiagramNode, TableNode, int)

Creates a new DiagramLink instance between the specified nodes and the specified table, and adds it to the Links collection of the underlying diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink createDiagramLink (
    DiagramNode origin,
    TableNode destination,
    int destRow
)
```

Parameters

origin
The origin node.

destination
The destination node.

destRow
The zero-based index of the destination table row of the new link.

Return Value

The newly created DiagramLink instance.

Remarks

The method creates a link connecting the node specified by *origin* and the table specified by *destination*. For further customization of the link, use the methods of the DiagramLink class.

See Also

createDiagramLink Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createDiagramLink Method (Point2D, DiagramNode)

Creates a new DiagramLink instance between the specified point and the specified node, and adds it to the Links collection of the underlying diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink createDiagramLink (
    Point2D origin,
    DiagramNode destination
)
```

Parameters

origin

The origin point.

destination
The destination node.

Return Value

The newly created DiagramLink instance.

Remarks

The method creates a link connecting the point specified by *origin* and the node specified by *destination*. For further customization of the link, use the methods of the DiagramLink class.

See Also

createDiagramLink Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createDiagramLink Method (Point2D, Point2D)

Creates a new DiagramLink instance between the specified points and adds it to the Links collection of the underlying diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink createDiagramLink (
    Point2D origin,
    Point2D destination
)
```

Parameters

origin
The origin point.

destination
The destination point.

Return Value

The newly created DiagramLink instance.

Remarks

The method creates a link connecting the points specified by *origin* and *destination*. For further customization of the link, use the methods of the DiagramLink class.

See Also

createDiagramLink Method Overload List
Factory Members

Factory Class
com.mindfusion.diagramming Namespace

Factory.createDiagramLink Method (ShapeNode, int, ShapeNode, int)

Creates a new DiagramLink instance between the specified nodes and adds it to the Links collection of the underlying diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink createDiagramLink (
    ShapeNode origin,
    int originAnchor,
    ShapeNode destination,
    int destAnchor
)
```

Parameters

origin
The origin node.

originAnchor
The index of an anchor point within the origin node's AnchorPattern.

destination
The destination node.

destAnchor
The index of an anchor point within the destination node's **AnchorPattern**.

Return Value

The newly created DiagramLink instance.

Remarks

The method creates a link connecting the shape nodes specified by origin and destination. For further customization of the link, use the methods of the DiagramLink class.

See Also

createDiagramLink Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createDiagramLink Method (TableNode, int, DiagramNode)

Creates a new DiagramLink instance between the specified table and the specified node, and adds it to the Links collection of the underlying diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink createDiagramLink (
    TableNode origin,
    int originRow,
    DiagramNode destination
)
```

Parameters

origin
The origin node.

originRow
The zero-based index of the destination table row of the new link.

destination
The destination node.

Return Value

The newly created DiagramLink instance.

Remarks

The method creates a link connecting the table specified by *origin* and the node specified by *destination*. For further customization of the link, use the methods of the DiagramLink class.

See Also

createDiagramLink Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createDiagramLink Method (TableNode, int, TableNode, int)

Creates a new DiagramLink instance between the specified tables and adds it to the Links collection of the underlying diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink createDiagramLink (
    TableNode origin,
    int originRow,
    TableNode destination,
    int destRow
)
```

Parameters

origin
The origin node.

originRow
The zero-based index of the origin table row of the new link.

destination
The destination node.

destRow
The zero-based index of the destination table row of the new link.

Return Value

The newly created DiagramLink instance.

Remarks

The method creates a link connecting the tables specified by *origin* and *destination*. For further customization of the link, use the methods of the DiagramLink class.

See Also

createDiagramLink Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createDiagramLink Method (TableNode, TableNode)

Creates a new DiagramLink instance between the specified tables and adds it to the Links collection of the underlying diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink createDiagramLink (
    TableNode origin,
    TableNode destination
)
```

Parameters

origin
The origin node.

destination
The destination node.

Return Value

The newly created DiagramLink instance.

Remarks

The method creates a link connecting the tables specified by origin and destination. For further customization of the link, use the methods of the DiagramLink class.

See Also

createDiagramLink Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createDiagramLink Method (TreeViewNode, TreeViewItem, TreeViewNode, TreeViewItem)

Creates a new DiagramLink instance between the specified tree items and adds it to the Diagram.getLinks collection of the underlying diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink createDiagramLink (
    TreeViewNode origin,
    TreeViewItem originItem,
    TreeViewNode destination,
    TreeViewItem destinationItem
)
```

Parameters

origin
The origin node.

originItem
The origin item.

destination
The destination node.

destinationItem
The destination item.

Return Value

The newly created DiagramLink instance.

See Also

createDiagramLink Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createGroup Method

Creates a new hierarchical Group with the specified main item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Group createGroup (
    DiagramItem mainItem
)
```

Parameters

mainItem
The DiagramItem around which the group would be built.

Return Value

The newly created Group instance.

Remarks

Use this method to create an hierarchical group of items. Attach subordinated items through the various Group members.

See Also

Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createShapeNode Method

Creates a new ShapeNode instance and adds it to the Nodes collection of the underlying diagram.

Overload List

Name	Description
Factory.createShapeNode (double, double, double, double)	Creates a new **ShapeNode** instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram.
Factory.createShapeNode (double, double, double, double, Shape)	Creates a new **ShapeNode** instance with the specified dimensions and shape.
Factory.createShapeNode (Point2D, Dimension2D)	Creates a new **ShapeNode** instance at the specified position with the specified size.
Factory.createShapeNode (Point2D, Dimension2D, Shape)	Creates a new **ShapeNode** instance at the specified position with the specified size and shape.
Factory.createShapeNode (Rectangle2D)	Creates a new **ShapeNode** instance with the specified dimensions.
Factory.createShapeNode (Rectangle2D, Shape)	Creates a new **ShapeNode** instance with the specified dimensions and shape.

See Also

Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createShapeNode Method (double, double, double, double)

Creates a new ShapeNode instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeNode createShapeNode (
    double x,
    double y,
    double width,
    double height
)
```

Parameters

x
The x-coordinate of the upper-left corner of the new node.

y
The y-coordinate of the upper-left corner of the new node.

width
The width of the new node.

height
The height of the new node.

Return Value

The newly created ShapeNode instance.

Remarks

The method creates a shape node at the position specified by x and y. The size of the node is set by *width* and *height*. For further customization of the node, use the methods of the ShapeNode class.

See Also

createShapeNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createShapeNode Method (double, double, double, double, Shape)

Creates a new ShapeNode instance with the specified dimensions and shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeNode createShapeNode (
    double x,
```

```
    double y,
    double width,
    double height,
    Shape shape
)
```

Parameters

x
The x-coordinate of the upper-left corner of the new node.

y
The y-coordinate of the upper-left corner of the new node.

width
The width of the new node.

height
The height of the new node.

shape
The shape of the new node.

Return Value

The newly created ShapeNode instance.

Remarks

The method creates a shape node at the position specified by x and y. The size of the node is set by *width* and *height*. The shape of the new node is specified by *shape*. For further customization of the node, use the methods of the ShapeNode class.

See Also

createShapeNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createShapeNode Method (Point2D, Dimension2D)

Creates a new ShapeNode instance at the specified position with the specified size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeNode createShapeNode (
    Point2D location,
    Dimension2D size
)
```

Parameters

location
The position of the new node.

size
The size of the new node.

Return Value

The newly created ShapeNode instance.

Remarks

The method creates a shape node at the position specified by *location*. The size of the node is set by *size*. For further customization of the node, use the methods of the ShapeNode class.

See Also

createShapeNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createShapeNode Method (Point2D, Dimension2D, Shape)

Creates a new ShapeNode instance at the specified position with the specified size and shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeNode createShapeNode (
    Point2D location,
    Dimension2D size,
    Shape shape
)
```

Parameters

location
The position of the new node.

size
The size of the new node.

shape
The shape of the new node.

Return Value

The newly created ShapeNode instance.

Remarks

The method creates a shape node at the position specified by *location*. The size of the node is set by *size*. The shape of the new node is specified by *shape*. For further customization of the node, use the methods of the ShapeNode class.

See Also

createShapeNode Method Overload List
Factory Members

Factory Class
com.mindfusion.diagramming Namespace

Factory.createShapeNode Method (Rectangle2D)

Creates a new ShapeNode instance with the specified dimensions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeNode createShapeNode (
    Rectangle2D bounds
)
```

Parameters

bounds
The bounding rectangle of the new node.

Return Value

The newly created ShapeNode instance.

Remarks

The method creates a shape node with dimensions specified by bounds. For further customization of the node, use the methods of the ShapeNode class.

See Also

createShapeNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createShapeNode Method (Rectangle2D, Shape)

Creates a new ShapeNode instance with the specified dimensions and shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeNode createShapeNode (
    Rectangle2D bounds,
    Shape shape
)
```

Parameters

bounds

The bounding rectangle of the new node.

shape
The shape of the new node.

Return Value

The newly created ShapeNode instance.

Remarks

The method creates a shape node with dimensions specified by *bounds*. The shape of the new node is specified by *shape*. For further customization of the node, use the methods of the ShapeNode class.

See Also

createShapeNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createSvgNode Method

Overload List

Name	Description
Factory.createSvgNode (double, double, double, double)	Creates a new SvgNode instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a svg node at the position specified by x and y. The size of the node is set by width and height.
Factory.createSvgNode (double, double, double, double, String)	Creates a new **SvgNode** instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a svg node at the position specified by x and y. The size of the node is set by width and height.
Factory.createSvgNode (double, double, double, double, SvgContent)	Creates a new **SvgNode** instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a svg node at the position specified by x and y. The size of the node is set by width and height.
Factory.createSvgNode (Point2D, Dimension2D)	Creates a new **SvgNode** instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a svg node at the position specified by location. The size of the node is set by size.
Factory.createSvgNode (Point2D, Dimension2D, String)	Creates a new **SvgNode** instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a svg node at the position specified by location. The size of the node is set by size.
Factory.createSvgNode (Point2D, Dimension2D, SvgContent)	Creates a new **SvgNode** instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a svg node at

	the position specified by location. The size of the node is set by size.
Factory.createSvgNode (Rectangle2D)	Creates a new **SvgNode** instance with the specified dimensions and adds it to the Nodes collection of the underlying diagram. The method creates a svg node with dimensions specified by bounds.
Factory.createSvgNode (Rectangle2D, String)	Creates a new **SvgNode** instance with the specified dimensions and adds it to the Nodes collection of the underlying diagram. The method creates a svg node with dimensions specified by bounds.
Factory.createSvgNode (Rectangle2D, SvgContent)	Creates a new **SvgNode** instance with the specified dimensions and adds it to the Nodes collection of the underlying diagram. The method creates a svg node with dimensions specified by bounds.

See Also

Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createSvgNode Method (double, double, double, double)

Creates a new SvgNode instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a svg node at the position specified by x and y. The size of the node is set by width and height.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgNode createSvgNode (
    double x,
    double y,
    double width,
    double height
)
```

Parameters

x
The x-coordinate of the upper-left corner of the new node

y
The y-coordinate of the upper-left cornet of the new node

width
The width of the new node

height
The height of the new node

Return Value

The newly created SvgNode instance

See Also

createSvgNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createSvgNode Method (double, double, double, double, String)

Creates a new SvgNode instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a svg node at the position specified by x and y. The size of the node is set by width and height.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgNode createSvgNode (
    double x,
    double y,
    double width,
    double height,
    String svgUrl
)
```

Parameters

x
The x-coordinate of the upper-left corner of the new node

y
The y-coordinate of the upper-left cornet of the new node

width
The width of the new node

height
The height of the new node

svgUrl
The URL used to load an SVG file into SvgNode

Return Value

The newly created **SvgNode** instance

See Also

createSvgNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createSvgNode Method (double, double, double, double, SvgContent)

Creates a new SvgNode instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a svg node at the position specified by x and y. The size of the node is set by width and height.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgNode createSvgNode (
    double x,
    double y,
    double width,
    double height,
    SvgContent svgContent
)
```

Parameters

x
The x-coordinate of the upper-left corner of the new node

y
The y-coordinate of the upper-left cornet of the new node

width
The width of the new node

height
The height of the new node

svgContent
The SvgContent instance representing the SVG drawing rendered in SvgNode

Return Value

The newly created **SvgNode** instance

See Also

createSvgNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createSvgNode Method (Point2D, Dimension2D)

Creates a new SvgNode instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a svg node at the position specified by location. The size of the node is set by size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgNode createSvgNode (
    Point2D location,
    Dimension2D size
)
```

Parameters

location
The position of the new node.

size
The size of the new node.

Return Value

The newly created SvgNode instance.

See Also

createSvgNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createSvgNode Method (Point2D, Dimension2D, String)

Creates a new SvgNode instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a svg node at the position specified by location. The size of the node is set by size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgNode createSvgNode (
    Point2D location,
    Dimension2D size,
    String svgUrl
)
```

Parameters

location
The position of the new node.

size
The size of the new node.

svgUrl
The URL used to load an SVG file into SvgNode

Return Value

The newly created **SvgNode** instance.

See Also

createSvgNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createSvgNode Method (Point2D, Dimension2D, SvgContent)

Creates a new SvgNode instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a svg node at the position specified by location. The size of the node is set by size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgNode createSvgNode (
    Point2D location,
    Dimension2D size,
    SvgContent svgContent
)
```

Parameters

location
The position of the new node.

size
The size of the new node.

svgContent
The SvgContent instance representing the SVG drawing rendered in SvgNode

Return Value

The newly created **SvgNode** instance.

See Also

createSvgNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createSvgNode Method (Rectangle2D)

Creates a new SvgNode instance with the specified dimensions and adds it to the Nodes collection of the underlying diagram. The method creates a svg node with dimensions specified by bounds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgNode createSvgNode (
    Rectangle2D bounds
)
```

Parameters

bounds
The bounding rectangle of the new node.

Return Value

The newly created SvgNode instance.

See Also

createSvgNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createSvgNode Method (Rectangle2D, String)

Creates a new SvgNode instance with the specified dimensions and adds it to the Nodes collection of the underlying diagram. The method creates a svg node with dimensions specified by bounds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgNode createSvgNode (
    Rectangle2D bounds,
    String svgUrl
)
```

Parameters

bounds
The bounding rectangle of the new node.

svgUrl
The URL used to load an SVG file into SvgNode

Return Value

The newly created **SvgNode** instance.

See Also

createSvgNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createSvgNode Method (Rectangle2D, SvgContent)

Creates a new SvgNode instance with the specified dimensions and adds it to the Nodes collection of the underlying diagram. The method creates a svg node with dimensions specified by bounds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgNode createSvgNode (
    Rectangle2D bounds,
    SvgContent svgContent
)
```

Parameters

bounds
The bounding rectangle of the new node.

svgContent
The SvgContent instance representing the SVG drawing rendered in SvgNode

Return Value

The newly created **SvgNode** instance.

See Also

createSvgNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createTableNode Method

Creates a new TableNode instance and adds it to the Nodes collection of the underlying diagram.

Overload List

Name	Description
Factory.createTableNode (double, double, double, double)	Creates a new **TableNode** instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a table node at the position specified by x and y. The size of the node is set by width and height.
Factory.createTableNode (double, double, double, double, int, int)	Creates a new **TableNode** instance at the specified position with the specified size and the specified number of columns and rows, and adds it to the Nodes collection of the underlying diagram.
Factory.createTableNode (Point2D, Dimension2D)	Creates a new **TableNode** instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram.

Factory.createTableNode (Point2D, Dimension2D, int, int)	Creates a new **TableNode** instance at the specified position with the specified size and with the specified number of columns and rows, and adds it to the Nodes collection of the underlying diagram.
Factory.createTableNode (Rectangle2D)	Creates a new **TableNode** instance with the specified dimensions and adds it to the Nodes collection of the underlying diagram. The method creates a table node with dimensions specified by bounds.
Factory.createTableNode (Rectangle2D, int, int)	Creates a new **TableNode** instance with the specified dimensions and with the specified number of columns and rows, and adds it to the Nodes collection of the underlying diagram.

See Also

Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createTableNode Method (double, double, double, double)

Creates a new TableNode instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a table node at the position specified by x and y. The size of the node is set by width and height.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TableNode createTableNode (
    double x,
    double y,
    double width,
    double height
)
```

Parameters

x
The x-coordinate of the upper-left corner of the new table.

y
The y-coordinate of the upper-left corner of the new table.

width
The width of the new table.

height
The height of the new table.

Return Value

The newly created TableNode instance.

Remarks

The method creates a table node at the position specified by x and y. The size of the node is set by *width* and *height*.

See Also

createTableNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createTableNode Method (double, double, double, double, int, int)

Creates a new TableNode instance at the specified position with the specified size and the specified number of columns and rows, and adds it to the Nodes collection of the underlying diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TableNode createTableNode (
    double x,
    double y,
    double width,
    double height,
    int columns,
    int rows
)
```

Parameters

x
The x-coordinate of the upper-left corner of the new table.

y
The y-coordinate of the upper-left corner of the new table.

width
The width of the new table.

height
The height of the new table.

columns
The initial number of columns in the table.

rows
The initial number of rows in the table.

Return Value

The newly created TableNode instance.

Remarks

The method creates a table node at the position specified by x and y. The size of the node is set by *width* and *height*. The initial number of columns and rows in the table is specified by *columns* and *rows* respectively.

See Also

createTableNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createTableNode Method (Point2D, Dimension2D)

Creates a new TableNode instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TableNode createTableNode (
    Point2D location,
    Dimension2D size
)
```

Parameters

location
The position of the new table.

size
The size of the new table.

Return Value

The newly created TableNode instance.

Remarks

The method creates a table node at the position specified by *location*. The size of the node is set by *size*.

See Also

createTableNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createTableNode Method (Point2D, Dimension2D, int, int)

Creates a new TableNode instance at the specified position with the specified size and with the specified number of columns and rows, and adds it to the Nodes collection of the underlying diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TableNode createTableNode (
    Point2D location,
```

```
    Dimension2D size,
    int columns,
    int rows
)
```

Parameters

location
The position of the new table.

size
The size of the new table.

columns
The initial number of columns in the table.

rows
The initial number of rows in the table.

Return Value

The newly created TableNode instance.

Remarks

The method creates a table node at the position specified by *location*. The size of the node is set by *size*. The initial number of *columns* and *rows* in the table is specified by columns and rows respectively. For further customization of the node, use the methods of the TableNode class.

See Also

createTableNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createTableNode Method (Rectangle2D)

Creates a new TableNode instance with the specified dimensions and adds it to the Nodes collection of the underlying diagram. The method creates a table node with dimensions specified by bounds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TableNode createTableNode (
    Rectangle2D bounds
)
```

Parameters

bounds
The bounding rectangle of the new table.

Return Value

The newly created TableNode instance.

Remarks

The method creates a table node with dimensions specified by *bounds*. For further customization of the node, use the methods of the TableNode class.

See Also

createTableNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createTableNode Method (Rectangle2D, int, int)

Creates a new TableNode instance with the specified dimensions and with the specified number of columns and rows, and adds it to the Nodes collection of the underlying diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TableNode createTableNode (
    Rectangle2D bounds,
    int columns,
    int rows
)
```

Parameters

bounds
The bounding rectangle of the new table.

columns
The initial number of columns in the table.

rows
The initial number of rows in the table.

Return Value

The newly created TableNode instance.

Remarks

The method creates a table node with dimensions specified by *bounds*. The initial number of *columns* and *rows* in the table is specified by columns and rows respectively.

See Also

createTableNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createTreeViewNode Method

Overload List

Name	Description
Factory.createTreeViewNode (double, double, double, double)	Creates a new TreeViewNode instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a treeview node at the position specified by x and y. The size of the node is set by width and height.
Factory.createTreeViewNode (Point2D, Dimension2D)	Creates a new **TreeViewNode** instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a treeview node at the position specified by location. The size of the node is set by size.
Factory.createTreeViewNode (Rectangle2D)	Creates a new **TreeViewNode** instance with the specified dimensions and adds it to the Nodes collection of the underlying diagram. The method creates a treeview node with dimensions specified by bounds.

See Also

Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createTreeViewNode Method (double, double, double, double)

Creates a new TreeViewNode instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a treeview node at the position specified by x and y. The size of the node is set by width and height.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeViewNode createTreeViewNode (
    double x,
    double y,
    double width,
    double height
)
```

Parameters

x
The x-coordinate of the upper-left corner of the new node.

y
The y-coordinate of the upper-left corner of the new node.

width
The width of the new node.

height
The height of the new node.

Return Value

The newly created TreeViewNode instance.

See Also

createTreeViewNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createTreeViewNode Method (Point2D, Dimension2D)

Creates a new TreeViewNode instance at the specified position with the specified size and adds it to the Nodes collection of the underlying diagram. The method creates a treeview node at the position specified by location. The size of the node is set by size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeViewNode createTreeViewNode (
    Point2D location,
    Dimension2D size
)
```

Parameters

location
The position of the new node.

size
The size of the new node.

Return Value

The newly created TreeViewNode instance.

See Also

createTreeViewNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

Factory.createTreeViewNode Method (Rectangle2D)

Creates a new TreeViewNode instance with the specified dimensions and adds it to the Nodes collection of the underlying diagram. The method creates a treeview node with dimensions specified by bounds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public TreeViewNode createTreeViewNode (
    Rectangle2D bounds
)
```

Parameters

bounds
The bounding rectangle of the new node.

Return Value

The newly created TreeViewNode instance.

See Also

createTreeViewNode Method Overload List
Factory Members
Factory Class
com.mindfusion.diagramming Namespace

FitSize Enumeration

Specifies how the ShapeNode.resizeToFitText method should resize a box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public enum FitSize
```

Members

	Member name	Description
	KeepHeight	Specifies that the original node height should remain intact.
	KeepRatio	Allows changing both the width and height of a node, but keep
	KeepWidth	Specifies that the original node width should remain intact.

See Also

com.mindfusion.diagramming Namespace

FlowchartLayout Class

FlowchartLayout can be used to arrange flowcharts representing program source code.

Syntax

Java
`public class FlowchartLayout extends AbstractLayout`

Remarks

The algorithm recognizes program code -like patterns in the graph, such as loops, sequences and if/switch branchings, and arranges them recursively. **FlowchartLayout** could be used to arrange other types of graphs as well, though with some restrictions. For example it treats all back links as loops in the code, and expects that they are nested - loop links starting closer to the stop node should end closer to the start node. Another similar restriction is that there shouldn't be any cross-links that connect different branches of a decision sub-graph.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AbstractLayout
    com.mindfusion.diagramming.FlowchartLayout

See Also

FlowchartLayout Members
com.mindfusion.diagramming Namespace

FlowchartLayout Members

FlowchartLayout can be used to arrange flowcharts representing program source code.

The following tables list the members exposed by the **FlowchartLayout** type.

Public Constructors

	Name	Description
	FlowchartLayout	Initializes a new instance of the **FlowchartLayout** class.

Public Methods

	Name	Description
	arrange	Applies the layout on the specified subset of items from the specified Diagram instance.
	getAnchoring	Gets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	getBranchPadding	Gets how much space to leave between adjacent decision branches in the flowchart.
	getGrowToFit	Gets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	getIgnoreRepeatingLinks	Gets a value indicating whether to ignore repeating links.

	getKeepGroupLayout	Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	getLayoutLink	Gets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	getLayoutNode	Gets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	getLinkPadding	Gets how much space to leave between adjacent back links designating nested loops.
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	getMultipleGraphsPlacement	Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	getNodeDistance	Gets the distance between consecutive nodes in the flowchart.
	getOrientation	Gets the overall orientation of the arranged diagram.
	getProgress	Gets the progress callback delegate. (Inherited from AbstractLayout.)
	getSplitGraph	Gets a value indicating whether unconnected subgraphs should be laid out independently from each other. If this property is set to true, each independent graph in the diagram is laid out in its own layout area. Otherwise all subgraphs are arranged in the same layout area.
	init	Returns a FlowchartLayoutBuilder object used to configure this FlowchartLayout instance.
	removeMidleSegmentPoint	(Inherited from AbstractLayout.)
	setAnchoring	Sets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	setBranchPadding	Sets how much space to leave between adjacent decision branches in the flowchart.
	setGrowToFit	Sets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	setIgnoreRepeatingLinks	Sets a value indicating whether to ignore repeating links.
	setKeepGroupLayout	Sets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	setLayoutLink	Sets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	setLayoutNode	Sets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)

	setLinkPadding	Sets how much space to leave between adjacent back links designating nested loops.
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	setMultipleGraphsPlacement	Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	setNodeDistance	Sets the distance between consecutive nodes in the flowchart.
	setOrientation	Sets the overall orientation of the arranged diagram.
	setProgress	Sets the progress callback delegate. (Inherited from AbstractLayout.)
	setSplitGraph	Sets a value indicating whether unconnected subgraphs should be laid out independently from each other. If this property is set to true, each independent graph in the diagram is laid out in its own layout area. Otherwise all subgraphs are arranged in the same layout area.
S	with	Returns a FlowchartLayoutBuilder object used to configure and create new FlowchartLayout instances.

See Also

FlowchartLayout Class
com.mindfusion.diagramming Namespace

FlowchartLayout Constructor

Initializes a new instance of the FlowchartLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public FlowchartLayout ()
```

See Also

FlowchartLayout Class
com.mindfusion.diagramming Namespace

FlowchartLayout Methods

FlowchartLayout.arrange Method

Applies the layout on the specified subset of items from the specified Diagram instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram diagram,
    DiagramItemList items
)
```

Parameters

diagram
The Diagram to arrange.

items
Specifies a subset of diagram items to arrange.

Return Value

true if the diagram has been arranged successfully; otherwise, false.

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming Namespace

FlowchartLayout.getBranchPadding Method

Gets how much space to leave between adjacent decision branches in the flowchart.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getBranchPadding ()
```

Return Value

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming Namespace

FlowchartLayout.getIgnoreRepeatingLinks Method

Gets a value indicating whether to ignore repeating links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getIgnoreRepeatingLinks ()
```

Return Value

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming Namespace

FlowchartLayout.getLinkPadding Method

Gets how much space to leave between adjacent back links designating nested loops.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getLinkPadding ()
```

Return Value

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming Namespace

FlowchartLayout.getNodeDistance Method

Gets the distance between consecutive nodes in the flowchart.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getNodeDistance ()
```

Return Value

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming Namespace

FlowchartLayout.getOrientation Method

Gets the overall orientation of the arranged diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Orientation getOrientation ()
```

Return Value

A member of the Orientation enumeration.

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming Namespace

FlowchartLayout.getSplitGraph Method

Gets a value indicating whether unconnected subgraphs should be laid out independently from each other. If this property is set to true, each independent graph in the diagram is laid out in its own layout area. Otherwise all subgraphs are arranged in the same layout area.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getSplitGraph ()
```

Return Value

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming Namespace

FlowchartLayout.init Method

Returns a FlowchartLayoutBuilder object used to configure this FlowchartLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public FlowchartLayoutBuilder init ()
```

Return Value

A **FlowchartLayoutBuilder** instance.

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming Namespace

FlowchartLayout.setBranchPadding Method

Sets how much space to leave between adjacent decision branches in the flowchart.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBranchPadding (
    int value
)
```

Parameters

value

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming Namespace

FlowchartLayout.setIgnoreRepeatingLinks Method

Sets a value indicating whether to ignore repeating links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIgnoreRepeatingLinks (
    boolean value
)
```

Parameters

value

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming Namespace

FlowchartLayout.setLinkPadding Method

Sets how much space to leave between adjacent back links designating nested loops.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkPadding (
    float value
)
```

Parameters

value

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming Namespace

FlowchartLayout.setNodeDistance Method

Sets the distance between consecutive nodes in the flowchart.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setNodeDistance (
    float value
)
```

Parameters

value

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming Namespace

FlowchartLayout.setOrientation Method

Sets the overall orientation of the arranged diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value
A member of the Orientation enumeration.

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming Namespace

FlowchartLayout.setSplitGraph Method

Sets a value indicating whether unconnected subgraphs should be laid out independently from each other. If this property is set to true, each independent graph in the diagram is laid out in its own layout area. Otherwise all subgraphs are arranged in the same layout area.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSplitGraph (
    boolean value
)
```

Parameters

value

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming Namespace

FlowchartLayout.with Method

Returns a FlowchartLayoutBuilder object used to configure and create new FlowchartLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static FlowchartLayoutBuilder with ()
```

Return Value

A **FlowchartLayoutBuilder** instance.

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming Namespace

FoldContainerCmd Class

Undoable command that implements folding and unfolding of container nodes.

Syntax

```
Java
public class FoldContainerCmd extends Command
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.FoldContainerCmd

See Also

FoldContainerCmd Members
com.mindfusion.diagramming Namespace

FoldContainerCmd Members

Undoable command that implements folding and unfolding of container nodes.

The following tables list the members exposed by the FoldContainerCmd type.

Public Constructors

	Name	Description
	FoldContainerCmd	Initializes a new instance of the **FoldContainerCmd** class.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	Carries out the command action.
	getContainer	Gets the table associated with the command.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	Redoes the command action.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	Undoes the command.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

FoldContainerCmd Class
com.mindfusion.diagramming Namespace

FoldContainerCmd Constructor

Initializes a new instance of the FoldContainerCmd class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public FoldContainerCmd (
    ContainerNode container
)
```

Parameters

container

See Also

FoldContainerCmd Methods

FoldContainerCmd.execute Method

Carries out the command action.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled

See Also

FoldContainerCmd Members
FoldContainerCmd Class
com.mindfusion.diagramming Namespace

FoldContainerCmd.getContainer Method

Gets the table associated with the command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public ContainerNode getContainer ()
```

Return Value

See Also

FoldContainerCmd Members
FoldContainerCmd Class
com.mindfusion.diagramming Namespace

FoldContainerCmd.redo Method

Redoes the command action.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void redo ()
```

See Also

FoldContainerCmd Members
FoldContainerCmd Class
com.mindfusion.diagramming Namespace

FoldContainerCmd.undo Method

Undoes the command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void undo ()
```

See Also

FoldContainerCmd Members
FoldContainerCmd Class
com.mindfusion.diagramming Namespace

Folder Class

Implements the fold/unfold button shown in ContainerNode caption.

Syntax

```
Java
public class Folder extends Manipulator
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Manipulator
    com.mindfusion.diagramming.Folder

See Also

Folder Members

Implements the fold/unfold button shown in ContainerNode caption.

The following tables list the members exposed by the Folder type.

Public Constructors

	Name	Description
	Folder	Initializes a new instance of the **Folder** class.

Protected Fields

	Name	Description
	item	(Inherited from Manipulator.)

Public Methods

	Name	Description
	addToRepaintRect	Manipulator.AddToRepaintRect override.
	cancel	Called when the manipulator should cancel the current manipulation. (Inherited from Manipulator.)
	draw	Manipulator.draw override.
	drawsInLocalCoordinates	Returns whether the manipulator object draws in local or global coordinates. (Inherited from Manipulator.)
	getItem	(Inherited from Manipulator.)
	hitTest	Manipulator.hitTest override.
	needsPointerMessages	Returns whether the manipulator object needs to track mouse events. (Inherited from Manipulator.)
	onClick	Manipulator.onClick override.
	onGotFocus	Called when the manipulator receives input focus. (Inherited from Manipulator.)
	onLostFocus	Called when the manipulator loses the input focus. (Inherited from Manipulator.)
	onPointerDown	Called when the left mouse button is pressed while the pointer is over this manipulator. (Inherited from Manipulator.)
	onPointerMove	Called when the mouse is moved while this manipulator tracks the mouse events. (Inherited from Manipulator.)
	onPointerUp	Called when the left mouse button is released while this manipulator tracks the mouse events. (Inherited from Manipulator.)

	setMouseCursor	(Inherited from Manipulator.)
	supportClipping	Manipulator.SupportClipping override.

See Also

Folder Class
com.mindfusion.diagramming Namespace

Folder Constructor

Initializes a new instance of the Folder class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Folder (
    DiagramItem item
)
```

Parameters

item

See Also

Folder Class
com.mindfusion.diagramming Namespace

Folder Methods

Folder.addToRepaintRect Method

Manipulator.AddToRepaintRect override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addToRepaintRect (
    Rectangle2D rect
)
```

Parameters

rect

See Also

Folder Members
Folder Class
com.mindfusion.diagramming Namespace

Folder.draw Method

Manipulator.draw override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void draw (
    Graphics2D graphics
)
```

Parameters

graphics

See Also

Folder Members
Folder Class
com.mindfusion.diagramming Namespace

Folder.hitTest Method

Manipulator.hitTest override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean hitTest (
    Point2D point
)
```

Parameters

point

Return Value

See Also

Folder Members
Folder Class
com.mindfusion.diagramming Namespace

Folder.onClick Method

Manipulator.onClick override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onClick (
    Point2D point
)
```

Parameters

point

See Also

Folder Members
Folder Class
com.mindfusion.diagramming Namespace

Folder.supportClipping Method

Manipulator.SupportClipping override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean supportClipping ()
```

Return Value

See Also

Folder Members
Folder Class
com.mindfusion.diagramming Namespace

FoldIconRenderer Class

Draws fold and unfold buttons in ContainerNode caption bar.

Syntax

Java

```
public class FoldIconRenderer
```

Remarks

You can assign an instance of this class to Renderers.FoldIconRenderer to override the default appearance of fold / unfold icons.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.FoldIconRenderer

See Also

FoldIconRenderer Members
com.mindfusion.diagramming Namespace

FoldIconRenderer Members

Draws fold and unfold buttons in ContainerNode caption bar.

The following tables list the members exposed by the FoldIconRenderer type.

Public Constructors

	Name	Description
	FoldIconRenderer	Overloaded.

Public Methods

	Name	Description
	getAlignment	Gets icon's alignment within caption bar.
	setAlignment	Sets icon's alignment within caption bar.

See Also

FoldIconRenderer Class
com.mindfusion.diagramming Namespace

FoldIconRenderer Constructor

Overload List

Name	Description
FoldIconRenderer (Image, Image)	Initializes a new instance of the FoldIconRenderer class that renders fold / unfold icons provided as bitmaps.
FoldIconRenderer (RenderCallback)	Initializes a new instance of the **FoldIconRenderer** class.
FoldIconRenderer (SvgContent, SvgContent)	Initializes a new instance of the **FoldIconRenderer** class that renders fold / unfold icons provided as SVG drawings.

See Also

FoldIconRenderer Class
com.mindfusion.diagramming Namespace

FoldIconRenderer Constructor (Image, Image)

Initializes a new instance of the FoldIconRenderer class that renders fold / unfold icons provided as bitmaps.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public FoldIconRenderer (
    Image foldIcon,
    Image unfoldIcon
)
```

Parameters

foldIcon
A **java.awt.Image** representing the fold icon.

unfoldIcon
A **java.awt.Image** representing the unfold icon.

See Also

FoldIconRenderer Constructor Overload List
FoldIconRenderer Class
com.mindfusion.diagramming Namespace

FoldIconRenderer Constructor (RenderCallback<ContainerNode>)

Initializes a new instance of the FoldIconRenderer class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public FoldIconRenderer (
    RenderCallback<ContainerNode> renderCallback
)
```

Parameters

renderCallback
A callback function that draws the icon using Graphics2D API.

See Also

FoldIconRenderer Constructor Overload List
FoldIconRenderer Class
com.mindfusion.diagramming Namespace

FoldIconRenderer Constructor (SvgContent, SvgContent)

Initializes a new instance of the FoldIconRenderer class that renders fold / unfold icons provided as SVG drawings.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public FoldIconRenderer (
    SvgContent foldIcon,
    SvgContent unfoldIcon
)
```

Parameters

foldIcon
An SvgContent representing the fold icon.

unfoldIcon
An **SvgContent** representing the unfold icon.

See Also

FoldIconRenderer Constructor Overload List
FoldIconRenderer Class
com.mindfusion.diagramming Namespace

FoldIconRenderer Methods

FoldIconRenderer.getAlignment Method

Gets icon's alignment within caption bar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Align getAlignment ()
```

Return Value

A member of the Align enumeration. The default value is **Far**.

See Also

FoldIconRenderer Members
FoldIconRenderer Class
com.mindfusion.diagramming Namespace

FoldIconRenderer.setAlignment Method

Sets icon's alignment within caption bar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAlignment (
    Align value
)
```

Parameters

value
A member of the Align enumeration. The default value is **Far**.

See Also

FoldIconRenderer Members
FoldIconRenderer Class
com.mindfusion.diagramming Namespace

FractalLayout Class

A tree layout algorithm that places child nodes symmetrically around their parent node.

Syntax

Java

```
public class FractalLayout extends AbstractLayout
```

Remarks

Nodes at the lowest level are arranged directly in a circle around their parent. At the upper level, the already arranged nodes form branches that are arranged in a circle around the new parent node. The algorithm is recursively repeated till the highest level is reached. If nodes in the tree have uniform number of children, the end result has fractal-like appearance (subsets of the graph look like scaled-down copies of the whole graph).

You can choose which node should be displayed at the center of the topmost circle by setting the Root property. If it is not specified, the algorithm automatically selects a root that leads to more balanced distribution of nodes.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AbstractLayout

com.mindfusion.diagramming.FractalLayout

See Also

FractalLayout Members
com.mindfusion.diagramming Namespace

FractalLayout Members

A tree layout algorithm that places child nodes symmetrically around their parent node.

The following tables list the members exposed by the FractalLayout type.

Public Constructors

	Name	Description
	FractalLayout	Initializes a new instance of the FractalLayout class.

Public Methods

	Name	Description
	arrange	Applies the layout on the specified subset of items from the specified Diagram instance.
	getAnchoring	Gets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	getGrowToFit	Gets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	getKeepGroupLayout	Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	getLayoutLink	Gets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	getLayoutNode	Gets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	getMultipleGraphsPlacement	Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	getProgress	Gets the progress callback delegate. (Inherited from AbstractLayout.)
	getRoot	Gets the tree root.
	init	Returns a FractalLayoutBuilder object used to configure this FractalLayout instance.

	removeMidleSegmentPoint	(Inherited from AbstractLayout.)
	setAnchoring	Sets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	setGrowToFit	Sets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	setKeepGroupLayout	Sets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	setLayoutLink	Sets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	setLayoutNode	Sets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	setMultipleGraphsPlacement	Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	setProgress	Sets the progress callback delegate. (Inherited from AbstractLayout.)
	setRoot	Sets the tree root.
	with	Returns a FractalLayoutBuilder object used to configure and create new FractalLayout instances.

See Also

FractalLayout Class
com.mindfusion.diagramming Namespace

FractalLayout Constructor

Initializes a new instance of the FractalLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public FractalLayout ()
```

See Also

FractalLayout Class
com.mindfusion.diagramming Namespace

FractalLayout Methods

FractalLayout.arrange Method

Applies the layout on the specified subset of items from the specified Diagram instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram diagram,
    DiagramItemList items
)
```

Parameters

diagram
The Diagram that should be arranged.

items
A collection of nodes and links from diagram that define the subgraph to arrange.

Return Value

This method always returns **true**.

See Also

FractalLayout Members
FractalLayout Class
com.mindfusion.diagramming Namespace

FractalLayout.getRoot Method

Gets the tree root.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode getRoot ()
```

Return Value

A DiagramNode specifying the root.

See Also

FractalLayout Members
FractalLayout Class

FractalLayout.init Method

Returns a FractalLayoutBuilder object used to configure this FractalLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public FractalLayoutBuilder init ()
```

Return Value

A **FractalLayoutBuilder** instance.

See Also

FractalLayout Members
FractalLayout Class
com.mindfusion.diagramming Namespace

FractalLayout.setRoot Method

Sets the tree root.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRoot (
    DiagramNode value
)
```

Parameters

value
A DiagramNode specifying the root.

Remarks

If there is no root specified, the algorithm automatically selects one that will lead to more balanced branch sizes.

See Also

FractalLayout Members
FractalLayout Class
com.mindfusion.diagramming Namespace

FractalLayout.with Method

Returns a FractalLayoutBuilder object used to configure and create new FractalLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static FractalLayoutBuilder with ()`

Return Value

A **FractalLayoutBuilder** instance.

See Also

FractalLayout Members
FractalLayout Class
com.mindfusion.diagramming Namespace

FreeFormHandle Class

Represents an adjustment handle used to modify the outline of a FreeFormNode.

Syntax

Java
`public class FreeFormHandle extends AdjustmentHandle`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AdjustmentHandle
    com.mindfusion.diagramming.FreeFormHandle

See Also

FreeFormHandle Members
com.mindfusion.diagramming Namespace

FreeFormHandle Members

Represents an adjustment handle used to modify the outline of a FreeFormNode.

The following tables list the members exposed by the FreeFormHandle type.

Public Constructors

	Name	Description
	FreeFormHandle	Initializes a new instance of the **FreeFormHandle** class.

Public Methods

	Name	Description
	getPointIndex	Gets the index of a point from FreeFormNode.Points collection that is being modified through this handle.
	setPointIndex	Sets the index of a point from **FreeFormNode.Points** collection that is being modified through this handle.

See Also

FreeFormHandle Class
com.mindfusion.diagramming Namespace

FreeFormHandle Constructor

Initializes a new instance of the FreeFormHandle class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public FreeFormHandle (
    int pointIndex
)
```

Parameters

pointIndex
An index of a point from FreeFormNode.Points collection that is being modified through this handle.

See Also

FreeFormHandle Class
com.mindfusion.diagramming Namespace

FreeFormHandle Methods

FreeFormHandle.getPointIndex Method

Gets the index of a point from FreeFormNode.Points collection that is being modified through this handle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getPointIndex ()
```

Return Value

An integer index of modified outline point.

See Also

FreeFormHandle Members
FreeFormHandle Class
com.mindfusion.diagramming Namespace

FreeFormHandle.setPointIndex Method

Sets the index of a point from FreeFormNode.Points collection that is being modified through this handle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPointIndex (
    int pointIndex
)
```

Parameters

pointIndex
An integer index of modified outline point.

See Also

FreeFormHandle Members
FreeFormHandle Class
com.mindfusion.diagramming Namespace

FreeFormNode Class

A **FreeFormNode** collects all points from users' mouse or touch input and displays them as node's outline.

Syntax

Java

```
public class FreeFormNode extends DiagramNode implements InplaceEditable
```

Remarks

To let users draw free-form nodes interactively, set Behavior to DrawFreeForms or LinkFreeForms. Use the Points property of **FreeFormNode** to get or set outline points programmatically. If the Closed property is set, the node is drawn as a closed shape and its interior filled, or otherwise the node is drawn as a polyline. If the distance between first and last points drawn by user is shorter than AutoCloseDistance, the node's Closed property is automatically set to **true**. **AutoCloseDistance** default value is Float.MAX_VALUE, so free-form nodes are always closed.

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.DiagramItem
com.mindfusion.diagramming.DiagramNode
com.mindfusion.diagramming.FreeFormNode

See Also

FreeFormNode Members
com.mindfusion.diagramming Namespace

FreeFormNode Members

A FreeFormNode collects all points from users' mouse or touch input and displays them as node's outline.

The following tables list the members exposed by the **FreeFormNode** type.

Public Constructors

	Name	Description
	FreeFormNode	Overloaded.

Protected Fields

	Name	Description
	allowIncomingLinks	(Inherited from DiagramNode.)
	allowOutgoingLinks	(Inherited from DiagramNode.)
	anchorPattern	(Inherited from DiagramNode.)
	AV_Cancel	(Inherited from DiagramNode.)
	AV_EndModIncoming	(Inherited from DiagramNode.)
	AV_EndModOutgoing	(Inherited from DiagramNode.)
	AV_StartModIncoming	(Inherited from DiagramNode.)
	AV_StartModOutgoing	(Inherited from DiagramNode.)
	AV_UpdateIncoming	(Inherited from DiagramNode.)
	AV_UpdateOutgoing	(Inherited from DiagramNode.)
	AV_UpdIntscIncoming	(Inherited from DiagramNode.)
	AV_UpdIntscOutgoing	(Inherited from DiagramNode.)
	AV_UpdPosIncoming	(Inherited from DiagramNode.)
	AV_UpdPosOutgoing	(Inherited from DiagramNode.)
	bounds	(Inherited from DiagramNode.)
	brush	(Inherited from DiagramItem.)
	cycleDetected	(Inherited from DiagramItem.)
	cycleProtect	(Inherited from DiagramItem.)

	enabledHandles	(Inherited from DiagramNode.)
	handlesStyle	(Inherited from DiagramNode.)
	incomingLinks	(Inherited from DiagramNode.)
	masterGroup	(Inherited from DiagramNode.)
	modifyDX	(Inherited from DiagramItem.)
	modifyDY	(Inherited from DiagramItem.)
	modifyHandle	(Inherited from DiagramItem.)
	modifying	(Inherited from DiagramItem.)
	obstacle	(Inherited from DiagramNode.)
	outgoingLinks	(Inherited from DiagramNode.)
	pen	(Inherited from DiagramItem.)
	ptEnd	(Inherited from DiagramItem.)
	ptMdfLast	(Inherited from DiagramItem.)
	ptOrg	(Inherited from DiagramItem.)
	ptSavedEnd	(Inherited from DiagramItem.)
	ptSavedOrg	(Inherited from DiagramItem.)
	savedBounds	(Inherited from DiagramNode.)
	subordinateGroup	(Inherited from DiagramItem.)

Public Methods

	Name	Description
	addLabel	Overloaded. (Inherited from DiagramNode.)
	as	Down-casts the item to specified type. (Inherited from DiagramItem.)
	attachTo	Overloaded. (Inherited from DiagramNode.)
	clone	Creates a copy of this item. (Inherited from DiagramItem.)
	containsPoint	Overloaded.
	detach	Detaches a node from its master group. (Inherited from DiagramNode.)
	getAllIncomingLinks	Gets a collection of all links entering this node. (Inherited from DiagramNode.)
	getAllLinks	Gets all links connected to this node. (Inherited from DiagramNode.)
	getAllOutgoingLinks	Gets a collection of all links going out of this node. (Inherited from DiagramNode.)

	getAllowIncomingLinks	Gets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	getAllowOutgoingLinks	Gets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	getAnchorPattern	Gets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)
	getBounds	Gets the node location and size. (Inherited from DiagramNode.)
	getBrush	Gets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	getCenter	Returns the center point of this node. (Inherited from DiagramNode.)
	getClosed	Gets if the node's shape is closed.
	getConstraints	Gets the movement and size constraints applied to a node. (Inherited from DiagramNode.)
	getContainer	Gets the parent ContainerNode containing this node. (Inherited from DiagramNode.)
	getEditRect	Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).
	getEffectiveBrush	Gets the effective brush of the item. (Inherited from DiagramItem.)
	getEffectiveFont	Gets the currently effective font of the item. This property returns getFont if it is not null, or a font with the DiagramItemStyle.getFontFamily, DiagramItemStyle.getFontSize, and DiagramItemStyle.getFontStyle properties of the item's style. (Inherited from DiagramItem.)
	getEffectivePen	Gets the effective pen of the item. (Inherited from DiagramItem.)
	getEffectiveShadowBrush	Creates a Brush object representing the currently effective shadow brush of the item. This method returns a system brush corresponding to the item's getShadowBrush if the item's **getShadowBrush** is not null, or a system brush corresponding to the DiagramItemStyle.getShadowBrush property of the item's style. (Inherited from DiagramItem.)
	getEffectiveTextBrush	Gets the effective text brush of the item. (Inherited from DiagramItem.)
	getEffects	Gets a collection with all effects applied to this node. (Inherited from DiagramNode.)
	getEnabledHandles	Gets a combination of NodeHandleType members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)

	getExpandable	Gets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	getExpanded	Gets a value indicating whether the tree branch that starts from a node is expanded or collapsed. (Inherited from DiagramNode.)
	getFont	Gets the font used to draw the text of an item. (Inherited from DiagramItem.)
	getHandlesStyle	Gets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	getHyperLink	Gets the hyperlink associated with an item. (Inherited from DiagramItem.)
	getId	Gets user-defined identifier associated with this item. (Inherited from DiagramItem.)
	getIgnoreLayout	Gets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	getIncomingLinks	Gets the links coming into a node. (Inherited from DiagramNode.)
	getLabels	Returns the list of supplementary labels displayed by this node. (Inherited from DiagramNode.)
	getLayerIndex	Gets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	getLayoutTraits	Returns a hashtable containing properties specific to layout algorithms. (Inherited from DiagramItem.)
	getLocalCenter	(Inherited from DiagramNode.)
	getLocked	Gets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	getMasterGroup	Gets the hierarchical group in which this node is a subordinate item. (Inherited from DiagramNode.)
	getMasterItem	Returns the node's **Container** or main item of **MasterGroup**. (Inherited from DiagramNode.)
	getNearestBorderPoint	Returns a point that lies on the outline of this node, at the shortest distance from the specified point. (Inherited from DiagramNode.)
	getObstacle	Gets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	getOpacity	Gets the opacity of this item. (Inherited from DiagramItem.)
	getOutgoingLinks	Gets the links going out from a node. (Inherited from DiagramNode.)
	getParent	Gets the diagram that contains this item. (Inherited from DiagramItem.)

	getPen	Gets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	getPoints	Gets the node's outline points.
	getPrintable	Gets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
S	getRotatedBounds	Gets the bounding rectangle of this node, when it is rotated at the specified angle around the specified pivot. (Inherited from DiagramNode.)
	getRotationAngle	Gets the rotation angle of this node. (Inherited from DiagramNode.)
	getRuntimeIndex	For internal use. (Inherited from DiagramItem.)
	getSelected	Gets a value indicating whether this item is selected. (Inherited from DiagramItem.)
	getShadowBrush	Gets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	getShadowOffsetX	Gets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getShadowOffsetY	Gets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getStyle	Gets the style associated with the item. (Inherited from DiagramItem.)
	getSubordinateGroup	Gets the group of subordinated items attached to this one. (Inherited from DiagramItem.)
	getTag	Gets user-defined data assigned to an item. (Inherited from DiagramItem.)
	getText	Gets the text displayed inside this node.
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	getTextPadding	Gets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	getTextToEdit	Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when this node is edited in-place.
	getToolTip	Gets the tooltip text displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	getVisible	Gets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	getWeight	Gets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	getZIndex	Gets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	hasSubordinates	Checks whether there are any nodes attached to this item. (Inherited from DiagramItem.)

	hitTest	Returns the diagram item that contains the specified point. (Inherited from DiagramItem.)
	hitTestHandle	DiagramNode.hitTestHandle override. Determines whether a selection handle of this node is located at the specified point.
	init	Returns a FreeFormNodeBuilder object used to configure this FreeFormNode instance.
	labelFromPoint	Returns the label whose layout rectangle contains the specified point. (Inherited from DiagramNode.)
	moveTo	Moves a node to the specified location. (Inherited from DiagramNode.)
	nodesIntersect	Determines whether two nodes intersect. (Inherited from DiagramNode.)
	onDragOut	Invoked when a diagram item is being dragged out of this node. (Inherited from DiagramNode.)
	onDragOver	Invoked when a diagram item is being dragged over this node. (Inherited from DiagramNode.)
	onDropOver	Invoked when a diagram item is dropped over this node. (Inherited from DiagramNode.)
	query	Returns the items that can be reached from this item by following the path specified in the given query expression. (Inherited from DiagramItem.)
	readExternal	DiagramNode.readExternal override.
	removeLabel	Removes the specified label from this node. (Inherited from DiagramNode.)
	resize	Sets the size of a node. (Inherited from DiagramNode.)
	setAllowIncomingLinks	Sets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	setAllowOutgoingLinks	Sets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	setAnchorPattern	Sets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)
	setBounds	Overloaded. (Inherited from DiagramNode.)
	setBoundsDirect	For internal use. (Inherited from DiagramNode.)
	setBrush	Sets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	setClosed	Sets if the node's shape is closed.
	setConstraints	Sets constraints to the node size and movement direction. The constraints are applied when a user modifies the node interactively. They are not checked when the position of a node is set programmatically. (Inherited from DiagramNode.)

	setEditedText	Implements InplaceEditable.setEditedText. Assigns the edited text to this node after in-place edit operation completes successfully.
	setEnabledHandles	Sets a combination of **NodeHandleType** members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	setExpandable	Sets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	setExpanded	Expands or collapses the tree branch that starts from a node. (Inherited from DiagramNode.)
	setExpandedFlag	Changes the "expanded" flag without actually expanding or collapsing the tree branch that starts from a node. (Inherited from DiagramNode.)
	setFont	Sets the font used to draw the text of an item. (Inherited from DiagramItem.)
	setHandlesStyle	Sets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	setHyperLink	Sets the hyperlink associated with an item. (Inherited from DiagramItem.)
	setId	Assigns user-defined identifier to this item. (Inherited from DiagramItem.)
	setIgnoreLayout	Sets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	setLayerIndex	Sets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	setLocked	Sets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	setObstacle	Sets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	setOpacity	Sets the opacity of this item. (Inherited from DiagramItem.)
	setPen	Sets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	setPoints	Sets the node's outline points.
	setPrintable	Sets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	setRotationAngle	Sets the rotation angle of a node. (Inherited from DiagramNode.)
	setSelected	Selects or deselects an item. (Inherited from DiagramItem.)

	setShadowBrush	Sets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	setShadowOffsetX	Sets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShadowOffsetY	Sets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setStyle	Sets the style associated with the item. (Inherited from DiagramItem.)
	setTag	Assigns user-defined data to an item. If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event. (Inherited from DiagramItem.)
	setText	Sets the text label displayed inside this node.
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	setTextPadding	Sets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	setToolTip	Sets the tooltip text that should be displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	setVisible	Sets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	setWeight	Sets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	setZIndex	Sets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	updateFromPoints	Updates the node's internal state after its points have changed.
	with	Returns a FreeFormNodeBuilder object used to configure and create new FreeFormNode instances.
	writeExternal	DiagramNode.writeExternal override.
	zBottom	Moves an item to the bottom of the Z order. (Inherited from DiagramItem.)
	zLevelDown	Moves an item down in the Z order. (Inherited from DiagramItem.)
	zLevelUp	Moves an item up in the Z order. (Inherited from DiagramItem.)
	zTop	Moves an item to the top of the Z order. (Inherited from DiagramItem.)

Protected Methods

	Name	Description

	allowCreate	DiagramNode.allowCreate override.
	allowModify	(Inherited from DiagramNode.)
	allowModifyImpl	(Inherited from DiagramNode.)
	cancelModify	DiagramItem.cancelModify override. Invoked when the interactive modification of this node has been canceled.
	completeCreate	DiagramNode.completeCreate override.
	completeModify	(Inherited from DiagramNode.)
	constraintsInfringed	(Inherited from DiagramNode.)
	createConnectionPoint	(Inherited from DiagramNode.)
	createProperties	DiagramNode.createProperties override.
	createState	DiagramNode.createState override.
	draw	DiagramNode.draw override. Draws this node on the specified Graphics2D surface.
	drawLocal	Override in a derived class to provide implementation specific drawing for the node. (Inherited from DiagramNode.)
	drawShadow	DiagramNode.drawShadow override. Draws the node's shadow on the specified Graphics2D surface.
	drawShadowLocal	Override in a derived class to provide implementation specific drawing for the shadow of the node. (Inherited from DiagramNode.)
	getLocalBounds	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getLocalBoundsD	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getMeasureUnit	(Inherited from DiagramItem.)
	getRepaintRect	DiagramItem.getRepaintRect override. (Inherited from DiagramNode.)
	getValue	Gets the effective value of the style property with the specified name. (Inherited from DiagramItem.)
	groupContains	(Inherited from DiagramNode.)
	loadFromJson	Loads the node from a JSON object.
	loadFromXml	Loads the item content from an XML element.
	move	(Inherited from DiagramNode.)
	onAdd	Called when an item is added to a Diagram, either by the user, programmatically or by undo / redo. (Inherited from DiagramItem.)
	onChangeFont	(Inherited from DiagramItem.)
	onChangeTextPadding	(Inherited from DiagramItem.)

	onChildModified	Called when a group child node has been modified. Override this method if you need to know when a node from the **SubordinateGroup** is modified. (Inherited from DiagramItem.)
	onClick	Invoked when the user clicks this item. (Inherited from DiagramItem.)
	onDoubleClick	Invoked when the user double-clicks this item. (Inherited from DiagramItem.)
	onLoad	Called when this item is loaded from a file. (Inherited from DiagramItem.)
	onMeasureUnitChanged	Called when the diagram's MeasureUnit changes. (Inherited from DiagramItem.)
	onModify	Called when an item is modified (Inherited from DiagramNode.)
	onRemove	Called when an item is removed from a **Diagram**, either by the user, programmatically or by undo / redo. (Inherited from DiagramNode.)
	onRotationAngleChanged	Called when the node's rotation angle changes. (Inherited from DiagramNode.)
	onRotationAngleChanged	**DiagramNode.onRotationAngleChanged** override.
	onStyleChanged	Invoked when the associated style or theme have changed. (Inherited from DiagramItem.)
	onStyleFontChanged	Invoked when font property values of an associated style change. (Inherited from DiagramItem.)
	onUpdateBounds	DiagramNode.onUpdateBounds override. Invoked when the bounding rectangle of this node has changed.
	parentConstraintsInfringed	(Inherited from DiagramNode.)
	putExpandable	(Inherited from DiagramNode.)
	putSelected	(Inherited from DiagramItem.)
	rectFromPoints	(Inherited from DiagramNode.)
	repaint	Overloaded. (Inherited from DiagramItem.)
	resizeToFitImage	(Inherited from DiagramNode.)
	restoreProperties	DiagramNode.restoreProperties override.
	restoreState	DiagramNode.restoreState override.
	saveProperties	DiagramNode.saveProperties override.
	saveState	DiagramNode.saveState override.
	saveToJson	Saves the node as a JSON object.
	saveToXml	Saves the item content into an XML element.
	scaleElements	Scales the node's elements by specified amount. (Inherited from DiagramNode.)

	setDiagramDirty	Marks the diagram as changed. (Inherited from DiagramItem.)
	setReflexive	Invoked to let a node set the shape of a reflexive link connected to it. (Inherited from DiagramNode.)
	shouldRender	Determines whether the item is rendered in the current context. (Inherited from DiagramItem.)
	shouldRenderAnchors	Determines whether the node should render its anchor points. (Inherited from DiagramNode.)
	startCreate	DiagramItem.startCreate override.
	startModify	DiagramNode.startModify override. Invoked when the user starts modifying this node interactively.
	updateCreate	DiagramNode.updateCreate override.
	updateLinkPositions	(Inherited from DiagramNode.)
	updateModify	DiagramNode.updateModify override. Invoked during interactive modification of this node.

See Also

FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode Constructor

Overload List

Name	Description
FreeFormNode ()	Initializes a new instance of the FreeFormNode class.
FreeFormNode (Diagram)	Initializes a new instance of the **FreeFormNode** class.
FreeFormNode (FreeFormNode)	Initializes a new instance of the **FreeFormNode** class using the specified node as a prototype.

See Also

FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode Constructor ()

Initializes a new instance of the FreeFormNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public FreeFormNode ()
```

See Also

FreeFormNode Constructor Overload List
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode Constructor (Diagram)

Initializes a new instance of the FreeFormNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public FreeFormNode (
    Diagram parent
)
```

Parameters

parent
The Diagram from which to obtain default values for the node properties.

See Also

FreeFormNode Constructor Overload List
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode Constructor (FreeFormNode)

Initializes a new instance of the FreeFormNode class using the specified node as a prototype.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public FreeFormNode (
    FreeFormNode prototype
)
```

Parameters

prototype
The node to use as a prototype. The properties of the new node are initialized from the property values of this node.

See Also

FreeFormNode Constructor Overload List
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode Methods

FreeFormNode.allowCreate Method

DiagramNode.allowCreate override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean allowCreate (
    Point2D current,
    InteractionState ist
)
```

Parameters

current
The current mouse position.

ist
An InteractionState object containing more information about the current state of the operation.

Return Value

true to allow the creation of this item, or **false** otherwise.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.cancelModify Method

DiagramItem.cancelModify override. Invoked when the interactive modification of this node has been canceled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void cancelModify (
    InteractionState ist
)
```

Parameters

ist
An InteractionState object containing more information about the current state of the operation.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.completeCreate Method

DiagramNode.completeCreate override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void completeCreate (
    Point2D end
)
```

Parameters

end
The final mouse position.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.containsPoint Method

Overload List

Name	Description
FreeFormNode.containsPoint (Point2D)	DiagramNode.containsPoint override. Checks whether this node contains the specified point. This method is called during hit-testing to determine if the pointer is over the node.
FreeFormNode.containsPoint (Point2D, float)	DiagramNode.containsPoint override. Checks whether this node contains the specified point. This method is called during hit-testing to determine if the pointer is over the node.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.containsPoint Method (Point2D)

DiagramNode.containsPoint override. Checks whether this node contains the specified point. This method is called during hit-testing to determine if the pointer is over the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean containsPoint (
    Point2D point
)
```

Parameters

point
The point to check.

Return Value

true it this node contains the specified point, or **false** otherwise.

See Also

containsPoint Method Overload List
FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.containsPoint Method (Point2D, float)

DiagramNode.containsPoint override. Checks whether this node contains the specified point. This method is called during hit-testing to determine if the pointer is over the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean containsPoint (
    Point2D point,
    float threshold
)
```

Parameters

point
The point to check.

threshold

Specifies the size of the area around the node outlines where the point is still considered inside.

Return Value

true it this node contains the specified point, or **false** otherwise.

See Also

containsPoint Method Overload List
FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.createProperties Method

DiagramNode.createProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramItemProperties createProperties ()
```

Return Value

A DiagramItemProperties -derived object.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.createState Method

DiagramNode.createState override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramItemState createState ()
```

Return Value

A DiagramItemState -derived objects.

See Also

FreeFormNode Members
FreeFormNode Class

FreeFormNode.draw Method

DiagramNode.draw override. Draws this node on the specified Graphics2D surface.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void draw (
    Graphics2D g,
    RenderOptions options
)
```

Parameters

g
A Graphics2D instance.

options
Provides options for the drawing operation.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.drawShadow Method

DiagramNode.drawShadow override. Draws the node's shadow on the specified Graphics2D surface.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void drawShadow (
    Graphics2D g,
    RenderOptions options
)
```

Parameters

g
A Graphics2D instance.

options
Provides options for the drawing operation.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.getClosed Method

Gets if the node's shape is closed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getClosed ()
```

Return Value

true if the node should be drawn as a closed polygon and filled, or **false** otherwise.

Remarks

This property is set automatically if the distance between start and end points is smaller than AutoCloseDistance when the user finishes drawing the node.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.getEditRect Method

Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getEditRect (
    DiagramItem item,
    Point2D mousePosition
)
```

Parameters

item
A reference to this node.

mousePosition
A Point2D instance specifying the current pointer position.

Return Value

A Rectangle2D specifying where the edit box should be placed.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.getPoints Method

Gets the node's outline points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ArrayList<Point2D.Float> getPoints ()
```

Return Value

An ArrayList<Rectangle2D.Float> instance.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.getText Method

Gets the text displayed inside this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getText ()
```

Return Value

A String containing the label text.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.getTextToEdit Method

Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when this node is edited in-place.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getTextToEdit ()
```

Return Value

A String that represents the initial contents of the in-place edit box.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.hitTestHandle Method

DiagramNode.hitTestHandle override. Determines whether a selection handle of this node is located at the specified point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AdjustmentHandle hitTestHandle (
    Point2D point
)
```

Parameters

point
A Point2D instance specifying the location where to look for adjustment handles.

Return Value

Returns a NodeAdjustmentHandle or FreeFormHandle representing the adjustment handle found at the specified location, or **null** if there is none.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.init Method

Returns a FreeFormNodeBuilder object used to configure this FreeFormNode instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public FreeFormNodeBuilder init ()
```

Return Value

A **FreeFormNodeBuilder** instance.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.loadFromJson Method

Loads the node from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the node's data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.loadFromXml Method

Loads the item content from an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An Xml Element containing the item's data.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.onRotationAngleChanged Method

DiagramNode.onRotationAngleChanged override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onRotationAngleChanged (
    double oldAngle
)
```

Parameters

oldAngle

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.onUpdateBounds Method

DiagramNode.onUpdateBounds override. Invoked when the bounding rectangle of this node has changed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onUpdateBounds (
    Rectangle2D oldBounds
)
```

Parameters

oldBounds

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.readExternal Method

DiagramNode.readExternal override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.restoreProperties Method

DiagramNode.restoreProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void restoreProperties (
    DiagramItemProperties props
)
```

Parameters

props
A DiagramItemProperties instance.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.restoreState Method

DiagramNode.restoreState override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void restoreState (
    DiagramItemState state
)
```

Parameters

state
A DiagramItemState instance.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.saveProperties Method

DiagramNode.saveProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveProperties (
    DiagramItemProperties props
)
```

Parameters

props
A DiagramItemProperties instance.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.saveState Method

DiagramNode.saveState override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveState (
    DiagramItemState state
)
```

Parameters

state
A DiagramItemState instance.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.saveToJson Method

Saves the node as a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject instance to contain the serialized data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.saveToXml Method

Saves the item content into an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An Xml Element the item's data should be stored into.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.setClosed Method

Sets if the node's shape is closed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setClosed (
    boolean value
)
```

Parameters

value
true if the node should be drawn as a closed polygon and filled, or **false** otherwise.

Remarks

This property is set automatically if the distance between start and end points is smaller than AutoCloseDistance when the user finishes drawing the node.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.setEditedText Method

Implements InplaceEditable.setEditedText. Assigns the edited text to this node after in-place edit operation completes successfully.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEditedText (
    String newText
)
```

Parameters

newText
The new text of this node.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.setPoints Method

Sets the node's outline points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPoints (
    ArrayList<Point2D.Float> value
)
```

Parameters

value
An ArrayList<Point2D.Float> instance.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.setText Method

Sets the text label displayed inside this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setText (
    String value
)
```

Parameters

value
A String containing the label text.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.startCreate Method

DiagramItem.startCreate override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void startCreate (
    Point2D org
)
```

Parameters

org
The initial mouse position.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.startModify Method

DiagramNode.startModify override. Invoked when the user starts modifying this node interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void startModify (
    Point2D org,
    AdjustmentHandle handle,
    InteractionState ist
)
```

Parameters

org
The initial mouse position.

handle
The adjustment handle used to modify this item.

ist
An InteractionState object containing more information about the current state of the operation.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.updateCreate Method

DiagramNode.updateCreate override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void updateCreate (
    Point2D current
)
```

Parameters

current
The current position of the mouse pointer.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.updateFromPoints Method

Updates the node's internal state after its points have changed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void updateFromPoints ()
```

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.updateModify Method

DiagramNode.updateModify override. Invoked during interactive modification of this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void updateModify (
    Point2D current,
    InteractionState ist
)
```

Parameters

current
The current mouse position.

ist
An InteractionState object containing more information about the current state of the operation.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.with Method

Returns a FreeFormNodeBuilder object used to configure and create new FreeFormNode instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static FreeFormNodeBuilder with ()
```

Return Value

A **FreeFormNodeBuilder** instance.

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNode.writeExternal Method

DiagramNode.writeExternal override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

FreeFormNode Members
FreeFormNode Class
com.mindfusion.diagramming Namespace

FreeFormNodeStyle Class

Represents a reusable set of properties that define the appearance of free-form nodes.

Syntax

Java

```
public class FreeFormNodeStyle extends DiagramNodeStyle
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Style
    com.mindfusion.diagramming.DiagramItemStyle
      com.mindfusion.diagramming.DiagramNodeStyle
        com.mindfusion.diagramming.FreeFormNodeStyle

See Also

FreeFormNodeStyle Members
com.mindfusion.diagramming Namespace

FreeFormNodeStyle Members

Represents a reusable set of properties that define the appearance of free-form nodes.

The following tables list the members exposed by the FreeFormNodeStyle type.

Public Constructors

	Name	Description
	FreeFormNodeStyle	Initializes a new instance of the **FreeFormNodeStyle** class.

Public Methods

	Name	Description
	addPropertyChangeListener	(Inherited from Style.)
	getBrush	Gets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	getEffects	Gets a list of the effects applied to the node. (Inherited from DiagramNodeStyle.)
	getFontFamily	Gets the font family of the item text. (Inherited from DiagramItemStyle.)
	getFontSize	Gets the font size of the item text. (Inherited from DiagramItemStyle.)
	getFontStyle	Gets the font style of the item text. (Inherited from DiagramItemStyle.)
	getFontUnit	Gets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	getShadowBrush	Gets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	getStroke	Gets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	getStrokeThickness	Gets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
	init	Returns a FreeFormNodeStyleBuilder object used to configure this FreeFormNodeStyle instance.
	readExternal	**Externalizable.readExternal** implementation. (Inherited from Style.)

	registerType	Associates a type with an alias. The alias is used when saving and loading objects of the specified type during style serialization and deserialization. (Inherited from Style.)
	removePropertyChangeListener	(Inherited from Style.)
	setBrush	Sets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	setFontFamily	Sets the font family of the item text. (Inherited from DiagramItemStyle.)
	setFontSize	Sets the font size of the item text. (Inherited from DiagramItemStyle.)
	setFontStyle	Sets the font style of the item text. (Inherited from DiagramItemStyle.)
	setFontUnit	Sets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	setShadowBrush	Sets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	setStroke	Sets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	setStrokeThickness	Sets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
	with	Returns a FreeFormNodeStyleBuilder object used to configure and create new FreeFormNodeStyle instances.
	writeExternal	**Externalizable.writeExternal** implementation. (Inherited from Style.)

Protected Methods

	Name	Description
	getValue	Gets the value of the specified property. (Inherited from Style.)
	isPropertySet	Checks whether the specified property has a value. (Inherited from Style.)
	loadFromJson	Loads the style content from a JsonObject. (Inherited from DiagramNodeStyle.)
	loadFromXml	Loads the style content from an XML element. (Inherited from Style.)
	registerProperty	Registers a new property with the specified name and type. (Inherited from Style.)
	saveToJson	Saves the style content into a JsonObject. (Inherited from DiagramNodeStyle.)

	saveToXml	Saves the style content into an XML element. (Inherited from Style.)
	setValue	Sets the value of the specified property. (Inherited from Style.)
	unsetValue	Clears the value of the specified property. (Inherited from Style.)

See Also

FreeFormNodeStyle Class
com.mindfusion.diagramming Namespace

FreeFormNodeStyle Constructor

Initializes a new instance of the FreeFormNodeStyle class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public FreeFormNodeStyle ()
```

See Also

FreeFormNodeStyle Class
com.mindfusion.diagramming Namespace

FreeFormNodeStyle Methods

FreeFormNodeStyle.init Method

Returns a FreeFormNodeStyleBuilder object used to configure this FreeFormNodeStyle instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public FreeFormNodeStyleBuilder init ()
```

Return Value

A **FreeFormNodeStyleBuilder** instance.

See Also

FreeFormNodeStyle Members
FreeFormNodeStyle Class

com.mindfusion.diagramming Namespace

FreeFormNodeStyle.with Method

Returns a FreeFormNodeStyleBuilder object used to configure and create new FreeFormNodeStyle instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static FreeFormNodeStyleBuilder with ()
```

Return Value

A **FreeFormNodeStyleBuilder** instance.

See Also

FreeFormNodeStyle Members
FreeFormNodeStyle Class
com.mindfusion.diagramming Namespace

GlassEffect Class

Represents a glass-like visual effect. This effect can be applied to the nodes in a Diagram by adding an instance of this class to the Diagram.getNodeEffects collection.

Syntax

```
Java
public class GlassEffect extends NodeEffect
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.NodeEffect
    com.mindfusion.diagramming.GlassEffect

See Also

GlassEffect Members
com.mindfusion.diagramming Namespace

GlassEffect Members

Represents a glass-like visual effect. This effect can be applied to the nodes in a Diagram by adding an instance of this class to the Diagram.getNodeEffects collection.

The following tables list the members exposed by the GlassEffect type.

Public Constructors

	Name	Description
	GlassEffect	Initializes a new instance of the **GlassEffect** class.

Public Methods

	Name	Description
	addPropertyChangeListener	(Inherited from NodeEffect.)
	clone	NodeEffect.clone override.
	getGlowColor	Gets the color of the glow portion of the effect.
	getReflectionColor	Gets the color of the reflection portion of the effect.
	getType	Gets the type of the glass effect.
	getUsePenAsGlow	Gets a value indicating whether the glow portion of the effect should be painted with the Pen color of the respective node.
	readExternal	NodeEffect.readExternal override.
	removePropertyChangeListener	(Inherited from NodeEffect.)
	setGlowColor	Sets the color of the glow portion of the effect.
	setReflectionColor	Sets the color of the reflection portion of the effect.
	setType	Sets the type of the glass effect.
	setUsePenAsGlow	Sets a value indicating whether the glow portion of the effect should be painted with the Pen color of the respective node.
	writeExternal	NodeEffect.writeExternal override.

See Also

GlassEffect Class
com.mindfusion.diagramming Namespace

GlassEffect Constructor

Initializes a new instance of the GlassEffect class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public GlassEffect ()`

See Also

GlassEffect Methods

GlassEffect.clone Method

NodeEffect.clone override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Object clone ()
```

Return Value

A GlassEffect instance.

See Also

GlassEffect Members
GlassEffect Class
com.mindfusion.diagramming Namespace

GlassEffect.getGlowColor Method

Gets the color of the glow portion of the effect.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Color getGlowColor ()
```

Return Value

See Also

GlassEffect Members
GlassEffect Class
com.mindfusion.diagramming Namespace

GlassEffect.getReflectionColor Method

Gets the color of the reflection portion of the effect.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Color getReflectionColor ()
```

Return Value

See Also

GlassEffect Members
GlassEffect Class
com.mindfusion.diagramming Namespace

GlassEffect.getType Method

Gets the type of the glass effect.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public GlassEffectType getType ()
```

Return Value

A member of the GlassEffectType enumeration.

See Also

GlassEffect Members
GlassEffect Class
com.mindfusion.diagramming Namespace

GlassEffect.getUsePenAsGlow Method

Gets a value indicating whether the glow portion of the effect should be painted with the Pen color of the respective node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getUsePenAsGlow ()
```

Return Value

See Also

GlassEffect Members
GlassEffect Class
com.mindfusion.diagramming Namespace

GlassEffect.readExternal Method

NodeEffect.readExternal override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

GlassEffect Members
GlassEffect Class
com.mindfusion.diagramming Namespace

GlassEffect.setGlowColor Method

Sets the color of the glow portion of the effect.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setGlowColor (
    Color value
)
```

Parameters

value

See Also

GlassEffect Members
GlassEffect Class
com.mindfusion.diagramming Namespace

GlassEffect.setReflectionColor Method

Sets the color of the reflection portion of the effect.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setReflectionColor (
    Color value
)
```

Parameters

value

See Also

GlassEffect Members
GlassEffect Class
com.mindfusion.diagramming Namespace

GlassEffect.setType Method

Sets the type of the glass effect.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setType (
    GlassEffectType value
)
```

Parameters

value
A member of the GlassEffectType enumeration.

See Also

GlassEffect Members
GlassEffect Class
com.mindfusion.diagramming Namespace

GlassEffect.setUsePenAsGlow Method

Sets a value indicating whether the glow portion of the effect should be painted with the Pen color of the respective node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setUsePenAsGlow (
    boolean value
)
```

Parameters

value

See Also

GlassEffect Members
GlassEffect Class
com.mindfusion.diagramming Namespace

GlassEffect.writeExternal Method

NodeEffect.writeExternal override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

GlassEffect Members
GlassEffect Class
com.mindfusion.diagramming Namespace

GlassEffectType Enumeration

The members of this enumeration specify the type of a GlassEffect node effect.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public enum GlassEffectType
```

Members

	Member name	Description
	Type1	Indicates a glass effect with soft radial glow at the bottom and a sharp reflection at the top.
	Type2	Indicates a glass effect with linear glow at the bottom and sharp reflection at the top.
	Type3	Indicates a glass effect with radial glow at the bottom and smooth reflection and emphasized outline at the top.
	Type4	Indicates a glass effect with sharp reflection at the top and soft glow at the left and right sides.

See Also

com.mindfusion.diagramming Namespace

GlassPane Class

For internal use.

Syntax

Java
`public class GlassPane extends JComponent`

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        com.mindfusion.diagramming.GlassPane

See Also

GlassPane Members
com.mindfusion.diagramming Namespace

GlassPane Members

For internal use.

The following tables list the members exposed by the GlassPane type.

Public Constructors

	Name	Description
	GlassPane	

Public Methods

	Name	Description
	controlNodeAt	
	deferPaintHandles	
S	setSessionId	

Protected Methods

	Name	Description
	paintComponent	
	processMouseEvent	
	processMouseMotionEvent	
	processMouseWheelEvent	

See Also

GlassPane Class
com.mindfusion.diagramming Namespace

GlassPane Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GlassPane (
    DiagramView view
)
```

Parameters

view

See Also

GlassPane Class
com.mindfusion.diagramming Namespace

GlassPane Methods

GlassPane.controlNodeAt Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ControlNode controlNodeAt (
    Point2D point
)
```

Parameters

point

Return Value

See Also

GlassPane Members
GlassPane Class
com.mindfusion.diagramming Namespace

GlassPane.deferPaintHandles Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void deferPaintHandles (
    ControlNode node,
    HandlesVisualStyle style
)
```

Parameters

node

style

See Also

GlassPane Members
GlassPane Class
com.mindfusion.diagramming Namespace

GlassPane.paintComponent Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void paintComponent (
    Graphics g
)
```

Parameters

g

See Also

GlassPane Members
GlassPane Class
com.mindfusion.diagramming Namespace

GlassPane.processMouseEvent Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void processMouseEvent (
    MouseEvent e
)
```

Parameters

e

See Also

GlassPane Members
GlassPane Class
com.mindfusion.diagramming Namespace

GlassPane.processMouseMotionEvent Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void processMouseMotionEvent (
    MouseEvent e
)
```

Parameters

e

See Also

GlassPane Members
GlassPane Class
com.mindfusion.diagramming Namespace

GlassPane.processMouseWheelEvent Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void processMouseWheelEvent (
    MouseWheelEvent e
)
```

Parameters

e

See Also

GlassPane Members
GlassPane Class
com.mindfusion.diagramming Namespace

GlassPane.setSessionId Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void setSessionId (
    long id
)
```

Parameters

id

See Also

GlassPane Members
GlassPane Class
com.mindfusion.diagramming Namespace

Granularity Enumeration

The members of this enumeration specify the granularity of the obstacles map generated by QuickRouter.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum Granularity`

Members

	Member name	Description
	CoarseGrained	Merge map tiles if possible to create a coarse-grained map. The fewer tiles in the map lead to faster path-finding.
	FineGrained	Reserved for future use.
	Normal	Use the map tiles found by the initial division algorithm.

See Also

com.mindfusion.diagramming Namespace

GridLayout Class

Implements a grid graph layout algorithm. **GridLayout** arranges diagram nodes in a grid, keeping connected nodes close together. The algorithm strives to achieve a small number of link crossings. It is based on an iterative process whose initial steps shuffle the grid nodes randomly. That can lead to very different results each time the algorithm is run.

Syntax

Java
`public class GridLayout implements Layout`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.GridLayout

See Also

GridLayout Members
com.mindfusion.diagramming Namespace

GridLayout Members

Implements a grid graph layout algorithm. GridLayout arranges diagram nodes in a grid, keeping connected nodes close together. The algorithm strives to achieve a small number of link crossings. It is based on an iterative process whose initial steps shuffle the grid nodes randomly. That can lead to very different results each time the algorithm is run.

The following tables list the members exposed by the **GridLayout** type.

Public Constructors

	Name	Description
	GridLayout	Initializes a new instance of the **GridLayout** class.

Public Methods

	Name	Description
	arrange	Arranges the specified diagram.
	getAnchoring	Gets a value indicating how links will be aligned to the anchor points of tree nodes.
	getEndNode	Gets the node that should be placed at the bottom right corner of the grid.
	getGridSize	Gets the desired distance between adjacent grid points.
	getIterations	Gets the number of iterations that the layout algorithm should run.
	getKeepGroupLayout	Gets a value specifying whether the relative position of nodes within groups should be kept intact.
	getRandomSeed	Gets the randomization seed used for generating random node positions.
	getStartNode	Gets the node that should be placed at the upper left corner of the grid.
	getXGap	Gets a value indicating how much horizontal space should be left between the document boundaries and the graph.
	getYGap	Gets a value indicating how much vertical space should be left between the document boundaries and the graph.
	init	Returns a GridLayoutBuilder object used to configure this GridLayout instance.
	setAnchoring	Sets a value indicating how links should be aligned to the anchor points of tree nodes.
	setEndNode	Sets the node that should be placed at the bottom right corner of the grid.
	setGridSize	Sets the desired distance between adjacent grid points.
	setIterations	Sets the number of iterations that the layout algorithm should run.

	setKeepGroupLayout	Sets a value specifying whether the relative position of nodes within groups should be kept intact.
	setRandomSeed	Sets the randomization seed used for generating random node positions.
	setStartNode	Sets the node that should be placed at the upper left corner of the grid.
	setXGap	Sets a value indicating how much horizontal space should be left between the document boundaries and the graph.
	setYGap	Sets a value indicating how much vertical space should be left between the document boundaries and the graph.
S	with	Returns a GridLayoutBuilder object used to configure and create new GridLayout instances.

See Also

GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout Constructor

Initializes a new instance of the GridLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GridLayout ()
```

See Also

GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout Methods

GridLayout.arrange Method

Arranges the specified diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram chart
)
```

Parameters

chart
The Diagram to arrange.

Return Value

true

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.getAnchoring Method

Gets a value indicating how links will be aligned to the anchor points of tree nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Anchoring getAnchoring ()
```

Return Value

A member of the Anchoring enumeration.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.getEndNode Method

Gets the node that should be placed at the bottom right corner of the grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode getEndNode ()
```

Return Value

Reference to the end DiagramNode.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.getGridSize Method

Gets the desired distance between adjacent grid points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getGridSize ()
```

Return Value

A float value specifying the distance between adjacent grid points.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.getIterations Method

Gets the number of iterations that the layout algorithm should run.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getIterations ()
```

Return Value

An integer value specifying the number of iterations.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.getKeepGroupLayout Method

Gets a value specifying whether the relative position of nodes within groups should be kept intact.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getKeepGroupLayout ()
```

Return Value

true if the relative position of nodes withingroups should be preserved, otherwise **false**.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.getRandomSeed Method

Gets the randomization seed used for generating random node positions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getRandomSeed ()
```

Return Value

An integer value specifying the randomization seed.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.getStartNode Method

Gets the node that should be placed at the upper left corner of the grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramNode getStartNode ()
```

Return Value

Reference to the start DiagramNode.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.getXGap Method

Gets a value indicating how much horizontal space should be left between the document boundaries and the graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getXGap ()
```

Return Value

A float value specifying the horizontal offset from theleft document border.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.getYGap Method

Gets a value indicating how much vertical space should be left between the document boundaries and the graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getYGap ()
```

Return Value

A float value specifying the vertical offset from thetop document border.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.init Method

Returns a GridLayoutBuilder object used to configure this GridLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GridLayoutBuilder init ()
```

Return Value

A **GridLayoutBuilder** instance.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.setAnchoring Method

Sets a value indicating how links should be aligned to the anchor points of tree nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAnchoring (
    Anchoring value
)
```

Parameters

value
A member of the Anchoring enumeration.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.setEndNode Method

Sets the node that should be placed at the bottom right corner of the grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setEndNode (
    DiagramNode value
)
```

Parameters

value
A DiagramNode object representing the grid end node.

Remarks

If you set the end node, you should also call the setStartNode method to specify the start node. GridLayout usually produces better layouts if you do not specify start and end nodes; in such a case the algorithm automatically selects suitable nodes.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.setGridSize Method

Sets the desired distance between adjacent grid points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setGridSize (
    float value
)
```

Parameters

value
A float value specifying the distance between adjacent grid points.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.setIterations Method

Sets the number of iterations that the layout algorithm should run.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIterations (
    int value
)
```

Parameters

value
An integer value specifying the number of iterations.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.setKeepGroupLayout Method

Sets a value specifying whether the relative position of nodes within groups should be kept intact.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setKeepGroupLayout (
    boolean value
)
```

Parameters

value
true if the relative position of nodes withingroups should be preserved, otherwise **false**.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.setRandomSeed Method

Sets the randomization seed used for generating random node positions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRandomSeed (
    int value
)
```

Parameters

value
An integer value specifying the randomization seed.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.setStartNode Method

Sets the node that should be placed at the upper left corner of the grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setStartNode (
    DiagramNode value
)
```

Parameters

value
A DiagramNode object representing the grid start node.

Remarks

If you set the start node, you should also call the setEndNode method to specify the end node. GridLayout usually produces better layouts if you do not specify start and end nodes; in such a case the algorithm automatically selects suitable nodes.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.setXGap Method

Sets a value indicating how much horizontal space should be left between the document boundaries and the graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setXGap (
    float value
)
```

Parameters

value
A float value specifying the horizontal offset from theleft document border.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.setYGap Method

Sets a value indicating how much vertical space should be left between the document boundaries and the graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setYGap (
    float value
)
```

Parameters

value
A float value specifying the vertical offset from thetop document border.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridLayout.with Method

Returns a GridLayoutBuilder object used to configure and create new GridLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static GridLayoutBuilder with ()
```

Return Value

A **GridLayoutBuilder** instance.

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming Namespace

GridRouter Class

Implements a link routing algorithm that uses a grid to represent the free and occupied regions in the diagram.

Syntax

Java
`public class GridRouter implements LinkRouter`

Remarks

To use this class for link routing, assign its instance to the LinkRouter property of the Diagram class. It is based on heuristic algorithm whose parameters can be customized via RoutingOptions.

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.GridRouter

See Also

GridRouter Members
com.mindfusion.diagramming Namespace

GridRouter Members

Implements a link routing algorithm that uses a grid to represent the free and occupied regions in the diagram.

The following tables list the members exposed by the GridRouter type.

Public Constructors

	Name	Description
	GridRouter	

Public Methods

	Name	Description
	getDiagram	Gets the Diagram whose links will be routed.
	routeLink	Implements LinkRouter.routeLink.

	routeLinks	Implements LinkRouter.routeLinks.
	setDiagram	Sets the Diagram whose links will be routed.

See Also

GridRouter Class
com.mindfusion.diagramming Namespace

GridRouter Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GridRouter ()
```

See Also

GridRouter Class
com.mindfusion.diagramming Namespace

GridRouter Methods

GridRouter.getDiagram Method

Gets the Diagram whose links will be routed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Diagram getDiagram ()
```

Return Value

A Diagram instance.

See Also

GridRouter Members
GridRouter Class
com.mindfusion.diagramming Namespace

GridRouter.routeLink Method

Implements LinkRouter.routeLink.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean routeLink (
    DiagramLink link,
    ConnectionPoint originConnection,
    ConnectionPoint destinationConnection,
    boolean nowCreating
)
```

Parameters

link
The DiagramLink to route.

originConnection
Represents connection to Origin node, potentially different from link's stored connection when modifying first control point.

destinationConnection
Represents connection to Destination node, potentially different from link's stored connection when modifying last control point.

nowCreating
Indicates whether link is currently being created.

Return Value

true if a path has been found successfully, otherwise false.

See Also

GridRouter Members
GridRouter Class
com.mindfusion.diagramming Namespace

GridRouter.routeLinks Method

Implements LinkRouter.routeLinks.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLinkList routeLinks (
    DiagramLinkList links
)
```

Parameters

links
A list of DiagramLink objects that should be routed.

Return Value

A list of links that were not routed successfully.

See Also

GridRouter Members
GridRouter Class
com.mindfusion.diagramming Namespace

GridRouter.setDiagram Method

Sets the Diagram whose links will be routed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDiagram (
    Diagram value
)
```

Parameters

value
A Diagram instance.

See Also

GridRouter Members
GridRouter Class
com.mindfusion.diagramming Namespace

GridStyle Enumeration

The members of this enumeration specify how the alignment grid should be drawn on the screen. Its elements can be used as arguments of the setGridStyle method of the Diagram class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public enum GridStyle
```

Members

	Member name	Description
	Lines	The grid is drawn as a series of crossing horizontal and vertical lines.
	Points	The alignment grid is drawn as a matrix of points.

See Also

com.mindfusion.diagramming Namespace

Group Class

Represents an hierarchical group of items. One of the items is considered the master item, the rest are subordinated items that follow the master one when it is modified.

Syntax

Java
`public class Group implements Externalizable`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Group

See Also

Group Members
com.mindfusion.diagramming Namespace

Group Members

Represents an hierarchical group of items. One of the items is considered the master item, the rest are subordinated items that follow the master one when it is modified.

The following tables list the members exposed by the Group type.

Public Constructors

	Name	Description
	Group	Overloaded.

Public Methods

	Name	Description
	attachProportional	Adds a node to the group.
	attachToCorner	Adds a node to the group.
	attachToLinkPoint	Adds a node to the group.
	attachToLinkSegment	Adds a node to the group.
	attachToLongestHSegment	Adds a node to the group, maintaining its relative positions to master link's longest horizontal segment.
	attachToSideMiddle	Attaches a node to the group, so that it will follow the middle point of another node's side.

	detach	Removes a node from the group.
	getAttachedNodes	Gets a list of the subordinated nodes in this group.
	getAutoDeleteItems	Gets a value indicating whether the subordinated items in this group will be deleted automatically when the group is destroyed.
	getExpandable	Gets a value indicating whether expansion of a tree branch that contains the master item of a group will propagate through its attached items.
	getFollowMasterContainment	
	getFollowMasterRotation	Gets a value indicating whether the attached items in a group follow the rotation of the group's master item.
	getMainItem	Gets the master item of this group.
	getTag	Gets the custom data object assigned to this group.
	getVisible	Gets a value indicating whether this group is visible.
	readExternal	Implements Externalizable.
	setAutoDeleteItems	Sets a value indicating whether the subordinated items in this group should be deleted automatically when the group is destroyed.
	setExpandable	Sets a value indicating whether expansion of a tree branch that contains the master item of a group should propagate through its attached items.
	setFollowMasterContainment	
	setFollowMasterRotation	Sets a value indicating whether the attached items in a group should follow the rotation of the group's master item.
	setTag	Assigns a custom data object to this group. If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event.
	setVisible	Shows or hides all items in the group.
	writeExternal	Implements Externalizable.

See Also

Group Class
com.mindfusion.diagramming Namespace

Group Constructor

Overload List

Name	Description
Group ()	Used internally to implement serialization.

Group (Group)	Initializes a new instance of the Group class.

See Also

Group Class
com.mindfusion.diagramming Namespace

Group Constructor ()

Used internally to implement serialization.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Group ()
```

See Also

Group Constructor Overload List
Group Class
com.mindfusion.diagramming Namespace

Group Constructor (Group)

Initializes a new instance of the Group class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Group (
    Group prototype
)
```

Parameters

prototype
A Group instance whose attributes are copied to this group.

See Also

Group Constructor Overload List
Group Class
com.mindfusion.diagramming Namespace

Group Methods

Group.attachProportional Method

Adds a node to the group.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean attachProportional (
    DiagramNode node,
    float left,
    float top,
    float right,
    float bottom
)
```

Parameters

node
The DiagramNode to attach.

left
A float percent value specifying to what X position in themaster node to attach the left side of this node.

top
A float percent value specifying to what Y position in themaster node to attach the top side of this node.

right
A float percent value specifying to what X position in themaster node to attach the right side of this node.

bottom
A float percent value specifying to what Y position in themaster node to attach the bottom side of this node.

Return Value

true if the node is attached successfully,otherwise false.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.attachToCorner Method

Adds a node to the group.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean attachToCorner (
    DiagramNode node,
    int corner
)
```

Parameters

node
The DiagramNode to attach.

corner
The corner to attach to.

Return Value

true if the node is attached successfully,otherwise false.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.attachToLinkPoint Method

Adds a node to the group.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean attachToLinkPoint (
    DiagramNode node,
    int point
)
```

Parameters

node
The DiagramNode to attach.

point
Index of the link control point to attach to.

Return Value

true if the node is attached successfully,otherwise **false**.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.attachToLinkSegment Method

Adds a node to the group.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean attachToLinkSegment (
    DiagramNode node,
    int segment
)
```

Parameters

node
The DiagramNode to attach.

segment
The link segment to attach to.

Return Value

true if the node is attached successfully, otherwise **false**.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.attachToLongestHSegment Method

Adds a node to the group, maintaining its relative positions to master link's longest horizontal segment.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean attachToLongestHSegment (
    DiagramNode node
)
```

Parameters

node
The DiagramNode to attach.

Return Value

true if the node is attached successfully, otherwise **false**.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.attachToSideMiddle Method

Attaches a node to the group, so that it will follow the middle point of another node's side.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean attachToSideMiddle (
    DiagramNode node,
    int side
)
```

Parameters

node
The DiagramNode to attach.

side
The side to attach to.

Return Value

true if the node is attached successfully, otherwise **false**.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.detach Method

Removes a node from the group.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean detach (
    DiagramNode node
)
```

Parameters

node
The DiagramNode that should be detached.

Return Value

true if the node is detached, otherwise **false**.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.getAttachedNodes Method

Gets a list of the subordinated nodes in this group.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNodeList getAttachedNodes ()
```

Return Value

An DiagramNodeList containing the nodes attached to this group.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.getAutoDeleteItems Method

Gets a value indicating whether the subordinated items in this group will be deleted automatically when the group is destroyed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAutoDeleteItems ()
```

Return Value

true if the items will be deleted automatically,otherwise **false**.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.getExpandable Method

Gets a value indicating whether expansion of a tree branch that contains the master item of a group will propagate through its attached items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getExpandable ()
```

Return Value

true if tree expansion propagates throughthis group, otherwise **false**.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.getFollowMasterContainment Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getFollowMasterContainment ()
```

Return Value

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.getFollowMasterRotation Method

Gets a value indicating whether the attached items in a group follow the rotation of the group's master item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GroupRotation getFollowMasterRotation ()
```

Return Value

A member of the GroupRotation enumeration. The default is **IgnoreRotation**.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.getMainItem Method

Gets the master item of this group.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramItem getMainItem ()
```

Return Value

A reference to the master DiagramItem.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.getTag Method

Gets the custom data object assigned to this group.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Object getTag ()
```

Return Value

A custom data Object assigned to this group.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.getVisible Method

Gets a value indicating whether this group is visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getVisible ()
```

Return Value

true if the group is visible,otherwise false.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.setAutoDeleteItems Method

Sets a value indicating whether the subordinated items in this group should be deleted automatically when the group is destroyed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAutoDeleteItems (
    boolean value
)
```

Parameters

value
true if the items should be deleted automatically,otherwise **false**.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.setExpandable Method

Sets a value indicating whether expansion of a tree branch that contains the master item of a group should propagate through its attached items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setExpandable (
    boolean value
)
```

Parameters

value
true if tree expansion should propagate throughthis group, otherwise **false**.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.setFollowMasterContainment Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFollowMasterContainment (
    boolean value
)
```

Parameters

value

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.setFollowMasterRotation Method

Sets a value indicating whether the attached items in a group should follow the rotation of the group's master item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFollowMasterRotation (
    GroupRotation value
)
```

Parameters

value
A member of the GroupRotation enumeration.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.setTag Method

Assigns a custom data object to this group. If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTag (
    Object value
)
```

Parameters

value

An Object containing custom data.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.setVisible Method

Shows or hides all items in the group.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setVisible (
    boolean value
)
```

Parameters

value
true if the group should be visible,otherwise **false**.

See Also

Group Members
Group Class
com.mindfusion.diagramming Namespace

Group.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

Group Members
Group Class

GroupAttachCmd Class

Represents an action that attaches an item to a group.

Syntax

Java
`public class GroupAttachCmd extends Command`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.GroupAttachCmd

See Also

GroupAttachCmd Members
com.mindfusion.diagramming Namespace

GroupAttachCmd Members

Represents an action that attaches an item to a group.

The following tables list the members exposed by the GroupAttachCmd type.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	Overloaded.
	getGroup	Gets the group related to this command.
	getItem	Gets the item related to this command.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	This method is called by the UndoManager when redoing actions. (Inherited from Command.)
	setTitle	Sets the command title. (Inherited from Command.)
	undo	This method is called by the **UndoManager** when undoing actions.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

GroupAttachCmd Class
com.mindfusion.diagramming Namespace

GroupAttachCmd Methods

GroupAttachCmd.execute Method

Overload List

Name	Description
GroupAttachCmd.execute ()	Attaches the item to the group.
GroupAttachCmd.execute (boolean)	This method is called internally by JDiagram when attaching items to groups.

See Also

GroupAttachCmd Members
GroupAttachCmd Class
com.mindfusion.diagramming Namespace

GroupAttachCmd.execute Method ()

Attaches the item to the group.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void execute ()`

See Also

execute Method Overload List
GroupAttachCmd Members

GroupAttachCmd.execute Method (boolean)

This method is called internally by JDiagram when attaching items to groups.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled
true if the undo manager is enabledat this time, otherwise **false**.

See Also

execute Method Overload List
GroupAttachCmd Members
GroupAttachCmd Class
com.mindfusion.diagramming Namespace

GroupAttachCmd.getGroup Method

Gets the group related to this command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Group getGroup ()
```

Return Value

A Group instance.

See Also

GroupAttachCmd Members
GroupAttachCmd Class
com.mindfusion.diagramming Namespace

GroupAttachCmd.getItem Method

Gets the item related to this command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramItem getItem ()
```

Return Value

An DiagramItem instance.

See Also

GroupAttachCmd Members
GroupAttachCmd Class
com.mindfusion.diagramming Namespace

GroupAttachCmd.undo Method

This method is called by the UndoManager when undoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void undo ()
```

See Also

GroupAttachCmd Members
GroupAttachCmd Class
com.mindfusion.diagramming Namespace

GroupDetachCmd Class

Represents an action that detaches an item from a group.

Syntax

```
Java
public class GroupDetachCmd extends Command
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.GroupDetachCmd

See Also

GroupDetachCmd Members
com.mindfusion.diagramming Namespace

GroupDetachCmd Members

Represents an action that detaches an item from a group.

The following tables list the members exposed by the GroupDetachCmd type.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	Overloaded.
	getGroup	Gets the group related to this command.
	getItem	Gets the item related to this command.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	This method is called by the UndoManager when redoing actions. (Inherited from Command.)
	setTitle	Sets the command title. (Inherited from Command.)
	undo	This method is called by the **UndoManager** when undoing actions.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

GroupDetachCmd Class
com.mindfusion.diagramming Namespace

GroupDetachCmd Methods

GroupDetachCmd.execute Method

Overload List

Name	Description
GroupDetachCmd.execute ()	Detaches the item from the group.
GroupDetachCmd.execute (boolean)	This method is called internally by JDiagram when detaching items from groups.

See Also

GroupDetachCmd Members
GroupDetachCmd Class
com.mindfusion.diagramming Namespace

GroupDetachCmd.execute Method ()

Detaches the item from the group.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void execute ()
```

See Also

execute Method Overload List
GroupDetachCmd Members
GroupDetachCmd Class
com.mindfusion.diagramming Namespace

GroupDetachCmd.execute Method (boolean)

This method is called internally by JDiagram when detaching items from groups.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled

true if the undo manager is enabledat this time, otherwise **false**.

See Also

execute Method Overload List
GroupDetachCmd Members
GroupDetachCmd Class
com.mindfusion.diagramming Namespace

GroupDetachCmd.getGroup Method

Gets the group related to this command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Group getGroup ()
```

Return Value

A Group instance.

See Also

GroupDetachCmd Members
GroupDetachCmd Class
com.mindfusion.diagramming Namespace

GroupDetachCmd.getItem Method

Gets the item related to this command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem getItem ()
```

Return Value

An DiagramItem instance.

See Also

GroupDetachCmd Members
GroupDetachCmd Class
com.mindfusion.diagramming Namespace

GroupDetachCmd.undo Method

This method is called by the UndoManager when undoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void undo ()`

See Also

GroupDetachCmd Members
GroupDetachCmd Class
com.mindfusion.diagramming Namespace

GroupEvent Class

Contains the arguments passed to handlers of group-related events, such as groupDestroyed.

Syntax

Java
`public class GroupEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.GroupEvent

See Also

GroupEvent Members
com.mindfusion.diagramming Namespace

GroupEvent Members

Contains the arguments passed to handlers of group-related events, such as groupDestroyed.

The following tables list the members exposed by the GroupEvent type.

Public Constructors

	Name	Description
	GroupEvent	Represents methods that will handle general group-related events.

Public Methods

	Name	Description
	getGroup	Gets the group for which the event was raised.
	getIndex	Gets an integer index related to the event.

See Also

GroupEvent Class
com.mindfusion.diagramming Namespace

GroupEvent Constructor

Represents methods that will handle general group-related events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GroupEvent (
    Object source,
    Group group
)
```

Parameters

source
The source of the event.

group
The Group for which the event is raised.

See Also

GroupEvent Class
com.mindfusion.diagramming Namespace

GroupEvent Methods

GroupEvent.getGroup Method

Gets the group for which the event was raised.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Group getGroup ()
```

Return Value

An instance of the Group class.

See Also

GroupEvent Members
GroupEvent Class
com.mindfusion.diagramming Namespace

GroupEvent.getIndex Method

Gets an integer index related to the event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getIndex ()
```

Return Value

An integer value.

See Also

GroupEvent Members
GroupEvent Class
com.mindfusion.diagramming Namespace

GroupList Class

A strongly typed list of Group objects.

Syntax

Java

```
public class GroupList extends BaseList<E>
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.BaseList(E)
        com.mindfusion.diagramming.GroupList

See Also

GroupList Members
com.mindfusion.diagramming Namespace

GroupList Members

A strongly typed list of Group objects.

The following tables list the members exposed by the GroupList type.

Public Constructors

	Name	Description
	GroupList	

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)
	listEvent	(Inherited from BaseList.)
	notifyParent	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	Adds a new element to the list. (Inherited from BaseList.)
	clear	Removes all elements from the list. (Inherited from BaseList.)
	contains	Determines if this list contains the specified element. (Inherited from BaseList.)
	first	Gets the first element of this list. (Inherited from BaseList.)
	get	Gets the element at the specified position in this list. (Inherited from BaseList.)
	last	Gets the last element of this list. (Inherited from BaseList.)
	readExternal	Loads the list's contents. (Inherited from BaseList.)
	remove	Overloaded. (Inherited from BaseList.)
	removeRange	Removes a range of elements from this list. (Inherited from BaseList.)
	set	Sets the element at the specified position in this list. (Inherited from BaseList.)
	size	Gets the number of elements in this list. (Inherited from BaseList.)
	writeExternal	Saves the list's contents. (Inherited from BaseList.)

Protected Methods

	Name	Description
	raiseAdding	Raises the adding event. (Inherited from BaseList.)

	raiseClearing	Raises the clearing event. (Inherited from BaseList.)
	raiseRemoving	Raises the removing event. (Inherited from BaseList.)

See Also

GroupList Class
com.mindfusion.diagramming Namespace

GroupList Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public GroupList ()`

See Also

GroupList Class
com.mindfusion.diagramming Namespace

GroupRotation Enumeration

The members of this enumeration indicate how rotation of a group's master node affects the nodes attached to that group.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum GroupRotation`

Members

	Member name	Description
	FerrisWheel	Attached nodes are moved to a position corresponding to the master node's rotation angle, but they are node rotated.
	IgnoreRotation	Attached nodes ignore the rotation angle applied to the master node.
	RotateChildren	Attached nodes are rotated by the RotationAngle of the group's master node and around its center.

See Also

HandlesStyle Enumeration

The members of this enumeration specify the appearance and functionality of the manipulation handles displayed around a selected node. They can be used as parameters of the setHandlesStyle method of the DiagramNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum HandlesStyle`

Members

	Member name	Description
	Custom	JDiagram raises the drawHandles and hitTestSelHandles events to let your application perform custom drawing and hit testing of selection handles.
	DashFrame	If selected, a node is drawn with a dashed frame around it. The frame enables resizing the node. The center of the node allows moving it and the edge area enables creating links.
	EasyMove	Any point of the interior of a node enables moving the node, except a small area in the center that allows creating links. This works best after calling DiagramView.setModificationStart specifying AutoHandles as argument.
	HatchFrame	If selected, the object is drawn with hatched frame around it. Modifications can be done as with DashFrame.
	HatchHandles	If selected, a node is drawn with both hatched frame and modification handles. The frame enable moving the node, and the handles enable resizing. Links are created from any point of the interior.
	HatchHandles2	Looks like HatchHandles, but allows moving the node from its interior region. Links are created from the points near the edge.
	HatchHandles3	Behaves like HatchHandles2, but paints the selection frame using a denser brush pattern.
	Invisible	There is no visible difference between selected and unselected node.
	InvisibleMove	There aren't any selection handles displayed. The selected node can only be moved, but not resized.
	MoveOnly	If a node is selected, it can only be moved. This works best after calling **DiagramView.setModificationStart** specifying **AutoHandles** as argument.

	RoundAndSquare	Corner resize handles are round, remaining handles are square.
	RoundAndSquare2	Corner resize handles are round, remaining handles are square. In addition, there is a dashed frame drawn around selected nodes.
	SquareHandles	If selected, the node is drawn with square modification handles around it.
	SquareHandles2	Square resize handles are drawn around a selected node. There isn't a move- handle in the center as with the SquareHandles style, but nodes can be moved by dragging their interior or caption areas. Links can be created by drawing from near the edges of a node.

See Also

com.mindfusion.diagramming Namespace

HandlesVisualStyle Class

Defines the Pen and Brush objects used to draw items' adjustment handles.

Syntax

Java
`public class HandlesVisualStyle implements Externalizable`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.HandlesVisualStyle

See Also

HandlesVisualStyle Members
com.mindfusion.diagramming Namespace

HandlesVisualStyle Members

Defines the Pen and Brush objects used to draw items' adjustment handles.

The following tables list the members exposed by the HandlesVisualStyle type.

Public Constructors

	Name	Description
	HandlesVisualStyle	Initializes a new instance of the HandlesVisualStyle class.

Public Methods

	Name	Description
	getControlPointBrush	Gets a Brush used to fill the interior of shape control points.
	getDashBackground	Gets a Brush used to draw dash frame background.
	getDashPen	Gets a Pen used to draw dashed selection frames.
	getHandleBrush	Gets a Brush used to fill the interior of selection handles.
	getHandlePen	Gets a Pen used to draw the border of selection handles.
	getHatchBrush	Gets a Brush used to draw hatch frames.
	getPatternBrush	Gets a Brush used to draw selection frames for the MoveOnly style.
	getRotationHandleBrush	Gets a Brush used to fill the interior of the rotation handle.
	loadFromXml	Loads the style from XML.
	readExternal	
	saveToXml	Saves the style to XML.
	setControlPointBrush	Sets a Brush used to fill the interior of shape control points.
	setDashBackground	Sets a Brush used to draw dash frame background.
	setDashPen	Sets a Pen used to draw dashed selection frames.
	setHandleBrush	Sets a Brush used to fill the interior of selection handles.
	setHandlePen	Sets a Pen used to draw the border of selection handles.
	setHatchBrush	Sets a Brush used to draw hatch frames.
	setPatternBrush	Sets a Brush used to draw selection frames for the MoveOnly style.
	setRotationHandleBrush	Sets a Brush used to fill the interior of the rotation handle.
	writeExternal	

See Also

HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle Constructor

Initializes a new instance of the HandlesVisualStyle class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public HandlesVisualStyle ()`

See Also

HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle Methods

HandlesVisualStyle.getControlPointBrush Method

Gets a Brush used to fill the interior of shape control points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getControlPointBrush ()
```

Return Value

Instance of a Brush -derived class. The default is solid-color yellow brush.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.getDashBackground Method

Gets a Brush used to draw dash frame background.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getDashBackground ()
```

Return Value

Instance of a Brush -derived class.

Remarks

This brush is used to draw the background of selection frame when item's HandlesStyle is set to DashFrame.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class

HandlesVisualStyle.getDashPen Method

Gets a Pen used to draw dashed selection frames.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Pen getDashPen ()
```

Return Value

A Pen instance.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.getHandleBrush Method

Gets a Brush used to fill the interior of selection handles.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getHandleBrush ()
```

Return Value

Instance of a Brush -derived class.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.getHandlePen Method

Gets a Pen used to draw the border of selection handles.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Pen getHandlePen ()
```

Return Value

A Pen instance.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.getHatchBrush Method

Gets a Brush used to draw hatch frames.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getHatchBrush ()
```

Return Value

Instance of a Brush -derived class.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.getPatternBrush Method

Gets a Brush used to draw selection frames for the MoveOnly style.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getPatternBrush ()
```

Return Value

Instance of a Brush -derived class.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.getRotationHandleBrush Method

Gets a Brush used to fill the interior of the rotation handle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getRotationHandleBrush ()
```

Return Value

A Brush instance. The default value is **null**.

Remarks

If this property is set to **null**, the rotation brush is painted using HandleBrush.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.loadFromXml Method

Loads the style from XML.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromXml (
    String elementName,
    String colorElementName,
    Element parentElement,
    XmlPersistContext context
)
```

Parameters

elementName
The name of the element that describes the style.

colorElementName
The name of an element that contains a fallback color.

parentElement
The parent XML element.

context
An <@link XmlPersistContext} object providing contextual information about the serialization process and some helper serialization methods.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.readExternal Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.saveToXml Method

Saves the style to XML.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToXml (
    String elementName,
    Element parentElement,
    XmlPersistContext context
)
```

Parameters

elementName
The name of the element that describes the style.

parentElement
The parent XML element.

context
An <@link XmlPersistContext} object providing contextual information about the serialization process and some helper serialization methods.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.setControlPointBrush Method

Sets a Brush used to fill the interior of shape control points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setControlPointBrush (
    Brush value
)
```

Parameters

value
Instance of a Brush -derived class.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.setDashBackground Method

Sets a Brush used to draw dash frame background.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDashBackground (
    Brush value
)
```

Parameters

value
Instance of a Brush -derived class.

Remarks

This brush is used to draw the background of selection frame when item's HandlesStyle is set to DashFrame.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.setDashPen Method

Sets a Pen used to draw dashed selection frames.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDashPen (
    Pen value
)
```

Parameters

value
A Pen instance.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.setHandleBrush Method

Sets a Brush used to fill the interior of selection handles.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHandleBrush (
    Brush value
)
```

Parameters

value
Instance of a Brush -derived class.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.setHandlePen Method

Sets a Pen used to draw the border of selection handles.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHandlePen (
    Pen value
)
```

Parameters

value
A Pen instance.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.setHatchBrush Method

Sets a Brush used to draw hatch frames.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHatchBrush (
    Brush value
)
```

Parameters

value
Instance of a Brush -derived class.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.setPatternBrush Method

Sets a Brush used to draw selection frames for the MoveOnly style.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPatternBrush (
    Brush value
)
```

Parameters

value
Instance of a Brush -derived class.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.setRotationHandleBrush Method

Sets a Brush used to fill the interior of the rotation handle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRotationHandleBrush (
    Brush value
)
```

Parameters

value
Instance of a Brush -derived class.

Remarks

If this property is set to **null**, the rotation brush is painted using HandleBrush.

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HandlesVisualStyle.writeExternal Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

HandlesVisualStyle Members
HandlesVisualStyle Class
com.mindfusion.diagramming Namespace

HierarchicalLayout Class

Performs hierarchical layout on simple, connected, level-planar graphs.

Syntax

Java

```
public class HierarchicalLayout extends AbstractLayout
```

Remarks

HierarchicalLayout places nodes on user-defined levels, such that if the source graph is level-planar, all links are guaranteed to have a single segment and will not intersect. A graph is considered level-planar if it is possible to draw it without link intersections when its nodes are positioned on predefined levels. The layout method requires that for each node LayoutTraits contains a HierarchicalLayoutTraits.Level entry specifying the level, and no two connected nodes must be on the same level.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AbstractLayout
    com.mindfusion.diagramming.HierarchicalLayout

See Also

HierarchicalLayout Members
com.mindfusion.diagramming Namespace

HierarchicalLayout Members

Performs hierarchical layout on simple, connected, level-planar graphs.

The following tables list the members exposed by the HierarchicalLayout type.

Public Constructors

	Name	Description
	HierarchicalLayout	Initializes a new instance of the **HierarchicalLayout** class.

Public Methods

	Name	Description
	arrange	Applies the layout on the specified subset of items from the specified Diagram instance.
	getAnchoring	Gets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	getGrowToFit	Gets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	getKeepGroupLayout	Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	getLayoutLink	Gets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	getLayoutNode	Gets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	getLevelDistance	Gets the distance between adjacent levels in the hierarchical layout.
	getLinkBendFactor	Gets the bending factor of links.
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	getMultipleGraphsPlacement	Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	getOrientation	Gets a the orientation of the arranged graph.
	getProgress	Gets the progress callback delegate. (Inherited from AbstractLayout.)
	init	Returns a HierarchicalLayoutBuilder object used to configure this HierarchicalLayout instance.
S	removeMidleSegmentPoint	(Inherited from AbstractLayout.)

	setAnchoring	Sets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	setGrowToFit	Sets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	setKeepGroupLayout	Sets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	setLayoutLink	Sets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	setLayoutNode	Sets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	setLevelDistance	Sets the distance between adjacent levels in the hierarchical layout.
	setLinkBendFactor	Sets the bending factor of links. A value of 1 indicates that the links should not bend. A value less than 1 indicates that the links should bend towards the geometric center of the graph. A value greater than 1 indicates that the links should bend outwards.
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	setMultipleGraphsPlacement	Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	setOrientation	Sets a the orientation of the arranged graph.
	setProgress	Sets the progress callback delegate. (Inherited from AbstractLayout.)
S	with	Returns a HierarchicalLayoutBuilder object used to configure and create new HierarchicalLayout instances.

See Also

HierarchicalLayout Class
com.mindfusion.diagramming Namespace

HierarchicalLayout Constructor

Initializes a new instance of the HierarchicalLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public HierarchicalLayout ()
```

See Also

HierarchicalLayout Class
com.mindfusion.diagramming Namespace

HierarchicalLayout Methods

HierarchicalLayout.arrange Method

Applies the layout on the specified subset of items from the specified Diagram instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram diagram,
    DiagramItemList items
)
```

Parameters

diagram
The Diagram that should be arranged.

items
A collection of nodes and links from diagram that define the subgraph to arrange.

Return Value

This method always returns true.

See Also

HierarchicalLayout Members
HierarchicalLayout Class
com.mindfusion.diagramming Namespace

HierarchicalLayout.getLevelDistance Method

Gets the distance between adjacent levels in the hierarchical layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getLevelDistance ()
```

Return Value

See Also

HierarchicalLayout Members
HierarchicalLayout Class
com.mindfusion.diagramming Namespace

HierarchicalLayout.getLinkBendFactor Method

Gets the bending factor of links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public float getLinkBendFactor ()`

Return Value

See Also

HierarchicalLayout Members
HierarchicalLayout Class
com.mindfusion.diagramming Namespace

HierarchicalLayout.getOrientation Method

Gets a the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Orientation getOrientation ()`

Return Value

A member of the Orientation enumeration.

See Also

HierarchicalLayout Members
HierarchicalLayout Class
com.mindfusion.diagramming Namespace

HierarchicalLayout.init Method

Returns a HierarchicalLayoutBuilder object used to configure this HierarchicalLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public HierarchicalLayoutBuilder init ()
```

Return Value

A **HierarchicalLayoutBuilder** instance.

See Also

HierarchicalLayout Members
HierarchicalLayout Class
com.mindfusion.diagramming Namespace

HierarchicalLayout.setLevelDistance Method

Sets the distance between adjacent levels in the hierarchical layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLevelDistance (
    float value
)
```

Parameters

value

See Also

HierarchicalLayout Members
HierarchicalLayout Class
com.mindfusion.diagramming Namespace

HierarchicalLayout.setLinkBendFactor Method

Sets the bending factor of links. A value of 1 indicates that the links should not bend. A value less than 1 indicates that the links should bend towards the geometric center of the graph. A value greater than 1 indicates that the links should bend outwards.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkBendFactor (
    float value
)
```

Parameters

value

See Also

HierarchicalLayout Members
HierarchicalLayout Class
com.mindfusion.diagramming Namespace

HierarchicalLayout.setOrientation Method

Sets a the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value
A member of the Orientation enumeration.

See Also

HierarchicalLayout Members
HierarchicalLayout Class
com.mindfusion.diagramming Namespace

HierarchicalLayout.with Method

Returns a HierarchicalLayoutBuilder object used to configure and create new HierarchicalLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static HierarchicalLayoutBuilder with ()
```

Return Value

A **HierarchicalLayoutBuilder** instance.

See Also

HierarchicalLayout Members
HierarchicalLayout Class
com.mindfusion.diagramming Namespace

HitTestEvent Class

Contains the arguments passed to custom hit-testing event handlers.

Syntax

Java
`public class HitTestEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.HitTestEvent

See Also

HitTestEvent Members
com.mindfusion.diagramming Namespace

HitTestEvent Members

Contains the arguments passed to custom hit-testing event handlers.

The following tables list the members exposed by the HitTestEvent type.

Public Constructors

	Name	Description
	HitTestEvent	Initializes a new instance of the **HitTestEvent** class.

Public Methods

	Name	Description
	getHitResult	Gets the adjustment handle that has been hit.
	getItem	Gets the item whose adjustment handles are being hit-tested.
	getPointerPosition	Gets the current cursor position, expressed in document coordinates.
	setHitResult	Sets the adjustment handle that has been hit.

See Also

HitTestEvent Class
com.mindfusion.diagramming Namespace

HitTestEvent Constructor

Initializes a new instance of the HitTestEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public HitTestEvent (
    Object source,
    DiagramItem item,
    Point2D pointerPosition
)
```

Parameters

source
The event source.

item
The DiagramItem related to the event.

mousePosition
The cursor location at the time the event is raised, expressed in document coordinates.

See Also

HitTestEvent Class
com.mindfusion.diagramming Namespace

HitTestEvent Methods

HitTestEvent.getHitResult Method

Gets the adjustment handle that has been hit.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AdjustmentHandle getHitResult ()
```

Return Value

An AdjustmentHandle instance representing the handle, or **null** if there is no handle located at the specified position.

See Also

HitTestEvent Members
HitTestEvent Class
com.mindfusion.diagramming Namespace

HitTestEvent.getItem Method

Gets the item whose adjustment handles are being hit-tested.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public DiagramItem getItem ()
```

Return Value

A DiagramItem instance.

See Also

HitTestEvent Members
HitTestEvent Class
com.mindfusion.diagramming Namespace

HitTestEvent.getPointerPosition Method

Gets the current cursor position, expressed in document coordinates.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public Point2D getPointerPosition ()
```

Return Value

See Also

HitTestEvent Members
HitTestEvent Class
com.mindfusion.diagramming Namespace

HitTestEvent.setHitResult Method

Sets the adjustment handle that has been hit.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void setHitResult (
    AdjustmentHandle hitResult
```

```
)
```

Parameters

hitResult
An AdjustmentHandle instance representing the handle, or **null** if there is no handle located at the specified position.

See Also

HitTestEvent Members
HitTestEvent Class
com.mindfusion.diagramming Namespace

HitTestPriority Enumeration

The members of this enumeration specify the order of item hit testing. They can be used as arguments to the setHitTestPriority method.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum HitTestPriority`

Members

	Member name	Description
	NodesBeforeLinks	Test nodes first, then links.
	ZOrder	Test items in decreasing Z order, independently of their types.

See Also

com.mindfusion.diagramming Namespace

HtmlBuilder Class

Provides helper methods for building HTML image maps.

Syntax

Java
`public class HtmlBuilder`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.HtmlBuilder

See Also

HtmlBuilder Members
com.mindfusion.diagramming Namespace

HtmlBuilder Members

Provides helper methods for building HTML image maps.

The following tables list the members exposed by the HtmlBuilder type.

Public Constructors

	Name	Description
	HtmlBuilder	Initializes a new HtmlBuilder instance.

Public Methods

	Name	Description
	createImageHtml	Exports a diagram image file and generates the code for an html page that displays that file along with the html image map that corresponds to the diagram.
	createImageMap	Creates an HTML image map.
	createUseMapAttr	Creates a USEMAP attribute for the specified image map.
	getAreasForTableCells	Gets a value indicating whether image map AREA elements will be created for tables' cells.
	getExpandBtnHyperLink	Gets a hyperlink assigned to the AREA elements created for expand/collapse buttons.
	getLinkTarget	Gets the name of the target frame where hyperlinks should be opened.
	getScale	
	setAreasForTableCells	Sets a value indicating whether image map AREA elements should be created for tables' cells.
	setExpandBtnHyperLink	Sets a hyperlink that should be assigned to the AREA elements created for expand/collapse buttons.
	setLinkTarget	Sets the name of the target frame where hyperlinks should be opened.
	setScale	

See Also

HtmlBuilder Class
com.mindfusion.diagramming Namespace

HtmlBuilder Constructor

Initializes a new HtmlBuilder instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public HtmlBuilder (
    Diagram diagram
)
```

Parameters

diagram
The Diagram whose contents should be exported to HTML.

See Also

HtmlBuilder Class
com.mindfusion.diagramming Namespace

HtmlBuilder Methods

HtmlBuilder.createImageHtml Method

Exports a diagram image file and generates the code for an html page that displays that file along with the html image map that corresponds to the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String createImageHtml (
    String htmlFileName,
    String htmlTitle,
    String imgLocalPath,
    String imgURL,
    String imgFormat
)
```

Parameters

htmlFileName
The name of the html file that should be created.

htmlTitle
The title of the HTML page.

imgLocalPath
The name of the exported image file.

imgURL
The URL of the image file.

imgFormat
The format of the exported image.

Return Value

A String object containing the HTML code.

See Also

HtmlBuilder Members
HtmlBuilder Class
com.mindfusion.diagramming Namespace

HtmlBuilder.createImageMap Method

Creates an HTML image map.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String createImageMap (
    String mapName
)
```

Parameters

mapName
A **String** containing the map element ID.

Return Value

A **String** object containing the image map tags.

See Also

HtmlBuilder Members
HtmlBuilder Class
com.mindfusion.diagramming Namespace

HtmlBuilder.createUseMapAttr Method

Creates a USEMAP attribute for the specified image map.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String createUseMapAttr (
    String mapID
)
```

Parameters

mapID
A String containing the map element ID.

Return Value

A String object containing the USEMAP code.

See Also

HtmlBuilder Members
HtmlBuilder Class
com.mindfusion.diagramming Namespace

HtmlBuilder.getAreasForTableCells Method

Gets a value indicating whether image map AREA elements will be created for tables' cells.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAreasForTableCells ()
```

Return Value

true if cell areas will be created, otherwise **false**.

See Also

HtmlBuilder Members
HtmlBuilder Class
com.mindfusion.diagramming Namespace

HtmlBuilder.getExpandBtnHyperLink Method

Gets a hyperlink assigned to the AREA elements created for expand/collapse buttons.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getExpandBtnHyperLink ()
```

Return Value

A String object containing the hyperlink.

See Also

HtmlBuilder Members
HtmlBuilder Class
com.mindfusion.diagramming Namespace

HtmlBuilder.getLinkTarget Method

Gets the name of the target frame where hyperlinks should be opened.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getLinkTarget ()
```

Return Value

A String object containing the target frame name.

See Also

HtmlBuilder Members
HtmlBuilder Class
com.mindfusion.diagramming Namespace

HtmlBuilder.getScale Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getScale ()
```

Return Value

See Also

HtmlBuilder Members
HtmlBuilder Class
com.mindfusion.diagramming Namespace

HtmlBuilder.setAreasForTableCells Method

Sets a value indicating whether image map AREA elements should be created for tables' cells.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAreasForTableCells (
    boolean value
)
```

Parameters

value
true if cell areas should be created, otherwise **false**.

See Also

HtmlBuilder Members
HtmlBuilder Class
com.mindfusion.diagramming Namespace

HtmlBuilder.setExpandBtnHyperLink Method

Sets a hyperlink that should be assigned to the AREA elements created for expand/collapse buttons.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setExpandBtnHyperLink (
    String value
)
```

Parameters

value
A String object containing the hyperlink.

See Also

HtmlBuilder Members
HtmlBuilder Class
com.mindfusion.diagramming Namespace

HtmlBuilder.setLinkTarget Method

Sets the name of the target frame where hyperlinks should be opened.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setLinkTarget (
    String value
)
```

Parameters

value
A String containing the name of the target frame.

See Also

HtmlBuilder Members
HtmlBuilder Class
com.mindfusion.diagramming Namespace

HtmlBuilder.setScale Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setScale (
    float scale
)
```

Parameters

scale

See Also

HtmlBuilder Members
HtmlBuilder Class
com.mindfusion.diagramming Namespace

HyperLinkStyle Enumeration

Specifies how various export components should treat the HyperLink property of items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public enum HyperLinkStyle
```

Members

	Member name	Description
	None	Do not generate hyperlinks.
	Shape	Generate hyperlinks that correspond to the item's shape.

	Text	Generate hyperlinks for the text bounding rectangle.

See Also

com.mindfusion.diagramming Namespace

IItemFactory Interface

Defines an interface for constructing objects from their XML elements.

Syntax

Java
`public interface IItemFactory`

Inheritors

com.mindfusion.diagramming.Diagram

See Also

IItemFactory Members
com.mindfusion.diagramming Namespace

IItemFactory Members

Defines an interface for constructing objects from their XML elements.

The following tables list the members exposed by the IItemFactory type.

Public Methods

	Name	Description
	createItem	
	getClsidTable	
	getTypeTable	

See Also

IItemFactory Interface
com.mindfusion.diagramming Namespace

IItemFactory Methods

IItemFactory.createItem Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
Object createItem (
    String itemClass
)
```

Parameters

itemClass

Return Value

See Also

IItemFactory Members
IItemFactory Interface
com.mindfusion.diagramming Namespace

IItemFactory.getClsidTable Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
HashMap<String, ClassDescriptor> getClsidTable ()
```

Return Value

See Also

IItemFactory Members
IItemFactory Interface
com.mindfusion.diagramming Namespace

IItemFactory.getTypeTable Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
HashMap<Class<?>, ClassDescriptor> getTypeTable ()
```

Return Value

See Also

ImageAlign Enumeration

The members of this enumeration specify the position and size of the image displayed inside a node. These constants can be used as parameters of the setImageAlign method of the ShapeNode and TableNode classes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public enum ImageAlign
```

Members

	Member name	Description
	BottomCenter	The image is aligned to the bottom-center point of the node.
	BottomLeft	The image is aligned to the bottom-left corner of the node.
	BottomRight	The image is aligned to the bottom-right corner of the node.
	Center	The image is centered.
	Fit	The image is resized to fit the node, preserving its original x/y ratio.
	FitBottom	The image is resized to fit the size of the object and aligned to bottom side.
	FitLeft	The image is resized to fit the size of the object and aligned to left side.
	FitRight	The image is resized to fit the size of the object and aligned to right side.
	FitTop	The image is resized to fit the size of the object and aligned to top side.
	MiddleLeft	The image is aligned to the middle-left point of the node.
	MiddleRight	The image is aligned to the middle-right point of the node.
	Stretch	The image is stretched to fill the node.
	Tile	The image is tiled across the node area.
	TopCenter	The image is aligned to the top-center point of the node.
	TopLeft	The image is aligned to the top-left corner of the node.
	TopRight	The image is aligned to the top-right corner of the node.

See Also

com.mindfusion.diagramming Namespace

ImageLoadedEvent Class

Contains information passed to the events defined in DiagramListener.

Syntax

Java
`public class ImageLoadedEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.ImageLoadedEvent

See Also

ImageLoadedEvent Members
com.mindfusion.diagramming Namespace

ImageLoadedEvent Members

Contains information passed to the events defined in DiagramListener.

The following tables list the members exposed by the ImageLoadedEvent type.

Public Constructors

	Name	Description
	ImageLoadedEvent	

Public Methods

	Name	Description
	getException	
	getImage	
	getUrl	
	isSuccessful	

See Also

ImageLoadedEvent Class
com.mindfusion.diagramming Namespace

ImageLoadedEvent Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ImageLoadedEvent (
    Object source,
    String url,
    boolean success,
    Image img,
    Exception e
)
```

Parameters

source

url

success

img

e

See Also

ImageLoadedEvent Class
com.mindfusion.diagramming Namespace

ImageLoadedEvent Methods

ImageLoadedEvent.getException Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Exception getException ()
```

Return Value

See Also

ImageLoadedEvent Members
ImageLoadedEvent Class
com.mindfusion.diagramming Namespace

ImageLoadedEvent.getImage Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Image getImage ()`

Return Value

See Also

ImageLoadedEvent Members
ImageLoadedEvent Class
com.mindfusion.diagramming Namespace

ImageLoadedEvent.getUrl Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public String getUrl ()`

Return Value

See Also

ImageLoadedEvent Members
ImageLoadedEvent Class
com.mindfusion.diagramming Namespace

ImageLoadedEvent.isSuccessful Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public boolean isSuccessful ()`

Return Value

See Also

ImageLoadedEvent Members
ImageLoadedEvent Class
com.mindfusion.diagramming Namespace

InplaceEditable Interface

Represents an in-place editable object.

Syntax

Java
`public interface InplaceEditable`

Inheritors

com.mindfusion.diagramming.Cell
com.mindfusion.diagramming.ContainerNode
com.mindfusion.diagramming.DiagramLink
com.mindfusion.diagramming.FreeFormNode
com.mindfusion.diagramming.ItemLabel
com.mindfusion.diagramming.ShapeNode
com.mindfusion.diagramming.TableNode
com.mindfusion.diagramming.TreeViewItem
com.mindfusion.diagramming.TreeViewNode

See Also

InplaceEditable Members
com.mindfusion.diagramming Namespace

InplaceEditable Members

Represents an in-place editable object.

The following tables list the members exposed by the InplaceEditable type.

Public Methods

	Name	Description
	getEditRect	Returns the rectangle where the in-place edit text box should appear (in document coordinates).
	getTextToEdit	Returns the text of the object which will be displayed initially when the object is in-place edited.
	setEditedText	Sets the edited text to the object after the in-place editing operation has been completed successfully.

See Also

InplaceEditable Interface
com.mindfusion.diagramming Namespace

InplaceEditable Methods

InplaceEditable.getEditRect Method

Returns the rectangle where the in-place edit text box should appear (in document coordinates).

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

Rectangle2D getEditRect (
    DiagramItem item,
    Point2D mousePosition
)
```

Parameters

item
The DiagramItem whose text will be edited or that contains the edited component.

mousePosition
A **Point2D** instance specifying the current pointer position.

Return Value

A **Rectangle2D** specifying where the edit box should be placed.

See Also

InplaceEditable Members
InplaceEditable Interface
com.mindfusion.diagramming Namespace

InplaceEditable.getTextToEdit Method

Returns the text of the object which will be displayed initially when the object is in-place edited.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

String getTextToEdit ()
```

Return Value

A string value that represents the initial contents of the in-place editing box.

See Also

InplaceEditable Members
InplaceEditable Interface
com.mindfusion.diagramming Namespace

InplaceEditable.setEditedText Method

Sets the edited text to the object after the in-place editing operation has been completed successfully.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void setEditedText (
    String newText
)
```

Parameters

newText
The new text of the in-place edited object.

See Also

InplaceEditable Members
InplaceEditable Interface
com.mindfusion.diagramming Namespace

InPlaceEditEvent Class

The event is raised when leaving in-place editing mode.

Syntax

Java

```
public class InPlaceEditEvent extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.InPlaceEditEvent

See Also

InPlaceEditEvent Members
com.mindfusion.diagramming Namespace

InPlaceEditEvent Members

The event is raised when leaving in-place editing mode.

The following tables list the members exposed by the InPlaceEditEvent type.

Public Constructors

	Name	Description
	InPlaceEditEvent	Initializes a new instance of the **InPlaceEditEvent** class.

Public Methods

	Name	Description
	getBounds	
	getEditControl	Gets the control used to edit the item's text.
	getItem	Gets an instance of the InplaceEditable class.
	setBounds	
	setEditControl	Sets the control used to edit the item's text.
	setItem	Sets the **InplaceEditable** instance.

See Also

InPlaceEditEvent Class
com.mindfusion.diagramming Namespace

InPlaceEditEvent Constructor

Initializes a new instance of the InPlaceEditEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public InPlaceEditEvent (
    Object source,
    InplaceEditable item,
    JComponent editControl
)
```

Parameters

source
The node or table cell whose text has been edited.

item
An InplaceEditable instance that contains the event data.

editControl
The used to edit the item.

See Also

InPlaceEditEvent Class
com.mindfusion.diagramming Namespace

InPlaceEditEvent Methods

InPlaceEditEvent.getBounds Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Rectangle2D getBounds ()
```

Return Value

See Also

InPlaceEditEvent Members
InPlaceEditEvent Class
com.mindfusion.diagramming Namespace

InPlaceEditEvent.getEditControl Method

Gets the control used to edit the item's text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public JComponent getEditControl ()
```

Return Value

The component that lets users edit item's text.

See Also

InPlaceEditEvent Members
InPlaceEditEvent Class
com.mindfusion.diagramming Namespace

InPlaceEditEvent.getItem Method

Gets an instance of the InplaceEditable class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public InplaceEditable getItem ()
```

Return Value

An instance of the InplaceEditable class.

See Also

InPlaceEditEvent Members
InPlaceEditEvent Class
com.mindfusion.diagramming Namespace

InPlaceEditEvent.setBounds Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBounds (
    Rectangle2D value
)
```

Parameters

value

See Also

InPlaceEditEvent Members
InPlaceEditEvent Class
com.mindfusion.diagramming Namespace

InPlaceEditEvent.setEditControl Method

Sets the control used to edit the item's text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEditControl (
    JComponent value
)
```

Parameters

value
The component that lets users edit item's text.

See Also

InPlaceEditEvent Members
InPlaceEditEvent Class
com.mindfusion.diagramming Namespace

InPlaceEditEvent.setItem Method

Sets the InplaceEditable instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setItem (
    InplaceEditable item
)
```

Parameters

item
Sets an InplaceEditable object.

See Also

InPlaceEditEvent Members
InPlaceEditEvent Class
com.mindfusion.diagramming Namespace

Interaction Class

Tracks pointer messages to implement user interaction with the diagram.

Syntax

Java

```
public class Interaction
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
    com.mindfusion.diagramming.LaneGridInteraction

See Also

Interaction Members
com.mindfusion.diagramming Namespace

Interaction Members

Tracks pointer messages to implement user interaction with the diagram.

The following tables list the members exposed by the Interaction type.

Protected Constructors

	Name	Description
	Interaction	Initializes a new instance of the **Interaction** class.

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled.
	pointerDown	Invoked in response to system pointer down events.
	pointerMove	Invoked when the pointer moves.
	pointerOver	Invoked in response to system pointer over events.
	pointerUp	Invoked in response to system pointer up events.

Protected Methods

	Name	Description
	getDiagramView	Gets a reference to the DiagramView control this interaction is associated with.

See Also

Interaction Class
com.mindfusion.diagramming Namespace

Interaction Constructor

Initializes a new instance of the Interaction class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Interaction (
    DiagramView diagramView
)
```

Parameters

diagramView
A DiagramView where the interaction takes place.

See Also

Interaction Class
com.mindfusion.diagramming Namespace

Interaction Methods

Interaction.cancelDrag Method

Invoked when the operation should be canceled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void cancelDrag ()`

See Also

Interaction Members
Interaction Class
com.mindfusion.diagramming Namespace

Interaction.getDiagramView Method

Gets a reference to the DiagramView control this interaction is associated with.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`protected DiagramView getDiagramView ()`

Return Value

See Also

Interaction Members
Interaction Class
com.mindfusion.diagramming Namespace

Interaction.pointerDown Method

Invoked in response to system pointer down events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void pointerDown (
    Point pointerPosition,
    MouseEvent e
)
```

Parameters

mousePosition
A Point instance that specifies the mouse pointer position.

e
The corresponding system **MouseEvent** object.

See Also

Interaction Members
Interaction Class
com.mindfusion.diagramming Namespace

Interaction.pointerMove Method

Invoked when the pointer moves.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void pointerMove (
    Point pointerPosition,
    MouseEvent e
)
```

Parameters

mousePosition
A Point instance that specifies the mouse pointer position.

e
The corresponding system **MouseEvent** object.

See Also

Interaction Members
Interaction Class
com.mindfusion.diagramming Namespace

Interaction.pointerOver Method

Invoked in response to system pointer over events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void pointerOver (
    Point pointerPosition,
    MouseEvent e
)
```

Parameters

mousePosition
A Point instance that specifies the mouse pointer position.

e
The corresponding system **MouseEvent** object.

See Also

Interaction Members
Interaction Class
com.mindfusion.diagramming Namespace

Interaction.pointerUp Method

Invoked in response to system pointer up events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void pointerUp (
    Point pointerPosition,
    MouseEvent e
)
```

Parameters

mousePosition
A Point instance that specifies the mouse pointer position.

e
The corresponding system **MouseEvent** object.

See Also

Interaction Members
Interaction Class
com.mindfusion.diagramming Namespace

InteractionState Class

Encapsulates the current state of user interaction with the control.

Syntax

Java
`public class InteractionState`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.InteractionState

See Also

InteractionState Members
com.mindfusion.diagramming Namespace

InteractionState Members

Encapsulates the current state of user interaction with the control.

The following tables list the members exposed by the InteractionState type.

Public Constructors

	Name	Description
	InteractionState	Initializes a new **InteractionState** instance.

Public Methods

	Name	Description
	getAction	Gets a value indicating what action is currently being performed.
	getAdjustmentHandle	Gets the adjustment handle being dragged by the user.
	getCurrentItem	Gets the item being created or modified.
	getDiagram	Gets the current Diagram instance.
	getInvalidRect	Gets the area that should be repainted.
	getLinkTarget	Gets the current target node when a link is being modified.
	getOriginalStates	
	getPointerMoved	Gets a value indicating whether the mouse pointer has moved since the user pressed down the mouse button
	getSkipSavingState	Gets a value indicating whether diagram items should skip storing their state for subsequent cancel.
	getStartPoint	Gets the coordinates of the point where the modification has started.
	setLinkTarget	Sets the current target node when a link is being modified
	setOriginalStates	

	setPointerMoved	Sets a value indicating whether the mouse pointer has moved since the user pressed down the mouse button

See Also

InteractionState Class
com.mindfusion.diagramming Namespace

InteractionState Constructor

Initializes a new InteractionState instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public InteractionState (
    DiagramItem currentItem,
    AdjustmentHandle adjustmentHandle,
    Action action
)
```

Parameters

currentItem
The DiagramItem to be created or modified.

adjustmentHandle
The selection handle to be dragged with the mouse, defines what kind of modification to perform.

action
A member of the Action enumeration, specifying what kind of action to perform.

See Also

InteractionState Class
com.mindfusion.diagramming Namespace

InteractionState Methods

InteractionState.getAction Method

Gets a value indicating what action is currently being performed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Action getAction ()
```

Return Value

A member of the Action enumeration.

See Also

InteractionState Members
InteractionState Class
com.mindfusion.diagramming Namespace

InteractionState.getAdjustmentHandle Method

Gets the adjustment handle being dragged by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AdjustmentHandle getAdjustmentHandle ()
```

Return Value

An AdjustmentHandle instance representing the dragged handle.

See Also

InteractionState Members
InteractionState Class
com.mindfusion.diagramming Namespace

InteractionState.getCurrentItem Method

Gets the item being created or modified.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem getCurrentItem ()
```

Return Value

See Also

InteractionState Members
InteractionState Class
com.mindfusion.diagramming Namespace

InteractionState.getDiagram Method

Gets the current Diagram instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Diagram getDiagram ()
```

Return Value

An instance of the Diagram class.

See Also

InteractionState Members
InteractionState Class
com.mindfusion.diagramming Namespace

InteractionState.getInvalidRect Method

Gets the area that should be repainted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Rectangle2D getInvalidRect ()
```

Return Value

A **Rectangle2D** specifying a rectangular region of the diagram that should be repainted.

See Also

InteractionState Members
InteractionState Class
com.mindfusion.diagramming Namespace

InteractionState.getLinkTarget Method

Gets the current target node when a link is being modified.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramNode getLinkTarget ()
```

Return Value

A DiagramNode that the currently modified DiagramLink should connect to if the interaction completes at the current pointer position.

See Also

InteractionState Members
InteractionState Class
com.mindfusion.diagramming Namespace

InteractionState.getOriginalStates Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Map<DiagramItem, DiagramItemState> getOriginalStates ()
```

Return Value

See Also

InteractionState Members
InteractionState Class
com.mindfusion.diagramming Namespace

InteractionState.getPointerMoved Method

Gets a value indicating whether the mouse pointer has moved since the user pressed down the mouse button

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getPointerMoved ()
```

Return Value

true if the pointer has moved; otherwise, **false**.

See Also

InteractionState Members
InteractionState Class
com.mindfusion.diagramming Namespace

InteractionState.getSkipSavingState Method

Gets a value indicating whether diagram items should skip storing their state for subsequent cancel.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getSkipSavingState ()
```

Return Value

See Also

InteractionState Members
InteractionState Class
com.mindfusion.diagramming Namespace

InteractionState.getStartPoint Method

Gets the coordinates of the point where the modification has started.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D.Float getStartPoint ()
```

Return Value

A **Point2D.Float** object specifying the start point coordinates.

See Also

InteractionState Members
InteractionState Class
com.mindfusion.diagramming Namespace

InteractionState.setLinkTarget Method

Sets the current target node when a link is being modified

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkTarget (
    DiagramNode value
```

```
)
```

Parameters

value
A DiagramNode that the currently modified DiagramLink should connect to if the interaction completes at the current pointer position.

See Also

InteractionState Members
InteractionState Class
com.mindfusion.diagramming Namespace

InteractionState.setOriginalStates Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOriginalStates (
    Map<DiagramItem, DiagramItemState> value
)
```

Parameters

value

See Also

InteractionState Members
InteractionState Class
com.mindfusion.diagramming Namespace

InteractionState.setPointerMoved Method

Sets a value indicating whether the mouse pointer has moved since the user pressed down the mouse button

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPointerMoved (
    boolean value
)
```

Parameters

value

true if the pointer has moved; otherwise, **false.**

See Also

InteractionState Members
InteractionState Class
com.mindfusion.diagramming Namespace

ItemEvent Class

Contains information passed to the events defined in DiagramListener.

Syntax

Java
`public class ItemEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.ItemEvent

See Also

ItemEvent Members
com.mindfusion.diagramming Namespace

ItemEvent Members

Contains information passed to the events defined in DiagramListener.

The following tables list the members exposed by the ItemEvent type.

Public Constructors

	Name	Description
	ItemEvent	Initializes a new **ItemEvent** instance.

Public Methods

	Name	Description
	getItem	Gets a reference to the item related to the event.

See Also

ItemEvent Class
com.mindfusion.diagramming Namespace

ItemEvent Constructor

Initializes a new ItemEvent instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ItemEvent (
    Object source,
    DiagramItem item
)
```

Parameters

source
The sender of this event.

item
The DiagramItem related to the event.

See Also

ItemEvent Class
com.mindfusion.diagramming Namespace

ItemEvent Methods

ItemEvent.getItem Method

Gets a reference to the item related to the event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem getItem ()
```

Return Value

A reference to an DiagramItem -derived object.

See Also

ItemEvent Members
ItemEvent Class
com.mindfusion.diagramming Namespace

ItemLabel Class

The base class for node and link labels.

Syntax

Java

```
public abstract class ItemLabel
    implements InplaceEditable
```

Remarks

This class represents supplementary labels displayed by an item, in addition to its main Text property. Call the addLabel method to create a label, and customize it through various members of type-specific LinkLabel and NodeLabel classes.

A label can also display a **java.awt.Image** bitmap assigned to the Image property. This lets you draw multiple icons per node, or along a link's geometry.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ItemLabel
    com.mindfusion.diagramming.LinkLabel
    com.mindfusion.diagramming.NodeLabel

See Also

ItemLabel Members
com.mindfusion.diagramming Namespace

ItemLabel Members

The base class for node and link labels.

The following tables list the members exposed by the ItemLabel type.

Public Constructors

	Name	Description
	ItemLabel	Overloaded. Initializes a new instance of the **ItemLabel** class.

Public Methods

	Name	Description
	cancel	Called when drag operation is canceled.
	getBrush	Gets the brush used to draw the label's background.
	getContentPadding	Gets the distance between Image and Text when both are specified.
	getEditRect	Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in

		document coordinates).
	getEnableWrap	Gets whether the text should wrap to multiple lines.
	getFont	Gets the font of the label's text.
	getHorizontalAlign	Gets label's horizontal alignment relative to the pin point.
	getHorizontalOffset	Gets label's horizontal offset from its pin point.
	getImage	Gets the image displayed by this label.
	getImageAlign	Gets the alignment of label's image relative to text.
	getImageSize	Gets a size that overrides the native image size.
	getImageUrl	Gets a URL used to load an image into this label.
	getIndex	Gets the index of an edge or point this label is relative to.
	getLocked	Gets a value indicating whether users are allowed to edit this label.
	getMargin	Gets the text margins size.
	getMaxWidth	Gets the maximal width that when reached should cause text to wrap to a new line.
	getText	Gets the label's text.
	getTextColor	Gets the color of the label's text.
	getTextToEdit	Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when this label is edited in-place.
	getVerticalAlign	Gets label's vertical alignment relative to the pin point.
	getVerticalOffset	Gets label's vertical offset from its pin point.
	onPointerDown	Called when the left mouse button is pressed while the pointer is over this label.
	onPointerMove	Called when the mouse is moved while this label tracks the mouse events.
	onPointerUp	Called when the left mouse button is released while this label tracks the mouse events.
	setBrush	Sets the brush used to draw the label's background.
	setContentPadding	Sets the distance between **Image** and **Text** when both are specified.
	setEditedText	Implements InplaceEditable.setEditedText. Assigns the edited text to the label after in-place edit operation completes successfully
	setEnableWrap	Sets whether the text should wrap to multiple lines.
	setFont	Sets the font of the label's text.
	setHorizontalAlign	Sets label's horizontal alignment relative to the pin point.
	setHorizontalOffset	Sets label's horizontal offset from its pin point.

	setImage	Sets the image displayed by this label.
	setImageAlign	Sets the alignment of label's image relative to text.
	setImageSize	Sets a size that overrides the native image size.
	setImageUrl	Sets a URL used to load an image into this label.
	setIndex	Sets the index of an edge or point this label is relative to.
	setLocked	Sets a value indicating whether users are allowed to edit this label.
	setMargin	Sets the text margins size.
	setMaxWidth	Sets the maximal width that when reached should cause text to wrap to a new line.
	setMouseCursor	Indicates what cursor to display for interactive labels.
	setText	Sets the label's text.
	setTextColor	Sets the color of the label's text.
	setVerticalAlign	Sets label's vertical alignment relative to the pin point.
	setVerticalOffset	Sets label's vertical offset from its pin point.

Protected Methods

	Name	Description
	draw	Draws this label on the specified **Graphics2D** surface.
	getItem	Returns the DiagramItem that displays this label.
	getLayoutRect	Gets the label's layout rectangle calculated from text length, font and alignment.
	loadFromJson	Loads the label from a JSON object.
	loadFromXml	Loads the label from the specified XML element.
	saveToJson	Saves the label as a JSON object.
	saveToXml	Saves the label into the specified XML element.

See Also

ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel Constructor

Initializes a new instance of the ItemLabel class.

Overload List

Name	Description

ItemLabel ()	Used during deserialization.
ItemLabel (DiagramItem)	Initializes a new instance of the **ItemLabel** class.

See Also

ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel Constructor ()

Used during deserialization.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ItemLabel ()
```

See Also

ItemLabel Constructor Overload List
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel Constructor (DiagramItem)

Initializes a new instance of the ItemLabel class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ItemLabel (
    DiagramItem item
)
```

Parameters

item
The DiagramItem that displays the label.

See Also

ItemLabel Constructor Overload List
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel Methods

ItemLabel.cancel Method

Called when drag operation is canceled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void cancel ()
```

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.draw Method

Draws this label on the specified **Graphics2D** surface.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void draw (
    Graphics2D graphics
)
```

Parameters

graphics
A **java.awt.Graphics2D** instance.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getBrush Method

Gets the brush used to draw the label's background.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getBrush ()
```

Return Value

A Brush used to paint the label's background. The default value is **null**.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getContentPadding Method

Gets the distance between Image and Text when both are specified.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Float getContentPadding ()
```

Return Value

A **Float** value specifying padding distance. The default value is **null**.

Remarks

If this property is not set, distance is set to 1mm independent of current measure unit.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getEditRect Method

Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getEditRect (
    DiagramItem item,
    Point2D mousePosition
)
```

Parameters

item
The DiagramItem whose label's text will be edited.

mousePosition
A **java.awt.geom.Point2D** instance specifying the current pointer position.

Return Value

A **java.awt.geom.Rectangle2D** specifying where the edit box should be placed.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getEnableWrap Method

Gets whether the text should wrap to multiple lines.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getEnableWrap ()
```

Return Value

true if text wrapping is enabled, or **false** otherwise.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getFont Method

Gets the font of the label's text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Font getFont ()
```

Return Value

A **java.awt.Font** object representing the text font.

Remarks

This property can be **null**, in which case the label will use the Font of its parent item.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getHorizontalAlign Method

Gets label's horizontal alignment relative to the pin point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Align getHorizontalAlign ()
```

Return Value

A member of the Align enumeration. The default is **Center**.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getHorizontalOffset Method

Gets label's horizontal offset from its pin point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getHorizontalOffset ()
```

Return Value

A **float** value specifying horizontal offset.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getImage Method

Gets the image displayed by this label.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Image getImage ()
```

Return Value

A **java.awt.Image** object.

Remarks

If a label displays both image and text, the image position relative to text depends on the ImageAlign property.

If the label is only intended to display an icon image and no text, you could also set its Locked property to prevent users from entering text.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getImageAlign Method

Gets the alignment of label's image relative to text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ImageAlign getImageAlign ()
```

Return Value

A member of the ImageAlign enumeration.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace
Image Property
Text Property

ItemLabel.getImageSize Method

Gets a size that overrides the native image size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension2D getImageSize ()
```

Return Value

A **Dimension2D** instance.

Remarks

By default, Image is rendered using bitmap's intrinsic size. Set this value to increase or reduce the size of the rendered image.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getImageUrl Method

Gets a URL used to load an image into this label.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getImageUrl ()
```

Return Value

a String containing the URL.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace
Image Property

ItemLabel.getIndex Method

Gets the index of an edge or point this label is relative to.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getIndex ()
```

Return Value

An integer index.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getItem Method

Returns the DiagramItem that displays this label.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected DiagramItem getItem ()
```

Return Value

A DiagramItem instance.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getLayoutRect Method

Gets the label's layout rectangle calculated from text length, font and alignment.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected Rectangle2D getLayoutRect ()
```

Return Value

A **java.awt.geom.Rectangle2D** specifying the label's layout rectangle.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getLocked Method

Gets a value indicating whether users are allowed to edit this label.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getLocked ()
```

Return Value

true to prevent users from editing this label, or **false** otherwise.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getMargin Method

Gets the text margins size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Thickness getMargin ()
```

Return Value

A Thickness instance specifying the size of text margins.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getMaxWidth Method

Gets the maximal width that when reached should cause text to wrap to a new line.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getMaxWidth ()
```

Return Value

A **float** value specifying the maximal label width.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getText Method

Gets the label's text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getText ()
```

Return Value

A String containing the label's text.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getTextColor Method

Gets the color of the label's text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getTextColor ()
```

Return Value

A **java.awt.Color** object representing the text color.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getTextToEdit Method

Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when this label is edited in-place.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getTextToEdit ()
```

Return Value

A String that represents the initial contents of the in-place edit box.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getVerticalAlign Method

Gets label's vertical alignment relative to the pin point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Align getVerticalAlign ()
```

Return Value

A member of the Align enumeration. The default is **Center**.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.getVerticalOffset Method

Gets label's vertical offset from its pin point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getVerticalOffset ()
```

Return Value

A **float** value specifying vertical offset.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.loadFromJson Method

Loads the label from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the label's data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.loadFromXml Method

Loads the label from the specified XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An **org.w3c.dom.Element** instance.

context
An XmlPersistContext instance.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.onPointerDown Method

Called when the left mouse button is pressed while the pointer is over this label.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onPointerDown (
    Point2D mousePosition
)
```

Parameters

mousePosition
A **java.awt.geom.Point2D** instance that specifies the current mouse position.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.onPointerMove Method

Called when the mouse is moved while this label tracks the mouse events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onPointerMove (
    Point2D mousePosition
)
```

Parameters

mousePosition
A **java.awt.geom.Point2D** instance that specifies the current mouse position.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.onPointerUp Method

Called when the left mouse button is released while this label tracks the mouse events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onPointerUp (
    Point2D mousePosition
)
```

Parameters

mousePosition
A **java.awt.geom.Point2D** instance that specifies the current mouse position.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.saveToJson Method

Saves the label as a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject instance to contain the serialized data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.saveToXml Method

Saves the label into the specified XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An **org.w3c.dom.Element** instance.

context
An XmlPersistContext instance.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setBrush Method

Sets the brush used to draw the label's background.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void setBrush (
    Brush value
)
```

Parameters

value
A Brush used to paint the label's background.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setContentPadding Method

Sets the distance between Image and Text when both are specified.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void setContentPadding (
    Float value
)
```

Parameters

value
A **Float** value specifying padding distance. The default value is **null**.

Remarks

If this property is not set, distance is set to 1mm independent of current measure unit.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setEditedText Method

Implements InplaceEditable.setEditedText. Assigns the edited text to the label after in-place edit operation completes successfully

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setEditedText (
    String newText
)
```

Parameters

newText
The new text of this label.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setEnableWrap Method

Sets whether the text should wrap to multiple lines.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setEnableWrap (
    boolean enableWrap
)
```

Parameters

enableWrap
true to enable text wrapping, or **false** otherwise.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setFont Method

Sets the font of the label's text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFont (
    Font value
)
```

Parameters

value
A **java.awt.Font** object representing the text font.

Remarks

This property can be **null**, in which case the label will use the Font of its parent item.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setHorizontalAlign Method

Sets label's horizontal alignment relative to the pin point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHorizontalAlign (
    Align align
)
```

Parameters

align
A member of the Align enumeration.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setHorizontalOffset Method

Sets label's horizontal offset from its pin point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHorizontalOffset (
    float value
)
```

Parameters

value
A **float** value specifying horizontal offset.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setImage Method

Sets the image displayed by this label.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImage (
    Image value
)
```

Parameters

value
A **java.awt.Image** object.

Remarks

If a label displays both image and text, the image position relative to text depends on the ImageAlign property.

If the label is only intended to display an icon image and no text, you could also set its Locked property to prevent users from entering text.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setImageAlign Method

Sets the alignment of label's image relative to text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImageAlign (
    ImageAlign value
)
```

Parameters

value
A member of the ImageAlign enumeration.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace
Image Property
Text Property

ItemLabel.setImageSize Method

Sets a size that overrides the native image size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImageSize (
    Dimension2D value
)
```

Parameters

value
A Dimension2D instance.

Remarks

By default, Image is rendered using bitmap's intrinsic size. Set this value to increase or reduce the size of the rendered image.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setImageUrl Method

Sets a URL used to load an image into this label.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImageUrl (
    String value
)
```

Parameters

value
A String containing the URL

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace
Image Property

ItemLabel.setIndex Method

Sets the index of an edge or point this label is relative to.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIndex (
    int value
)
```

Parameters

value
An integer index.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setLocked Method

Sets a value indicating whether users are allowed to edit this label.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLocked (
    boolean value
)
```

Parameters

value
true to prevent users from editing this label, or **false** otherwise.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setMargin Method

Sets the text margins size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMargin (
    Thickness margin
)
```

Parameters

margin
A Thickness instance specifying the size of text margins.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setMaxWidth Method

Sets the maximal width that when reached should cause text to wrap to a new line.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMaxWidth (
    float maxWidth
)
```

Parameters

maxWidth
A **float** value specifying the maximal label width.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setMouseCursor Method

Indicates what cursor to display for interactive labels.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CursorHint setMouseCursor (
    Point2D point
)
```

Parameters

point
Specifies mouse pointer position.

Return Value

A member of the CursorHint enumeration.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setText Method

Sets the label's text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setText (
    String text
)
```

Parameters

text
A String containing the label's text.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setTextColor Method

Sets the color of the label's text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextColor (
    Color value
)
```

Parameters

value
A **java.awt.Color** object representing the text color.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setVerticalAlign Method

Sets label's vertical alignment relative to the pin point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setVerticalAlign (
    Align align
)
```

Parameters

align
A member of the Align enumeration.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemLabel.setVerticalOffset Method

Sets label's vertical offset from its pin point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setVerticalOffset (
    float value
)
```

Parameters

value
A **float** value specifying vertical offset.

See Also

ItemLabel Members
ItemLabel Class
com.mindfusion.diagramming Namespace

ItemListEvent Class

Provides data for the events that are raised by an ItemListView.

Syntax

Java

```
public class ItemListEvent extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.ItemListEvent

See Also

ItemListEvent Members
com.mindfusion.diagramming Namespace

ItemListEvent Members

Provides data for the events that are raised by an ItemListView.

The following tables list the members exposed by the ItemListEvent type.

Public Constructors

	Name	Description
	ItemListEvent	Initializes a new instance of the **ItemListEvent** class.

Public Methods

	Name	Description
	getIndex	Gets the index of the item.
	getItem	Gets the item that the event is related to.

See Also

ItemListEvent Class
com.mindfusion.diagramming Namespace

ItemListEvent Constructor

Initializes a new instance of the ItemListEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ItemListEvent (
    Object source,
    DiagramItem item,
    int index
)
```

Parameters

source
The ItemListView that raised the event.

item
The DiagramItem that the event is related to.

index
The index of the item.

See Also

ItemListEvent Class
com.mindfusion.diagramming Namespace

ItemListEvent Methods

ItemListEvent.getIndex Method

Gets the index of the item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getIndex ()
```

Return Value

An integer value specifying the item's index.

See Also

ItemListEvent Members
ItemListEvent Class
com.mindfusion.diagramming Namespace

ItemListEvent.getItem Method

Gets the item that the event is related to.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramItem getItem ()
```

Return Value

A DiagramItem instance.

See Also

ItemListEvent Members
ItemListEvent Class
com.mindfusion.diagramming Namespace

ItemListView Class

A list view control that hosts DiagramItems and supports drag-and-drop to DiagramView.

Syntax

```
Java
public class ItemListView extends JList<E>
```

Remarks

The **ItemListView** control provides a list of diagram items that can be dragged and dropped onto a DiagramView to create new item instances.

Item Management

Items can be added to the list by calling the addItem method and removed using removeItemAt. To clear the entire list, use the clearItems method. The control supports displaying both DiagramNode and DiagramLink objects, superseding the legacy NodeListView which was limited to nodes.

Drag-and-Drop Behavior

When an item is dragged from the list and dropped onto a diagram, the control creates a new instance by calling the source item's clone method. If you are using custom item subclasses, ensure you override the **clone** method to correctly copy all custom property values.
The dimensions of the newly created item are determined by the NewInstanceSize property. If this property is not set, the item's original size is used.

Automatic Connections

The control supports an auto-connect feature enabled via the AutoConnectLinks property. When active:

- Links: Dropping a link near existing nodes (within the range specified by AutoConnectDistance) will automatically connect the link's ends to those nodes.
- Nodes: Dropping a node near the unconnected end of an existing link will automatically attach that link to the new node.

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        javax.swing.JList(E)
          com.mindfusion.diagramming.ItemListView

See Also

ItemListView Members
com.mindfusion.diagramming Namespace
Palette Class

ItemListView Members

A list view control that hosts DiagramItems and supports drag-and-drop to DiagramView.

The following tables list the members exposed by the ItemListView type.

Public Constructors

	Name	Description
	ItemListView	Initializes a new instance of the **ItemListView** class.

Public Methods

	Name	Description

	addItem	Overloaded.
	addItemListViewListener	Registers listener so that it will receive events when users select or delete items from the list.
	addItems	Overloaded.
	clearItems	Removes all items from the list view.
	getAllowRemove	Gets a value indicating whether to allow deletion of list items by pressing Del.
	getAutoConnectDistance	Gets the maximum distance within which a link will attempt to auto-connect to a nearby node.
	getAutoConnectLinks	Gets a value indicating whether links should be automatically connected to nearby nodes when dropped from the ItemListView.
	getIconMargin	Gets the horizontal and vertical margins around the items.
	getIconSize	Gets the size of the items displayed in the list.
	getItemAt	Gets the item at the specified position.
	getItemsCount	Gets the number of items in the list view.
	getMeasureUnit	Gets the unit of measure used when drawing items.
	getNewInstanceSize	Gets the default size with which items dragged onto a diagram will be created.
	getShowLabels	Gets a value indicating whether to show text labels along with icons for each list item.
	insertItem	Overloaded.
	removeItemAt	Removes the item at the specified position.
	removeItemListViewListener	Unregisters listener so that it will no longer receive ItemListView events.
	setAllowRemove	Sets a value indicating whether to allow deletion of list items by pressing Del.
	setAutoConnectDistance	Sets the maximum distance within which a link will attempt to auto-connect to a nearby node.
	setAutoConnectLinks	Sets a value indicating whether links should be automatically connected to nearby nodes when dropped from the ItemListView.
	setIconMargin	Sets the horizontal and vertical margins around the items.
	setIconSize	Sets the size of the items displayed in the list.
	setMeasureUnit	Sets the unit of measure used when drawing items.
	setNewInstanceSize	Sets the default size with which items dragged onto a diagram will be created.
	setShowLabels	Sets a value specifying whether to show text labels along with icons for each list item.

Protected Methods

	Name	Description
	onComponentResized	
	onItemRemoved	
	onItemSelected	Overloaded.
	onKeyPressed	

See Also

ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView Constructor

Initializes a new instance of the ItemListView class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public ItemListView ()`

See Also

ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView Methods

ItemListView.addItem Method

Overload List

Name	Description
ItemListView.addItem (DiagramItem)	Adds a new item to the end of the list view.
ItemListView.addItem (DiagramItem, String)	Adds a new item to the end of the list view.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.addItem Method (DiagramItem)

Adds a new item to the end of the list view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addItem (
    DiagramItem item
)
```

Parameters

item
The item to add.

See Also

addItem Method Overload List
ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace
removeItemAt Method

ItemListView.addItem Method (DiagramItem, String)

Adds a new item to the end of the list view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addItem (
    DiagramItem item,
    String label
)
```

Parameters

item
The item to add.

label
The text to be displayed for the item.

See Also

addItem Method Overload List
ItemListView Members
ItemListView Class

ItemListView.addItemListViewListener Method

Registers listener so that it will receive events when users select or delete items from the list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addItemListViewListener (
    ItemListViewListener listener
)
```

Parameters

listener
An object implementing the ItemListViewListener interface.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace
ItemListViewAdapter Class

ItemListView.addItems Method

Overload List

Name	Description
ItemListView.addItems (DiagramItem[], String[])	Adds the specified items to the end of the list box.
ItemListView.addItems (DiagramItemList)	Adds the specified items to the end of the list box.
ItemListView.addItems (DiagramItemList, String[])	Adds the specified items to the end of the list box.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.addItems Method (DiagramItem[], String[])

Adds the specified items to the end of the list box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void addItems (
    DiagramItem[] items,
    String[] labels
)
```

Parameters

items
The array of items to add.

labels
The array of texts to be displayed for the items.

See Also

addItems Method Overload List
ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.addItems Method (DiagramItemList)

Adds the specified items to the end of the list box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void addItems (
    DiagramItemList items
)
```

Parameters

items
The collection of items to add.

See Also

addItems Method Overload List
ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.addItems Method (DiagramItemList, String[])

Adds the specified items to the end of the list box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void addItems (
    DiagramItemList items,
    String[] labels
)
```

Parameters

items
The collection of items to add.

labels
The array of texts to be displayed for the items.

See Also

addItems Method Overload List
ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.clearItems Method

Removes all items from the list view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void clearItems ()
```

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace
addItem Method

ItemListView.getAllowRemove Method

Gets a value indicating whether to allow deletion of list items by pressing Del.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public boolean getAllowRemove ()
```

Return Value

true to allow item deletion, otherwise false.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.getAutoConnectDistance Method

Gets the maximum distance within which a link will attempt to auto-connect to a nearby node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getAutoConnectDistance ()
```

Return Value

The auto-connect distance.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.getAutoConnectLinks Method

Gets a value indicating whether links should be automatically connected to nearby nodes when dropped from the ItemListView.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAutoConnectLinks ()
```

Return Value

true to auto-connect links, or **false** otherwise.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.getIconMargin Method

Gets the horizontal and vertical margins around the items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Dimension getIconMargin ()
```

Return Value

A Dimension instance specifying the icon margins.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.getIconSize Method

Gets the size of the items displayed in the list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Dimension getIconSize ()
```

Return Value

A Dimension instance specifying the item size.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.getItemAt Method

Gets the item at the specified position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramItem getItemAt (
    int index
)
```

Parameters

index
An integer value specifying the item's index in the list.

Return Value

The DiagramItem at the specified position.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.getItemsCount Method

Gets the number of items in the list view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getItemsCount ()
```

Return Value

Returns the number of items in this list view.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.getMeasureUnit Method

Gets the unit of measure used when drawing items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public GraphicsUnit getMeasureUnit ()
```

Return Value

A member of the GraphicsUnit enumeration.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.getNewInstanceSize Method

Gets the default size with which items dragged onto a diagram will be created.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension2D getNewInstanceSize ()
```

Return Value

A Dimension2D instance specifying the size of created items.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.getShowLabels Method

Gets a value indicating whether to show text labels along with icons for each list item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getShowLabels ()
```

Return Value

true if labels are shown.

See Also

ItemListView Members
ItemListView Class

ItemListView.insertItem Method

Overload List

Name	Description
ItemListView.insertItem (int, DiagramItem)	Inserts the item at the specified position.
ItemListView.insertItem (int, DiagramItem, String)	Inserts the item at the specified position.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.insertItem Method (int, DiagramItem)

Inserts the item at the specified position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void insertItem (
    int index,
    DiagramItem item
)
```

Parameters

index
The zero-based index at which the item should be inserted.

item
The item to insert.

See Also

insertItem Method Overload List
ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.insertItem Method (int, DiagramItem, String)

Inserts the item at the specified position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void insertItem (
    int index,
    DiagramItem item,
    String label
)
```

Parameters

index
The zero-based index at which the item should be inserted.

item
The item to insert.

label
The text to be displayed for the item.

See Also

insertItem Method Overload List
ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.onComponentResized Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onComponentResized ()
```

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.onItemRemoved Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`protected void onItemRemoved (`
`    ItemListEvent e`
`)`

Parameters

e

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.onItemSelected Method

Overload List

Name	Description
ItemListView.onItemSelected (ItemListEvent)	
ItemListView.onItemSelected (ListSelectionEvent)	

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.onItemSelected Method (ItemListEvent)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`protected void onItemSelected (`
`    ItemListEvent e`
`)`

Parameters

e

See Also

onItemSelected Method Overload List
ItemListView Members

ItemListView.onItemSelected Method (ListSelectionEvent)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onItemSelected (
    ListSelectionEvent e
)
```

Parameters

e

See Also

onItemSelected Method Overload List
ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.onKeyPressed Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onKeyPressed (
    KeyEvent e
)
```

Parameters

e

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.removeItemAt Method

Removes the item at the specified position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeItemAt (
    int index
)
```

Parameters

index
The zero-based index of the item to remove.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.removeItemListViewListener Method

Unregisters listener so that it will no longer receive ItemListView events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeItemListViewListener (
    ItemListViewListener listener
)
```

Parameters

listener
An object implementing the ItemListViewListener interface.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.setAllowRemove Method

Sets a value indicating whether to allow deletion of list items by pressing Del.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowRemove (
    boolean value
)
```

Parameters

value
true to allow users to delete items, or **false** otherwise. The default value is **false**.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace
itemRemoved Event

ItemListView.setAutoConnectDistance Method

Sets the maximum distance within which a link will attempt to auto-connect to a nearby node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAutoConnectDistance (
    float value
)
```

Parameters

value
The auto-connect distance.

Remarks

This value is applied when AutoConnectLinks is enabled. If a link is dropped within specified distance from an existing node, or if a node is dropped near unconnected link, the node is set as Origin or Destination of the link.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.setAutoConnectLinks Method

Sets a value indicating whether links should be automatically connected to nearby nodes when dropped from the ItemListView.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAutoConnectLinks (
    boolean value
)
```

Parameters

value
true to auto-connect links, otherwise false.

Remarks

If a link is dropped within AutoConnectDistance from an existing node, or if a node is dropped near unconnected link, the node is set as Origin or Destination of the link.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.setIconMargin Method

Sets the horizontal and vertical margins around the items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setIconMargin (
    Dimension value
)
```

Parameters

value
A Dimension instance specifying the icon margins.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.setIconSize Method

Sets the size of the items displayed in the list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIconSize (
    Dimension value
)
```

Parameters

value
A Dimension instance specifying the item size.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.setMeasureUnit Method

Sets the unit of measure used when drawing items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMeasureUnit (
    GraphicsUnit value
)
```

Parameters

value
A member of the GraphicsUnit enumeration.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.setNewInstanceSize Method

Sets the default size with which items dragged onto a diagram will be created.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setNewInstanceSize (
    Dimension2D value
)
```

Parameters

value
A Dimension2D instance specifying the size of created items.

Remarks

The copy created from an item dragged from the list view is resized to this size.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListView.setShowLabels Method

Sets a value specifying whether to show text labels along with icons for each list item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShowLabels (
    boolean value
)
```

Parameters

value
true if text labels must be shown, or **false** otherwise.

See Also

ItemListView Members
ItemListView Class
com.mindfusion.diagramming Namespace

ItemListViewAdapter Class

Provides empty implementations for the methods defined in the ItemListViewListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of **ItemListViewListener**.

Syntax

Java

```
public class ItemListViewAdapter implements ItemListViewListener
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ItemListViewAdapter

See Also

ItemListViewAdapter Members
com.mindfusion.diagramming Namespace

ItemListViewAdapter Members

Provides empty implementations for the methods defined in the ItemListViewListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of **ItemListViewListener**.

The following tables list the members exposed by the ItemListViewAdapter type.

Public Constructors

	Name	Description
	ItemListViewAdapter	

Public Methods

	Name	Description
	itemRemoved	Raised when the user removes an item from the list view.
	itemSelected	Raised when the user selects an item in the list view.

See Also

ItemListViewAdapter Class
com.mindfusion.diagramming Namespace

ItemListViewAdapter Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public ItemListViewAdapter ()`

See Also

ItemListViewAdapter Methods

ItemListViewAdapter.itemRemoved Method

Raised when the user removes an item from the list view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void itemRemoved (
    ItemListEvent e
)
```

Parameters

e

See Also

ItemListViewAdapter Members
ItemListViewAdapter Class
com.mindfusion.diagramming Namespace

ItemListViewAdapter.itemSelected Method

Raised when the user selects an item in the list view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void itemSelected (
    ItemListEvent e
)
```

Parameters

e

See Also

ItemListViewAdapter Members
ItemListViewAdapter Class
com.mindfusion.diagramming Namespace

ItemListViewListener Interface

Defines the events that can be raised by an ItemListView.

Syntax

Java
`public interface ItemListViewListener extends EventListener`

Inheritors

com.mindfusion.diagramming.ItemListViewAdapter

See Also

ItemListViewListener Members
com.mindfusion.diagramming Namespace

ItemListViewListener Members

Defines the events that can be raised by an ItemListView.

The following tables list the members exposed by the ItemListViewListener type.

Public Methods

	Name	Description
	itemRemoved	Raised when the user removes an item from the list view.
	itemSelected	Raised when the user selects an item in the list view.

See Also

ItemListViewListener Interface
com.mindfusion.diagramming Namespace

ItemListViewListener Methods

ItemListViewListener.itemRemoved Method

Raised when the user removes an item from the list view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`void itemRemoved (`
`  ItemListEvent e`
`)`

Parameters

e
An ItemListEvent object providing information about the event.

See Also

ItemListViewListener Members
ItemListViewListener Interface
com.mindfusion.diagramming Namespace

ItemListViewListener.itemSelected Method

Raised when the user selects an item in the list view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void itemSelected (
    ItemListEvent e
)
```

Parameters

e
An ItemListEvent object providing information about the event.

See Also

ItemListViewListener Members
ItemListViewListener Interface
com.mindfusion.diagramming Namespace

ItemTransferHandler Class

Implements drag-and-drop transfers from ItemListView.

Syntax

Java

```
public class ItemTransferHandler extends TransferHandler
```

Inheritance Hierarchy

java.lang.Object
  javax.swing.TransferHandler
    com.mindfusion.diagramming.ItemListView.ItemTransferHandler

See Also

ItemTransferHandler Members

Implements drag-and-drop transfers from ItemListView.

The following tables list the members exposed by the ItemTransferHandler type.

Public Constructors

	Name	Description
	ItemTransferHandler	

Public Methods

	Name	Description
	getSourceActions	

Protected Methods

	Name	Description
	createTransferable	

See Also

ItemTransferHandler Class
com.mindfusion.diagramming Namespace

ItemTransferHandler Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public ItemTransferHandler ()`

See Also

ItemTransferHandler Class
com.mindfusion.diagramming Namespace

ItemTransferHandler Methods

ItemTransferHandler.createTransferable Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected Transferable createTransferable (
    JComponent c
)
```

Parameters

c

Return Value

See Also

ItemTransferHandler Members
ItemTransferHandler Class
com.mindfusion.diagramming Namespace

ItemTransferHandler.getSourceActions Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getSourceActions (
    JComponent c
)
```

Parameters

c

Return Value

See Also

ItemTransferHandler Members
ItemTransferHandler Class
com.mindfusion.diagramming Namespace

JsonPersistContext Class

Syntax

```
Java
```

```
public class JsonPersistContext extends JsonContext
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.common.JsonContext
    com.mindfusion.diagramming.JsonPersistContext

See Also

JsonPersistContext Members
com.mindfusion.diagramming Namespace

JsonPersistContext Members

The following tables list the members exposed by the JsonPersistContext type.

Public Constructors

	Name	Description
	JsonPersistContext	Overloaded.

Public Fields

	Name	Description
	LatestFormat	

Protected Fields

	Name	Description
	brushes	(Inherited from JsonContext.)
	inplaceImages	(Inherited from JsonContext.)
	inplaceResources	(Inherited from JsonContext.)

Public Methods

	Name	Description
	getDiagram	
	getFileVersion	
	getItemProperties	
	loadItem	Reads a diagram item from the specified JsonObject.
	parse	Deserializes the specified JSON formatted string to a JsonObject. (Inherited from JsonContext.)
	readAnchorPattern	Reads an AnchorPattern object.

	readBrush	Overloaded. (Inherited from JsonContext.)
	readBrushColor	Reads a Brush object with the specified color. (Inherited from JsonContext.)
	readBrushes	Reads all brushes. (Inherited from JsonContext.)
	readColor	Overloaded. (Inherited from JsonContext.)
	readComposite	Reads the properties of a CompositeNode, which are marked with the AutoJson attribute.
	readEffect	Reads a NodeEffect object.
	readEnum	Reads an enum value. (Inherited from JsonContext.)
S	readFile	Reads json file (Inherited from JsonContext.)
	readFont	
	readImage	Reads an Image object. (Inherited from JsonContext.)
	readImages	Reads all images. (Inherited from JsonContext.)
	readItemId	Reads an item reference.
	readObject	(Inherited from JsonContext.)
	readPen	Overloaded. (Inherited from JsonContext.)
	readPointF	Reads a **Point2D.Float** object. (Inherited from JsonContext.)
	readPointString	Reads a list of points. (Inherited from JsonContext.)
	readRectangleF	Reads a Rectangle2D.Float object. (Inherited from JsonContext.)
	readShape	Reads a Shape object.
	readSizeF	read the SizeF object (Inherited from JsonContext.)
	readStringFormat	Reads a StringFormat object. (Inherited from JsonContext.)
	readStyle	Reads a Style object.
	readSvg	Read SVG object.
	readTag	Reads the specified tag for the specified object. Tags are read similarly to arbitrary objects except that the client of the diagram is given a chance to perform custom deserialization through event handling.
	readTheme	Reads a Theme object.
	readThickness	Reads a Thickness object.
	saveItem	Saves the specified diagram item to a JsonObject.
	serialize	Serializes the specified JsonObject to a JSON formatted string. (Inherited from JsonContext.)
	setItemProperties	
	writeAnchorPattern	Writes an AnchorPattern object.

	writeBrush	Writes a MindFusion.Drawing.Brush object. (Inherited from JsonContext.)
	writeBrushColor	Writes the color of the specified brush. (Inherited from JsonContext.)
	writeBrushes	Writes all currently accumulated brushes. (Inherited from JsonContext.)
	writeColor	Writes a Color object. (Inherited from JsonContext.)
	writeComposite	Writes the properties of a CompositeNode, which are marked with the AutoJson attribute.
	writeEffect	Writes a NodeEffect object.
	writeEnum	Writes an enum value. (Inherited from JsonContext.)
S	writeFile	Writes serialized json to file. (Inherited from JsonContext.)
	writeFont	
	writeImage	Writes an Image object. (Inherited from JsonContext.)
	writeImages	Writes all currently accumulated images. (Inherited from JsonContext.)
	writeItemId	Writes a reference to the specified item.
	writeItemType	
	writeObject	(Inherited from JsonContext.)
	writePen	Writes a MindFusion.Drawing.Pen object. (Inherited from JsonContext.)
	writePointF	Writes a PointF object. (Inherited from JsonContext.)
	writePointString	Writes a Point string. (Inherited from JsonContext.)
	writeRectangleF	Writes a RectangleF object. (Inherited from JsonContext.)
	writeShape	Writes a Shape object.
	writeSizeF	Writes a sizeF object (Inherited from JsonContext.)
	writeStringFormat	Writes a StringFormat object. (Inherited from JsonContext.)
	writeStyle	Writes a Style object.
	writeSvg	
	writeTag	Writes the specified tag of the specified object. Tags are written similarly to arbitrary objects except that the client of the diagram is given a chance to perform custom serialization through event handling.
	writeTheme	Writes a Theme object.
	writeThickness	Writes a Thickness object.

Protected Methods

	Name	Description

	Base64Decode	(Inherited from JsonContext.)
	base64Encode	(Inherited from JsonContext.)
	toCamelCase	(Inherited from JsonContext.)
	toPascalCase	(Inherited from JsonContext.)

See Also

JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext Fields

JsonPersistContext.LatestFormat Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static int LatestFormat`

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext Constructor

Overload List

Name	Description
JsonPersistContext (Diagram, int)	Contains methods that can help serialize and deserialize MindFusion.Diagramming items to and from JSON.
JsonPersistContext (Diagram, int, boolean)	Initializes a new instance of the JsonPersistContext class.

See Also

JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext Constructor (Diagram, int)

Contains methods that can help serialize and deserialize MindFusion.Diagramming items to and from JSON.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public JsonPersistContext (
    Diagram diagram,
    int fileVersion
)
```

Parameters

diagram
A Diagram that will be serialized and deserialized

fileVersion
Specifies the current file format number.

See Also

JsonPersistContext Constructor Overload List
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext Constructor (Diagram, int, boolean)

Initializes a new instance of the JsonPersistContext class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public JsonPersistContext (
    Diagram diagram,
    int fileVersion,
    boolean trackItems
)
```

Parameters

diagram
The Diagram that will be serialized or deserialized.

fileVersion
Specifies the current file format number.

trackItems
true to track shared item instances by their identifier, or false otherwise.

See Also

JsonPersistContext Constructor Overload List
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext Methods

JsonPersistContext.getDiagram Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Diagram getDiagram ()`

Return Value

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.getFileVersion Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public int getFileVersion ()`

Return Value

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.getItemProperties Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Map<DiagramItem, Map<Object, Object>> getItemProperties ()`

Return Value

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.loadItem Method

Reads a diagram item from the specified JsonObject.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem loadItem (
    JsonObject obj
)
```

Parameters

obj

Return Value

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.readAnchorPattern Method

Reads an AnchorPattern object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPattern readAnchorPattern (
    JsonValue value
)
```

Parameters

value
A JsonValue

Return Value

A AnchorPattern Object

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.readComposite Method

Reads the properties of a CompositeNode, which are marked with the AutoJson attribute.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readComposite (
    JsonObject obj,
    CompositeNode node
)
```

Parameters

obj
A JsonObject containing deserialized data

node
A ComposideNode

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.readEffect Method

Reads a NodeEffect object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeEffect readEffect (
    JsonValue value
)
```

Parameters

value

Return Value

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.readFont Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Font readFont (
    JsonObject obj,
    Font defaultFont
)
```

Parameters

obj
A JsonObject containing Font Details

defaultFont
A default Font Object to return in case JsonObject == null

Return Value

Font

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.readItemId Method

Reads an item reference.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem readItemId (
    JsonValue value
)
```

Parameters

value
A JsonValue

Return Value

DiagramItem

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.readShape Method

Reads a Shape object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Shape readShape (
    JsonValue value
)
```

Parameters

value

Return Value

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.readStyle Method

Reads a Style object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readStyle (
    JsonValue value,
    Style style
)
```

Parameters

value

style

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.readSvg Method

Read SVG object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgContent readSvg (
    JsonValue value
)
```

Parameters

value

Return Value

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.readTag Method

Reads the specified tag for the specified object. Tags are read similarly to arbitrary objects except that the client of the diagram is given a chance to perform custom deserialization through event handling.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object readTag (
    Object item,
    JsonValue tagValue,
    String propertyName
)
```

Parameters

item
item

tagValue
JsonValue

propertyName
A name

Return Value

tag Object

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.readTheme Method

Reads a Theme object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Theme readTheme (
    JsonValue value
)
```

Parameters

value

Return Value

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.readThickness Method

Reads a Thickness object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Thickness readThickness (
    JsonValue value
)
```

Parameters

value

Return Value

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.saveItem Method

Saves the specified diagram item to a JsonObject.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public JsonObject saveItem (
    DiagramItem item
)
```

Parameters

item
A DiagramItem

Return Value

A JsonObject

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.setItemProperties Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setItemProperties (
    Map<DiagramItem, Map<Object, Object>> itemProperties
)
```

Parameters

itemProperties

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.writeAnchorPattern Method

Writes an AnchorPattern object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public JsonValue writeAnchorPattern (
    AnchorPattern anchorPattern
)
```

Parameters

anchorPattern
A AnchorPattern

Return Value

A JsonValue

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.writeComposite Method

Writes the properties of a CompositeNode, which are marked with the AutoJson attribute.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeComposite (
    JsonObject obj,
    CompositeNode node
)
```

Parameters

obj
A JsonObject where AutoJson data is stored.

node
A ComposideNode

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.writeEffect Method

Writes a NodeEffect object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public JsonValue writeEffect (
    NodeEffect effect
)
```

Parameters

effect
NodeEffect

Return Value

JsonValue

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.writeFont Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public JsonObject writeFont (
    Font font
)
```

Parameters

font

Return Value

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.writeItemId Method

Writes a reference to the specified item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public JsonValue writeItemId (
    DiagramItem item
)
```

Parameters

item
A DiagramItem

Return Value

A JsonValue

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.writeItemType Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public JsonValue writeItemType (
    Class itemType
)
```

Parameters

itemType

Return Value

See Also

JsonPersistContext Members
JsonPersistContext Class

JsonPersistContext.writeShape Method

Writes a Shape object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public JsonValue writeShape (
    Shape shape
)
```

Parameters

shape
A Shape

Return Value

A JsonValue

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.writeStyle Method

Writes a Style object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public JsonValue writeStyle (
    Style style
)
```

Parameters

style
A Style Object

Return Value

A JsonValue

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.writeSvg Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public JsonValue writeSvg (
    SvgContent content
)
```

Parameters

content
An svg content object to write

Return Value

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.writeTag Method

Writes the specified tag of the specified object. Tags are written similarly to arbitrary objects except that the client of the diagram is given a chance to perform custom serialization through event handling.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public JsonValue writeTag (
    Object item,
    Object tagValue,
    String propertyName
)
```

Parameters

item

tagValue

propertyName

Return Value

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.writeTheme Method

Writes a Theme object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public JsonObject writeTheme (
    Theme theme
)
```

Parameters

theme
A Theme object to write

Return Value

A JsonObject

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonPersistContext.writeThickness Method

Writes a Thickness object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public JsonObject writeThickness (
    Thickness thickness
)
```

Parameters

thickness
A Thickness containing values to write

Return Value

a JsonObject

See Also

JsonPersistContext Members
JsonPersistContext Class
com.mindfusion.diagramming Namespace

JsonSerializeTagEvent Class

Contains the arguments passed to the JsonSerializeTag and JsonDeserializeTag event handlers.

Syntax

Java
`public class JsonSerializeTagEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.JsonSerializeTagEvent

See Also

JsonSerializeTagEvent Members
com.mindfusion.diagramming Namespace

JsonSerializeTagEvent Members

Contains the arguments passed to the JsonSerializeTag and JsonDeserializeTag event handlers.

The following tables list the members exposed by the JsonSerializeTagEvent type.

Public Constructors

	Name	Description
	JsonSerializeTagEvent	Initializes a new instance of the JsonSerializeTagArgs class. Constructs a prototypical Event.

Public Methods

	Name	Description
	getContext	Gets a context object that can help you write and read various values.
	getObject	Gets the object being serialized or deserialized.
	getPropertyName	Gets the name of the property being serialized.
	getRepresentation	Gets the JsonObject, representing the tag object

	getTag	Gets the tag object being serialized or deserialized.
	isHandled	Gets a value indicating whether the event is handled.
	setHandled	Sets a value indicating whether the event is handled. Always set this flag to true if you perform custom tag serialization.
	setRepresentation	Sets the JsonObject, representing the tag object
	setTag	Sets the tag object being serialized or deserialized.

See Also

JsonSerializeTagEvent Class
com.mindfusion.diagramming Namespace

JsonSerializeTagEvent Constructor

Initializes a new instance of the JsonSerializeTagArgs class. Constructs a prototypical Event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public JsonSerializeTagEvent (
    Object source,
    Object item,
    Object tag,
    String propertyName,
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

source
The object on which the Event initially occurred.

item

tag

propertyName

obj

context

See Also

JsonSerializeTagEvent Class
com.mindfusion.diagramming Namespace

JsonSerializeTagEvent Methods

JsonSerializeTagEvent.getContext Method

Gets a context object that can help you write and read various values.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public JsonPersistContext getContext ()
```

Return Value

JsonPersistContext object

See Also

JsonSerializeTagEvent Members
JsonSerializeTagEvent Class
com.mindfusion.diagramming Namespace

JsonSerializeTagEvent.getObject Method

Gets the object being serialized or deserialized.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object getObject ()
```

Return Value

See Also

JsonSerializeTagEvent Members
JsonSerializeTagEvent Class
com.mindfusion.diagramming Namespace

JsonSerializeTagEvent.getPropertyName Method

Gets the name of the property being serialized.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getPropertyName ()
```

Return Value

A property name

See Also

JsonSerializeTagEvent Members
JsonSerializeTagEvent Class
com.mindfusion.diagramming Namespace

JsonSerializeTagEvent.getRepresentation Method

Gets the JsonObject, representing the tag object

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public JsonObject getRepresentation ()
```

Return Value

JsonObject serialized or deserialized.

See Also

JsonSerializeTagEvent Members
JsonSerializeTagEvent Class
com.mindfusion.diagramming Namespace

JsonSerializeTagEvent.getTag Method

Gets the tag object being serialized or deserialized.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object getTag ()
```

Return Value

An object representing the tag value being serialized or deserialized.

See Also

JsonSerializeTagEvent Members
JsonSerializeTagEvent Class
com.mindfusion.diagramming Namespace

JsonSerializeTagEvent.isHandled Method

Gets a value indicating whether the event is handled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean isHandled ()
```

Return Value

true/false

See Also

JsonSerializeTagEvent Members
JsonSerializeTagEvent Class
com.mindfusion.diagramming Namespace

JsonSerializeTagEvent.setHandled Method

Sets a value indicating whether the event is handled. Always set this flag to true if you perform custom tag serialization.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHandled (
    boolean handled
)
```

Parameters

handled
boolean

See Also

JsonSerializeTagEvent Members
JsonSerializeTagEvent Class
com.mindfusion.diagramming Namespace

JsonSerializeTagEvent.setRepresentation Method

Sets the JsonObject, representing the tag object

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setRepresentation (
    JsonObject representation
)
```

Parameters

representation
JsonObject

See Also

JsonSerializeTagEvent Members
JsonSerializeTagEvent Class
com.mindfusion.diagramming Namespace

JsonSerializeTagEvent.setTag Method

Sets the tag object being serialized or deserialized.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setTag (
    Object tag
)
```

Parameters

tag
An object representing the tag value being serialized or deserialized.

See Also

JsonSerializeTagEvent Members
JsonSerializeTagEvent Class
com.mindfusion.diagramming Namespace

LaneGrid Class

Represents an SwimlaneGrid which operates on a com.mindfusion.diagramming.lanes.Grid object.

Syntax

```
Java
public class LaneGrid implements SwimlaneGrid
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.LaneGrid

See Also

LaneGrid Members
com.mindfusion.diagramming Namespace

LaneGrid Members

Represents an SwimlaneGrid which operates on a com.mindfusion.diagramming.lanes.Grid object.

The following tables list the members exposed by the LaneGrid type.

Public Constructors

	Name	Description
	LaneGrid	Initializes a new instance of the **LaneGrid** class.

Public Methods

	Name	Description
	getColumnCount	SwimlaneGrid.getColumnCount implementation.
	getColumnWidth	**SwimlaneGrid.getColumnCount** implementation.
	getRowCount	SwimlaneGrid.getRowCount implementation.
	getRowHeight	SwimlaneGrid.getRowHeight implementation.
	setColumnCount	SwimlaneGrid.setColumnCount implementation.
	setColumnWidth	**SwimlaneGrid.setColumnCount** implementation.
	setLeftMargin	SwimlaneGrid.setLeftMargin implementation.
	setRowCount	SwimlaneGrid.setRowCount implementation.
	setRowHeight	SwimlaneGrid.setRowHeight implementation.
	setTopMargin	SwimlaneGrid.setTopMargin implementation.

See Also

LaneGrid Class
com.mindfusion.diagramming Namespace

LaneGrid Constructor

Initializes a new instance of the LaneGrid class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public LaneGrid (
    Grid grid
)
```

Parameters

grid

See Also

LaneGrid Class
com.mindfusion.diagramming Namespace

LaneGrid Methods

LaneGrid.getColumnCount Method

SwimlaneGrid.getColumnCount implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getColumnCount ()
```

Return Value

See Also

LaneGrid Members
LaneGrid Class
com.mindfusion.diagramming Namespace

LaneGrid.getColumnWidth Method

SwimlaneGrid.getColumnCount implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getColumnWidth (
    int index
)
```

Parameters

index

Return Value

See Also

LaneGrid Members
LaneGrid Class
com.mindfusion.diagramming Namespace

LaneGrid.getRowCount Method

SwimlaneGrid.getRowCount implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getRowCount ()
```

Return Value

See Also

LaneGrid Members
LaneGrid Class
com.mindfusion.diagramming Namespace

LaneGrid.getRowHeight Method

SwimlaneGrid.getRowHeight implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getRowHeight (
    int index
)
```

Parameters

index

Return Value

See Also

LaneGrid Members
LaneGrid Class
com.mindfusion.diagramming Namespace

LaneGrid.setColumnCount Method

SwimlaneGrid.setColumnCount implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setColumnCount (
    int value
)
```

Parameters

value

See Also

LaneGrid Members
LaneGrid Class
com.mindfusion.diagramming Namespace

LaneGrid.setColumnWidth Method

SwimlaneGrid.setColumnCount implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setColumnWidth (
    int index,
    float value
)
```

Parameters

index

value

See Also

LaneGrid Members
LaneGrid Class
com.mindfusion.diagramming Namespace

LaneGrid.setLeftMargin Method

SwimlaneGrid.setLeftMargin implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLeftMargin (
    float value
)
```

Parameters

value

See Also

LaneGrid Members
LaneGrid Class
com.mindfusion.diagramming Namespace

LaneGrid.setRowCount Method

SwimlaneGrid.setRowCount implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRowCount (
    int value
)
```

Parameters

value

See Also

LaneGrid Members
LaneGrid Class
com.mindfusion.diagramming Namespace

LaneGrid.setRowHeight Method

SwimlaneGrid.setRowHeight implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRowHeight (
    int index,
    float value
)
```

Parameters

index

value

See Also

LaneGrid Members
LaneGrid Class
com.mindfusion.diagramming Namespace

LaneGrid.setTopMargin Method

SwimlaneGrid.setTopMargin implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTopMargin (
    float value
)
```

Parameters

value

See Also

LaneGrid Members
LaneGrid Class
com.mindfusion.diagramming Namespace

LaneGridInteraction Class

Resizes rows and columns of the LaneGrid.

Syntax

Java

```
public class LaneGridInteraction extends Interaction
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.Interaction
com.mindfusion.diagramming.LaneGridInteraction

See Also

LaneGridInteraction Members
com.mindfusion.diagramming Namespace

LaneGridInteraction Members

Resizes rows and columns of the LaneGrid.

The following tables list the members exposed by the LaneGridInteraction type.

Public Constructors

	Name	Description
	LaneGridInteraction	Initializes a new instance of the LaneGridInteraction class.

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Invoked when the mouse button is pressed.
	pointerMove	
	pointerOver	Invoked when the mouse moves.
	pointerUp	Invoked when the mouse button is released.

Protected Methods

	Name	Description
	getDiagramView	Gets a reference to the DiagramView control this interaction is associated with. (Inherited from Interaction.)

See Also

LaneGridInteraction Class
com.mindfusion.diagramming Namespace

LaneGridInteraction Constructor

Initializes a new instance of the LaneGridInteraction class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LaneGridInteraction (
    DiagramView view,
    Header header,
    boolean resizingWidth,
    Rectangle2D.Float headerBounds
)
```

Parameters

view

header

resizingWidth

headerBounds

See Also

LaneGridInteraction Class
com.mindfusion.diagramming Namespace

LaneGridInteraction Methods

LaneGridInteraction.pointerDown Method

Invoked when the mouse button is pressed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void pointerDown (
    Point pointerPosition,
    MouseEvent e
)
```

Parameters

mousePosition
A Point instance that specifies the mouse pointer position.

e

See Also

LaneGridInteraction Members
LaneGridInteraction Class
com.mindfusion.diagramming Namespace

LaneGridInteraction.pointerMove Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void pointerMove (
    Point pointerPosition,
    MouseEvent e
)
```

Parameters

mousePosition

e

See Also

LaneGridInteraction Members
LaneGridInteraction Class
com.mindfusion.diagramming Namespace

LaneGridInteraction.pointerOver Method

Invoked when the mouse moves.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void pointerOver (
    Point pointerPosition,
    MouseEvent e
)
```

Parameters

mousePosition
A Point instance that specifies the mouse pointer position.

e

See Also

LaneGridInteraction Members
LaneGridInteraction Class
com.mindfusion.diagramming Namespace

LaneGridInteraction.pointerUp Method

Invoked when the mouse button is released.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void pointerUp (
    Point pointerPosition,
    MouseEvent e
)
```

Parameters

mousePosition
A Point instance that specifies the mouse pointer position.

e

See Also

LaneGridInteraction Members
LaneGridInteraction Class
com.mindfusion.diagramming Namespace

LassoBehavior Class

Implements the Zoom behavior.

Syntax

```
Java
public class LassoBehavior extends BehaviorBase
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.LassoBehavior

See Also

LassoBehavior Members
com.mindfusion.diagramming Namespace

LassoBehavior Members

Implements the Zoom behavior.

The following tables list the members exposed by the LassoBehavior type.

Public Constructors

	Name	Description
	LassoBehavior	Overloaded.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	getZoom	Gets or sets a value indicating whether drawing the lasso zooms to the selected area.
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	
	startDraw	
	startDrawCommon	

See Also

LassoBehavior Class
com.mindfusion.diagramming Namespace

LassoBehavior Constructor

Overload List

Name	Description

LassoBehavior (DiagramView)	Initializes a new instance of the LassoBehavior class.
LassoBehavior (DiagramView, boolean)	Initializes a new instance of the LassoBehavior class.

See Also

LassoBehavior Class
com.mindfusion.diagramming Namespace

LassoBehavior Constructor (DiagramView)

Initializes a new instance of the LassoBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LassoBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
The DiagramView that will be zoomed.

See Also

LassoBehavior Constructor Overload List
LassoBehavior Class
com.mindfusion.diagramming Namespace

LassoBehavior Constructor (DiagramView, boolean)

Initializes a new instance of the LassoBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LassoBehavior (
    DiagramView diagramView,
    boolean zoom
)
```

Parameters

diagramView
The DiagramView that will be zoomed.

zoom

Specifies whether this behavior is used for zooming.

See Also

LassoBehavior Constructor Overload List
LassoBehavior Class
com.mindfusion.diagramming Namespace

LassoBehavior Methods

LassoBehavior.getZoom Method

Gets or sets a value indicating whether drawing the lasso zooms to the selected area.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getZoom ()
```

Return Value

See Also

LassoBehavior Members
LassoBehavior Class
com.mindfusion.diagramming Namespace

LassoBehavior.setMouseCursor Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected CursorHint setMouseCursor (
    Point2D point,
    ByRef<Boolean> startInteraction
)
```

Parameters

point

startInteraction

Return Value

See Also

LassoBehavior Members
LassoBehavior Class
com.mindfusion.diagramming Namespace

LassoBehavior.startDraw Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected InteractionState startDraw (
    Point2D point,
    MouseEvent e
)
```

Parameters

point

e

Return Value

See Also

LassoBehavior Members
LassoBehavior Class
com.mindfusion.diagramming Namespace

LassoBehavior.startDrawCommon Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected InteractionState startDrawCommon (
    Point2D point,
    MouseEvent e
)
```

Parameters

point

e

Return Value

See Also

Layer Class

The Layer class represents a layer in the diagram. The visibility, z order and lock status of items in a layer can be controlled via properties of the respective Layer object.

Syntax

Java
`public class Layer implements Externalizable`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Layer

See Also

Layer Members
com.mindfusion.diagramming Namespace

Layer Members

The Layer class represents a layer in the diagram. The visibility, z order and lock status of items in a layer can be controlled via properties of the respective Layer object.

The following tables list the members exposed by the Layer type.

Public Constructors

	Name	Description
	Layer	

Public Methods

	Name	Description
	addPropertyChangeListener	Registers listener so that it will receive events when the properties of this layer change.
	getLocked	Gets a value indicating whether the layer is locked. Items associated with locked layers cannot be modified interactively, regardless of their own DiagramItem.getLocked property.
	getTitle	Gets a title associated with the layer.
	getVisible	Gets a value indicating whether the layer is visible. Items associated with hidden layers are not displayed, regardless of their own DiagramItem.getVisible property.

	getZIndex	Gets the z-index of the layer.
	readExternal	Implements Externalizable.
	removePropertyChangeListener	Unregisters listener so that it will no longer receive layer events.
	setLocked	Sets a value indicating whether the layer is locked. Items associated with locked layers cannot be modified interactively, regardless of their own **DiagramItem.getLocked** property.
	setTitle	Sets a title associated with the layer.
	setVisible	Sets a value indicating whether the layer is visible. Items associated with hidden layers are not displayed, regardless of their own **DiagramItem.getVisible** property.
	setZIndex	Sets the z-index of the layer.
	writeExternal	Implements Externalizable.

See Also

Layer Class
com.mindfusion.diagramming Namespace

Layer Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Layer ()
```

See Also

Layer Class
com.mindfusion.diagramming Namespace

Layer Methods

Layer.addPropertyChangeListener Method

Registers listener so that it will receive events when the properties of this layer change.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addPropertyChangeListener (
    PropertyChangeListener listener
)
```

Parameters

listener
An object implementing the PropertyChangeListener interface.

See Also

Layer Members
Layer Class
com.mindfusion.diagramming Namespace

Layer.getLocked Method

Gets a value indicating whether the layer is locked. Items associated with locked layers cannot be modified interactively, regardless of their own DiagramItem.getLocked property.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getLocked ()
```

Return Value

A boolean value specifying if the layer is locked.

See Also

Layer Members
Layer Class
com.mindfusion.diagramming Namespace

Layer.getTitle Method

Gets a title associated with the layer.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getTitle ()
```

Return Value

A String containing the layer's title.

See Also

Layer Members
Layer Class
com.mindfusion.diagramming Namespace

Layer.getVisible Method

Gets a value indicating whether the layer is visible. Items associated with hidden layers are not displayed, regardless of their own DiagramItem.getVisible property.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getVisible ()
```

Return Value

A boolean value specifying if the layer is visible.

See Also

Layer Members
Layer Class
com.mindfusion.diagramming Namespace

Layer.getZIndex Method

Gets the z-index of the layer.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getZIndex ()
```

Return Value

An integer value specifying the position of the layerwithin the diagram Z order.

See Also

Layer Members
Layer Class
com.mindfusion.diagramming Namespace

Layer.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

Layer Members
Layer Class
com.mindfusion.diagramming Namespace

Layer.removePropertyChangeListener Method

Unregisters listener so that it will no longer receive layer events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removePropertyChangeListener (
    PropertyChangeListener listener
)
```

Parameters

listener
An object implementing the PropertyChangeListener interface.

See Also

Layer Members
Layer Class
com.mindfusion.diagramming Namespace

Layer.setLocked Method

Sets a value indicating whether the layer is locked. Items associated with locked layers cannot be modified interactively, regardless of their own DiagramItem.getLocked property.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLocked (
    boolean value
)
```

Parameters

value
A boolean value specifying if the layer is locked.

See Also

Layer Members
Layer Class
com.mindfusion.diagramming Namespace

Layer.setTitle Method

Sets a title associated with the layer.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTitle (
    String value
)
```

Parameters

value
A String containing the layer's title.

See Also

Layer Members
Layer Class
com.mindfusion.diagramming Namespace

Layer.setVisible Method

Sets a value indicating whether the layer is visible. Items associated with hidden layers are not displayed, regardless of their own DiagramItem.getVisible property.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setVisible (
    boolean value
)
```

Parameters

value
A boolean value specifying if the layer is visible.

See Also

Layer Members
Layer Class
com.mindfusion.diagramming Namespace

Layer.setZIndex Method

Sets the z-index of the layer.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setZIndex (
    int value
)
```

Parameters

value
An integer value specifying the position of the layerwithin the diagram Z order.

See Also

Layer Members
Layer Class
com.mindfusion.diagramming Namespace

Layer.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

Layer Members
Layer Class
com.mindfusion.diagramming Namespace

LayeredLayout Class

Implements a layered graph layout algorithm.

Syntax

Java

```
public class LayeredLayout implements Layout
```

Remarks

This algorithm assigns diagram nodes to distinct horizontal or vertical layers. While arranging the layers, the layout routine seeks to meet the following criteria:

- connected nodes must be placed close together;
- links must flow in one direction if possible;
- links must cross as few layers as possible;
- links must not cross other links;

To apply this layout to a diagram, create a **LayeredLayout** instance, set its members and invoke the arrange method.

The final appearance of arranged graphs depends mostly on the Orientation and Direction properties which define the overall orientation of the layout. The LayerDistance and NodeDistance properties specify how much space to leave between adjacent layers and adjacent nodes in a layer.

The performance of **LayeredLayout** is dependent on the number of links in the diagram. At its first stage, the algorithm looks for the longest sequence of links in the graph and builds the node layers along it. That stage can be the most time consuming if there are a lot of links in a graph, so there is the TimeLimit property provided to control how much time the layout routine is allowed to spend on path-finding. Next, if there are layers much longer than the other ones and SplitLayers is enabled, nodes from these layers are moved to new ones so the graph width is uniformly distributed.

The layout routine continues by shuffling nodes and link points across their layers, so the criteria mentioned above are approximated. Finally, link ends are aligned to anchor points if Anchoring is enabled and the distance between outermost links is decreased as set in LinksCompactFactor.

The layered graph layout algorithm produces best results if it can place link ends at arbitrary positions over nodes' outlines, that is, when using the Ignore value. If your application logic requires links to be always attached to anchor points, use the other two values. In such cases Reassign would yield better results.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AbstractLayout
    com.mindfusion.diagramming.LayeredLayout

See Also

LayeredLayout Members

Implements a layered graph layout algorithm.

The following tables list the members exposed by the LayeredLayout type.

Public Constructors

	Name	Description
	LayeredLayout	Overloaded.

Public Methods

	Name	Description
	arrange	Arranges the specified flowchart.
	getAnchoring	Gets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	getDirection	Gets a value indicating in what direction the links in the arranged diagram should go.
	getEnableCustomLayers	Gets a value indicating whether to indicating whether the layered layout will honor the LayeredLayoutTraits.Layer flags.
	getEndNode	Gets the node that should be placed in the last layer of the arranged graph.
	getEnforceLinkFlow	Gets a value indicating whether to attempt to force all links to go in the same direction. If the graph being arrange has cycles, some of the links will still go backward. EnableCustomLayers and SplitLayers are ignored if this property is set to true.
	getGrowToFit	Gets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	getIgnoreNodeSize	Gets a value indicating whether the distance between adjacent nodes in the final layout should be independent of the nodes' size.
	getKeepGroupLayout	Gets a value specifying whether the relative position of nodes within groups should be kept intact.
	getLayerDistance	Gets the desired distance between adjacent layers.
	getLayoutLink	Gets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	getLayoutNode	Gets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)

	getLinksCompactFactor	Gets a value indicating how much to compact the outermost links.
	getLinkType	Gets the appearance of the links in the final layout.
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	getMultipleGraphsPlacement	Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	getNodeDistance	Gets the desired distance between adjacent nodes on the same layer.
	getOrientation	Gets a value indicating what the overall orientation of the arranged diagram should be.
	getProgress	Gets the progress callback delegate. (Inherited from AbstractLayout.)
	getSplitLayers	Gets a value indicating whether layers that are much wider than the other layers should be split.
	getStartNode	Gets the node that should be placed in the first layer of the arranged graph.
	getStatistics	Gets layout-specific information about the nodes and links participating in the layout.
	getStraightenLongLinks	Gets whether the layout algorithm should strive to straigten links that cross more than one layer of the graph.
	getTimeLimit	Gets the time-out value set for the path-finding part of the layered layout algorithm.
	getXGap	Gets a value indicating how much horizontal space should be left between the document boundaries and the graph.
	getYGap	Gets a value indicating how much vertical space should be left between the document boundaries and the graph.
	init	Returns a LayeredLayoutBuilder object used to configure this LayeredLayout instance.
S	removeMidleSegmentPoint	(Inherited from AbstractLayout.)
	setAnchoring	Sets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	setDirection	Sets a value indicating in what direction the links in the arranged diagram should go.
	setEnableCustomLayers	Sets a value indicating whether to indicating whether the layered layout will honor the LayeredLayoutTraits.Layer flags.
	setEndNode	Sets the node that should be placed in the last layer of the arranged graph. This value is honored only if a start node is specified too.
	setEnforceLinkFlow	Sets a value indicating whether to attempt to force all links to go in the same direction. If the graph being arrange has

		cycles, some of the links will still go backward. EnableCustomLayers and SplitLayers are ignored if this property is set to true.
	setGrowToFit	Sets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	setIgnoreNodeSize	Sets a value indicating whether the distance between adjacent nodes in the final layout should be independent of the nodes' size.
	setKeepGroupLayout	Sets a value specifying whether the relative position of nodes within groups should be kept intact.
	setLayerDistance	Sets the desired distance between adjacent layers.
	setLayoutLink	Sets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	setLayoutNode	Sets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	setLinksCompactFactor	Sets a value indicating how much to compact the outermost links.
	setLinkType	Sets the appearance of the links in the final layout.
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	setMultipleGraphsPlacement	Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	setNodeDistance	Sets the desired distance between adjacent nodes on the same layer.
	setOrientation	Sets a value indicating what the overall orientation of the arranged diagram should be.
	setProgress	Sets the progress callback delegate. (Inherited from AbstractLayout.)
	setSplitLayers	Sets a value indicating whether layers that are much wider than the other layers should be split.
	setStartNode	Sets the node that should be placed in the first layer of the arranged graph.
	setStraightenLongLinks	Sets whether the layout algorithm should strive to straigten links that cross more than one layer of the graph.
	setTimeLimit	Sets a time-out value for the path-finding part of the layered layout algorithm.
	setXGap	Sets a value indicating how much horizontal space should be left between the document boundaries and the graph.
	setYGap	Sets a value indicating how much vertical space should be left between the document boundaries and the graph.

	with	Returns a LayeredLayoutBuilder object used to configure and create new LayeredLayout instances.

See Also

LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout Constructor

Overload List

Name	Description
LayeredLayout ()	Initializes a new instance of the LayeredLayout class.
LayeredLayout (Orientation, float, float, float, float)	Initializes a new instance of the LayeredLayout class.

See Also

LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout Constructor ()

Initializes a new instance of the LayeredLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public LayeredLayout ()`

See Also

LayeredLayout Constructor Overload List
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout Constructor (Orientation, float, float, float, float)

Initializes a new instance of the LayeredLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LayeredLayout (
    Orientation orientation,
    float layerDistance,
    float nodeDistance,
    float xGap,
    float yGap
)
```

Parameters

orientation
One of the com.mindfusion.diagramming.jlayout.Orientation constants.

layerDistance
A float value specifying the desired distancebetween adjacent layers.

nodeDistance
A float value specifying the desired distancebetween adjacent nodes.

xGap
A float value specifying the horizontal offset from theleft document border.

yGap
A float value specifying the vertical offset from thetop document border.

See Also

LayeredLayout Constructor Overload List
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout Methods

LayeredLayout.arrange Method

Arranges the specified flowchart.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram diagram,
    DiagramItemList items
)
```

Parameters

diagram
The Diagram to arrange.

items

Return Value

true

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getDirection Method

Gets a value indicating in what direction the links in the arranged diagram should go.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Direction getDirection ()
```

Return Value

A member of the Direction enumeration.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getEnableCustomLayers Method

Gets a value indicating whether to indicating whether the layered layout will honor the LayeredLayoutTraits.Layer flags.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getEnableCustomLayers ()
```

Return Value

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getEndNode Method

Gets the node that should be placed in the last layer of the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramNode getEndNode ()
```

Return Value

Reference to the end DiagramNode.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getEnforceLinkFlow Method

Gets a value indicating whether to attempt to force all links to go in the same direction. If the graph being arrange has cycles, some of the links will still go backward. EnableCustomLayers and SplitLayers are ignored if this property is set to true.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getEnforceLinkFlow ()
```

Return Value

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getIgnoreNodeSize Method

Gets a value indicating whether the distance between adjacent nodes in the final layout should be independent of the nodes' size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getIgnoreNodeSize ()
```

Return Value

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getKeepGroupLayout Method

Gets a value specifying whether the relative position of nodes within groups should be kept intact.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getKeepGroupLayout ()
```

Return Value

true if the relative position of nodes within groups should be preserved, otherwise **false**.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getLayerDistance Method

Gets the desired distance between adjacent layers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getLayerDistance ()
```

Return Value

A float value specifying the distance between adjacent layers.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getLinksCompactFactor Method

Gets a value indicating how much to compact the outermost links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getLinksCompactFactor ()
```

Return Value

A float multiplier applied to the distance between outermost links.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getLinkType Method

Gets the appearance of the links in the final layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LayeredLayoutLinkType getLinkType ()
```

Return Value

A member of the LayeredLayoutLinkType enumeration.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getNodeDistance Method

Gets the desired distance between adjacent nodes on the same layer.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getNodeDistance ()
```

Return Value

A float value specifying the distance between adjacent nodes.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getOrientation Method

Gets a value indicating what the overall orientation of the arranged diagram should be.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Orientation getOrientation ()
```

Return Value

A member of the Orientation enumeration.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getSplitLayers Method

Gets a value indicating whether layers that are much wider than the other layers should be split.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getSplitLayers ()
```

Return Value

true if long layers will be split, otherwise **false**.

See Also

LayeredLayout Members
LayeredLayout Class

LayeredLayout.getStartNode Method

Gets the node that should be placed in the first layer of the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramNode getStartNode ()
```

Return Value

Reference to the start DiagramNode.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getStatistics Method

Gets layout-specific information about the nodes and links participating in the layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public LayeredLayoutStatistics getStatistics ()
```

Return Value

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getStraightenLongLinks Method

Gets whether the layout algorithm should strive to straigten links that cross more than one layer of the graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getStraightenLongLinks ()
```

Return Value

true to straighten long links; otherwise **false**. The default value is **false**.

Remarks

If this property is enabled, links that cross multiple layers have at most two bends. Because of the additional horizontal alignment contraints, the arranged graph osually occupies a larger area than when not using **StraightenLongLinks**.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getTimeLimit Method

Gets the time-out value set for the path-finding part of the layered layout algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public long getTimeLimit ()
```

Return Value

An integer value specifying the maximum time in milliseconds the path-finding algorithm can run.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getXGap Method

Gets a value indicating how much horizontal space should be left between the document boundaries and the graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getXGap ()
```

Return Value

A float value specifying the horizontal offset from theleft document border.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.getYGap Method

Gets a value indicating how much vertical space should be left between the document boundaries and the graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public float getYGap ()`

Return Value

A float value specifying the vertical offset from thetop document border.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.init Method

Returns a LayeredLayoutBuilder object used to configure this LayeredLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public LayeredLayoutBuilder init ()`

Return Value

A **LayeredLayoutBuilder** instance.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.setDirection Method

Sets a value indicating in what direction the links in the arranged diagram should go.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDirection (
    Direction value
)
```

Parameters

value
A member of the Direction enumeration.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.setEnableCustomLayers Method

Sets a value indicating whether to indicating whether the layered layout will honor the LayeredLayoutTraits.Layer flags.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableCustomLayers (
    boolean value
)
```

Parameters

value

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.setEndNode Method

Sets the node that should be placed in the last layer of the arranged graph. This value is honored only if a start node is specified too.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void setEndNode (
    DiagramNode value
)
```

Parameters

value
A DiagramNode object representing the end node.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace
getEndNode Method
setStartNode Method

LayeredLayout.setEnforceLinkFlow Method

Sets a value indicating whether to attempt to force all links to go in the same direction. If the graph being arrange has cycles, some of the links will still go backward. EnableCustomLayers and SplitLayers are ignored if this property is set to true.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void setEnforceLinkFlow (
    boolean value
)
```

Parameters

value

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.setIgnoreNodeSize Method

Sets a value indicating whether the distance between adjacent nodes in the final layout should be independent of the nodes' size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setIgnoreNodeSize (
    boolean value
)
```

Parameters

value

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.setKeepGroupLayout Method

Sets a value specifying whether the relative position of nodes within groups should be kept intact.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setKeepGroupLayout (
    boolean value
)
```

Parameters

value
true if the relative position of nodes within groups should be preserved, otherwise **false**.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.setLayerDistance Method

Sets the desired distance between adjacent layers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public void setLayerDistance (
    float value
)
```

Parameters

value
A float value specifying the distance between adjacent layers.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.setLinksCompactFactor Method

Sets a value indicating how much to compact the outermost links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinksCompactFactor (
    float value
)
```

Parameters

value
A float multiplier applied to the distance between outermost links.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.setLinkType Method

Sets the appearance of the links in the final layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkType (
    LayeredLayoutLinkType value
)
```

Parameters

value
A member of the LayeredLayoutLinkType enumeration.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.setNodeDistance Method

Sets the desired distance between adjacent nodes on the same layer.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setNodeDistance (
    float value
)
```

Parameters

value
A float value specifying the distance between adjacent nodes.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.setOrientation Method

Sets a value indicating what the overall orientation of the arranged diagram should be.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value
A member of the Orientation enumeration.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.setSplitLayers Method

Sets a value indicating whether layers that are much wider than the other layers should be split.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSplitLayers (
    boolean value
)
```

Parameters

value
true if long layers should be split, otherwise **false**.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.setStartNode Method

Sets the node that should be placed in the first layer of the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setStartNode (
    DiagramNode value
)
```

Parameters

value
A DiagramNode object representing the start node.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace
getStartNode Method
setEndNode Method

LayeredLayout.setStraightenLongLinks Method

Sets whether the layout algorithm should strive to straigten links that cross more than one layer of the graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setStraightenLongLinks (
    boolean value
)
```

Parameters

value
true to straighten long links; otherwise **false**. The default value is **false**.

Remarks

If this property is enabled, links that cross multiple layers have at most two bends. Because of the additional horizontal alignment contraints, the arranged graph osually occupies a larger area than when not using **StraightenLongLinks**.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.setTimeLimit Method

Sets a time-out value for the path-finding part of the layered layout algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTimeLimit (
    long value
)
```

Parameters

value
An integer value specifying the maximum time in milliseconds the path-finding algorithm can run.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.setXGap Method

Sets a value indicating how much horizontal space should be left between the document boundaries and the graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setXGap (
    float value
)
```

Parameters

value
A **float** value specifying the horizontal offset from the left document border.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.setYGap Method

Sets a value indicating how much vertical space should be left between the document boundaries and the graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setYGap (
    float value
)
```

Parameters

value
A **float** value specifying the vertical offset from the top document border.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayout.with Method

Returns a LayeredLayoutBuilder object used to configure and create new LayeredLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static LayeredLayoutBuilder with ()`

Return Value

A **LayeredLayoutBuilder** instance.

See Also

LayeredLayout Members
LayeredLayout Class
com.mindfusion.diagramming Namespace

LayeredLayoutLinkType Enumeration

Specifies the style of the links after they are laid out.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum LayeredLayoutLinkType`

Members

	Member name	Description
	Cascading	Indicates cascading links.
	Straight	Indicates straight links.

See Also

com.mindfusion.diagramming Namespace

LayeredLayoutStatistics Class

Encapsulates information about a layered layout which has already complete.

Syntax

Java
`public class LayeredLayoutStatistics`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.LayeredLayoutStatistics

See Also

LayeredLayoutStatistics Members
com.mindfusion.diagramming Namespace

LayeredLayoutStatistics Members

Encapsulates information about a layered layout which has already complete.

The following tables list the members exposed by the LayeredLayoutStatistics type.

Public Methods

	Name	Description
	getLayerCount	Gets the total number of layers in the layout. If more than one subgraph is laid out, this property returns the number of layers in the last subgraph.
	getLinkLayerCount	Gets a mapping between links and the number of layers they run through.
	getNodeGridPositions	Gets a mapping between nodes and their assigned grid positions.
	getNodeLayerIndices	Gets a mapping between nodes and their assigned layers.

See Also

LayeredLayoutStatistics Class
com.mindfusion.diagramming Namespace

LayeredLayoutStatistics Methods

LayeredLayoutStatistics.getLayerCount Method

Gets the total number of layers in the layout. If more than one subgraph is laid out, this property returns the number of layers in the last subgraph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public int getLayerCount ()`

Return Value

See Also

LayeredLayoutStatistics Members
LayeredLayoutStatistics Class
com.mindfusion.diagramming Namespace

LayeredLayoutStatistics.getLinkLayerCount Method

Gets a mapping between links and the number of layers they run through.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Hashtable<DiagramLink, Integer> getLinkLayerCount ()
```

Return Value

See Also

LayeredLayoutStatistics Members
LayeredLayoutStatistics Class
com.mindfusion.diagramming Namespace

LayeredLayoutStatistics.getNodeGridPositions Method

Gets a mapping between nodes and their assigned grid positions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Hashtable<DiagramNode, Double> getNodeGridPositions ()
```

Return Value

See Also

LayeredLayoutStatistics Members
LayeredLayoutStatistics Class
com.mindfusion.diagramming Namespace

LayeredLayoutStatistics.getNodeLayerIndices Method

Gets a mapping between nodes and their assigned layers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Hashtable<DiagramNode, Integer> getNodeLayerIndices ()`

Return Value

See Also

LayeredLayoutStatistics Members
LayeredLayoutStatistics Class
com.mindfusion.diagramming Namespace

LayerListView Class

Provides user interface for changing layer attributes.

Syntax

Java
`public class LayerListView extends JPanel`

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        javax.swing.JPanel
          com.mindfusion.diagramming.LayerListView

See Also

LayerListView Members
com.mindfusion.diagramming Namespace

LayerListView Members

Provides user interface for changing layer attributes.

The following tables list the members exposed by the LayerListView type.

Public Constructors

	Name	Description
	LayerListView	Initializes a new instance of the LayerListView class.

Public Methods

	Name	Description
	addLayerListViewListener	Registers listener so that it will receive events when users select, add or remove layers from the list.

	getActiveButtonTooltip	Gets the tooltip for the 'Active Layer' button in each item.
	getAddLayerButtonTooltip	Gets the tooltip for the 'Add Layer' button.
	getAllowTitleEdit	Gets a value indicating whether layer titles can be in-place edited.
	getDiagram	Gets the diagram this control is associated with.
	getDisplayText	Gets a value indicating whether to paint the text of items in the overview.
	getImages	Gets the image list used to draw icons for visibility and lock status.
	getItemColor	Gets the color with which items' background is painted.
	getItemHeight	Gets the height of the list items.
	getItems	Gets a list of layer items shown in this control.
	getLockedButtonTooltip	Gets the tooltip for the 'Locked' button in each item.
	getOverviewWidth	Gets the width of the layer overview.
	getRemoveLayerButtonTooltip	Gets the tooltip for the 'Remove Layer' button.
	getSelectedColor	Gets the color with which selected items' background is painted.
	getShowTooltips	Gets a value indicating whether to display tooltips.
	getVisibleButtonTooltip	Gets the tooltip for the 'Visible' button in each item.
	removeLayerListViewListener	Unregisters listener so that it will no longer receive LayerListView events.
	setActiveButtonTooltip	Sets the tooltip for the 'Active Layer' button in each item.
	setAddLayerButtonTooltip	Sets the tooltip for the 'Add Layer' button.
	setAllowTitleEdit	Sets a value indicating whether layer titles can be in-place edited.
	setDiagram	Sets the diagram this control is associated with.
	setDisplayText	Sets a value indicating whether to paint the text of items in the overview.
	setImages	Gets the image list used to draw icons for visibility and lock status.
	setItemColor	Sets the color with which items' background is painted.
	setItemHeight	Sets the height of the items.
	setLockedButtonTooltip	Sets the tooltip for the 'Locked' button in each item.
	setOverviewWidth	Sets the width of the layer overview.
	setRemoveLayerButtonTooltip	Sets the tooltip for the 'Remove Layer' button.
	setSelectedColor	Sets the color with which selected items' background is painted.

	setShowTooltips	Sets a value indicating whether to display tooltips.
	setVisibleButtonTooltip	Gets the tooltip for the 'Visible' button in each item.

See Also

LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView Constructor

Initializes a new instance of the LayerListView class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LayerListView ()
```

See Also

LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView Methods

LayerListView.addLayerListViewListener Method

Registers listener so that it will receive events when users select, add or remove layers from the list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addLayerListViewListener (
    LayerListViewListener listener
)
```

Parameters

listener
An object implementing the LayerListViewListener interface.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.getActiveButtonTooltip Method

Gets the tooltip for the 'Active Layer' button in each item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getActiveButtonTooltip ()
```

Return Value

A String specifying the tooltip of the Active Layer button.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.getAddLayerButtonTooltip Method

Gets the tooltip for the 'Add Layer' button.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getAddLayerButtonTooltip ()
```

Return Value

A String specifying the tooltip of the Add Layer button.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.getAllowTitleEdit Method

Gets a value indicating whether layer titles can be in-place edited.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowTitleEdit ()
```

Return Value

true to allow editing the layers titles, otherwise false.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.getDiagram Method

Gets the diagram this control is associated with.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Diagram getDiagram ()
```

Return Value

A Diagram instance.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.getDisplayText Method

Gets a value indicating whether to paint the text of items in the overview.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getDisplayText ()
```

Return Value

true to display items' text, otherwise false.

See Also

LayerListView Members
LayerListView Class

LayerListView.getImages Method

Gets the image list used to draw icons for visibility and lock status.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public List<Image> getImages ()
```

Return Value

A List of Image objects.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.getItemColor Method

Gets the color with which items' background is painted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getItemColor ()
```

Return Value

The Color of items when not selected.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.getItemHeight Method

Gets the height of the list items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getItemHeight ()
```

Return Value

An integer value specifying the items height.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.getItems Method

Gets a list of layer items shown in this control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ExtendedArrayList<LayerListViewItem> getItems ()
```

Return Value

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.getLockedButtonTooltip Method

Gets the tooltip for the 'Locked' button in each item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getLockedButtonTooltip ()
```

Return Value

A String specifying the tooltip of the Locked button.

See Also

LayerListView Members
LayerListView Class

LayerListView.getOverviewWidth Method

Gets the width of the layer overview.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getOverviewWidth ()
```

Return Value

An integer value specifying the width of the layers' overview area.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.getRemoveLayerButtonTooltip Method

Gets the tooltip for the 'Remove Layer' button.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getRemoveLayerButtonTooltip ()
```

Return Value

A String specifying the tooltip of the Remove Layer button.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.getSelectedColor Method

Gets the color with which selected items' background is painted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getSelectedColor ()
```

Return Value

The Color of selected items.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.getShowTooltips Method

Gets a value indicating whether to display tooltips.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getShowTooltips ()
```

Return Value

true to show tooltips, otherwise false.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.getVisibleButtonTooltip Method

Gets the tooltip for the 'Visible' button in each item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getVisibleButtonTooltip ()
```

Return Value

A String specifying the tooltip of the Visible button.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.removeLayerListViewListener Method

Unregisters listener so that it will no longer receive LayerListView events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeLayerListViewListener (
    LayerListViewListener listener
)
```

Parameters

listener
An object implementing the LayerListViewListener interface.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.setActiveButtonTooltip Method

Sets the tooltip for the 'Active Layer' button in each item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setActiveButtonTooltip (
    String value
)
```

Parameters

value
A String specifying the tooltip of the Active Layer button.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.setAddLayerButtonTooltip Method

Sets the tooltip for the 'Add Layer' button.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAddLayerButtonTooltip (
    String value
)
```

Parameters

value
A String specifying the tooltip of the Add Layer button.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.setAllowTitleEdit Method

Sets a value indicating whether layer titles can be in-place edited.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowTitleEdit (
    boolean value
)
```

Parameters

value
true to allow editing the layers titles, otherwise false.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.setDiagram Method

Sets the diagram this control is associated with.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setDiagram (
    Diagram value
)
```

Parameters

value
A Diagram instance.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.setDisplayText Method

Sets a value indicating whether to paint the text of items in the overview.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setDisplayText (
    boolean value
)
```

Parameters

value
true to display items' text, otherwise false.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.setImages Method

Gets the image list used to draw icons for visibility and lock status.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public void setImages (
    List<Image> value
)
```

Parameters

value
A List of Image objects.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.setItemColor Method

Sets the color with which items' background is painted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setItemColor (
    Color value
)
```

Parameters

value
The Color of items when not selected.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.setItemHeight Method

Sets the height of the items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setItemHeight (
    int value
)
```

Parameters

value
An integer value specifying the items height.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.setLockedButtonTooltip Method

Sets the tooltip for the 'Locked' button in each item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLockedButtonTooltip (
    String value
)
```

Parameters

value
A String specifying the tooltip of the Locked button.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.setOverviewWidth Method

Sets the width of the layer overview.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOverviewWidth (
    int value
)
```

Parameters

value
An integer value specifying the width of the layers' overview area.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.setRemoveLayerButtonTooltip Method

Sets the tooltip for the 'Remove Layer' button.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRemoveLayerButtonTooltip (
    String value
)
```

Parameters

value
A String specifying the tooltip of the Remove Layer button.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.setSelectedColor Method

Sets the color with which selected items' background is painted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSelectedColor (
    Color value
)
```

Parameters

value
The Color of selected items.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.setShowTooltips Method

Sets a value indicating whether to display tooltips.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShowTooltips (
    boolean value
)
```

Parameters

value
true to show tooltips, otherwise false.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListView.setVisibleButtonTooltip Method

Gets the tooltip for the 'Visible' button in each item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setVisibleButtonTooltip (
    String value
)
```

Parameters

value
A String specifying the tooltip of the Visible button.

See Also

LayerListView Members
LayerListView Class
com.mindfusion.diagramming Namespace

LayerListViewAdapter Class

Provides empty implementations for the methods defined in the LayerListViewListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of LayerListViewListener.

Syntax

Java
`public class LayerListViewAdapter implements LayerListViewListener`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.LayerListViewAdapter

See Also

LayerListViewAdapter Members
com.mindfusion.diagramming Namespace

LayerListViewAdapter Members

Provides empty implementations for the methods defined in the LayerListViewListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of LayerListViewListener.

The following tables list the members exposed by the LayerListViewAdapter type.

Public Constructors

	Name	Description
	LayerListViewAdapter	

Public Methods

	Name	Description
	addButtonClick	Raised when the user clicks the control's add button.
	removeButtonClick	Raised when the user clicks the control's remove button.
	selectedItemChanged	Raised when the control's selected item has changed.

See Also

LayerListViewAdapter Class
com.mindfusion.diagramming Namespace

LayerListViewAdapter Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LayerListViewAdapter ()
```

See Also

LayerListViewAdapter Class
com.mindfusion.diagramming Namespace

LayerListViewAdapter Methods

LayerListViewAdapter.addButtonClick Method

Raised when the user clicks the control's add button.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addButtonClick (
    ValidationEvent e
)
```

Parameters

e

See Also

LayerListViewAdapter Members
LayerListViewAdapter Class
com.mindfusion.diagramming Namespace

LayerListViewAdapter.removeButtonClick Method

Raised when the user clicks the control's remove button.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeButtonClick (
    ValidationEvent e
)
```

Parameters

e

See Also

LayerListViewAdapter Members
LayerListViewAdapter Class
com.mindfusion.diagramming Namespace

LayerListViewAdapter.selectedItemChanged Method

Raised when the control's selected item has changed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void selectedItemChanged (
    ListSelectionEvent e
)
```

Parameters

e

See Also

LayerListViewAdapter Members
LayerListViewAdapter Class
com.mindfusion.diagramming Namespace

LayerListViewItem Class

Represents an item within a LayerListView control.

Syntax

Java

```
public class LayerListViewItem extends JComponent implements IDrawer
```

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        com.mindfusion.diagramming.LayerListViewItem

See Also

LayerListViewItem Members
com.mindfusion.diagramming Namespace

LayerListViewItem Members

Represents an item within a LayerListView control.

The following tables list the members exposed by the LayerListViewItem type.

Public Constructors

	Name	Description
	LayerListViewItem	Initializes a new instance of the LayerListViewItem class.

Public Methods

	Name	Description
	getIndex	Gets the index of this item.
	getLayer	Gets the layer object represented by this item.
	onPaintComponent	Called when a control host pane is repainted.

Protected Methods

	Name	Description
	paintComponent	
	processKeyEvent	

See Also

LayerListViewItem Class
com.mindfusion.diagramming Namespace

LayerListViewItem Constructor

Initializes a new instance of the LayerListViewItem class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LayerListViewItem (
    LayerListView parent,
    Layer layer
)
```

Parameters

parent
The parent control of this item.

layer
The layer represented by this item.

See Also

LayerListViewItem Class
com.mindfusion.diagramming Namespace

LayerListViewItem Methods

LayerListViewItem.getIndex Method

Gets the index of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getIndex ()
```

Return Value

See Also

LayerListViewItem Members
LayerListViewItem Class
com.mindfusion.diagramming Namespace

LayerListViewItem.getLayer Method

Gets the layer object represented by this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Layer getLayer ()
```

Return Value

See Also

LayerListViewItem Members
LayerListViewItem Class
com.mindfusion.diagramming Namespace

LayerListViewItem.onPaintComponent Method

Called when a control host pane is repainted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onPaintComponent (
    Graphics graphics
)
```

Parameters

graphics

See Also

LayerListViewItem Members
LayerListViewItem Class
com.mindfusion.diagramming Namespace

LayerListViewItem.paintComponent Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void paintComponent (
    Graphics graphics
)
```

Parameters

graphics

See Also

LayerListViewItem Members
LayerListViewItem Class
com.mindfusion.diagramming Namespace

LayerListViewItem.processKeyEvent Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void processKeyEvent (
    KeyEvent e
)
```

Parameters

e

See Also

LayerListViewItem Members
LayerListViewItem Class
com.mindfusion.diagramming Namespace

LayerListViewListener Interface

Defines the events that can be raised by LayerListView.

Syntax

Java
`public interface LayerListViewListener extends EventListener`

Inheritors

com.mindfusion.diagramming.LayerListViewAdapter

See Also

LayerListViewListener Members
com.mindfusion.diagramming Namespace

LayerListViewListener Members

Defines the events that can be raised by LayerListView.

The following tables list the members exposed by the LayerListViewListener type.

Public Methods

	Name	Description
	addButtonClick	Raised when the user clicks the control's add button.
	removeButtonClick	Raised when the user clicks the control's remove button.
	selectedItemChanged	Raised when the control's selected item has changed.

See Also

LayerListViewListener Interface
com.mindfusion.diagramming Namespace

LayerListViewListener Methods

LayerListViewListener.addButtonClick Method

Raised when the user clicks the control's add button.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
void addButtonClick (
    ValidationEvent e
)
```

Parameters

e
A ValidationEvent object providing information about the event.

See Also

LayerListViewListener Members
LayerListViewListener Interface
com.mindfusion.diagramming Namespace

LayerListViewListener.removeButtonClick Method

Raised when the user clicks the control's remove button.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
void removeButtonClick (
    ValidationEvent e
)
```

Parameters

e
A ValidationEvent object providing information about the event.

See Also

LayerListViewListener Members
LayerListViewListener Interface
com.mindfusion.diagramming Namespace

LayerListViewListener.selectedItemChanged Method

Raised when the control's selected item has changed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void selectedItemChanged (
    ListSelectionEvent e
)
```

Parameters

e
A ListSelectionEvent object providing information about the event.

See Also

LayerListViewListener Members
LayerListViewListener Interface
com.mindfusion.diagramming Namespace

Layout Interface

Defines the interface of automatic graph layout classes.

Syntax

Java

```
public interface Layout
```

Inheritors

com.mindfusion.diagramming.AnnealLayout
com.mindfusion.diagramming.GridLayout
com.mindfusion.diagramming.SpringLayout
com.mindfusion.diagramming.TreeLayout

See Also

Layout Members
com.mindfusion.diagramming Namespace

Layout Members

Defines the interface of automatic graph layout classes.

The following tables list the members exposed by the Layout type.

Public Methods

	Name	Description
	arrange	

See Also

Layout Interface
com.mindfusion.diagramming Namespace

Layout Methods

Layout.arrange Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
boolean arrange (
    Diagram diagram
)
```

Parameters

diagram

Return Value

See Also

Layout Members
Layout Interface
com.mindfusion.diagramming Namespace

LayoutLink Interface

Defines a callback method called for links during layout.

Syntax

Java

```
public interface LayoutLink
```

See Also

LayoutLink Members
com.mindfusion.diagramming Namespace

LayoutLink Members

Defines a callback method called for links during layout.

The following tables list the members exposed by the LayoutLink type.

Public Methods

	Name	Description
	layout	

See Also

LayoutLink Interface
com.mindfusion.diagramming Namespace

LayoutLink Methods

LayoutLink.layout Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void layout (
    DiagramLink link
)
```

Parameters

link

See Also

LayoutLink Members
LayoutLink Interface
com.mindfusion.diagramming Namespace

LayoutNode Interface

Defines a callback method called for nodes during layout.

Syntax

Java

```
public interface LayoutNode
```

See Also

LayoutNode Members
com.mindfusion.diagramming Namespace

LayoutNode Members

Defines a callback method called for nodes during layout.

The following tables list the members exposed by the LayoutNode type.

Public Methods

	Name	Description
	layout	

See Also

LayoutNode Interface
com.mindfusion.diagramming Namespace

LayoutNode Methods

LayoutNode.layout Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void layout (
    DiagramNode node,
    Rectangle2D.Float oldBounds
)
```

Parameters

node

oldBounds

See Also

LayoutNode Members
LayoutNode Interface
com.mindfusion.diagramming Namespace

LayoutProgress Interface

Defines a callback method that notifies about layout progress.

Syntax

Java

```
public interface LayoutProgress
```

See Also

LayoutProgress Members

Defines a callback method that notifies about layout progress.

The following tables list the members exposed by the LayoutProgress type.

Public Methods

	Name	Description
	update	

See Also

LayoutProgress Interface
com.mindfusion.diagramming Namespace

LayoutProgress Methods

LayoutProgress.update Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void update (
    int current,
    int total
)
```

Parameters

current

total

See Also

LayoutProgress Members
LayoutProgress Interface
com.mindfusion.diagramming Namespace

LegacySupport Class

Implements deserialization of objects saved with JDiagram 1.x versions.

Syntax

Java
`public class LegacySupport`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.LegacySupport

See Also

LegacySupport Members
com.mindfusion.diagramming Namespace

LegacySupport Members

Implements deserialization of objects saved with JDiagram 1.x versions.

The following tables list the members exposed by the LegacySupport type.

Public Constructors

	Name	Description
	LegacySupport	

See Also

LegacySupport Class
com.mindfusion.diagramming Namespace

LegacySupport Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public LegacySupport ()`

See Also

LegacySupport Class
com.mindfusion.diagramming Namespace

LegacySupportStream Class

Implements deserialization of objects saved with JDiagram 1.x versions.

Syntax

Java
`public class LegacySupportStream extends ObjectInputStream`

Inheritance Hierarchy

java.lang.Object
  java.io.InputStream
    java.io.ObjectInputStream
      com.mindfusion.diagramming.LegacySupportStream

See Also

LegacySupportStream Members
com.mindfusion.diagramming Namespace

LegacySupportStream Members

Implements deserialization of objects saved with JDiagram 1.x versions.

The following tables list the members exposed by the LegacySupportStream type.

Public Constructors

	Name	Description
	LegacySupportStream	

Protected Methods

	Name	Description
	readClassDescriptor	

See Also

LegacySupportStream Class
com.mindfusion.diagramming Namespace

LegacySupportStream Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LegacySupportStream (
    InputStream in
)
```

Parameters

in

See Also

LegacySupportStream Class
com.mindfusion.diagramming Namespace

LegacySupportStream Methods

LegacySupportStream.readClassDescriptor Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`protected ObjectStreamClass readClassDescriptor ()`

Return Value

See Also

LegacySupportStream Members
LegacySupportStream Class
com.mindfusion.diagramming Namespace

LineTemplate Class

Represents a straight line segment in a Shape definition.

Syntax

Java
`public class LineTemplate extends ElementTemplate`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ElementTemplate
    com.mindfusion.diagramming.LineTemplate

See Also

LineTemplate Members
com.mindfusion.diagramming Namespace

LineTemplate Members

Represents a straight line segment in a Shape definition.

The following tables list the members exposed by the LineTemplate type.

Public Constructors

	Name	Description
	LineTemplate	Overloaded.

Public Methods

	Name	Description
	getColor	Gets the color of this element. (Inherited from ElementTemplate.)
	getDashStyle	(Inherited from ElementTemplate.)
	getWidth	(Inherited from ElementTemplate.)
	setColor	(Inherited from ElementTemplate.)
	setDashStyle	(Inherited from ElementTemplate.)
	setWidth	(Inherited from ElementTemplate.)
	toDOM	

Protected Methods

	Name	Description
	getElementPen	Gets a pen used to render the element. If no pen properties are explicitly specified for this element, returns the pen passed as an argument. (Inherited from ElementTemplate.)

See Also

LineTemplate Class
com.mindfusion.diagramming Namespace

LineTemplate Constructor

Overload List

Name	Description
LineTemplate (float, float, float, float)	Initializes a new LineTemplate instance with the specified coordinates of the segment end points.
LineTemplate (float, float, float, float, Color, DashStyle, float)	Initializes a new LineTemplate instance with the specified coordinates of the segment end points.

See Also

LineTemplate Class
com.mindfusion.diagramming Namespace

LineTemplate Constructor (float, float, float, float)

Initializes a new LineTemplate instance with the specified coordinates of the segment end points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LineTemplate (
    float x1,
    float y1,
    float x2,
    float y2
)
```

Parameters

x1
Horizontal position of the first point specified aspercents of the box width.

y1
Vertical position of the first point specified aspercents of the box height.

x2
Horizontal position of the second point specified aspercents of the box width.

y2
Vertical position of the second point specified aspercents of the box height.

See Also

LineTemplate Constructor Overload List
LineTemplate Class
com.mindfusion.diagramming Namespace

LineTemplate Constructor (float, float, float, float, Color, DashStyle, float)

Initializes a new LineTemplate instance with the specified coordinates of the segment end points.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LineTemplate (
    float x1,
    float y1,
    float x2,
    float y2,
    Color color,
    DashStyle dashStyle,
    float width
)
```

Parameters

x1

Horizontal position of the first point specified aspercents of the box width.

y1
Vertical position of the first point specified aspercents of the box height.

x2
Horizontal position of the second point specified aspercents of the box width.

y2
Vertical position of the second point specified aspercents of the box height.

color
The color of this segment.

dashStyle
The dash style of this segment.

width
The width of this segment.

See Also

LineTemplate Constructor Overload List
LineTemplate Class
com.mindfusion.diagramming Namespace

LineTemplate Methods

LineTemplate.toDOM Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element toDOM (
    Document doc
)
```

Parameters

doc

Return Value

See Also

LineTemplate Members
LineTemplate Class
com.mindfusion.diagramming Namespace

LinkAdjustmentHandle Class

Represents an adjustment handle used to modify the position of a link's control point.

Syntax

Java
`public class LinkAdjustmentHandle extends AdjustmentHandle`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AdjustmentHandle
    com.mindfusion.diagramming.LinkAdjustmentHandle

See Also

LinkAdjustmentHandle Members
com.mindfusion.diagramming Namespace

LinkAdjustmentHandle Members

Represents an adjustment handle used to modify the position of a link's control point.

The following tables list the members exposed by the LinkAdjustmentHandle type.

Public Constructors

	Name	Description
	LinkAdjustmentHandle	Initializes a new instance of the **LinkAdjustmentHandle** class.

Public Methods

	Name	Description
	getPointIndex	Gets the index of a link's control point that will be adjusted by this handle.
	setPointIndex	Sets the index of a link's control point that will be adjusted by this handle.

See Also

LinkAdjustmentHandle Class
com.mindfusion.diagramming Namespace

LinkAdjustmentHandle Constructor

Initializes a new instance of the LinkAdjustmentHandle class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkAdjustmentHandle (
    int pointIndex
)
```

Parameters

pointIndex
An integer value specifying the index of a link's control point that will be adjusted by this handle.

See Also

LinkAdjustmentHandle Class
com.mindfusion.diagramming Namespace

LinkAdjustmentHandle Methods

LinkAdjustmentHandle.getPointIndex Method

Gets the index of a link's control point that will be adjusted by this handle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getPointIndex ()
```

Return Value

An integer index of modified control point.

See Also

LinkAdjustmentHandle Members
LinkAdjustmentHandle Class
com.mindfusion.diagramming Namespace

LinkAdjustmentHandle.setPointIndex Method

Sets the index of a link's control point that will be adjusted by this handle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPointIndex (
    int pointIndex
)
```

Parameters

pointIndex
An integer index of modified control point.

See Also

LinkAdjustmentHandle Members
LinkAdjustmentHandle Class
com.mindfusion.diagramming Namespace

LinkContainersBehavior Class

Implements the Behavior.LinkContainers behavior.

Syntax

Java
`public class LinkContainersBehavior extends LinkNodesBehavior`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.LinkNodesBehavior
        com.mindfusion.diagramming.LinkContainersBehavior

See Also

LinkContainersBehavior Members
com.mindfusion.diagramming Namespace

LinkContainersBehavior Members

Implements the Behavior.LinkContainers behavior.

The following tables list the members exposed by the LinkContainersBehavior type.

Public Constructors

	Name	Description
	LinkContainersBehavior	Initializes a new instance of the LinkContainersBehavior class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	createNode	
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override. (Inherited from LinkNodesBehavior.)
	startDraw	(Inherited from LinkNodesBehavior.)
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

LinkContainersBehavior Class
com.mindfusion.diagramming Namespace

LinkContainersBehavior Constructor

Initializes a new instance of the LinkContainersBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected LinkContainersBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
A DiagramView instance.

See Also

LinkContainersBehavior Class
com.mindfusion.diagramming Namespace

LinkContainersBehavior Methods

LinkContainersBehavior.createNode Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`protected DiagramNode createNode ()`

Return Value

See Also

LinkContainersBehavior Members
LinkContainersBehavior Class
com.mindfusion.diagramming Namespace

LinkControlsBehavior Class

Implements the Behavior.LinkControls behavior.

Syntax

Java
`public class LinkControlsBehavior extends LinkNodesBehavior`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.LinkNodesBehavior
        com.mindfusion.diagramming.LinkControlsBehavior

See Also

LinkControlsBehavior Members
com.mindfusion.diagramming Namespace

LinkControlsBehavior Members

Implements the Behavior.LinkControls behavior.

The following tables list the members exposed by the LinkControlsBehavior type.

Public Constructors

	Name	Description
	LinkControlsBehavior	Initializes a new instance of the LinkControlsBehavior class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	createNode	LinkNodesBehavior.createNode override.
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override. (Inherited from LinkNodesBehavior.)
	startDraw	(Inherited from LinkNodesBehavior.)
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

LinkControlsBehavior Class
com.mindfusion.diagramming Namespace

LinkControlsBehavior Constructor

Initializes a new instance of the LinkControlsBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkControlsBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
The DiagramView this behavior will be associated with.

See Also

LinkControlsBehavior Class
com.mindfusion.diagramming Namespace

LinkControlsBehavior Methods

LinkControlsBehavior.createNode Method

LinkNodesBehavior.createNode override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramNode createNode ()
```

Return Value

A ControlNode instance.

See Also

LinkControlsBehavior Members
LinkControlsBehavior Class
com.mindfusion.diagramming Namespace

LinkCrossings Enumeration

The members of this enumeration specify how the points where links cross should be drawn on the screen. It is used as parameter of the setLinkCrossings method.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum LinkCrossings`

Members

	Member name	Description
	Arcs	Draw arcs above the intersection points.
	Cut	Break off the link segments at the intersection points.
	Straight	Draw straight lines.

See Also

com.mindfusion.diagramming Namespace

LinkEvent Class

Contains the arguments passed to handlers of link related events.

Syntax

Java
`public class LinkEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.LinkEvent
      com.mindfusion.diagramming.LinkShapeEvent
      com.mindfusion.diagramming.LinkValidationEvent

See Also

LinkEvent Members
com.mindfusion.diagramming Namespace

LinkEvent Members

Contains the arguments passed to handlers of link related events.

The following tables list the members exposed by the LinkEvent type.

Public Constructors

	Name	Description
	LinkEvent	Overloaded.

Public Methods

	Name	Description
	getAdjustmentHandle	Gets the adjustment handle being moved by the user.
	getLabel	Gets a LinkLabel related to this event.
	getLink	Gets the link for which the event raised.
	getMouseButton	Gets which mouse button has been pressed.
	getPointerPosition	Gets the current pointer position.
	setAdjustmentHandle	Sets the adjustment handle being moved by the user.
	setPointerPosition	Sets the current pointer position.

See Also

LinkEvent Class
com.mindfusion.diagramming Namespace

LinkEvent Constructor

Overload List

Name	Description
LinkEvent (Object, DiagramLink)	Initializes a new LinkEvent instance.
LinkEvent (Object, DiagramLink, int, Point2D)	Initializes a new instance of the **LinkEvent** class.
LinkEvent (Object, DiagramLink, Point2D, int)	Initializes a new instance of the **LinkEvent** class.

See Also

LinkEvent Class
com.mindfusion.diagramming Namespace

LinkEvent Constructor (Object, DiagramLink)

Initializes a new LinkEvent instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkEvent (
    Object source,
    DiagramLink link
)
```

Parameters

source
The sender of this event.

link
A LinkEvent that contains the event data.

See Also

LinkEvent Constructor Overload List
LinkEvent Class
com.mindfusion.diagramming Namespace

LinkEvent Constructor (Object, DiagramLink, int, Point2D)

Initializes a new instance of the LinkEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkEvent (
    Object source,
    DiagramLink link,
    int mouseButton,
    Point2D pointerPosition
)
```

Parameters

source

link
The DiagramLink related to the event.

mouseButton
One of the **MouseEvent** button constants.

mousePosition
The position of the mouse cursor, in document coordinates.

See Also

LinkEvent Constructor Overload List
LinkEvent Class
com.mindfusion.diagramming Namespace

LinkEvent Constructor (Object, DiagramLink, Point2D, int)

Initializes a new instance of the LinkEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkEvent (
    Object source,
    DiagramLink link,
    Point2D pointerPosition,
    int adjustmentHandle
)
```

Parameters

source

link

The DiagramLink related to the event.

mousePosition

The position of the mouse cursor, in document coordinates.

adjustmentHandle

An integer index of the adjustment handle used to modify an item.

See Also

LinkEvent Constructor Overload List
LinkEvent Class
com.mindfusion.diagramming Namespace

LinkEvent Methods

LinkEvent.getAdjustmentHandle Method

Gets the adjustment handle being moved by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getAdjustmentHandle ()
```

Return Value

An integer value that represents the index of the link's control point being moved.

See Also

LinkEvent Members
LinkEvent Class

LinkEvent.getLabel Method

Gets a LinkLabel related to this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkLabel getLabel ()
```

Return Value

A LinkLabel instance.

Remarks

At this time, label is reported by click and text edit events.

See Also

LinkEvent Members
LinkEvent Class
com.mindfusion.diagramming Namespace

LinkEvent.getLink Method

Gets the link for which the event raised.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink getLink ()
```

Return Value

A DiagramLink instance.

See Also

LinkEvent Members
LinkEvent Class
com.mindfusion.diagramming Namespace

LinkEvent.getMouseButton Method

Gets which mouse button has been pressed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getMouseButton ()
```

Return Value

The currently pressed mouse button.

See Also

LinkEvent Members
LinkEvent Class
com.mindfusion.diagramming Namespace

LinkEvent.getPointerPosition Method

Gets the current pointer position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Point2D getPointerPosition ()
```

Return Value

A **Point2D** object specifying the current mouse position.

See Also

LinkEvent Members
LinkEvent Class
com.mindfusion.diagramming Namespace

LinkEvent.setAdjustmentHandle Method

Sets the adjustment handle being moved by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAdjustmentHandle (
    int adjustmentHandle
)
```

Parameters

adjustmentHandle
The index of the link's control point being moved.

See Also

LinkEvent Members
LinkEvent Class
com.mindfusion.diagramming Namespace

LinkEvent.setPointerPosition Method

Sets the current pointer position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPointerPosition (
    Point2D pointerPosition
)
```

Parameters

mousePosition
A Point2D object specifying the current mouse position.

See Also

LinkEvent Members
LinkEvent Class
com.mindfusion.diagramming Namespace

LinkFreeFormsBehavior Class

This class is used when Behavior is set to LinkFreeForms or LinkFreeShapes.

Syntax

Java

```
public class LinkFreeFormsBehavior extends LinkNodesBehavior
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.LinkNodesBehavior
        com.mindfusion.diagramming.LinkFreeFormsBehavior

See Also

LinkFreeFormsBehavior Members
com.mindfusion.diagramming Namespace

LinkFreeFormsBehavior Members

This class is used when Behavior is set to LinkFreeForms or LinkFreeShapes.

The following tables list the members exposed by the LinkFreeFormsBehavior type.

Public Constructors

	Name	Description
	LinkFreeFormsBehavior	Initializes a new instance of the **LinkFreeFormsBehavior** class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	createNode	LinkNodesBehavior.createNode override.
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)

	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override. (Inherited from LinkNodesBehavior.)
	startDraw	(Inherited from LinkNodesBehavior.)
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

LinkFreeFormsBehavior Class
com.mindfusion.diagramming Namespace

LinkFreeFormsBehavior Constructor

Initializes a new instance of the LinkFreeFormsBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkFreeFormsBehavior (
    DiagramView diagramView,
    boolean convertToShape
)
```

Parameters

diagramView
The DiagramView this behavior will be associated with.

convertToShape
true to convert the FreeFormNode to a ShapeNode once user finishes drawing it, or **false** otherwise.

See Also

LinkFreeFormsBehavior Class
com.mindfusion.diagramming Namespace

LinkFreeFormsBehavior Methods

LinkFreeFormsBehavior.createNode Method

LinkNodesBehavior.createNode override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramNode createNode ()
```

Return Value

An instance of the FreeFormNode class.

See Also

LinkFreeFormsBehavior Members
LinkFreeFormsBehavior Class
com.mindfusion.diagramming Namespace

LinkLabel Class

Represents a label displayed by a DiagramLink. New labels can be added to a link by calling the DiagramLink.addLabel method.

Syntax

Java

```
public class LinkLabel
    extends ItemLabel
    implements Externalizable
```

Remarks

Each label can be associated with a specific segment or control point of the link, or it can be placed at a specific position along the link's length. To set a label's position, call one of the setSegmentPosition, setControlPointPosition or setLinkLengthPosition methods.

The alignment of text can be set via setHorizontalAlign and setVerticalAlign. Text can automatically wrap to new line if it exceeds a specified width. To enable that, call setEnableWrap and setMaxWidth.

By default, labels are rendered using the link's text color and font. Call setTextColor and setFont to specify distinct color and font for the label's text.

A label can also display a **java.awt.Image** bitmap assigned to the Image property. This lets you draw icons along a link's geometry. If a label contains both image and text, their relative position can be set using the ImageAlign property.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ItemLabel
    com.mindfusion.diagramming.LinkLabel

See Also

LinkLabel Members
com.mindfusion.diagramming Namespace

LinkLabel Members

Represents a label displayed by a DiagramLink. New labels can be added to a link by calling the DiagramLink.addLabel method.

The following tables list the members exposed by the LinkLabel type.

Public Constructors

	Name	Description
	LinkLabel	Overloaded.

Public Methods

	Name	Description
	cancel	Called when drag operation is canceled. (Inherited from ItemLabel.)
	clone	Creates a clone of this label.
	getAutoArrange	Gets a value indicating whether the label can be auto arranged.
	getBrush	Gets the brush used to draw the label's background.
	getContentPadding	Gets the distance between Image and Text when both are specified. (Inherited from ItemLabel.)
	getEditRect	Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).
	getEnableWrap	Gets whether the text should wrap to multiple lines.
	getFont	Gets the font of the link's label text.
	getHorizontalAlign	Gets the horizontal alignment of the text within the label's layout rectangle.
	getHorizontalOffset	Gets label's horizontal offset from its pin point. (Inherited from ItemLabel.)
	getImage	Gets the image displayed by this label. (Inherited from ItemLabel.)
	getImageAlign	Gets the alignment of label's image relative to text. (Inherited from ItemLabel.)
	getImageSize	Gets a size that overrides the native image size. (Inherited from ItemLabel.)
	getImageUrl	Gets a URL used to load an image into this label. (Inherited from ItemLabel.)
	getIndex	Gets the index of the segment or control point this label is relative to.
	getLengthFactor	Gets label's position along link's length when the RelativeTo property is set to LinkLength.
	getLocked	Gets a value indicating whether users are allowed to edit this label. (Inherited from ItemLabel.)
	getMargin	Gets the text margins size.

	getMaxWidth	Gets the maximal width that when reached should cause text to wrap to a new line.
	getRelativeTo	Gets the label's relative positioning.
	getText	Gets the label's text.
	getTextColor	Gets the color of the link's label text.
	getTextToEdit	Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when this label is edited in-place.
	getVerticalAlign	Gets the vertical alignment of the text relatively to the label's position.
	getVerticalOffset	Gets label's vertical offset from its pin point. (Inherited from ItemLabel.)
	onPointerDown	Called when the left mouse button is pressed while the pointer is over this label. (Inherited from ItemLabel.)
	onPointerMove	Called when the mouse is moved while this label tracks the mouse events. (Inherited from ItemLabel.)
	onPointerUp	Called when the left mouse button is released while this label tracks the mouse events. (Inherited from ItemLabel.)
	readExternal	Loads the label from the specified binary stream.
	setAutoArrange	Sets a value indicating whether the label can be auto arranged.
	setBrush	Sets the brush used to draw the label's background.
	setContentPadding	Sets the distance between **Image** and **Text** when both are specified. (Inherited from ItemLabel.)
	setControlPointPosition	Positions this label relatively to the specified control point.
	setEditedText	Implements InplaceEditable.setEditedText. Assigns the edited text to the label after in-place edit operation completes successfully
	setEnableWrap	Sets whether the text should wrap to multiple lines.
	setFont	Sets the font of the link's label.
	setHorizontalAlign	Sets the horizontal alignment of the text within the label's layout rectangle.
	setHorizontalOffset	Sets label's horizontal offset from its pin point. (Inherited from ItemLabel.)
	setImage	Sets the image displayed by this label. (Inherited from ItemLabel.)
	setImageAlign	Sets the alignment of label's image relative to text. (Inherited from ItemLabel.)
	setImageSize	Sets a size that overrides the native image size. (Inherited from ItemLabel.)
	setImageUrl	Sets a URL used to load an image into this label. (Inherited from ItemLabel.)

	setIndex	Sets the index of the segment or control point this label is relative to.
	setLengthFactor	Sets label's position along link's length when the **RelativeTo** property is set to **LinkLength**.
	setLinkLengthPosition	Positions this label relatively to the link length.
	setLocked	Sets a value indicating whether users are allowed to edit this label. (Inherited from ItemLabel.)
	setMargin	Sets the text margins size.
	setMaxWidth	Sets the maximal width that when reached should cause text to wrap to a new line.
	setMouseCursor	Indicates what cursor to display for interactive labels. (Inherited from ItemLabel.)
	setRelativeTo	Sets the label's relative positioning.
	setSegmentPosition	Positions this label relatively to the specified link segment.
	setText	Sets the label's text.
	setTextColor	Sets the color of the link's label.
	setVerticalAlign	Sets the vertical alignment of the text relatively to the label's position.
	setVerticalOffset	Sets label's vertical offset from its pin point. (Inherited from ItemLabel.)
	writeExternal	Saves the label into the specified binary stream.

Protected Methods

	Name	Description
	draw	Draws this label on the specified **Graphics2D** surface.
	getItem	Returns the DiagramItem that displays this label. (Inherited from ItemLabel.)
	getLayoutRect	Gets the label's layout rectangle calculated from text length, font and alignment.
	getLink	Returns the **DiagramLink** that displays this label.
	loadFromJson	Loads the label from a JSON object.
	loadFromXml	Loads the label from the specified XML element.
	pointAlongLength	Overloaded.
	saveToJson	Saves the label as a JSON object.
	saveToXml	Saves the label into the specified XML element.

See Also

LinkLabel Constructor

Overload List

Name	Description
LinkLabel ()	Used during deserialization.
LinkLabel (DiagramLink)	Initializes a new instance of the LinkLabel class.
LinkLabel (DiagramLink, String)	Initializes a new instance of the LinkLabel class.

See Also

LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel Constructor ()

Used during deserialization.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkLabel ()
```

See Also

LinkLabel Constructor Overload List
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel Constructor (DiagramLink)

Initializes a new instance of the LinkLabel class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkLabel (
    DiagramLink link
)
```

Parameters

link
The DiagramLink that displays the label.

See Also

LinkLabel Constructor Overload List
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel Constructor (DiagramLink, String)

Initializes a new instance of the LinkLabel class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkLabel (
    DiagramLink link,
    String text
)
```

Parameters

link
The DiagramLink that displays the label.

text
The label's text.

See Also

LinkLabel Constructor Overload List
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel Methods

LinkLabel.clone Method

Creates a clone of this label.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkLabel clone ()
```

Return Value

A new LinkLabel instance that is an exact copy of this label.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.draw Method

Draws this label on the specified **Graphics2D** surface.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void draw (
    Graphics2D graphics
)
```

Parameters

graphics
A **Graphics2D** instance.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.getAutoArrange Method

Gets a value indicating whether the label can be auto arranged.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAutoArrange ()
```

Return Value

A boolean indicating whether the label can be auto arranged.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.getBrush Method

Gets the brush used to draw the label's background.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getBrush ()
```

Return Value

A Brush instance specifying the background brush.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.getEditRect Method

Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getEditRect (
    DiagramItem item,
    Point2D mousePosition
)
```

Parameters

item
The DiagramLink whose label's text will be edited.

mousePosition
A **Point2D** instance specifying the current pointer position.

Return Value

A **Rectangle2D** specifying where the edit box should be placed.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.getEnableWrap Method

Gets whether the text should wrap to multiple lines.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getEnableWrap ()
```

Return Value

true if text wrapping is enabled; otherwise, **false**.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.getFont Method

Gets the font of the link's label text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Font getFont ()
```

Return Value

A **Font** object representing the text font. The default value is **null**.

Remarks

The label's text is rendered using the link's font if this value is **null**.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.getHorizontalAlign Method

Gets the horizontal alignment of the text within the label's layout rectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Align getHorizontalAlign ()
```

Return Value

A member of the Align enumeration. The default is **Center**.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.getIndex Method

Gets the index of the segment or control point this label is relative to.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getIndex ()
```

Return Value

The integer index of a link's segment or control point.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.getLayoutRect Method

Gets the label's layout rectangle calculated from text length, font and alignment.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected Rectangle2D getLayoutRect ()
```

Return Value

A **Rectangle2D** instance specifying the region in which to render the link's text.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.getLengthFactor Method

Gets label's position along link's length when the RelativeTo property is set to LinkLength.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getLengthFactor ()
```

Return Value

A **float** value specifying label's position. The default is **0.5**.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace
setLinkLengthPosition Method

LinkLabel.getLink Method

Returns the DiagramLink that displays this label.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramLink getLink ()
```

Return Value

A DiagramLink instance.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.getMargin Method

Gets the text margins size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Thickness getMargin ()
```

Return Value

A Thickness instance specifying the size of text margins.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.getMaxWidth Method

Gets the maximal width that when reached should cause text to wrap to a new line.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getMaxWidth ()
```

Return Value

A float value specifying the maximal label width.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.getRelativeTo Method

Gets the label's relative positioning.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RelativeToLink getRelativeTo ()
```

Return Value

A member of the RelativeToLink enumeration. The default value is **LinkLength**.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.getText Method

Gets the label's text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getText ()
```

Return Value

A String containing the label's text.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.getTextColor Method

Gets the color of the link's label text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getTextColor ()
```

Return Value

A **Color** object representing the text color. The default value is **null**.

Remarks

The label's text is rendered using the link's text color if this value is **null**.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.getTextToEdit Method

Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when this label is edited in-place.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getTextToEdit ()
```

Return Value

The label's text.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.getVerticalAlign Method

Gets the vertical alignment of the text relatively to the label's position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Align getVerticalAlign ()
```

Return Value

A member of the Align enumeration. The default value is **Far**.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.loadFromJson Method

Loads the label from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the label's data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.loadFromXml Method

Loads the label from the specified XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An Element instance.

context
An XmlPersistContext instance.

See Also

LinkLabel.pointAlongLength Method

Overload List

Name	Description
LinkLabel.pointAlongLength (float)	
LinkLabel.pointAlongLength (float, PointList)	Returns a point lying on a polyline that is positioned at a relative position along the polyline's length.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.pointAlongLength Method (float)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Point2D.Float pointAlongLength (
    float lengthFactor
)
```

Parameters

lengthFactor

Return Value

See Also

pointAlongLength Method Overload List
LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.pointAlongLength Method (float, PointList)

Returns a point lying on a polyline that is positioned at a relative position along the polyline's length.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Point2D.Float pointAlongLength (
    float lengthFactor,
    PointList segments
)
```

Parameters

lengthFactor
A value from 0 to 1 specifying a portion of link's length.

segments
A list of points specifying the polyline segments.

Return Value

A **Point2D.Float** instance.

See Also

pointAlongLength Method Overload List
LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.readExternal Method

Loads the label from the specified binary stream.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in
An **ObjectInput** stream from which to read the label's data.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.saveToJson Method

Saves the label as a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject instance to contain the serialized data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.saveToXml Method

Saves the label into the specified XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An Element instance.

context
An XmlPersistContext instance.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.setAutoArrange Method

Sets a value indicating whether the label can be auto arranged.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAutoArrange (
    boolean value
)
```

Parameters

value
A boolean indicating whether the label can be auto arranged.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.setBrush Method

Sets the brush used to draw the label's background.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBrush (
    Brush value
)
```

Parameters

value
A Brush instance specifying the background brush.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.setControlPointPosition Method

Positions this label relatively to the specified control point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setControlPointPosition (
    int controlPoint,
    float dx,
    float dy
)
```

Parameters

controlPoint
The control point index.

dx
Horizontal offset from the point.

dy
Vertical offset from the point.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.setEditedText Method

Implements InplaceEditable.setEditedText. Assigns the edited text to the label after in-place edit operation completes successfully

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setEditedText (
    String newText
)
```

Parameters

newText
The new text for this label.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.setEnableWrap Method

Sets whether the text should wrap to multiple lines.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setEnableWrap (
    boolean enableWrap
)
```

Parameters

enableWrap
true to enable text wrapping; otherwise, **false**.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.setFont Method

Sets the font of the link's label.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setFont (
    Font value
)
```

Parameters

value
A **Font** object representing the text font.

Remarks

The label's text is rendered using the link's font if this value is **null**.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.setHorizontalAlign Method

Sets the horizontal alignment of the text within the label's layout rectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setHorizontalAlign (
    Align align
)
```

Parameters

align
A member of the Align enumeration.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.setIndex Method

Sets the index of the segment or control point this label is relative to.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setIndex (
    int value
)
```

Parameters

value
The integer index of a link's segment or control point.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.setLengthFactor Method

Sets label's position along link's length when the RelativeTo property is set to LinkLength.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLengthFactor (
    float value
)
```

Parameters

value
A **float** value specifying label's position.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace
setLinkLengthPosition Method

LinkLabel.setLinkLengthPosition Method

Positions this label relatively to the link length.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkLengthPosition (
    float lengthFactor
)
```

Parameters

lengthFactor
A value between 0 and 1 specifying the position of the label relatively to the link's length.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.setMargin Method

Sets the text margins size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMargin (
    Thickness margin
)
```

Parameters

margin
A Thickness instance specifying the size of text margins.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.setMaxWidth Method

Sets the maximal width that when reached should cause text to wrap to a new line.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMaxWidth (
    float maxWidth
)
```

Parameters

maxWidth
A float value specifying the maximal label width.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.setRelativeTo Method

Sets the label's relative positioning.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRelativeTo (
    RelativeToLink value
)
```

Parameters

value
A member of the RelativeToLink enumeration.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.setSegmentPosition Method

Positions this label relatively to the specified link segment.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSegmentPosition (
    int segment,
    float dx,
    float dy
)
```

Parameters

segment
The segment index.

dx
Horizontal offset from the segment center.

dy
Vertical offset from the segment center.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.setText Method

Sets the label's text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setText (
    String text
)
```

Parameters

text
A String containing the label's text.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.setTextColor Method

Sets the color of the link's label.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextColor (
    Color value
)
```

Parameters

value
A **Color** object representing the text color.

Remarks

The label's text is rendered using the link's text color if this value is **null**.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.setVerticalAlign Method

Sets the vertical alignment of the text relatively to the label's position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setVerticalAlign (
    Align align
)
```

Parameters

align
A member of the Align enumeration.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkLabel.writeExternal Method

Saves the label into the specified binary stream.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out
An **ObjectOutput** stream into which to save the label's data.

See Also

LinkLabel Members
LinkLabel Class
com.mindfusion.diagramming Namespace

LinkNodesBehavior Class

The base class for behavior types that allow drawing both nodes and links.

Syntax

Java

```
public abstract class LinkNodesBehavior extends BehaviorBase
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.LinkNodesBehavior
        com.mindfusion.diagramming.LinkContainersBehavior
        com.mindfusion.diagramming.LinkControlsBehavior
        com.mindfusion.diagramming.LinkFreeFormsBehavior
        com.mindfusion.diagramming.LinkShapesBehavior
        com.mindfusion.diagramming.LinkTablesBehavior
        com.mindfusion.diagramming.LinkTreeViewsBehavior

See Also

LinkNodesBehavior Members

The base class for behavior types that allow drawing both nodes and links.

The following tables list the members exposed by the LinkNodesBehavior type.

Protected Constructors

	Name	Description
	LinkNodesBehavior	Initializes a new instance of the LinkNodesBehavior class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	createNode	
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override.

	startDraw	
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

LinkNodesBehavior Class
com.mindfusion.diagramming Namespace

LinkNodesBehavior Constructor

Initializes a new instance of the LinkNodesBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected LinkNodesBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
A DiagramView instance.

See Also

LinkNodesBehavior Class
com.mindfusion.diagramming Namespace

LinkNodesBehavior Methods

LinkNodesBehavior.createNode Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected abstract DiagramNode createNode ()
```

Return Value

See Also

LinkNodesBehavior.setMouseCursor Method

BehaviorBase.setMouseCursor override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected CursorHint setMouseCursor (
    Point2D point,
    ByRef<Boolean> startInteraction
)
```

Parameters

point
A Point2D instance that specifies the position of the mouse cursor.

startInteraction
true if the user is going to create, delete, modify or select a DiagramItem; **false** if mouse behavior is not considered; in this case the mouse pointer is set to a default cursor according to the background LaneGrid.

Return Value

A member of the CursorHint enumeration.

See Also

LinkNodesBehavior Members
LinkNodesBehavior Class
com.mindfusion.diagramming Namespace

LinkNodesBehavior.startDraw Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected InteractionState startDraw (
    Point2D point,
    MouseEvent e
)
```

Parameters

point

e

Return Value

See Also

LinkNodesBehavior Members
LinkNodesBehavior Class
com.mindfusion.diagramming Namespace

LinkRouter Interface

Defines methods that should be implemented by a link-router component. The control calls them when a new link path should be set in response to changes in the diagram, such as adding or modifying nodes.

Syntax

Java
`public interface LinkRouter`

Inheritors

com.mindfusion.diagramming.CompositeRouter
com.mindfusion.diagramming.GridRouter
com.mindfusion.diagramming.PatternRouter
com.mindfusion.diagramming.QuickRouter

See Also

LinkRouter Members
com.mindfusion.diagramming Namespace

LinkRouter Members

Defines methods that should be implemented by a link-router component. The control calls them when a new link path should be set in response to changes in the diagram, such as adding or modifying nodes.

The following tables list the members exposed by the LinkRouter type.

Public Methods

	Name	Description
	routeLink	Called when a single link must be routed.
	routeLinks	Called when more than one links must be routed.
	setDiagram	Sets the diagram this router is associated with.

See Also

LinkRouter Interface
com.mindfusion.diagramming Namespace

LinkRouter Methods

LinkRouter.routeLink Method

Called when a single link must be routed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
boolean routeLink (
    DiagramLink link,
    ConnectionPoint originConnection,
    ConnectionPoint destinationConnection,
    boolean nowCreating
)
```

Parameters

link
A DiagramLink object representing the link.

originConnection
Represents connection to Origin node, potentially different from link's stored connection when modifying first control point.

destinationConnection
Represents connection to Destination node, potentially different from link's stored connection when modifying last control point.

nowCreating
Indicates whether link is currently being created.

Return Value

true if a path has been found, otherwise **false**.

See Also

LinkRouter Members
LinkRouter Interface
com.mindfusion.diagramming Namespace

LinkRouter.routeLinks Method

Called when more than one links must be routed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
DiagramLinkList routeLinks (
    DiagramLinkList links
)
```

Parameters

links
A DiagramLinkList containing the links that should be routed.

Return Value

A list of links that were not routed successfully.

See Also

LinkRouter Members
LinkRouter Interface
com.mindfusion.diagramming Namespace

LinkRouter.setDiagram Method

Sets the diagram this router is associated with.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void setDiagram (
    Diagram value
)
```

Parameters

value
A Diagram instance.

See Also

LinkRouter Members
LinkRouter Interface
com.mindfusion.diagramming Namespace

LinkShape Enumeration

The members of this enumeration specify the geometry of link segments and how the segments are related to each other. The enumeration elements can be used as parameters of the setShape method of the DiagramLink class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public enum LinkShape
```

Members

	Member name	Description
	Bezier	The link segments are Bezier curves. Each two adjacent segments share a control point. The joins between segments are always kept smooth.
	Cascading	The link consists of straight line segments. All segments are either horizontal or vertical, where each two adjacent segments are orthogonal one to the other.
	Polyline	The link consists of straight line segments.
	Spline	The segments of a link are curves forming an interpolating spline that passes through all control points.

See Also

com.mindfusion.diagramming Namespace

LinkShapeEvent Class

Contains the arguments passed to the SetSelfLoopShape event handler.

Syntax

Java
`public class LinkShapeEvent extends LinkEvent`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.LinkEvent
      com.mindfusion.diagramming.LinkShapeEvent

See Also

LinkShapeEvent Members
com.mindfusion.diagramming Namespace

LinkShapeEvent Members

Contains the arguments passed to the SetSelfLoopShape event handler.

The following tables list the members exposed by the LinkShapeEvent type.

Public Constructors

	Name	Description
	LinkShapeEvent	Initializes a new instance of the LinkShapeEvent class.

Public Methods

	Name	Description
	getAdjustmentHandle	Gets the adjustment handle being moved by the user. (Inherited from LinkEvent.)
	getHandled	Gets if the event handler has set a custom loop shape.
	getLabel	Gets a LinkLabel related to this event. (Inherited from LinkEvent.)
	getLink	Gets the link for which the event raised. (Inherited from LinkEvent.)
	getMouseButton	Gets which mouse button has been pressed. (Inherited from LinkEvent.)
	getPointerPosition	Gets the current pointer position. (Inherited from LinkEvent.)
	setAdjustmentHandle	Sets the adjustment handle being moved by the user. (Inherited from LinkEvent.)
	setHandled	Sets if the event handler has set a custom loop shape.
	setPointerPosition	Sets the current pointer position. (Inherited from LinkEvent.)

See Also

LinkShapeEvent Class
com.mindfusion.diagramming Namespace

LinkShapeEvent Constructor

Initializes a new instance of the LinkShapeEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkShapeEvent (
    Object source,
    DiagramLink link
)
```

Parameters

source

link

The DiagramLink that becomes a self-loop.

See Also

LinkShapeEvent Class
com.mindfusion.diagramming Namespace

LinkShapeEvent Methods

LinkShapeEvent.getHandled Method

Gets if the event handler has set a custom loop shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getHandled ()
```

Return Value

See Also

LinkShapeEvent Members
LinkShapeEvent Class
com.mindfusion.diagramming Namespace

LinkShapeEvent.setHandled Method

Sets if the event handler has set a custom loop shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHandled (
    boolean handled
)
```

Parameters

handled

See Also

LinkShapeEvent Members
LinkShapeEvent Class
com.mindfusion.diagramming Namespace

LinkShapesBehavior Class

Implements the Behavior.LinkShapes behavior.

Syntax

Java

```
public class LinkShapesBehavior extends LinkNodesBehavior
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.LinkNodesBehavior
        com.mindfusion.diagramming.LinkShapesBehavior

See Also

LinkShapesBehavior Members
com.mindfusion.diagramming Namespace

LinkShapesBehavior Members

Implements the Behavior.LinkShapes behavior.

The following tables list the members exposed by the LinkShapesBehavior type.

Public Constructors

	Name	Description
	LinkShapesBehavior	Initializes a new instance of the LinkShapesBehavior class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	createNode	
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override. (Inherited from LinkNodesBehavior.)
	startDraw	(Inherited from LinkNodesBehavior.)
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

LinkShapesBehavior Class
com.mindfusion.diagramming Namespace

LinkShapesBehavior Constructor

Initializes a new instance of the LinkShapesBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkShapesBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
A DiagramView instance.

See Also

LinkShapesBehavior Class
com.mindfusion.diagramming Namespace

LinkShapesBehavior Methods

LinkShapesBehavior.createNode Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`protected DiagramNode createNode ()`

Return Value

See Also

LinkShapesBehavior Members
LinkShapesBehavior Class
com.mindfusion.diagramming Namespace

LinkTablesBehavior Class

Implements the Behavior.LinkTables behavior.

Syntax

Java
`public class LinkTablesBehavior extends LinkNodesBehavior`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.LinkNodesBehavior
        com.mindfusion.diagramming.LinkTablesBehavior

See Also

LinkTablesBehavior Members
com.mindfusion.diagramming Namespace

LinkTablesBehavior Members

Implements the Behavior.LinkTables behavior.

The following tables list the members exposed by the LinkTablesBehavior type.

Public Constructors

	Name	Description
	LinkTablesBehavior	Initializes a new instance of the LinkTablesBehavior class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)

	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	createNode	
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override. (Inherited from LinkNodesBehavior.)
	startDraw	(Inherited from LinkNodesBehavior.)
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

LinkTablesBehavior Class
com.mindfusion.diagramming Namespace

LinkTablesBehavior Constructor

Initializes a new instance of the LinkTablesBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkTablesBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
A DiagramView instance.

See Also

LinkTablesBehavior Class
com.mindfusion.diagramming Namespace

LinkTablesBehavior Methods

LinkTablesBehavior.createNode Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`protected DiagramNode createNode ()`

Return Value

See Also

LinkTablesBehavior Members
LinkTablesBehavior Class
com.mindfusion.diagramming Namespace

LinkTextStyle Enumeration

The members of this enumeration specify where the label of a link is placed and how it is oriented relatively to the link segments. These constants can be used as parameters of the setTextStyle method of the DiagramLink class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum LinkTextStyle`

Members

	Member name	Description

	Center	The text is displayed horizontally above the middle link segment or control point, depending on whether there are an odd or even number of segments.
	Follow	The label text starts from the first point of the link and follows the path defined by the link segments. This style is useful for displaying long text.
	OverLongestSegment	The text follows the longest link segment and is displayed centered at the segment's middle point.
	Rotate	The text is displayed rotated at the same angle as the segment where the text is placed. A long enough segment from the middle link segments is chosen for that purpose.

See Also

com.mindfusion.diagramming Namespace

LinkTreeViewsBehavior Class

Implements the Behavior.LinkTreeViews behavior.

Syntax

```
Java
public class LinkTreeViewsBehavior extends LinkNodesBehavior
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.LinkNodesBehavior
        com.mindfusion.diagramming.LinkTreeViewsBehavior

See Also

LinkTreeViewsBehavior Members
com.mindfusion.diagramming Namespace

LinkTreeViewsBehavior Members

Implements the Behavior.LinkTreeViews behavior.

The following tables list the members exposed by the LinkTreeViewsBehavior type.

Public Constructors

	Name	Description
	LinkTreeViewsBehavior	Initializes a new instance of the LinkTreeViewsBehavior class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	createNode	An instance of the DiagramNode class.
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override. (Inherited from LinkNodesBehavior.)
	startDraw	(Inherited from LinkNodesBehavior.)
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

LinkTreeViewsBehavior Class
com.mindfusion.diagramming Namespace

LinkTreeViewsBehavior Constructor

Initializes a new instance of the LinkTreeViewsBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public LinkTreeViewsBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
The DiagramView this behavior will be associated with.

See Also

LinkTreeViewsBehavior Class
com.mindfusion.diagramming Namespace

LinkTreeViewsBehavior Methods

LinkTreeViewsBehavior.createNode Method

An instance of the DiagramNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected DiagramNode createNode ()
```

Return Value

See Also

LinkTreeViewsBehavior Members
LinkTreeViewsBehavior Class
com.mindfusion.diagramming Namespace

LinkValidationEvent Class

Contains the arguments passed to handlers of link validation events.

Syntax

```
Java
public class LinkValidationEvent extends LinkEvent
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.LinkEvent
      com.mindfusion.diagramming.LinkValidationEvent

See Also

LinkValidationEvent Members
com.mindfusion.diagramming Namespace

LinkValidationEvent Members

Contains the arguments passed to handlers of link validation events.

The following tables list the members exposed by the LinkValidationEvent type.

Public Constructors

	Name	Description
	LinkValidationEvent	Overloaded.

Public Methods

	Name	Description
	cancelDrag	Cancels the creation or modification of the link.
	getAdjustmentHandle	Gets the adjustment handle being moved by the user. (Inherited from LinkEvent.)
	getAnchorIndex	Gets the anchor point related to a link validation event.
	getCancel	Gets a value indicating whether to cancel the current operation.
	getChangingDestination	Gets a value indicating whether the user modifies the link's destination end point.
	getChangingOrigin	Gets a value indicating whether the user modifies the link's origin end point.
	getDestination	Gets the node that will become the link's destination if the event is validated.
	getLabel	Gets a LinkLabel related to this event. (Inherited from LinkEvent.)
	getLink	Gets the link for which the event raised. (Inherited from LinkEvent.)
	getMouseButton	Gets which mouse button has been pressed. (Inherited from LinkEvent.)
	getNode	Gets the node to which the link will be connected.
	getNodeElement	Gets the node's element to which the link will be connected.
	getOrigin	Gets the node that would become the link's origin if the event is validated.

	getPointerPosition	Gets the current pointer position. (Inherited from LinkEvent.)
	getSelectionRectangle	Gets the current selection rectangle.
	getTableRow	Gets the table row related to a link validation event.
	setAdjustmentHandle	Sets the adjustment handle being moved by the user. (Inherited from LinkEvent.)
	setCancel	Sets a value indicating whether to cancel the current operation.
	setPointerPosition	Sets the current pointer position. (Inherited from LinkEvent.)

See Also

LinkValidationEvent Class
com.mindfusion.diagramming Namespace

LinkValidationEvent Constructor

Overload List

Name	Description
LinkValidationEvent (Object, DiagramLink)	Represents methods that will handle link validation events.
LinkValidationEvent (Object, DiagramLink, Point2D, int, DiagramNode, int, int)	
LinkValidationEvent (Object, DiagramLink, Rectangle2D)	

See Also

LinkValidationEvent Class
com.mindfusion.diagramming Namespace

LinkValidationEvent Constructor (Object, DiagramLink)

Represents methods that will handle link validation events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkValidationEvent (
    Object source,
    DiagramLink link
)
```

Parameters

source
The source of the validation event.

link
A LinkValidationEvent that contains the event data.

See Also

LinkValidationEvent Constructor Overload List
LinkValidationEvent Class
com.mindfusion.diagramming Namespace

LinkValidationEvent Constructor (Object, DiagramLink, Point2D, int, DiagramNode, int, int)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public LinkValidationEvent (
    Object source,
    DiagramLink link,
    Point2D mousePosition,
    int adjustmentHandle,
    DiagramNode node,
    int anchorIndex,
    int tableRow
)
```

Parameters

source

link

mousePosition

adjustmentHandle

node

anchorIndex

tableRow

See Also

LinkValidationEvent Constructor Overload List
LinkValidationEvent Class
com.mindfusion.diagramming Namespace

LinkValidationEvent Constructor (Object, DiagramLink, Rectangle2D)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public LinkValidationEvent (
    Object source,
    DiagramLink link,
    Rectangle2D selectionRectangle
)
```

Parameters

source

link

selectionRectangle

See Also

LinkValidationEvent Constructor Overload List
LinkValidationEvent Class
com.mindfusion.diagramming Namespace

LinkValidationEvent Methods

LinkValidationEvent.cancelDrag Method

Cancels the creation or modification of the link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void cancelDrag ()
```

See Also

LinkValidationEvent Members
LinkValidationEvent Class
com.mindfusion.diagramming Namespace

LinkValidationEvent.getAnchorIndex Method

Gets the anchor point related to a link validation event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getAnchorIndex ()
```

Return Value

An integer value specifying the index of an anchor point within an AnchorPattern.

See Also

LinkValidationEvent Members
LinkValidationEvent Class
com.mindfusion.diagramming Namespace

LinkValidationEvent.getCancel Method

Gets a value indicating whether to cancel the current operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getCancel ()
```

Return Value

true to cancel the operation; **false** to approve it.

See Also

LinkValidationEvent Members
LinkValidationEvent Class
com.mindfusion.diagramming Namespace

LinkValidationEvent.getChangingDestination Method

Gets a value indicating whether the user modifies the link's destination end point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getChangingDestination ()
```

Return Value

true if the user is changing the destination point; otherwise, **false**.

See Also

LinkValidationEvent Members
LinkValidationEvent Class
com.mindfusion.diagramming Namespace

LinkValidationEvent.getChangingOrigin Method

Gets a value indicating whether the user modifies the link's origin end point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getChangingOrigin ()
```

Return Value

true if the user is changing the origin point; otherwise, **false**.

See Also

LinkValidationEvent Members
LinkValidationEvent Class
com.mindfusion.diagramming Namespace

LinkValidationEvent.getDestination Method

Gets the node that will become the link's destination if the event is validated.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode getDestination ()
```

Return Value

An instance of the DiagramNode class.

See Also

LinkValidationEvent Members
LinkValidationEvent Class
com.mindfusion.diagramming Namespace

LinkValidationEvent.getNode Method

Gets the node to which the link will be connected.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode getNode ()
```

Return Value

An instance of the DiagramNode class.

See Also

LinkValidationEvent Members
LinkValidationEvent Class
com.mindfusion.diagramming Namespace

LinkValidationEvent.getNodeElement Method

Gets the node's element to which the link will be connected.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object getNodeElement ()
```

Return Value

The element of a compound node to which the link will connect.

Remarks

This property could refer to a TreeViewItem if the link connects to a TreeViewNode, or a Row if the link connects to a TableNode.

See Also

LinkValidationEvent Members
LinkValidationEvent Class
com.mindfusion.diagramming Namespace
Node Property

LinkValidationEvent.getOrigin Method

Gets the node that would become the link's origin if the event is validated.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode getOrigin ()
```

Return Value

An instance of the DiagramNode class.

See Also

LinkValidationEvent Members
LinkValidationEvent Class
com.mindfusion.diagramming Namespace

LinkValidationEvent.getSelectionRectangle Method

Gets the current selection rectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getSelectionRectangle ()
```

Return Value

A **Rectangle2D** instance representing the selection rectangle.

See Also

LinkValidationEvent Members
LinkValidationEvent Class
com.mindfusion.diagramming Namespace

LinkValidationEvent.getTableRow Method

Gets the table row related to a link validation event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getTableRow ()
```

Return Value

An integer value specifying the zero-based index of a TableNode's row.

See Also

LinkValidationEvent Members
LinkValidationEvent Class
com.mindfusion.diagramming Namespace

LinkValidationEvent.setCancel Method

Sets a value indicating whether to cancel the current operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCancel (
    boolean cancel
)
```

Parameters

cancel

true to cancel the operation; **false** to approve it.

See Also

LinkValidationEvent Members
LinkValidationEvent Class
com.mindfusion.diagramming Namespace

Manipulator Class

The base class for interactive widgets displayed in diagram items.

Syntax

Java

```
public abstract class Manipulator
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Manipulator
    com.mindfusion.diagramming.Folder
    com.mindfusion.diagramming.ScrollBar
    com.mindfusion.diagramming.TableSectionExpander

See Also

Manipulator Members
com.mindfusion.diagramming Namespace

Manipulator Members

The base class for interactive widgets displayed in diagram items.

The following tables list the members exposed by the Manipulator type.

Public Constructors

	Name	Description
	Manipulator	

Protected Fields

	Name	Description
	item	

Public Methods

	Name	Description
	cancel	Called when the manipulator should cancel the current manipulation.
	drawsInLocalCoordinates	Returns whether the manipulator object draws in local or global coordinates.
	getItem	
	needsPointerMessages	Returns whether the manipulator object needs to track mouse events.
	onGotFocus	Called when the manipulator receives input focus.
	onLostFocus	Called when the manipulator loses the input focus.
	onPointerDown	Called when the left mouse button is pressed while the pointer is over this manipulator.
	onPointerMove	Called when the mouse is moved while this manipulator tracks the mouse events.
	onPointerUp	Called when the left mouse button is released while this manipulator tracks the mouse events.
	setMouseCursor	

See Also

Manipulator Class
com.mindfusion.diagramming Namespace

Manipulator Fields

Manipulator.item Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramItem item
```

See Also

Manipulator Members
Manipulator Class
com.mindfusion.diagramming Namespace

Manipulator Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Manipulator (
    DiagramItem item
)
```

Parameters

item

See Also

Manipulator Class
com.mindfusion.diagramming Namespace

Manipulator Methods

Manipulator.cancel Method

Called when the manipulator should cancel the current manipulation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void cancel ()
```

See Also

Manipulator Members
Manipulator Class
com.mindfusion.diagramming Namespace

Manipulator.drawsInLocalCoordinates Method

Returns whether the manipulator object draws in local or global coordinates.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean drawsInLocalCoordinates ()
```

Return Value

true if drawn in local coordinates, otherwise, false.

See Also

Manipulator Members
Manipulator Class
com.mindfusion.diagramming Namespace

Manipulator.getItem Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem getItem ()
```

Return Value

See Also

Manipulator Members
Manipulator Class
com.mindfusion.diagramming Namespace

Manipulator.needsPointerMessages Method

Returns whether the manipulator object needs to track mouse events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean needsPointerMessages (
    Point2D point
)
```

Parameters

point

Return Value

true to track mouse events; otherwise, **false**.

See Also

Manipulator Members
Manipulator Class
com.mindfusion.diagramming Namespace

Manipulator.onGotFocus Method

Called when the manipulator receives input focus.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onGotFocus ()
```

See Also

Manipulator Members
Manipulator Class
com.mindfusion.diagramming Namespace

Manipulator.onLostFocus Method

Called when the manipulator loses the input focus.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onLostFocus ()
```

See Also

Manipulator Members
Manipulator Class
com.mindfusion.diagramming Namespace

Manipulator.onPointerDown Method

Called when the left mouse button is pressed while the pointer is over this manipulator.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void onPointerDown (
    Point2D pointerPosition
)
```

Parameters

mousePosition
A Point2D instance that specifies the current mouse position.

See Also

Manipulator Members
Manipulator Class
com.mindfusion.diagramming Namespace

Manipulator.onPointerMove Method

Called when the mouse is moved while this manipulator tracks the mouse events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void onPointerMove (
    Point2D pointerPosition
)
```

Parameters

mousePosition
A Point2D instance that specifies the current mouse position.

See Also

Manipulator Members
Manipulator Class
com.mindfusion.diagramming Namespace

Manipulator.onPointerUp Method

Called when the left mouse button is released while this manipulator tracks the mouse events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onPointerUp (
    Point2D pointerPosition
)
```

Parameters

mousePosition
A Point2D instance that specifies the current mouse position.

See Also

Manipulator Members
Manipulator Class
com.mindfusion.diagramming Namespace

Manipulator.setMouseCursor Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CursorHint setMouseCursor (
    Point2D mousePosition
)
```

Parameters

mousePosition

Return Value

See Also

Manipulator Members
Manipulator Class
com.mindfusion.diagramming Namespace

MarkStyle Enumeration

The members of this enumeration specify what marks should be drawn where the anchor points of a node are located. They can be used as parameters of the constructors and the setMarkStyle method of the AnchorPoint class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public enum MarkStyle
```

Members

	Member name	Description
	Circle	Draw a circle at the anchor point location.
	Cross	Draw a cross at the anchor point location.
	Custom	Custom-draw the anchor point.
	None	No visual indication for the anchor point.
	Rectangle	Draw a rectangle at the anchor point location.
	X	Draw an X at the anchor point location.

See Also

com.mindfusion.diagramming Namespace

MeasureUnit Class

Specifies units of measure.

Syntax

Java
`public class MeasureUnit`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.MeasureUnit

See Also

MeasureUnit Members
com.mindfusion.diagramming Namespace

MeasureUnit Members

Specifies units of measure.

The following tables list the members exposed by the MeasureUnit type.

Public Constructors

	Name	Description
	MeasureUnit	Overloaded.

Public Fields

	Name	Description
	Centimeter	
	Document	Specifies document units (1/300 inch) as the unit of measure.
	Inch	Specifies inches as the unit of measure.
	Millimeter	Specifies millimeters as the unit of measure.
	Percent	Specifies percents as the unit of measure.
	Pixel	Specifies device pixels as the unit of measure.
	Point	Specifies printer's points (1/72 inch) as the unit of measure.
	WpfPoint	Specifies device-independent pixels (1/96 inch) as the unit of measure.

Public Methods

	Name	Description
	convert	Overloaded.
	equals	**Object.equals** override.
	fromGraphicsUnit	Returns the measure unit corresponding to the specified graphics unit.
	fromId	Overloaded.
	getAmount	Gets the unit's amount.
	getId	Gets the unit identifier.
	getName	Gets the name of the unit.
	hashCode	**Object.hashCode** override.
	op_Equality	Compares two **MeasureUnit** objects for equality.
	op_Inequality	Compares two **MeasureUnit** objects for inequality.
	toString	**Object.toString** override.

See Also

MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit Fields

MeasureUnit.Centimeter Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static final MeasureUnit Centimeter`

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.Document Field

Specifies document units (1/300 inch) as the unit of measure.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static final MeasureUnit Document`

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.Inch Field

Specifies inches as the unit of measure.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static final MeasureUnit Inch`

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.Millimeter Field

Specifies millimeters as the unit of measure.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static final MeasureUnit Millimeter
```

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.Percent Field

Specifies percents as the unit of measure.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static final MeasureUnit Percent
```

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.Pixel Field

Specifies device pixels as the unit of measure.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static final MeasureUnit Pixel
```

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.Point Field

Specifies printer's points (1/72 inch) as the unit of measure.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static final MeasureUnit Point`

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.WpfPoint Field

Specifies device-independent pixels (1/96 inch) as the unit of measure.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static final MeasureUnit WpfPoint`

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit Constructor

Overload List

Name	Description
MeasureUnit (String, double)	Initializes a new instance of the MeasureUnit class with the specified amount.
MeasureUnit (String, double, int)	Initializes a new instance of the **MeasureUnit** class with the specified amount.
MeasureUnit (String, MeasureUnit, double)	Initializes a new instance of the **MeasureUnit** class with the specified unit of measure as a base.
MeasureUnit (String, MeasureUnit, double, int)	Initializes a new instance of the **MeasureUnit** class with the specified unit of measure as a base.

See Also

MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit Constructor (String, double)

Initializes a new instance of the MeasureUnit class with the specified amount.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public MeasureUnit (
    String name,
    double unitsPerInch
)
```

Parameters

name
The name of the new unit.

unitsPerInch
The amount of the new unit that is equal to one inch.

See Also

MeasureUnit Constructor Overload List
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit Constructor (String, double, int)

Initializes a new instance of the MeasureUnit class with the specified amount.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public MeasureUnit (
    String name,
    double unitsPerInch,
    int standardDivisions
)
```

Parameters

name
The name of the new unit.

unitsPerInch
The amount of the new unit that is equal to one inch.

standardDivisions
The number of divisions of the new unit.

See Also

MeasureUnit Constructor Overload List
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit Constructor (String, MeasureUnit, double)

Initializes a new instance of the MeasureUnit class with the specified unit of measure as a base.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public MeasureUnit (
    String name,
    MeasureUnit baseUnit,
    double scale
)
```

Parameters

name
The name of the new unit.

baseUnit
The base of the new unit.

scale
The scale of the new unit, relatively to the base.

See Also

MeasureUnit Constructor Overload List
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit Constructor (String, MeasureUnit, double, int)

Initializes a new instance of the MeasureUnit class with the specified unit of measure as a base.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public MeasureUnit (
    String name,
    MeasureUnit baseUnit,
    double scale,
    int standardDivisions
)
```

Parameters

name
The name of the new unit.

baseUnit
The base of the new unit.

scale
The scale of the new unit, relatively to the base.

standardDivisions
The number of divisions of the new unit.

See Also

MeasureUnit Constructor Overload List
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit Methods

MeasureUnit.convert Method

Overload List

Name	Description
MeasureUnit.convert (double, MeasureUnit, DiagramView)	Converts the specified value from this unit to the specified unit.
MeasureUnit.convert (Point2D, MeasureUnit, DiagramView)	Converts the specified point from this unit to the specified unit.
MeasureUnit.convert (Rectangle2D, MeasureUnit, DiagramView)	Converts the specified rectangle from this unit to the specified unit.

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.convert Method (double, MeasureUnit, DiagramView)

Converts the specified value from this unit to the specified unit.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public double convert (
    double value,
    MeasureUnit targetUnit,
    DiagramView view
)
```

Parameters

value
The value to convert, expressed in the current measure unit.

targetUnit
The target measure unit.

view
A parameter that is used when converting to special units (such as percents).

Return Value

The converted value.

See Also

convert Method Overload List
MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.convert Method (Point2D, MeasureUnit, DiagramView)

Converts the specified point from this unit to the specified unit.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Point2D convert (
    Point2D p,
    MeasureUnit targetUnit,
    DiagramView view
)
```

Parameters

p
The point to convert, expressed in the current measure unit.

targetUnit
The target measure unit.

view
A parameter that is used when converting to special units (such as percents).

Return Value

The converted point.

See Also

convert Method Overload List
MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.convert Method (Rectangle2D, MeasureUnit, DiagramView)

Converts the specified rectangle from this unit to the specified unit.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D convert (
    Rectangle2D r,
    MeasureUnit targetUnit,
    DiagramView view
)
```

Parameters

r
The rectangle to convert, expressed in the current measure unit.

targetUnit
The target measure unit.

view
A parameter that is used when converting to special units (such as percents).

Return Value

The converted rectangle.

See Also

convert Method Overload List
MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.equals Method

Object.equals override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean equals (
    Object obj
)
```

Parameters

obj
The object to compare with the current unit.

Return Value

true if the specified object is the same as or is equal to the current unit; otherwise, **false**.

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.fromGraphicsUnit Method

Returns the measure unit corresponding to the specified graphics unit.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static MeasureUnit fromGraphicsUnit (
    GraphicsUnit unit
)
```

Parameters

unit
One of the GraphicsUnit values.

Return Value

The built-in MeasureUnit corresponding to the specified graphics unit. If *unit* is World, this method returns **null**. If *unit* is Display, this method returns Pixel.

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.fromId Method

Overload List

Name	Description

MeasureUnit.fromId (GraphicsUnit)	Returns a MeasureUnit from its integer identifier.
MeasureUnit.fromId (int)	

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.fromId Method (GraphicsUnit)

Returns a MeasureUnit from its integer identifier.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static MeasureUnit fromId (
    GraphicsUnit id
)
```

Parameters

id
The identifier of one of the built-in measure units.

Return Value

The built-in MeasureUnit corresponding to the specified identifier.

See Also

fromId Method Overload List
MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.fromId Method (int)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static MeasureUnit fromId (
    int id
)
```

Parameters

id

Return Value

See Also

fromId Method Overload List
MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.getAmount Method

Gets the unit's amount.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public double getAmount ()`

Return Value

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.getId Method

Gets the unit identifier.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public int getId ()`

Return Value

Remarks

This property returns -1 for custom MeasureUnit objects.

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.getName Method

Gets the name of the unit.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getName ()
```

Return Value

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.hashCode Method

Object.hashCode override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int hashCode ()
```

Return Value

A hash code for the current unit.

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.op_Equality Method

Compares two MeasureUnit objects for equality.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static boolean op_Equality (
    MeasureUnit a,
    MeasureUnit b
)
```

Parameters

a

The first MeasureUnit to compare.

b

The second **MeasureUnit** to compare.

Return Value

{@code true} if the specified arguments are equal; otherwise, {@code false}.

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.op_Inequality Method

Compares two MeasureUnit objects for inequality.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static boolean op_Inequality (
    MeasureUnit a,
    MeasureUnit b
)
```

Parameters

a

The first MeasureUnit to compare.

b

The second **MeasureUnit** to compare.

Return Value

{@code true} if the specified arguments are not equal; otherwise, {@code false}.

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

MeasureUnit.toString Method

Object.toString override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public String toString ()`

Return Value

The name of the unit.

See Also

MeasureUnit Members
MeasureUnit Class
com.mindfusion.diagramming Namespace

ModificationStart Enumeration

The members of this enumeration specify how users can start modifying an item. They can be used as parameters of the setModificationStart method of the Diagram class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum ModificationStart`

Members

	Member name	Description
	AutoHandles	Modification handles appear automatically around the item that is under the mouse pointer. Users can start modifying items by simply pointing at them and dragging.
	SelectedOnly	Users must first select an item in order to modify it.

See Also

com.mindfusion.diagramming Namespace

ModifierKeyAction Enumeration

Defines the actions that can be assigned to a modifier key such as CTRL or ALT.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum ModifierKeyAction`

Members

	Member name	Description
	ExtendSelection	Similar to Select, but does not deselect currently selected items when they are outside of a newly drawn lasso rectangle.
	Magnify	Magnifies the diagram objects under the mouse while the modifier key is pressed down.
	None	Specifies that a modifier key does not have any specific function assigned to it.
	OverrideBehavior	While the modifier key is pressed down, dragging the mouse starts creating a new item or drawing a selection rectangle instead of modifying a selected item. Otherwise, dragging the mouse could start modification of the selected item.
	Pan	Pan the view if the mouse is dragged while the modifier key is pressed down.
	Select	Start drawing a selection rectangle if the mouse is dragged while a modifier key is pressed down. Toggle the selection if an item is clicked while the key is down.
	Zoom	Start drawing a zoom-lasso if the mouse is dragged while respective modifier key is pressed down.

Remarks

The values from this enumeration can be assigned to the members of the diagram view's ModifierKeyActions.

See Also

com.mindfusion.diagramming Namespace

ModifierKeyActions Class

Maps keyboard modifier keys to special actions in MindFusion.Diagramming, such as panning and drawing selection rectangle.

Syntax

Java
`public class ModifierKeyActions`

Remarks

The ModifierKeyActions property of DiagramView returns an object of this type, letting you specify the modifier key functions for each **DiagramView** instance.

Assign member of the ModifierKeyAction enumeration to the Alt, Control and Shift properties to specify what function is assigned to the ALT, CTRL and SHIFT keys.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ModifierKeyActions

See Also

ModifierKeyActions Members
com.mindfusion.diagramming Namespace

ModifierKeyActions Members

Maps keyboard modifier keys to special actions in MindFusion.Diagramming, such as panning and drawing selection rectangle.

The following tables list the members exposed by the ModifierKeyActions type.

Public Methods

	Name	Description
	getAlt	Gets what action is triggered by the ALT key.
	getControl	Gets what action is triggered by the CTRL key.
	getShift	Gets what action is triggered by the SHIFT key.
	setAlt	Sets what action is triggered by the ALT key.
	setControl	Sets what action is triggered by the CTRL key.
	setShift	Sets what action is triggered by the SHIFT key.

See Also

ModifierKeyActions Class
com.mindfusion.diagramming Namespace

ModifierKeyActions Methods

ModifierKeyActions.getAlt Method

Gets what action is triggered by the ALT key.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ModifierKeyAction getAlt ()
```

Return Value

A member of the ModifierKeyAction enumeration. The default is **Pan**.

Remarks

The value of this property specifies what happens when a user holds down the ALT key and drags the mouse. The default value Pan makes the control enter pan mode, letting the user scroll the diagram contents by dragging it with the mouse.

See Also

ModifierKeyActions Members
ModifierKeyActions Class
com.mindfusion.diagramming Namespace

ModifierKeyActions.getControl Method

Gets what action is triggered by the CTRL key.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ModifierKeyAction getControl ()
```

Return Value

A member of the ModifierKeyAction enumeration. The default is **Select**.

Remarks

The value of this property specifies what happens when a user holds down the CTRL key and drags the mouse. The default value Select makes the control enter selection mode, letting the user draw a lasso rectangle around diagram items in order to select them.

See Also

ModifierKeyActions Members
ModifierKeyActions Class
com.mindfusion.diagramming Namespace

ModifierKeyActions.getShift Method

Gets what action is triggered by the SHIFT key.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ModifierKeyAction getShift ()
```

Return Value

A member of the ModifierKeyAction enumeration. The default is **OverrideBehavior**.

Remarks

The value of this property specifies what happens when a user holds down the SHIFT key and drags the mouse. The default value OverrideBehavior makes the control ignore item's selection handles, thus not allowing modifying a selected item but starts the creation of a new item.

See Also

ModifierKeyActions Members
ModifierKeyActions Class
com.mindfusion.diagramming Namespace

ModifierKeyActions.setAlt Method

Sets what action is triggered by the ALT key.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAlt (
    ModifierKeyAction value
)
```

Parameters

value
A member of the ModifierKeyAction enumeration.

Remarks

The value of this property specifies what happens when a user holds down the ALT key and drags the mouse. The default value Pan makes the control enter pan mode, letting the user scroll the diagram contents by dragging it with the mouse.

See Also

ModifierKeyActions Members
ModifierKeyActions Class
com.mindfusion.diagramming Namespace

ModifierKeyActions.setControl Method

Sets what action is triggered by the CTRL key.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setControl (
    ModifierKeyAction value
)
```

Parameters

value
A member of the ModifierKeyAction enumeration.

Remarks

The value of this property specifies what happens when a user holds down the CTRL key and drags the mouse. The default value Select makes the control enter selection mode, letting the user draw a lasso rectangle around diagram items in order to select them.

See Also

ModifierKeyActions Members
ModifierKeyActions Class
com.mindfusion.diagramming Namespace

ModifierKeyActions.setShift Method

Sets what action is triggered by the SHIFT key.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShift (
    ModifierKeyAction value
)
```

Parameters

value
A member of the ModifierKeyAction enumeration.

Remarks

The value of this property specifies what happens when a user holds down the SHIFT key and drags the mouse. The default value OverrideBehavior makes the control ignore item's selection handles, thus not allowing modifying a selected item but starts the creation of a new item.

See Also

ModifierKeyActions Members
ModifierKeyActions Class

ModifyBehavior Class

Implements the Behavior.Modify behavior.

Syntax

```
Java
public class ModifyBehavior extends BehaviorBase
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.ModifyBehavior

See Also

ModifyBehavior Members
com.mindfusion.diagramming Namespace

ModifyBehavior Members

Implements the Behavior.Modify behavior.

The following tables list the members exposed by the ModifyBehavior type.

Public Constructors

	Name	Description
	ModifyBehavior	Initializes a new instance of the ModifyBehavior class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)

	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override.
	startDraw	
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

ModifyBehavior Class
com.mindfusion.diagramming Namespace

ModifyBehavior Constructor

Initializes a new instance of the ModifyBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected ModifyBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
A DiagramView instance.

See Also

ModifyBehavior Class
com.mindfusion.diagramming Namespace

ModifyBehavior Methods

ModifyBehavior.setMouseCursor Method

BehaviorBase.setMouseCursor override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected CursorHint setMouseCursor (
    Point2D point,
    ByRef<Boolean> startInteraction
)
```

Parameters

point
A Point2D instance that specifies the position of the mouse cursor.

startInteraction
true if the user is going to create, delete, modify or select a DiagramItem; **false** if mouse behavior is not considered; in this case the mouse pointer is set to a default cursor according to the background LaneGrid.

Return Value

A member of the CursorHint enumeration.

See Also

ModifyBehavior Members
ModifyBehavior Class
com.mindfusion.diagramming Namespace

ModifyBehavior.startDraw Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected InteractionState startDraw (
    Point2D point,
    MouseEvent e
)
```

Parameters

point

e

Return Value

See Also

ModifyBehavior Members
ModifyBehavior Class
com.mindfusion.diagramming Namespace

ModifyItemCmd Class

Represents an action that changes the size or position of a diagram item.

Syntax

Java
`public class ModifyItemCmd extends Command`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.ModifyItemCmd
      com.mindfusion.diagramming.ScrollContainerCmd

See Also

ModifyItemCmd Members
com.mindfusion.diagramming Namespace

ModifyItemCmd Members

Represents an action that changes the size or position of a diagram item.

The following tables list the members exposed by the ModifyItemCmd type.

Public Constructors

	Name	Description
	ModifyItemCmd	Initializes a new instance of the **ModifyItemCmd** class.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	This method is called internally by JDiagram when saving item position and size for later undo/redo.
	getItem	Gets a reference to the modified item.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)

	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	This method is called by the UndoManager when redoing actions.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	This method is called by the **UndoManager** when undoing actions.

Protected Methods

	Name	Description
	adopt	
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

ModifyItemCmd Class
com.mindfusion.diagramming Namespace

ModifyItemCmd Constructor

Initializes a new instance of the ModifyItemCmd class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ModifyItemCmd (
    DiagramItem item
)
```

Parameters

item
The item whose modification is represented by this command.

See Also

ModifyItemCmd Class
com.mindfusion.diagramming Namespace

ModifyItemCmd Methods

ModifyItemCmd.adopt Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

protected boolean adopt (
    Command command
)
```

Parameters

command

Return Value

See Also

ModifyItemCmd Members
ModifyItemCmd Class
com.mindfusion.diagramming Namespace

ModifyItemCmd.execute Method

This method is called internally by JDiagram when saving item position and size for later undo/redo.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled
true if the undo manager is enabled at this time, otherwise **false**.

See Also

ModifyItemCmd Members
ModifyItemCmd Class
com.mindfusion.diagramming Namespace

ModifyItemCmd.getItem Method

Gets a reference to the modified item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramItem getItem ()
```

Return Value

See Also

ModifyItemCmd Members
ModifyItemCmd Class
com.mindfusion.diagramming Namespace

ModifyItemCmd.redo Method

This method is called by the UndoManager when redoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void redo ()
```

See Also

ModifyItemCmd Members
ModifyItemCmd Class
com.mindfusion.diagramming Namespace

ModifyItemCmd.undo Method

This method is called by the UndoManager when undoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void undo ()
```

See Also

ModifyItemCmd Members
ModifyItemCmd Class
com.mindfusion.diagramming Namespace

MouseButtonAction Enumeration

Specifies what actions can be associated with the middle and right mouse buttons.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum MouseButtonAction`

Members

	Member name	Description
	Cancel	Cancels the current drawing operation.
	Draw	Draw new items or modify existing items.
	Magnify	Magnifies the items under the mouse while the button is pressed down.
	Pan	Pans the view if the mouse is dragged while the button is pressed down.
	Select	Starts a multiple selection operation.
	Zoom	Draw a zoom-lasso if the mouse is dragged with specified button pressed down.

See Also

com.mindfusion.diagramming Namespace

MouseInputMode Enumeration

The members of this enumeration specify specify how to process mouse actions done over a ControlNode.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum MouseInputMode`

Members

	Member name	Description
	HandledByBoth	Mouse events are sent to both the diagram view and the hosted control.
	HandledByDiagram	Mouse input is processed by the DiagramView.
	HandledByHostedControl	Mouse input is processed by the hosted control.

See Also

MoveNodesBehavior Class

This class is used when the view's Behavior is set to MoveNodes.

Syntax

Java

```
public class MoveNodesBehavior
    extends BehaviorBase
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.MoveNodesBehavior

See Also

MoveNodesBehavior Members
com.mindfusion.diagramming Namespace

MoveNodesBehavior Members

This class is used when the view's Behavior is set to MoveNodes.

The following tables list the members exposed by the MoveNodesBehavior type.

Public Constructors

	Name	Description
	MoveNodesBehavior	Initializes a new instance of the MoveNodesBehavior class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)

	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	
	startDraw	
	startDrawCommon	(Inherited from BehaviorBase.)

See Also

MoveNodesBehavior Class
com.mindfusion.diagramming Namespace

MoveNodesBehavior Constructor

Initializes a new instance of the MoveNodesBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public MoveNodesBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
A DiagramView instance.

See Also

MoveNodesBehavior Class
com.mindfusion.diagramming Namespace

MoveNodesBehavior Methods

MoveNodesBehavior.setMouseCursor Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected CursorHint setMouseCursor (
    Point2D point,
    ByRef<Boolean> startInteraction
)
```

Parameters

point

startInteraction

Return Value

See Also

MoveNodesBehavior Members
MoveNodesBehavior Class
com.mindfusion.diagramming Namespace

MoveNodesBehavior.startDraw Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected InteractionState startDraw (
    Point2D point,
    MouseEvent e
)
```

Parameters

point

e

Return Value

See Also

MoveNodesBehavior Members
MoveNodesBehavior Class
com.mindfusion.diagramming Namespace

MultipleGraphsPlacement Enumeration

The members of this enumeration specify graph orientation and positioning.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum MultipleGraphsPlacement`

Members

	Member name	Description
	Horizontal	Indicates that graphs should be placed in a row.
	MinimalArea	Indicates that graphs should be placed so that they cover minimal area.
	Vertical	Indicates that graphs should be placed in a column.

See Also

com.mindfusion.diagramming Namespace

NamedEnum Interface

Implements XML serialization of enumeration members.

Syntax

Java
`public interface NamedEnum`

See Also

NamedEnum Members
com.mindfusion.diagramming Namespace

NamedEnum Members

Implements XML serialization of enumeration members.

The following tables list the members exposed by the NamedEnum type.

Public Methods

	Name	Description

	getValue	Gets an integer value corresponding to enumeration member.

See Also

NamedEnum Interface
com.mindfusion.diagramming Namespace

NamedEnum Methods

NamedEnum.getValue Method

Gets an integer value corresponding to enumeration member.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
int getValue ()
```

Return Value

An integer value.

See Also

NamedEnum Members
NamedEnum Interface
com.mindfusion.diagramming Namespace

NodeAdjustmentHandle Class

Represents an adjustment handle used to move, resize or rotate a node.

Syntax

Java

```
public class NodeAdjustmentHandle extends AdjustmentHandle
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AdjustmentHandle
    com.mindfusion.diagramming.NodeAdjustmentHandle

See Also

NodeAdjustmentHandle Members
com.mindfusion.diagramming Namespace

NodeAdjustmentHandle Members

Represents an adjustment handle used to move, resize or rotate a node.

The following tables list the members exposed by the NodeAdjustmentHandle type.

Public Constructors

	Name	Description
	NodeAdjustmentHandle	Initializes a new instance of the **NodeAdjustmentHandle** class.

Public Methods

	Name	Description
	getHandleType	Gets the type of this adjustment handle.
	setHandleType	Sets the type of this adjustment handle.

See Also

NodeAdjustmentHandle Class
com.mindfusion.diagramming Namespace

NodeAdjustmentHandle Constructor

Initializes a new instance of the NodeAdjustmentHandle class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeAdjustmentHandle (
    NodeHandleType handleType
)
```

Parameters

handleType
A member of the NodeHandleType enumeration identifying the handle type.

See Also

NodeAdjustmentHandle Class
com.mindfusion.diagramming Namespace

NodeAdjustmentHandle Methods

NodeAdjustmentHandle.getHandleType Method

Gets the type of this adjustment handle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeHandleType getHandleType ()
```

Return Value

A member of the NodeHandleType enumeration.

See Also

NodeAdjustmentHandle Members
NodeAdjustmentHandle Class
com.mindfusion.diagramming Namespace

NodeAdjustmentHandle.setHandleType Method

Sets the type of this adjustment handle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHandleType (
    NodeHandleType handleType
)
```

Parameters

handleType
A member of the NodeHandleType enumeration.

See Also

NodeAdjustmentHandle Members
NodeAdjustmentHandle Class
com.mindfusion.diagramming Namespace

NodeConstraints Class

Represents the movement and size constraints that can be applied to a node.

Syntax

Java

```
public class NodeConstraints implements Externalizable
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.NodeConstraints

See Also

NodeConstraints Members
com.mindfusion.diagramming Namespace

NodeConstraints Members

Represents the movement and size constraints that can be applied to a node.

The following tables list the members exposed by the NodeConstraints type.

Public Constructors

	Name	Description
	NodeConstraints	Initializes a new **NodeConstraints** instance.

Public Methods

	Name	Description
	clone	Creates a copy of this **NodeConstraints** instance.
	getDisableMirroring	Gets a value indicating whether the user can drag a side of the node past its opposite side, so that they switch positions.
	getKeepInsideDiagram	Gets a value indicating whether a node must always stay inside the boundaries of the diagram that contains it.
	getKeepInsideParent	Gets a value indicating whether a node must always stay in the boundaries of its group master node.
	getKeepRatio	Gets a value indicating whether the initial width/height ratio of a node must be preserved.
	getMaxHeight	Gets the largest allowed height for the node.
	getMaxWidth	Gets the largest allowed width for the node.
	getMinHeight	Gets the smallest allowed height for the node.
	getMinWidth	Gets the smallest allowed width for the node.
	getMoveDirection	Gets a value indicating the movement direction constraint.
	loadFromXml	Loads the label from the specified XML element.
	readExternal	Implements Externalizable.
	saveToXml	Saves the label into the specified XML element.

	setDisableMirroring	Sets a value indicating whether the user can drag a side of the node past its opposite side, so that they switch positions.
	setKeepInsideDiagram	Sets a value indicating whether a node must always stay inside the boundaries of the diagram that contains it.
	setKeepInsideParent	Sets a value indicating whether a node must always stay in the boundaries of its group master node.
	setKeepRatio	Sets a value indicating whether the initial width/height ratio of a node must be preserved.
	setMaxHeight	Sets the largest allowed height for the node.
	setMaxWidth	Sets the largest allowed width for the node.
	setMinHeight	Sets the smallest allowed height for the node.
	setMinWidth	Sets the smallest allowed width for the node.
	setMoveDirection	Sets a value indicating the movement direction constraint.
	writeExternal	Implements Externalizable.

See Also

NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints Constructor

Initializes a new NodeConstraints instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeConstraints ()
```

See Also

NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints Methods

NodeConstraints.clone Method

Creates a copy of this NodeConstraints instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Object clone ()
```

Return Value

the new NodeConstraints object.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints.getDisableMirroring Method

Gets a value indicating whether the user can drag a side of the node past its opposite side, so that they switch positions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getDisableMirroring ()
```

Return Value

A value indicating whether the user can drag a side of the node past its opposite side, so that they switch positions.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace
setDisableMirroring Method

NodeConstraints.getKeepInsideDiagram Method

Gets a value indicating whether a node must always stay inside the boundaries of the diagram that contains it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getKeepInsideDiagram ()
```

Return Value

A value indicating whether a node should always stay inside the boundaries of the diagram that contains it.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints.getKeepInsideParent Method

Gets a value indicating whether a node must always stay in the boundaries of its group master node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getKeepInsideParent ()
```

Return Value

A value indicating whether a node should always stay in the boundaries of its group master node.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace
setKeepInsideParent Method

NodeConstraints.getKeepRatio Method

Gets a value indicating whether the initial width/height ratio of a node must be preserved.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getKeepRatio ()
```

Return Value

A value indicating whether the initial width/height ratio of a node should be preserved.

See Also

NodeConstraints Members
NodeConstraints Class

NodeConstraints.getMaxHeight Method

Gets the largest allowed height for the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getMaxHeight ()
```

Return Value

A float value specifying the maximal node height.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints.getMaxWidth Method

Gets the largest allowed width for the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getMaxWidth ()
```

Return Value

A float value specifying the maximal node width.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints.getMinHeight Method

Gets the smallest allowed height for the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getMinHeight ()
```

Return Value

A float value specifying the minimal node height.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints.getMinWidth Method

Gets the smallest allowed width for the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getMinWidth ()
```

Return Value

A float value specifying the minimal node width.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints.getMoveDirection Method

Gets a value indicating the movement direction constraint.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DirectionConstraint getMoveDirection ()
```

Return Value

A member of the DirectionConstraint enumeration.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints.loadFromXml Method

Loads the label from the specified XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An Element instance.

context
A XmlPersistContext instance.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints.saveToXml Method

Saves the label into the specified XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An Element instance.

context
An XmlPersistContext instance.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints.setDisableMirroring Method

Sets a value indicating whether the user can drag a side of the node past its opposite side, so that they switch positions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDisableMirroring (
    boolean value
)
```

Parameters

value
Indicates whether the user can drag a side of the node past its opposite side, so that they switch positions.

See Also

NodeConstraints.setKeepInsideDiagram Method

Sets a value indicating whether a node must always stay inside the boundaries of the diagram that contains it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setKeepInsideDiagram (
    boolean value
)
```

Parameters

value
Indicates whether a node should always stay inside the boundaries of the diagram that contains it.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints.setKeepInsideParent Method

Sets a value indicating whether a node must always stay in the boundaries of its group master node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setKeepInsideParent (
    boolean value
)
```

Parameters

value
Indicates whether a node should always stay in the boundaries of its group master node.

Remarks

This property lets you restrict nodes attached to another node by the attachTo method, and also the children of a ContainerNode, so that users cannot move the attached nodes out of the bounds of their parent.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace
getKeepInsideParent Method

NodeConstraints.setKeepRatio Method

Sets a value indicating whether the initial width/height ratio of a node must be preserved.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setKeepRatio (
    boolean value
)
```

Parameters

value
Indicates whether the initial width/height ratio of a node should be preserved.

Remarks

If you enable this property in an initialization-event handler, the node will have an aspect ratio of 1:1. For example in order to let users draw perfect square or circle shapes, set **KeepRatio** to **true** in the initializeNode handler.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace
getKeepRatio Method

NodeConstraints.setMaxHeight Method

Sets the largest allowed height for the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMaxHeight (
    float value
)
```

Parameters

value
A float value specifying the maximal node height.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints.setMaxWidth Method

Sets the largest allowed width for the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMaxWidth (
    float value
)
```

Parameters

value
A float value specifying the maximal node width.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints.setMinHeight Method

Sets the smallest allowed height for the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMinHeight (
    float value
)
```

Parameters

value
A float value specifying the minimal node height.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints.setMinWidth Method

Sets the smallest allowed width for the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMinWidth (
    float value
)
```

Parameters

value
A float value specifying the minimal node width.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints.setMoveDirection Method

Sets a value indicating the movement direction constraint.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMoveDirection (
    DirectionConstraint value
)
```

Parameters

value
A member of the DirectionConstraint enumeration.

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeConstraints.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

NodeConstraints Members
NodeConstraints Class
com.mindfusion.diagramming Namespace

NodeEffect Class

Represents the base class of all visual effects that can be applied to the nodes in a Diagram. Effects can be applied by adding instances of the concrete effect classes to the Diagram.getNodeEffects collection of the **Diagram**.

Syntax

Java

```
public abstract class NodeEffect implements Externalizable, Cloneable, NotifyPropertyChanged
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.NodeEffect
    com.mindfusion.diagramming.AeroEffect
    com.mindfusion.diagramming.GlassEffect

See Also

NodeEffect Members
com.mindfusion.diagramming Namespace

NodeEffect Members

Represents the base class of all visual effects that can be applied to the nodes in a Diagram. Effects can be applied by adding instances of the concrete effect classes to the Diagram.getNodeEffects collection of the **Diagram**.

The following tables list the members exposed by the NodeEffect type.

Protected Constructors

	Name	Description
	NodeEffect	Initializes a new instance of the **NodeEffect** class.

Public Methods

	Name	Description
	addPropertyChangeListener	
	clone	Cloneable.clone implementation.
	readExternal	**Externalizable.readExternal** implementation.
	removePropertyChangeListener	
	writeExternal	**Externalizable.writeExternal** implementation.

See Also

NodeEffect Class
com.mindfusion.diagramming Namespace

NodeEffect Constructor

Initializes a new instance of the NodeEffect class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`protected NodeEffect ()`

See Also

NodeEffect Class
com.mindfusion.diagramming Namespace

NodeEffect Methods

NodeEffect.addPropertyChangeListener Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addPropertyChangeListener (
    PropertyChangeListener listener
)
```

Parameters

listener

See Also

NodeEffect Members
NodeEffect Class
com.mindfusion.diagramming Namespace

NodeEffect.clone Method

Cloneable.clone implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public abstract Object clone ()
```

Return Value

A new effect that is a copy of this effect.

See Also

NodeEffect Members
NodeEffect Class
com.mindfusion.diagramming Namespace

NodeEffect.readExternal Method

Externalizable.readExternal implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

NodeEffect Members
NodeEffect Class
com.mindfusion.diagramming Namespace

NodeEffect.removePropertyChangeListener Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removePropertyChangeListener (
    PropertyChangeListener listener
)
```

Parameters

listener

See Also

NodeEffect Members
NodeEffect Class
com.mindfusion.diagramming Namespace

NodeEffect.writeExternal Method

Externalizable.writeExternal implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

NodeEffect Members
NodeEffect Class
com.mindfusion.diagramming Namespace

NodeEvent Class

Contains the arguments passed to handlers of node-related events, such as nodeCreated and nodeModified.

Syntax

Java
`public class NodeEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.NodeEvent
      com.mindfusion.diagramming.ContainerChildEvent
      com.mindfusion.diagramming.NodeValidationEvent

See Also

NodeEvent Members
com.mindfusion.diagramming Namespace

NodeEvent Members

Contains the arguments passed to handlers of node-related events, such as nodeCreated and nodeModified.

The following tables list the members exposed by the NodeEvent type.

Public Constructors

	Name	Description
	NodeEvent	Overloaded.

Public Methods

	Name	Description
	getAdjustmentHandle	Gets the adjustment handle being moved by the user.
	getLabel	Gets a NodeLabel related to this event.
	getMouseButton	Gets which mouse button has been pressed.
	getNode	Gets the node for which the event was raised.
	getNodeHandleType	Gets the type of adjustment handle moved by the user.
	getPointerPosition	Gets the current pointer position.
	setAdjustmentHandle	Sets the adjustment handle being moved by the user.
	setPointerPosition	Sets the current pointer position.

See Also

NodeEvent Class
com.mindfusion.diagramming Namespace

NodeEvent Constructor

Overload List

Name	Description
NodeEvent (Object, DiagramNode)	Represents methods that will handle general node related events.
NodeEvent (Object, DiagramNode, int, Point2D)	Initializes a new instance of the NodeEvent class.
NodeEvent (Object, DiagramNode, Point2D, AdjustmentHandle)	Initializes a new instance of the NodeEvent class.

See Also

NodeEvent Class
com.mindfusion.diagramming Namespace

NodeEvent Constructor (Object, DiagramNode)

Represents methods that will handle general node related events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeEvent (
    Object source,
    DiagramNode node
)
```

Parameters

source
The source of the event.

node
The DiagramNode related to the event.

See Also

NodeEvent Constructor Overload List
NodeEvent Class
com.mindfusion.diagramming Namespace

NodeEvent Constructor (Object, DiagramNode, int, Point2D)

Initializes a new instance of the NodeEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeEvent (
    Object source,
    DiagramNode node,
    int mouseButton,
    Point2D mousePosition
)
```

Parameters

source
The source of the event.

node
The DiagramNode related to the event.

mouseButton
One of the **MouseEvent** button constants.

mousePosition
The mouse position related to this event.

See Also

NodeEvent Constructor Overload List
NodeEvent Class
com.mindfusion.diagramming Namespace

NodeEvent Constructor (Object, DiagramNode, Point2D, AdjustmentHandle)

Initializes a new instance of the NodeEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeEvent (
    Object source,
    DiagramNode node,
    Point2D mousePosition,
    AdjustmentHandle adjustmentHandle
)
```

Parameters

source
The source of the event.

node
The DiagramNode related to the event.

mousePosition
The mouse location related to this event.

adjustmentHandle
An instance of the AdjustmentHandle class.

See Also

NodeEvent Constructor Overload List
NodeEvent Class
com.mindfusion.diagramming Namespace

NodeEvent Methods

NodeEvent.getAdjustmentHandle Method

Gets the adjustment handle being moved by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AdjustmentHandle getAdjustmentHandle ()
```

Return Value

An instance of the AdjustmentHandle class.

See Also

NodeEvent Members
NodeEvent Class
com.mindfusion.diagramming Namespace

NodeEvent.getLabel Method

Gets a NodeLabel related to this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeLabel getLabel ()
```

Return Value

A NodeLabel instance.

Remarks

At this time, label is reported by click and text edit events.

See Also

NodeEvent Members
NodeEvent Class
com.mindfusion.diagramming Namespace

NodeEvent.getMouseButton Method

Gets which mouse button has been pressed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getMouseButton ()
```

Return Value

the currently pressed mouse button.

See Also

NodeEvent Members
NodeEvent Class
com.mindfusion.diagramming Namespace

NodeEvent.getNode Method

Gets the node for which the event was raised.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode getNode ()
```

Return Value

An instance of the DiagramNode class.

See Also

NodeEvent Members
NodeEvent Class
com.mindfusion.diagramming Namespace

NodeEvent.getNodeHandleType Method

Gets the type of adjustment handle moved by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public NodeHandleType getNodeHandleType ()
```

Return Value

A member of the NodeHandleType enumeration.

Remarks

This method returns **null** if the event's AdjustmentHandle is a FreeFormHandle.

See Also

NodeEvent Members
NodeEvent Class
com.mindfusion.diagramming Namespace

NodeEvent.getPointerPosition Method

Gets the current pointer position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public Point2D getPointerPosition ()
```

Return Value

A **Point2D** object specifying the current mouse position.

See Also

NodeEvent Members
NodeEvent Class
com.mindfusion.diagramming Namespace

NodeEvent.setAdjustmentHandle Method

Sets the adjustment handle being moved by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAdjustmentHandle (
    AdjustmentHandle adjustmentHandle
)
```

Parameters

adjustmentHandle
An instance of the AdjustmentHandle class.

See Also

NodeEvent Members
NodeEvent Class
com.mindfusion.diagramming Namespace

NodeEvent.setPointerPosition Method

Sets the current pointer position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setPointerPosition (
    Point2D pointerPosition
)
```

Parameters

mousePosition
A Point2D object specifying the current mouse position.

See Also

NodeEvent Members
NodeEvent Class
com.mindfusion.diagramming Namespace

NodeHandleType Enumeration

Identifies the types of selection handles of a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public enum NodeHandleType
```

Members

	Member name	Description
	Move	A central selection handle that can be used to move the node.
	ResizeBottomCenter	A bottom-center handle that can be used to resize the node vertically.
	ResizeBottomLeft	A bottom-left handle that can be used to resize the node.
	ResizeBottomRight	A bottom-right handle that can be used to resize the node.
	ResizeMiddleLeft	A middle-left handle that can be used to resize the node horizontally.
	ResizeMiddleRight	A middle-right handle that can be used to resize the node horizontally.
	ResizeTopCenter	A top-center handle that can be used to resize the node vertically.
	ResizeTopLeft	A top-left handle that can be used to resize the node.
	ResizeTopRight	A top-right handle that can be used to resize the node.
	Rotate	A rotation handle that can be used to rotate the node.

See Also

com.mindfusion.diagramming Namespace

NodeLabel Class

Represents a label displayed by a DiagramNode. New labels can be added to a node by calling the addLabel method.

Syntax

Java

```
public class NodeLabel extends ItemLabel implements Externalizable
```

Remarks

The position of a label is determined by where it is pinned relative to node's bounding box, and offset from the pin point, as set using setCornerPosition, setEdgePosition and setCenterPosition methods. In addition, the HorizontalAlign and VerticalAlign properties specify whether the label is centered on its pin point or aligned to it.

Apart from Text, a label can also display **java.awt.Image** bitmap assigned to the Image property. This lets you draw multiple icons inside a node. If a label contains both image and text, their relative position can be set using the ImageAlign property.

You can let users arrange labels manually by setting the Behavior property of DiagramView to MoveLabels.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ItemLabel
    com.mindfusion.diagramming.NodeLabel

See Also

NodeLabel Members
com.mindfusion.diagramming Namespace
LinkLabel Class

NodeLabel Members

Represents a label displayed by a DiagramNode. New labels can be added to a node by calling the addLabel method.

The following tables list the members exposed by the NodeLabel type.

Public Constructors

	Name	Description
	NodeLabel	Overloaded. Initializes a new instance of the **NodeLabel** class.

Public Methods

	Name	Description
	cancel	Called when drag operation is canceled. (Inherited from ItemLabel.)
	clone	Creates a clone of this label.
	getBrush	Gets the brush used to draw the label's background. (Inherited from ItemLabel.)
	getContentPadding	Gets the distance between Image and Text when both are specified. (Inherited from ItemLabel.)
	getEditRect	Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates). (Inherited from ItemLabel.)
	getEnableWrap	Gets whether the text should wrap to multiple lines. (Inherited from ItemLabel.)
	getFont	Gets the font of the label's text. (Inherited from ItemLabel.)
	getHorizontalAlign	Gets label's horizontal alignment relative to the pin point. (Inherited from ItemLabel.)
	getHorizontalOffset	Gets label's horizontal offset from its pin point. (Inherited from ItemLabel.)
	getImage	Gets the image displayed by this label. (Inherited from ItemLabel.)

	getImageAlign	Gets the alignment of label's image relative to text. (Inherited from ItemLabel.)
	getImageSize	Gets a size that overrides the native image size. (Inherited from ItemLabel.)
	getImageUrl	Gets a URL used to load an image into this label. (Inherited from ItemLabel.)
	getIndex	Gets the index of an edge or point this label is relative to. (Inherited from ItemLabel.)
	getLocked	Gets a value indicating whether users are allowed to edit this label. (Inherited from ItemLabel.)
	getMargin	Gets the text margins size. (Inherited from ItemLabel.)
	getMaxWidth	Gets the maximal width that when reached should cause text to wrap to a new line. (Inherited from ItemLabel.)
	getRelativeTo	Gets the label's relative positioning.
	getText	Gets the label's text. (Inherited from ItemLabel.)
	getTextColor	Gets the color of the label's text. (Inherited from ItemLabel.)
	getTextToEdit	Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when this label is edited in-place. (Inherited from ItemLabel.)
	getVerticalAlign	Gets label's vertical alignment relative to the pin point. (Inherited from ItemLabel.)
	getVerticalOffset	Gets label's vertical offset from its pin point. (Inherited from ItemLabel.)
	onPointerDown	Called when the left mouse button is pressed while the pointer is over this label. (Inherited from ItemLabel.)
	onPointerMove	Called when the mouse is moved while this label tracks the mouse events. (Inherited from ItemLabel.)
	onPointerUp	Called when the left mouse button is released while this label tracks the mouse events. (Inherited from ItemLabel.)
	readExternal	Loads the label from the specified binary stream.
	setBrush	Sets the brush used to draw the label's background. (Inherited from ItemLabel.)
	setCenterPosition	Positions this label relatively to the node center.
	setContentPadding	Sets the distance between **Image** and **Text** when both are specified. (Inherited from ItemLabel.)
	setCornerPosition	Positions this label relatively to the specified corner point.
	setEdgePosition	Positions this label relatively to the specified node edge.
	setEditedText	Implements InplaceEditable.setEditedText. Assigns the edited text to the label after in-place edit operation completes successfully (Inherited from ItemLabel.)
	setEnableWrap	Sets whether the text should wrap to multiple lines. (Inherited from ItemLabel.)

	setFont	Sets the font of the label's text. (Inherited from ItemLabel.)
	setHorizontalAlign	Sets label's horizontal alignment relative to the pin point. (Inherited from ItemLabel.)
	setHorizontalOffset	Sets label's horizontal offset from its pin point. (Inherited from ItemLabel.)
	setImage	Sets the image displayed by this label. (Inherited from ItemLabel.)
	setImageAlign	Sets the alignment of label's image relative to text. (Inherited from ItemLabel.)
	setImageSize	Sets a size that overrides the native image size. (Inherited from ItemLabel.)
	setImageUrl	Sets a URL used to load an image into this label. (Inherited from ItemLabel.)
	setIndex	Sets the index of an edge or point this label is relative to. (Inherited from ItemLabel.)
	setLocked	Sets a value indicating whether users are allowed to edit this label. (Inherited from ItemLabel.)
	setMargin	Sets the text margins size. (Inherited from ItemLabel.)
	setMaxWidth	Sets the maximal width that when reached should cause text to wrap to a new line. (Inherited from ItemLabel.)
	setMouseCursor	Indicates what cursor to display for interactive labels. (Inherited from ItemLabel.)
	setRelativeTo	Sets the label's relative positioning.
	setText	Sets the label's text. (Inherited from ItemLabel.)
	setTextColor	Sets the color of the label's text. (Inherited from ItemLabel.)
	setVerticalAlign	Sets label's vertical alignment relative to the pin point. (Inherited from ItemLabel.)
	setVerticalOffset	Sets label's vertical offset from its pin point. (Inherited from ItemLabel.)
	writeExternal	Saves the label into the specified binary stream.

Protected Methods

	Name	Description
	draw	Draws this label on the specified **Graphics2D** surface. (Inherited from ItemLabel.)
	getItem	Returns the DiagramItem that displays this label. (Inherited from ItemLabel.)
	getLayoutRect	Gets the label's layout rectangle calculated from text length, font and alignment. (Inherited from ItemLabel.)
	getNode	Returns the **DiagramNode** that displays this label.

	loadFromJson	Loads the label from a JSON object.
	loadFromXml	Loads the label from the specified XML element.
	saveToJson	Saves the label as a JSON object.
	saveToXml	Saves the label into the specified XML element.

See Also

NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel Constructor

Initializes a new instance of the NodeLabel class.

Overload List

Name	Description
NodeLabel ()	Used during deserialization.
NodeLabel (DiagramNode)	Initializes a new instance of the **NodeLabel** class.
NodeLabel (DiagramNode, String)	Initializes a new instance of the **NodeLabel** class.

See Also

NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel Constructor ()

Used during deserialization.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public NodeLabel ()`

See Also

NodeLabel Constructor Overload List
NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel Constructor (DiagramNode)

Initializes a new instance of the NodeLabel class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public NodeLabel (
    DiagramNode node
)
```

Parameters

node
The DiagramNode that displays the label.

See Also

NodeLabel Constructor Overload List
NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel Constructor (DiagramNode, String)

Initializes a new instance of the NodeLabel class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public NodeLabel (
    DiagramNode node,
    String text
)
```

Parameters

node
The DiagramNode that displays the label.

text
The label's text.

See Also

NodeLabel Constructor Overload List
NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel Methods

NodeLabel.clone Method

Creates a clone of this label.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public NodeLabel clone ()
```

Return Value

A new NodeLabel instance that is an exact copy of this label.

See Also

NodeLabel Members
NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel.getNode Method

Returns the DiagramNode that displays this label.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected DiagramNode getNode ()
```

Return Value

A DiagramNode instance.

See Also

NodeLabel Members
NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel.getRelativeTo Method

Gets the label's relative positioning.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public RelativeToNode getRelativeTo ()
```

Return Value

A member of the RelativeToNode enumeration. The default is **Center**.

See Also

NodeLabel Members
NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel.loadFromJson Method

Loads the label from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the label's data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

NodeLabel Members
NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel.loadFromXml Method

Loads the label from the specified XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

An **org.w3c.dom.Element** instance.

context
An XmlPersistContext instance.

See Also

NodeLabel Members
NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel.readExternal Method

Loads the label from the specified binary stream.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in
A **java.io.ObjectInput** instance.

See Also

NodeLabel Members
NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel.saveToJson Method

Saves the label as a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject instance to contain the serialized data.

context

A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

NodeLabel Members
NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel.saveToXml Method

Saves the label into the specified XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

An **org.w3c.dom.Element** instance.

context

An XmlPersistContext instance.

See Also

NodeLabel Members
NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel.setCenterPosition Method

Positions this label relatively to the node center.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCenterPosition (
    float dx,
    float dy
)
```

Parameters

dx

Horizontal offset from the center point.

dy
Vertical offset from the center point.

Remarks

This method sets the node's center as label's pin point and assigns specified offsets to HorizontalOffset and VerticalOffset properties.

See Also

NodeLabel Members
NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel.setCornerPosition Method

Positions this label relatively to the specified corner point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCornerPosition (
    int cornerPoint,
    float dx,
    float dy
)
```

Parameters

cornerPoint
The corner point index.

dx
Horizontal offset from the point.

dy
Vertical offset from the point.

Remarks

This method sets node's corner as label's pin point and assigns specified offsets to HorizontalOffset and VerticalOffset properties. The *cornerPoint* index starts counting from top-left corner in clockwise direction:

- 0 desigates top-left corner;
- 1 desigates top-right corner;
- 2 desigates bottom-right corner;
- 3 desigates bottom-left corner;

See Also

NodeLabel Members
NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel.setEdgePosition Method

Positions this label relatively to the specified node edge.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEdgePosition (
    int edge,
    float dx,
    float dy
)
```

Parameters

edge
The edge index.

dx
Horizontal offset from the edge center.

dy
Vertical offset from the edge center.

See Also

NodeLabel Members
NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel.setRelativeTo Method

Sets the label's relative positioning.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRelativeTo (
    RelativeToNode value
)
```

Parameters

value
A member of the RelativeToNode enumeration.

See Also

NodeLabel Members
NodeLabel Class
com.mindfusion.diagramming Namespace

NodeLabel.writeExternal Method

Saves the label into the specified binary stream.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out
A **java.io.ObjectOutput** instance.

See Also

NodeLabel Members
NodeLabel Class
com.mindfusion.diagramming Namespace

NodeListEvent Class

Contains the arguments passed to the NodeSelected and NodeRemoved event handlers.

Syntax

Java

```
public class NodeListEvent
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.NodeListEvent

See Also

NodeListEvent Members
com.mindfusion.diagramming Namespace

NodeListEvent Members

Contains the arguments passed to the NodeSelected and NodeRemoved event handlers.

The following tables list the members exposed by the NodeListEvent type.

Public Constructors

	Name	Description
	NodeListEvent	Overloaded.

Public Methods

	Name	Description
	getIndex	Gets the index of the node within its containing collection.
	getNode	Gets the node related to the event.
	setIndex	Sets the index of the node within its containing collection.

See Also

NodeListEvent Class
com.mindfusion.diagramming Namespace

NodeListEvent Constructor

Overload List

Name	Description
NodeListEvent (DiagramNode)	Initializes a new instance of the NodeListEvent class.
NodeListEvent (DiagramNode, int)	Initializes a new instance of the NodeListEvent class.

See Also

NodeListEvent Class
com.mindfusion.diagramming Namespace

NodeListEvent Constructor (DiagramNode)

Initializes a new instance of the NodeListEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeListEvent (
    DiagramNode node
)
```

Parameters

node

The node related to the event.

See Also

NodeListEvent Constructor Overload List
NodeListEvent Class
com.mindfusion.diagramming Namespace

NodeListEvent Constructor (DiagramNode, int)

Initializes a new instance of the NodeListEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeListEvent (
    DiagramNode node,
    int index
)
```

Parameters

node
The node related to the event.

index
The zero-based index of the node within its containing collection.

See Also

NodeListEvent Constructor Overload List
NodeListEvent Class
com.mindfusion.diagramming Namespace

NodeListEvent Methods

NodeListEvent.getIndex Method

Gets the index of the node within its containing collection.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getIndex ()
```

Return Value

See Also

NodeListEvent Members
NodeListEvent Class
com.mindfusion.diagramming Namespace

NodeListEvent.getNode Method

Gets the node related to the event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode getNode ()
```

Return Value

See Also

NodeListEvent Members
NodeListEvent Class
com.mindfusion.diagramming Namespace

NodeListEvent.setIndex Method

Sets the index of the node within its containing collection.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIndex (
    int value
)
```

Parameters

value

See Also

NodeListEvent Members
NodeListEvent Class
com.mindfusion.diagramming Namespace

NodeListView Class

Represents a list control containing DiagramNode objects. Nodes from the list can be dragged to a Diagram canvas to create new nodes.

Syntax

Java

```
public class NodeListView
    extends JList<DraggedItem>
```

Remarks

Obsolete

This component has been superseded by ItemListView, which can also display DiagramLink objects.

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        javax.swing.JList(E)
          com.mindfusion.diagramming.NodeListView

See Also

NodeListView Members
com.mindfusion.diagramming Namespace

NodeListView Members

Represents a list control containing DiagramNode objects. Nodes from the list can be dragged to a Diagram canvas to create new nodes.

The following tables list the members exposed by the NodeListView type.

Public Constructors

	Name	Description
	NodeListView	Initializes a new instance of the NodeListView class.

Public Methods

	Name	Description
	addNode	Overloaded.
	addNodeListViewListener	Registers listener so that it will receive events when users select or delete nodes from the list.
	addNodes	Overloaded.
	clearNodes	Removes all nodes from the list view.
	getAllowRemove	Gets a value indicating whether to allow deletion of list nodes by pressing Del.

	getDefaultNodeSize	Gets the default size with which nodes dragged onto a diagram will be created.
	getIconMargin	Gets the horizontal and vertical margins around the nodes.
	getIconSize	Gets the size of the nodes displayed in the list.
	getMeasureUnit	Gets the unit of measure used when drawing nodes.
	getNodeAt	Gets the node at the specified position.
	getNodesCount	Gets the number of nodes in the list view.
	getShowLabels	Gets a value indicating whether to show text labels along with icons for each list item.
	insertNode	Overloaded.
	removeNodeAt	Removes the node at the specified position.
	removeNodeListViewListener	Unregisters listener so that it will no longer receive NodeListView events.
	setAllowRemove	Sets a value indicating whether to allow deletion of list nodes by pressing Del.
	setDefaultNodeSize	Sets the default size with which nodes dragged onto a diagram will be created.
	setIconMargin	Sets the horizontal and vertical margins around the nodes.
	setIconSize	Sets the size of the nodes displayed in the list.
	setMeasureUnit	Sets the unit of measure used when drawing nodes.
	setShowLabels	Sets a value specifying whether to show text labels along with icons for each list item.

Protected Methods

	Name	Description
	onComponentResized	
	onItemSelected	
	onKeyPressed	
	onMousePressed	
	onNodeRemoved	
	onNodeSelected	
	updateComponentResize	

See Also

NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView Constructor

Initializes a new instance of the NodeListView class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public NodeListView ()`

See Also

NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView Methods

NodeListView.addNode Method

Overload List

Name	Description
NodeListView.addNode (DiagramNode)	Adds a new node to the end of the list view.
NodeListView.addNode (DiagramNode, String)	Adds a new node to the end of the list view.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.addNode Method (DiagramNode)

Adds a new node to the end of the list view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public void addNode (`
`  DiagramNode node`
`)`

Parameters

node

The node to add.

See Also

addNode Method Overload List
NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.addNode Method (DiagramNode, String)

Adds a new node to the end of the list view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addNode (
    DiagramNode node,
    String label
)
```

Parameters

node
The node to add.

label
The text to be displayed for the node.

See Also

addNode Method Overload List
NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.addNodeListViewListener Method

Registers listener so that it will receive events when users select or delete nodes from the list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addNodeListViewListener (
    NodeListViewListener listener
)
```

Parameters

listener

An object implementing the NodeListViewListener interface.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.addNodes Method

Overload List

Name	Description
NodeListView.addNodes (DiagramNode[], String[])	Adds the specified nodes to the end of the list box.
NodeListView.addNodes (DiagramNodeList)	Adds the specified nodes to the end of the list box.
NodeListView.addNodes (DiagramNodeList, String[])	Adds the specified nodes to the end of the list box.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.addNodes Method (DiagramNode[], String[])

Adds the specified nodes to the end of the list box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addNodes (
    DiagramNode[] nodes,
    String[] labels
)
```

Parameters

nodes
The array of nodes to add.

labels
The array of texts to be displayed for the nodes.

See Also

addNodes Method Overload List
NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.addNodes Method (DiagramNodeList)

Adds the specified nodes to the end of the list box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addNodes (
    DiagramNodeList nodes
)
```

Parameters

nodes
The collection of nodes to add.

See Also

addNodes Method Overload List
NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.addNodes Method (DiagramNodeList, String[])

Adds the specified nodes to the end of the list box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addNodes (
    DiagramNodeList nodes,
    String[] labels
)
```

Parameters

nodes
The collection of nodes to add.

labels
The array of texts to be displayed for the nodes.

See Also

addNodes Method Overload List
NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.clearNodes Method

Removes all nodes from the list view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void clearNodes ()
```

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.getAllowRemove Method

Gets a value indicating whether to allow deletion of list nodes by pressing Del.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getAllowRemove ()
```

Return Value

true to allow node deletion, otherwise false.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.getDefaultNodeSize Method

Gets the default size with which nodes dragged onto a diagram will be created.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension2D getDefaultNodeSize ()
```

Return Value

A Dimension2D instance specifying the size of created nodes.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.getIconMargin Method

Gets the horizontal and vertical margins around the nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension getIconMargin ()
```

Return Value

A Dimension instance specifying the icon margins.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.getIconSize Method

Gets the size of the nodes displayed in the list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension getIconSize ()
```

Return Value

A Dimension instance specifying the node size.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.getMeasureUnit Method

Gets the unit of measure used when drawing nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GraphicsUnit getMeasureUnit ()
```

Return Value

A member of the GraphicsUnit enumeration.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.getNodeAt Method

Gets the node at the specified position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNode getNodeAt (
    int index
)
```

Parameters

index
An integer value specifying the node's index in the list.

Return Value

The DiagramNode at the specified position.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.getNodesCount Method

Gets the number of nodes in the list view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public int getNodesCount ()`

Return Value

Returns the number of nodes in this list view.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.getShowLabels Method

Gets a value indicating whether to show text labels along with icons for each list item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public boolean getShowLabels ()`

Return Value

true if labels are shown.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.insertNode Method

Overload List

Name	Description
NodeListView.insertNode (int, DiagramNode)	Inserts the node at the specified position.

NodeListView.insertNode (int, DiagramNode, String)	Inserts the node at the specified position.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.insertNode Method (int, DiagramNode)

Inserts the node at the specified position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void insertNode (
    int index,
    DiagramNode node
)
```

Parameters

index
The zero-based index at which the node should be inserted.

node
The node to insert.

See Also

insertNode Method Overload List
NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.insertNode Method (int, DiagramNode, String)

Inserts the node at the specified position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void insertNode (
    int index,
    DiagramNode node,
    String label
)
```

Parameters

index
The zero-based index at which the node should be inserted.

node
The node to insert. The text to be displayed for the node.

label
The text to be displayed for the node.

See Also

insertNode Method Overload List
NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.onComponentResized Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onComponentResized ()
```

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.onItemSelected Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onItemSelected (
    ListSelectionEvent e
)
```

Parameters

e

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.onKeyPressed Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onKeyPressed (
    KeyEvent e
)
```

Parameters

e

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.onMousePressed Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onMousePressed (
    MouseEvent e
)
```

Parameters

e

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.onNodeRemoved Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onNodeRemoved (
    NodeListEvent e
)
```

Parameters

e

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.onNodeSelected Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onNodeSelected (
    NodeListEvent e
)
```

Parameters

e

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.removeNodeAt Method

Removes the node at the specified position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeNodeAt (
    int index
)
```

Parameters

index
The zero-based index of the node to remove.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.removeNodeListViewListener Method

Unregisters listener so that it will no longer receive NodeListView events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeNodeListViewListener (
    NodeListViewListener listener
)
```

Parameters

listener
An object implementing the NodeListViewListener interface.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.setAllowRemove Method

Sets a value indicating whether to allow deletion of list nodes by pressing Del.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowRemove (
    boolean value
)
```

Parameters

value
true to allow node deletion, otherwise false.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.setDefaultNodeSize Method

Sets the default size with which nodes dragged onto a diagram will be created.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDefaultNodeSize (
    Dimension2D value
)
```

Parameters

value
A Dimension2D instance specifying the size of created nodes.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.setIconMargin Method

Sets the horizontal and vertical margins around the nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIconMargin (
    Dimension value
)
```

Parameters

value
A Dimension instance specifying the icon margins.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.setIconSize Method

Sets the size of the nodes displayed in the list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIconSize (
    Dimension value
)
```

Parameters

value
A Dimension instance specifying the node size.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.setMeasureUnit Method

Sets the unit of measure used when drawing nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMeasureUnit (
    GraphicsUnit value
)
```

Parameters

value
A member of the GraphicsUnit enumeration.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.setShowLabels Method

Sets a value specifying whether to show text labels along with icons for each list item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setShowLabels (
    boolean value
)
```

Parameters

value
true if text labels must be shown, otherwise false.

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListView.updateComponentResize Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void updateComponentResize ()
```

See Also

NodeListView Members
NodeListView Class
com.mindfusion.diagramming Namespace

NodeListViewAdapter Class

Provides empty implementations for the methods defined in the NodeListViewListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of NodeListViewListener.

Syntax

```
Java
public class NodeListViewAdapter implements NodeListViewListener
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.NodeListViewAdapter

See Also

NodeListViewAdapter Members
com.mindfusion.diagramming Namespace

NodeListViewAdapter Members

Provides empty implementations for the methods defined in the NodeListViewListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of NodeListViewListener.

The following tables list the members exposed by the NodeListViewAdapter type.

Public Constructors

	Name	Description
	NodeListViewAdapter	

Public Methods

	Name	Description
	nodeRemoved	Raised when the user removes a node from the list view.
	nodeSelected	Raised when the user selects a node in the list view.

See Also

NodeListViewAdapter Class
com.mindfusion.diagramming Namespace

NodeListViewAdapter Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public NodeListViewAdapter ()`

See Also

NodeListViewAdapter Class
com.mindfusion.diagramming Namespace

NodeListViewAdapter Methods

NodeListViewAdapter.nodeRemoved Method

Raised when the user removes a node from the list view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeRemoved (
    NodeListEvent e
)
```

Parameters

e

See Also

NodeListViewAdapter Members
NodeListViewAdapter Class
com.mindfusion.diagramming Namespace

NodeListViewAdapter.nodeSelected Method

Raised when the user selects a node in the list view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void nodeSelected (
    NodeListEvent e
)
```

Parameters

e

See Also

NodeListViewAdapter Members
NodeListViewAdapter Class
com.mindfusion.diagramming Namespace

NodeListViewListener Interface

Defines the events that can be raised by NodeListView.

Syntax

Java

```
public interface NodeListViewListener extends EventListener
```

Inheritors

com.mindfusion.diagramming.NodeListViewAdapter

See Also

NodeListViewListener Members
com.mindfusion.diagramming Namespace

NodeListViewListener Members

Defines the events that can be raised by NodeListView.

The following tables list the members exposed by the NodeListViewListener type.

Public Methods

	Name	Description
	nodeRemoved	Raised when the user removes a node from the list view.
	nodeSelected	Raised when the user selects a node in the list view.

See Also

NodeListViewListener Interface
com.mindfusion.diagramming Namespace

NodeListViewListener Methods

NodeListViewListener.nodeRemoved Method

Raised when the user removes a node from the list view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void nodeRemoved (
    NodeListEvent e
)
```

Parameters

e
A NodeListEvent object providing information about the event.

See Also

NodeListViewListener Members
NodeListViewListener Interface
com.mindfusion.diagramming Namespace

NodeListViewListener.nodeSelected Method

Raised when the user selects a node in the list view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

void nodeSelected (
    NodeListEvent e
)
```

Parameters

e
A NodeListEvent object providing information about the event.

See Also

NodeListViewListener Members
NodeListViewListener Interface
com.mindfusion.diagramming Namespace

NodeTransferHandler Class

Implements drag-and-drop transfers from NodeListView.

Syntax

```
Java

public class NodeTransferHandler extends TransferHandler
```

Inheritance Hierarchy

java.lang.Object
  javax.swing.TransferHandler
    com.mindfusion.diagramming.NodeListView.NodeTransferHandler

See Also

NodeTransferHandler Members
com.mindfusion.diagramming Namespace

NodeTransferHandler Members

Implements drag-and-drop transfers from NodeListView.

The following tables list the members exposed by the NodeTransferHandler type.

Public Constructors

	Name	Description
	NodeTransferHandler	

Public Methods

	Name	Description
	getSourceActions	TransferHandler.getSourceActions override.

Protected Methods

	Name	Description
	createTransferable	

See Also

NodeTransferHandler Class
com.mindfusion.diagramming Namespace

NodeTransferHandler Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public NodeTransferHandler ()`

See Also

NodeTransferHandler Class
com.mindfusion.diagramming Namespace

NodeTransferHandler Methods

NodeTransferHandler.createTransferable Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Transferable createTransferable (
    JComponent c
)
```

Parameters

c

Return Value

See Also

NodeTransferHandler Members
NodeTransferHandler Class
com.mindfusion.diagramming Namespace

NodeTransferHandler.getSourceActions Method

TransferHandler.getSourceActions override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getSourceActions (
    JComponent c
)
```

Parameters

c

Return Value

See Also

NodeTransferHandler Members
NodeTransferHandler Class
com.mindfusion.diagramming Namespace

NodeValidationEvent Class

Contains the arguments passed to handlers of node validation events.

Syntax

Java

```
public class NodeValidationEvent extends NodeEvent
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.NodeEvent
      com.mindfusion.diagramming.NodeValidationEvent

See Also

NodeValidationEvent Members
com.mindfusion.diagramming Namespace

NodeValidationEvent Members

Contains the arguments passed to handlers of node validation events.

The following tables list the members exposed by the NodeValidationEvent type.

Public Constructors

	Name	Description
	NodeValidationEvent	Overloaded.

Public Fields

	Name	Description
	label	

Public Methods

	Name	Description
	cancelDrag	Cancels the creation or modification of the node.
	getAdjustmentHandle	Gets the adjustment handle being moved by the user. (Inherited from NodeEvent.)
	getCancel	Gets a value indicating whether to cancel the current operation.
	getLabel	Gets a NodeLabel related to this event.
	getMouseButton	Gets which mouse button has been pressed. (Inherited from NodeEvent.)
	getNode	Gets the node for which the event was raised. (Inherited from NodeEvent.)
	getNodeHandleType	Gets the type of adjustment handle moved by the user. (Inherited from NodeEvent.)
	getPointerPosition	Gets the current pointer position. (Inherited from NodeEvent.)
	getSelectionRectangle	Gets the current selection rectangle.
	setAdjustmentHandle	Sets the adjustment handle being moved by the user. (Inherited from NodeEvent.)

	setCancel	Sets a value indicating whether to cancel the current operation.
	setPointerPosition	Sets the current pointer position. (Inherited from NodeEvent.)

See Also

NodeValidationEvent Class
com.mindfusion.diagramming Namespace

NodeValidationEvent Fields

NodeValidationEvent.label Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeLabel label
```

See Also

NodeValidationEvent Members
NodeValidationEvent Class
com.mindfusion.diagramming Namespace

NodeValidationEvent Constructor

Overload List

Name	Description
NodeValidationEvent (Object, DiagramNode)	Represents methods that will handle node validation events.
NodeValidationEvent (Object, DiagramNode, Point2D, AdjustmentHandle)	
NodeValidationEvent (Object, DiagramNode, Rectangle2D)	

See Also

NodeValidationEvent Class
com.mindfusion.diagramming Namespace

NodeValidationEvent Constructor (Object, DiagramNode)

Represents methods that will handle node validation events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeValidationEvent (
    Object source,
    DiagramNode node
)
```

Parameters

source
The source of the event.

node
A DiagramNode instance.

See Also

NodeValidationEvent Constructor Overload List
NodeValidationEvent Class
com.mindfusion.diagramming Namespace

NodeValidationEvent Constructor (Object, DiagramNode, Point2D, AdjustmentHandle)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeValidationEvent (
    Object source,
    DiagramNode node,
    Point2D mousePosition,
    AdjustmentHandle adjustmentHandle
)
```

Parameters

source

node

mousePosition

adjustmentHandle
An instance of the AdjustmentHandle class.

See Also

NodeValidationEvent Constructor Overload List
NodeValidationEvent Class
com.mindfusion.diagramming Namespace

NodeValidationEvent Constructor (Object, DiagramNode, Rectangle2D)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeValidationEvent (
    Object source,
    DiagramNode node,
    Rectangle2D selectionRectangle
)
```

Parameters

source

node

selectionRectangle

See Also

NodeValidationEvent Constructor Overload List
NodeValidationEvent Class
com.mindfusion.diagramming Namespace

NodeValidationEvent Methods

NodeValidationEvent.cancelDrag Method

Cancels the creation or modification of the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void cancelDrag ()
```

See Also

NodeValidationEvent Members
NodeValidationEvent Class
com.mindfusion.diagramming Namespace

NodeValidationEvent.getCancel Method

Gets a value indicating whether to cancel the current operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getCancel ()
```

Return Value

true to cancel the operation; **false** to approve it.

See Also

NodeValidationEvent Members
NodeValidationEvent Class
com.mindfusion.diagramming Namespace

NodeValidationEvent.getLabel Method

Gets a NodeLabel related to this event.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public NodeLabel getLabel ()
```

Return Value

A NodeLabel instance.

Remarks

This property is set when events are raised for supplementary node labels, e.g. nodeTextEditing firing when user tries to edit a label.

See Also

NodeValidationEvent Members
NodeValidationEvent Class
com.mindfusion.diagramming Namespace
DiagramNode.addLabel Method

NodeValidationEvent.getSelectionRectangle Method

Gets the current selection rectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Rectangle2D getSelectionRectangle ()
```

Return Value

A **Rectangle2D** instance representing the selection rectangle.

See Also

NodeValidationEvent Members
NodeValidationEvent Class
com.mindfusion.diagramming Namespace

NodeValidationEvent.setCancel Method

Sets a value indicating whether to cancel the current operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setCancel (
    boolean cancel
)
```

Parameters

cancel
true to cancel the operation; **false** to approve it.

See Also

NodeValidationEvent Members
NodeValidationEvent Class
com.mindfusion.diagramming Namespace

NotifyPropertyChanged Interface

Defines the interface for subscribing to property change events.

Syntax

```
Java
public interface NotifyPropertyChanged
```

Inheritors

com.mindfusion.diagramming.DiagramBookmark
com.mindfusion.diagramming.DiagramPage
com.mindfusion.diagramming.NodeEffect
com.mindfusion.diagramming.Style

See Also

NotifyPropertyChanged Members
com.mindfusion.diagramming Namespace

NotifyPropertyChanged Members

Defines the interface for subscribing to property change events.

The following tables list the members exposed by the NotifyPropertyChanged type.

Public Methods

	Name	Description
	addPropertyChangeListener	Registers a PropertyChangeListener.
	removePropertyChangeListener	Unregisters a PropertyChangeListener.

See Also

NotifyPropertyChanged Interface
com.mindfusion.diagramming Namespace

NotifyPropertyChanged Methods

NotifyPropertyChanged.addPropertyChangeListener Method

Registers a PropertyChangeListener.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void addPropertyChangeListener (
    PropertyChangeListener listener
)
```

Parameters

listener
An object implementing the PropertyChangeListener interface.

See Also

NotifyPropertyChanged Members
NotifyPropertyChanged Interface
com.mindfusion.diagramming Namespace

NotifyPropertyChanged.removePropertyChangeListener Method

Unregisters a PropertyChangeListener.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void removePropertyChangeListener (
    PropertyChangeListener listener
)
```

Parameters

listener
An object implementing the PropertyChangeListener interface.

See Also

NotifyPropertyChanged Members
NotifyPropertyChanged Interface
com.mindfusion.diagramming Namespace

OneWayLayout Class

Implements a one-way graph layout algorithm. The one-way layout ensures that links enter into nodes from the same general direction and exit them from the opposite side. If the graph contains cycles, some links bend around the nodes to keep the enter/exit direction consistent. The algorithm aims to minimize the number of such links.

Syntax

Java

```
public class OneWayLayout extends AbstractLayout
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AbstractLayout
    com.mindfusion.diagramming.OneWayLayout

See Also

OneWayLayout Members
com.mindfusion.diagramming Namespace

OneWayLayout Members

Implements a one-way graph layout algorithm. The one-way layout ensures that links enter into nodes from the same general direction and exit them from the opposite side. If the graph contains cycles, some links bend around the nodes to keep the enter/exit direction consistent. The algorithm aims to minimize the number of such links.

The following tables list the members exposed by the OneWayLayout type.

Public Constructors

	Name	Description
	OneWayLayout	Initializes a new instance of the **OneWayLayout** class with the default settings.

Public Methods

	Name	Description
	arrange	Applies the layout to the specified diagram.
	getAnchoring	Gets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	getGrowToFit	Gets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	getKeepGroupLayout	Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	getLayoutLink	Gets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	getLayoutNode	Gets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	getMultipleGraphsPlacement	Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	getNodeDistance	Gets the minimum spacing between adjacent nodes in the final layout.
	getOrientation	Gets the orientation of the arranged graph.
	getProgress	Gets the progress callback delegate. (Inherited from AbstractLayout.)
	getRoundedLinks	Gets a value indicating whether the layout should smooth link bends.
	init	Returns an OneWayLayoutBuilder object used to configure this OneWayLayout instance.

	removeMidleSegmentPoint	(Inherited from AbstractLayout.)
	setAnchoring	Sets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	setGrowToFit	Sets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	setKeepGroupLayout	Sets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	setLayoutLink	Sets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	setLayoutNode	Sets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	setMultipleGraphsPlacement	Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	setNodeDistance	Sets the minimum spacing between adjacent nodes in the final layout.
	setOrientation	Sets the orientation of the arranged graph.
	setProgress	Sets the progress callback delegate. (Inherited from AbstractLayout.)
	setRoundedLinks	Sets a value indicating whether the layout should smooth link bends.
	with	Returns an OneWayLayoutBuilder object used to configure and create new OneWayLayout instances.

Protected Methods

	Name	Description
	getDefaultMarginValue	Gets the default value of the **Margins** property.

See Also

OneWayLayout Class
com.mindfusion.diagramming Namespace

OneWayLayout Constructor

Initializes a new instance of the OneWayLayout class with the default settings.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public OneWayLayout ()
```

See Also

OneWayLayout Class
com.mindfusion.diagramming Namespace

OneWayLayout Methods

OneWayLayout.arrange Method

Applies the layout to the specified diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean arrange (
    Diagram diagram,
    DiagramItemList items
)
```

Parameters

diagram

items

Return Value

See Also

OneWayLayout Members
OneWayLayout Class
com.mindfusion.diagramming Namespace

OneWayLayout.getDefaultMarginValue Method

Gets the default value of the Margins property.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected XDimension2D.Double getDefaultMarginValue ()
```

Return Value

See Also

OneWayLayout Members
OneWayLayout Class
com.mindfusion.diagramming Namespace

OneWayLayout.getNodeDistance Method

Gets the minimum spacing between adjacent nodes in the final layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getNodeDistance ()
```

Return Value

A **float** value specifying the desired distance between nodes.

See Also

OneWayLayout Members
OneWayLayout Class
com.mindfusion.diagramming Namespace

OneWayLayout.getOrientation Method

Gets the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Orientation getOrientation ()
```

Return Value

A member of the Orientation enumeration.

See Also

OneWayLayout Members
OneWayLayout Class
com.mindfusion.diagramming Namespace

OneWayLayout.getRoundedLinks Method

Gets a value indicating whether the layout should smooth link bends.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getRoundedLinks ()
```

Return Value

true to set the links' Shape to Bezier, otherwise **false**.

See Also

OneWayLayout Members
OneWayLayout Class
com.mindfusion.diagramming Namespace

OneWayLayout.init Method

Returns an OneWayLayoutBuilder object used to configure this OneWayLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public OneWayLayoutBuilder init ()
```

Return Value

An **OneWayLayoutBuilder** instance.

See Also

OneWayLayout Members
OneWayLayout Class
com.mindfusion.diagramming Namespace

OneWayLayout.setNodeDistance Method

Sets the minimum spacing between adjacent nodes in the final layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setNodeDistance (
    float value
)
```

Parameters

value
A **float** value specifying the desired distance between nodes.

See Also

OneWayLayout Members
OneWayLayout Class
com.mindfusion.diagramming Namespace

OneWayLayout.setOrientation Method

Sets the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value
A member of the Orientation enumeration.

See Also

OneWayLayout Members
OneWayLayout Class
com.mindfusion.diagramming Namespace

OneWayLayout.setRoundedLinks Method

Sets a value indicating whether the layout should smooth link bends.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRoundedLinks (
    boolean value
)
```

Parameters

value
true to set the links' Shape to Bezier, otherwise **false**.

See Also

OneWayLayout Members
OneWayLayout Class
com.mindfusion.diagramming Namespace

OneWayLayout.with Method

Returns an OneWayLayoutBuilder object used to configure and create new OneWayLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static OneWayLayoutBuilder with ()`

Return Value

An **OneWayLayoutBuilder** instance.

See Also

OneWayLayout Members
OneWayLayout Class
com.mindfusion.diagramming Namespace

Orientation Enumeration

The members of this enumeration specify what orientation a graphic element should have - vertical, horizontal, or one determined automatically by JDiagram. They can be used as parameters of the setStartOrientation and setEndOrientation methods of RoutingOptions and the setCascadeOrientation method of the DiagramLink class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum Orientation`

Members

	Member name	Description
	Auto	JDiagram should select a proper orientation.
	Horizontal	Specifies horizontal orientation.

	Vertical	Specifies vertical orientation.

See Also

com.mindfusion.diagramming Namespace

OrthogonalLayout Class

Implements an orthogonal graph layout algorithm. Each link is drawn as a chain of alternating horizontal and vertical segments. Nodes are placed in a way that facilitates few links bends and crossings.

Syntax

Java
`public class OrthogonalLayout extends AbstractLayout`

Remarks

This algorithm is designed for planar graphs where the nodes have at most four incident links, and produces best results with such graphs as input. It can arrange any arbitrary graph as well, by adding some dummy nodes and links to planarize the graph and reduce its vertex degree, and removing them after the layout. However this might lead to using larger area than necessary, due to the space occupied by dummy elements.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AbstractLayout
    com.mindfusion.diagramming.OrthogonalLayout

See Also

OrthogonalLayout Members
com.mindfusion.diagramming Namespace

OrthogonalLayout Members

Implements an orthogonal graph layout algorithm. Each link is drawn as a chain of alternating horizontal and vertical segments. Nodes are placed in a way that facilitates few links bends and crossings.

The following tables list the members exposed by the OrthogonalLayout type.

Public Constructors

	Name	Description
	OrthogonalLayout	Initializes a new instance of the OrthogonalLayout class.

Public Methods

	Name	Description

	arrange	Applies the layout on the specified subset of items from the specified Diagram instance.
	getAnchoring	Gets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	getDirected	Gets a value indicating whether the graph being laid out is directed.
	getGrowToFit	Gets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	getKeepGroupLayout	Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	getLayoutLink	Gets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	getLayoutNode	Gets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	getMinimizeLinkBends	
	getMinLaneSize	Gets a value indicating the minimum size of a lane.
	getMultipleGraphsPlacement	Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	getPadding	Gets a value indicating how much space to leave between nodes in adjacent lanes.
	getProgress	Gets the progress callback delegate. (Inherited from AbstractLayout.)
	getRefine	Gets a value indicating whether to refine the layout.
	init	Returns an OrthogonalLayoutBuilder object used to configure this OrthogonalLayout instance.
	removeMidleSegmentPoint	(Inherited from AbstractLayout.)
	setAnchoring	Sets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	setDirected	Sets a value indicating whether the graph being laid out is directed.
	setGrowToFit	Sets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	setKeepGroupLayout	Sets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)

	setLayoutLink	Sets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	setLayoutNode	Sets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	setMinimizeLinkBends	Sets a value indicating whether the layout should attempt to minimize link bends.
	setMinLaneSize	Sets a value indicating the minimum size of a lane.
	setMultipleGraphsPlacement	Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	setPadding	Sets a value indicating how much space to leave between nodes in adjacent lanes.
	setProgress	Sets the progress callback delegate. (Inherited from AbstractLayout.)
	setRefine	Sets a value indicating whether to refine the layout.
S	with	Returns an OrthogonalLayoutBuilder object used to configure and create new OrthogonalLayout instances.

See Also

OrthogonalLayout Class
com.mindfusion.diagramming Namespace

OrthogonalLayout Constructor

Initializes a new instance of the OrthogonalLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public OrthogonalLayout ()
```

See Also

OrthogonalLayout Class
com.mindfusion.diagramming Namespace

OrthogonalLayout Methods

OrthogonalLayout.arrange Method

Applies the layout on the specified subset of items from the specified Diagram instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram diagram,
    DiagramItemList items
)
```

Parameters

diagram
The Diagram that should be arranged.

items
A collection of nodes and links from diagram that define the subgraph to arrange.

Return Value

This method always returns **true**.

See Also

OrthogonalLayout Members
OrthogonalLayout Class
com.mindfusion.diagramming Namespace

OrthogonalLayout.getDirected Method

Gets a value indicating whether the graph being laid out is directed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getDirected ()
```

Return Value

true if the direction of graph edges should be considered, **false** if it is ignored; the default value is **false**.

See Also

OrthogonalLayout Members
OrthogonalLayout Class
com.mindfusion.diagramming Namespace

OrthogonalLayout.getMinimizeLinkBends Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getMinimizeLinkBends ()
```

Return Value

Gets a value indicating whether the layout should attempt to minimize link bends.

Remarks

If this option is disabled, the layout class applies a fast linear time algorithm, however the layouts produced usually contain more bending links and occupy more space. If enabled, the layout class applies an algorithm of polynomial complexity and runs much slower.

See Also

OrthogonalLayout Members
OrthogonalLayout Class
com.mindfusion.diagramming Namespace

OrthogonalLayout.getMinLaneSize Method

Gets a value indicating the minimum size of a lane.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getMinLaneSize ()
```

Return Value

A float value specifying the minimum lane size. The default value is 10.

Remarks

The result of the layout's arrange method is a grid that contains the diagram's nodes and links. This property specifies the size of lanes which does not contain nodes, but only links.

See Also

OrthogonalLayout Members
OrthogonalLayout Class
com.mindfusion.diagramming Namespace

OrthogonalLayout.getPadding Method

Gets a value indicating how much space to leave between nodes in adjacent lanes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getPadding ()
```

Return Value

A float value specifying the padding. The default is 15.

See Also

OrthogonalLayout Members
OrthogonalLayout Class
com.mindfusion.diagramming Namespace

OrthogonalLayout.getRefine Method

Gets a value indicating whether to refine the layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getRefine ()
```

Return Value

true to run a refinement pass, otherwise **false**. The default value is **true**.

See Also

OrthogonalLayout Members
OrthogonalLayout Class
com.mindfusion.diagramming Namespace

OrthogonalLayout.init Method

Returns an OrthogonalLayoutBuilder object used to configure this OrthogonalLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public OrthogonalLayoutBuilder init ()
```

Return Value

An **OrthogonalLayoutBuilder** instance.

See Also

OrthogonalLayout Members
OrthogonalLayout Class
com.mindfusion.diagramming Namespace

OrthogonalLayout.setDirected Method

Sets a value indicating whether the graph being laid out is directed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDirected (
    boolean directed
)
```

Parameters

directed
true to consider the direction of graph edges, **false** to ignore it; the default value is **false**.

See Also

OrthogonalLayout Members
OrthogonalLayout Class
com.mindfusion.diagramming Namespace

OrthogonalLayout.setMinimizeLinkBends Method

Sets a value indicating whether the layout should attempt to minimize link bends.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMinimizeLinkBends (
    boolean value
)
```

Parameters

value
true to minimize link bends, otherwise **false**. The default value is **true**.

Remarks

If this option is disabled, the layout class applies a fast linear time algorithm, however the layouts produced usually contain more bending links and occupy more space. If enabled, the layout class applies an algorithm of polynomial complexity and runs much slower.

See Also

OrthogonalLayout Members
OrthogonalLayout Class
com.mindfusion.diagramming Namespace

OrthogonalLayout.setMinLaneSize Method

Sets a value indicating the minimum size of a lane.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMinLaneSize (
    float value
)
```

Parameters

value
A float value specifying the minimum lane size. The default value is 10.

Remarks

The result of the layout's arrange is a grid that contains the diagram's nodes and links. This property specifies the size of lanes which does not contain nodes, but only links.

See Also

OrthogonalLayout Members
OrthogonalLayout Class
com.mindfusion.diagramming Namespace

OrthogonalLayout.setPadding Method

Sets a value indicating how much space to leave between nodes in adjacent lanes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPadding (
    float padding
)
```

Parameters

padding
A float value specifying the padding. The default is 15.

See Also

OrthogonalLayout Members
OrthogonalLayout Class
com.mindfusion.diagramming Namespace

OrthogonalLayout.setRefine Method

Sets a value indicating whether to refine the layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRefine (
    boolean refine
)
```

Parameters

refine
true to run a refinement pass, otherwise **false**. The default value is **true**.

See Also

OrthogonalLayout Members
OrthogonalLayout Class
com.mindfusion.diagramming Namespace

OrthogonalLayout.with Method

Returns an OrthogonalLayoutBuilder object used to configure and create new OrthogonalLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static OrthogonalLayoutBuilder with ()
```

Return Value

An **OrthogonalLayoutBuilder** instance.

See Also

OrthogonalLayout Members
OrthogonalLayout Class
com.mindfusion.diagramming Namespace

OrthogonalRouter Class

Implements an orthogonal link routing algorithm.

Syntax

Java
`public class OrthogonalRouter extends AbstractLayout`

Remarks

OrthogonalRouter is a secondary layout algorithm that can be used to arrange links after an initial node arrangement has already been applied. The orthogonal layout is useful when there are much more links than nodes in a graph. The algorithm strives to achieve the following criteria, while preserving as much of the initial node configuration as possible.

- links must not overlap;
- only vertical and horizontal routing lines are used;
- graph routing is performed with respect to the specified main layout direction;
- links crossings are minimized;
- bends are minimized;

To arrange a diagram, create an **OrthogonalRouter** instance, set its properties and call the arrange method.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AbstractLayout
    com.mindfusion.diagramming.OrthogonalRouter

See Also

OrthogonalRouter Members
com.mindfusion.diagramming Namespace

OrthogonalRouter Members

Implements an orthogonal link routing algorithm.

The following tables list the members exposed by the OrthogonalRouter type.

Public Constructors

	Name	Description
	OrthogonalRouter	Initializes a new instance of the OrthogonalLayout class.

Public Methods

	Name	Description
	arrange	Applies the layout on the specified subset of items from the specified Diagram instance.
	getAnchoring	Gets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	getBaseLayout	Gets a value indicating whether to arrange nodes or use their current configuration.
	getBendDistance	Gets how far from its adjacent node a link should bend. This should be a value between 0 and 1, specifying a distance proportional to the node size.
	getDirection	Gets the direction of the arranged diagram when BaseLayout is set to Layered. This value is assigned to the Direction property of the base LayeredLayout.
	getEndOrientation	Gets the desired orientation of the last segments of routed links.
	getGridSize	Gets the distance between adjacent grid points when BaseLayout is set to Grid. This value is assigned to the GridSize property of the base GridLayout.
	getGrowToFit	Gets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	getKeepGroupLayout	Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	getLayerDistance	Gets the desired distance between layer axis lines. Specifies the distance between layers when BaseLayout is set to Layered or Cascading.
	getLayoutLink	Gets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	getLayoutNode	Gets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	getMultipleGraphsPlacement	Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	getNodeDistance	Gets the desired distance between adjacent nodes in a layer. Specifies the distance between nodes in the same layer when BaseLayout is set to Layered or Cascading.
	getOrientation	Gets the overall orientation of the arranged diagram when BaseLayout is set to Layered. This value is assigned to the Orientation property of the base LayeredLayout.
	getProgress	Gets the progress callback delegate. (Inherited from AbstractLayout.)

	getPutEndPointsAtNodeBorders	Gets a value indicating whether the end points of a link should be placed at the outlines of the nodes connected by that link.
	getRandomSeed	Gets the randomization seed to use for generating random node positions.
	getRoot	Gets a node indicating which subgraph of the diagram must be laid out. All links and nodes that can be reached from the root by following recursively its links form a graph. If the root is specified, only the graph which it defines is laid out by {#link arrange}.
	getSplitGraph	Gets a value indicating whether unconnected subgraphs should be laid out independently from each other. If this property is set to true, each independent graph in the diagram is laid out in its own layout area. Otherwise all subgraphs are arranged in the same layout area. If a Root node is specified and SplitGraph is true, only the graph that contains the root node will be arranged.
	getStartOrientation	Gets the desired orientation of the first segments of routed links.
S	removeMidleSegmentPoint	(Inherited from AbstractLayout.)
	setAnchoring	Sets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	setBaseLayout	Sets a value indicating whether to arrange nodes or use their current configuration.
	setBendDistance	Sets how far from its adjacent node a link should bend. This should be a value between 0 and 1, specifying a distance proportional to the node size.
	setDirection	Sets the direction of the arranged diagram when BaseLayout is set to Layered. This value is assigned to the Direction property of the base LayeredLayout.
	setEndOrientation	Sets the desired orientation of the last segments of routed links.
	setGridSize	Sets the distance between adjacent grid points when BaseLayout is set to Grid. This value is assigned to the GridSize property of the base GridLayout.
	setGrowToFit	Sets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	setKeepGroupLayout	Sets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	setLayerDistance	Sets the desired distance between layer axis lines. Specifies the distance between layers when BaseLayout is set to Layered or Cascading.
	setLayoutLink	Sets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	setLayoutNode	Sets an object, which is notified when the position of a node is changed by the layout. (Inherited from

		AbstractLayout.)
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	setMultipleGraphsPlacement	Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	setNodeDistance	Sets the desired distance between adjacent nodes in a layer. Specifies the distance between nodes in the same layer when BaseLayout is set to Layered or Cascading.
	setOrientation	Sets the overall orientation of the arranged diagram when BaseLayout is set to Layered. This value is assigned to the Orientation property of the base LayeredLayout.
	setProgress	Sets the progress callback delegate. (Inherited from AbstractLayout.)
	setPutEndPointsAtNodeBorders	Sets a value indicating whether the end points of a link should be placed at the outlines of the nodes connected by that link.
	setRandomSeed	Sets the randomization seed to use for generating random node positions.
	setRoot	Sets a node indicating which subgraph of the diagram must be laid out. All links and nodes that can be reached from the root by following recursively its links form a graph. If the root is specified, only the graph which it defines is laid out by {#link arrange}.
	setSplitGraph	Sets a value indicating whether unconnected subgraphs should be laid out independently from each other. If this property is set to true, each independent graph in the diagram is laid out in its own layout area. Otherwise all subgraphs are arranged in the same layout area. If a Root node is specified and SplitGraph is true, only the graph that contains the root node will be arranged.
	setStartOrientation	Sets the desired orientation of the first segments of routed links.

See Also

OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter Constructor

Initializes a new instance of the OrthogonalLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public OrthogonalRouter ()
```

See Also

OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter Methods

OrthogonalRouter.arrange Method

Applies the layout on the specified subset of items from the specified Diagram instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram diagram,
    DiagramItemList items
)
```

Parameters

diagram
The Diagram that should be arranged.

items
A collection of nodes and links from diagram that define the subgraph to arrange.

Return Value

This method always returns **true**.

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.getBaseLayout Method

Gets a value indicating whether to arrange nodes or use their current configuration.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getBaseLayout ()
```

Return Value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.getBendDistance Method

Gets how far from its adjacent node a link should bend. This should be a value between 0 and 1, specifying a distance proportional to the node size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getBendDistance ()
```

Return Value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.getDirection Method

Gets the direction of the arranged diagram when BaseLayout is set to Layered. This value is assigned to the Direction property of the base LayeredLayout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Direction getDirection ()
```

Return Value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.getEndOrientation Method

Gets the desired orientation of the last segments of routed links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Orientation getEndOrientation ()
```

Return Value

A member of the Orientation enumeration.

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.getGridSize Method

Gets the distance between adjacent grid points when BaseLayout is set to Grid. This value is assigned to the GridSize property of the base GridLayout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getGridSize ()
```

Return Value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.getLayerDistance Method

Gets the desired distance between layer axis lines. Specifies the distance between layers when BaseLayout is set to Layered or Cascading.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getLayerDistance ()
```

Return Value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.getNodeDistance Method

Gets the desired distance between adjacent nodes in a layer. Specifies the distance between nodes in the same layer when BaseLayout is set to Layered or Cascading.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getNodeDistance ()
```

Return Value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.getOrientation Method

Gets the overall orientation of the arranged diagram when BaseLayout is set to Layered. This value is assigned to the Orientation property of the base LayeredLayout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Orientation getOrientation ()
```

Return Value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.getPutEndPointsAtNodeBorders Method

Gets a value indicating whether the end points of a link should be placed at the outlines of the nodes connected by that link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getPutEndPointsAtNodeBorders ()
```

Return Value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.getRandomSeed Method

Gets the randomization seed to use for generating random node positions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getRandomSeed ()
```

Return Value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.getRoot Method

Gets a node indicating which subgraph of the diagram must be laid out. All links and nodes that can be reached from the root by following recursively its links form a graph. If the root is specified, only the graph which it defines is laid out by {#link arrange}.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramNode getRoot ()
```

Return Value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.getSplitGraph Method

Gets a value indicating whether unconnected subgraphs should be laid out independently from each other. If this property is set to true, each independent graph in the diagram is laid out in its own layout area. Otherwise all subgraphs are arranged in the same layout area. If a Root node is specified and SplitGraph is true, only the graph that contains the root node will be arranged.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getSplitGraph ()
```

Return Value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.getStartOrientation Method

Gets the desired orientation of the first segments of routed links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Orientation getStartOrientation ()
```

Return Value

A member of the Orientation enumeration.

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.setBaseLayout Method

Sets a value indicating whether to arrange nodes or use their current configuration.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setBaseLayout (
    int value
)
```

Parameters

value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.setBendDistance Method

Sets how far from its adjacent node a link should bend. This should be a value between 0 and 1, specifying a distance proportional to the node size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setBendDistance (
    float value
)
```

Parameters

value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.setDirection Method

Sets the direction of the arranged diagram when BaseLayout is set to Layered. This value is assigned to the Direction property of the base LayeredLayout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDirection (
    Direction value
)
```

Parameters

value

See Also

setDirection Method Overload List
OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.setEndOrientation Method

Sets the desired orientation of the last segments of routed links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEndOrientation (
    Orientation value
)
```

Parameters

value
A member of the Orientation enumeration.

See Also

setEndOrientation Method Overload List
OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.setGridSize Method

Sets the distance between adjacent grid points when BaseLayout is set to Grid. This value is assigned to the GridSize property of the base GridLayout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setGridSize (
    float value
```

```
)
```

Parameters

value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.setLayerDistance Method

Sets the desired distance between layer axis lines. Specifies the distance between layers when BaseLayout is set to Layered or Cascading.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLayerDistance (
    float value
)
```

Parameters

value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.setNodeDistance Method

Sets the desired distance between adjacent nodes in a layer. Specifies the distance between nodes in the same layer when BaseLayout is set to Layered or Cascading.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setNodeDistance (
    float value
)
```

Parameters

value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.setOrientation Method

Sets the overall orientation of the arranged diagram when BaseLayout is set to Layered. This value is assigned to the Orientation property of the base LayeredLayout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.setPutEndPointsAtNodeBorders Method

Sets a value indicating whether the end points of a link should be placed at the outlines of the nodes connected by that link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPutEndPointsAtNodeBorders (
    boolean value
)
```

Parameters

value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.setRandomSeed Method

Sets the randomization seed to use for generating random node positions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRandomSeed (
    int value
)
```

Parameters

value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.setRoot Method

Sets a node indicating which subgraph of the diagram must be laid out. All links and nodes that can be reached from the root by following recursively its links form a graph. If the root is specified, only the graph which it defines is laid out by {#link arrange}.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRoot (
    DiagramNode value
)
```

Parameters

value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.setSplitGraph Method

Sets a value indicating whether unconnected subgraphs should be laid out independently from each other. If this property is set to true, each independent graph in the diagram is laid out in its own layout area. Otherwise all subgraphs are arranged in the same layout area. If a Root node is specified and SplitGraph is true, only the graph that contains the root node will be arranged.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSplitGraph (
    boolean value
)
```

Parameters

value

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

OrthogonalRouter.setStartOrientation Method

Sets the desired orientation of the first segments of routed links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setStartOrientation (
    Orientation value
)
```

Parameters

value

Remarks

A member of the Orientation enumeration.

See Also

setStartOrientation Method Overload List
OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming Namespace

Overview Class

The Overview control provides a scaled-down view of Diagram contents and allows scrolling and zooming the diagram with the mouse.

Syntax

Java
`public class Overview extends JComponent implements MouseListener, MouseMotionListener`

Remarks

To specify which DiagramView instance is shown in the overview, call the setDiagramView method.

The scale in which the overview control paints items is specified by the setScaleFactor and setFitAll methods. If the FitAll mode is enabled, the whole diagram fits into the overview window.

To display scrollbars, call the setShowScrollbars method.

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        com.mindfusion.diagramming.Overview

See Also

Overview Members
com.mindfusion.diagramming Namespace

Overview Members

The Overview control provides a scaled-down view of Diagram contents and allows scrolling and zooming the diagram with the mouse.

The following tables list the members exposed by the Overview type.

Public Constructors

	Name	Description
	Overview	Initializes a new instance of the **Overview** class.

Public Methods

	Name	Description
	getBackgroundColor	Gets the background color of the overview control.
	getDiagramView	Gets the DiagramView instance whose contents is displayed in the overview.
	getDimColor	Gets a color used to blend with the part of the diagram that is not visible in the **Diagram**'s client rectangle.

	getFitAll	Gets a value that specifies whether to fit the whole diagram inside the overview.
	getScaleFactor	Gets the fixed scale factor that is used when the FitAll mode is disabled.
	getShowScrollbars	Gets a value indicating whether the overview control should display scrollbars.
	getTrackingRectPen	Gets the Pen object used to draw the tracking rectangle border.
	mouseClicked	
	mouseDragged	
	mouseEntered	
	mouseExited	
	mouseMoved	
	mousePressed	
	mouseReleased	
	overviewToDoc	
	paintComponent	
	resumeRepaint	Resumes repainting the control after a suspendRepaint call.
	setBackgroundColor	Sets the background color of the overview control.
	setDiagramView	Sets the **DiagramView** instance whose contents should be displayed in the overview.
	setDimColor	Sets a color used to blend with the part of the diagram that is not visible in the **Diagram**'s client rectangle.
	setFitAll	Sets a value indicating whether to fit the whole diagram inside the overview.
	setScaleFactor	Sets a fixed scale factor that should be used when the **FitAll** mode is disabled.
	setShowScrollbars	Sets a value indicating whether the overview control should display scrollbars.
	setTrackingRectPen	Sets the Pen object used to draw the tracking rectangle border.
	suspendRepaint	Stops repainting the control. This is useful when using the JDiagram API from JavaScript, where the control would be repainted after each script line executes.
	update	Causes the control to recalculate all its internals and repaint its client area.

See Also

Overview Class
com.mindfusion.diagramming Namespace

Overview Constructor

Initializes a new instance of the Overview class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Overview ()
```

See Also

Overview Class
com.mindfusion.diagramming Namespace

Overview Methods

Overview.getBackgroundColor Method

Gets the background color of the overview control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Color getBackgroundColor ()
```

Return Value

A Color object specifying the overview background color.

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.getDiagramView Method

Gets the DiagramView instance whose contents is displayed in the overview.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramView getDiagramView ()
```

Return Value

A DiagramView object representing the diagram.

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.getDimColor Method

Gets a color used to blend with the part of the diagram that is not visible in the Diagram's client rectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getDimColor ()
```

Return Value

A Color object representing the blend color.

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.getFitAll Method

Gets a value that specifies whether to fit the whole diagram inside the overview.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getFitAll ()
```

Return Value

true if the diagram contents fits the overview window size, otherwise **false**.

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.getScaleFactor Method

Gets the fixed scale factor that is used when the FitAll mode is disabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getScaleFactor ()
```

Return Value

A float value specifying the scale factor as percent of the diagram size.

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.getShowScrollbars Method

Gets a value indicating whether the overview control should display scrollbars.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getShowScrollbars ()
```

Return Value

true if the overview control displays scrollbars, otherwise **false**.

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.getTrackingRectPen Method

Gets the Pen object used to draw the tracking rectangle border.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Pen getTrackingRectPen ()
```

Return Value

A Pen instance used to draw the tracking rectangle border lines.

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.mouseClicked Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void mouseClicked (
    MouseEvent e
)
```

Parameters

e

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.mouseDragged Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void mouseDragged (
    MouseEvent e
)
```

Parameters

e

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.mouseEntered Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void mouseEntered (
    MouseEvent e
)
```

Parameters

e

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.mouseExited Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void mouseExited (
    MouseEvent e
)
```

Parameters

e

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.mouseMoved Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void mouseMoved (
    MouseEvent e
)
```

Parameters

e

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.mousePressed Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void mousePressed (
    MouseEvent e
)
```

Parameters

e

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.mouseReleased Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void mouseReleased (
    MouseEvent e
)
```

Parameters

e

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.overviewToDoc Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D overviewToDoc (
    Point point
)
```

Parameters

point

Return Value

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.paintComponent Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void paintComponent (
    Graphics g
)
```

Parameters

g

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.resumeRepaint Method

Resumes repainting the control after a suspendRepaint call.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void resumeRepaint ()
```

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.setBackgroundColor Method

Sets the background color of the overview control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBackgroundColor (
    Color value
)
```

Parameters

value
A Color object representing the overview background color.

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.setDiagramView Method

Sets the DiagramView instance whose contents should be displayed in the overview.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDiagramView (
    DiagramView value
)
```

Parameters

value
A DiagramView object representing the diagram.

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.setDimColor Method

Sets a color used to blend with the part of the diagram that is not visible in the Diagram's client rectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDimColor (
    Color value
)
```

Parameters

value
A Color object representing the blend color.

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.setFitAll Method

Sets a value indicating whether to fit the whole diagram inside the overview.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFitAll (
    boolean value
)
```

Parameters

value
true if the diagram contents should fit the overview window size, otherwise **false**.

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.setScaleFactor Method

Sets a fixed scale factor that should be used when the FitAll mode is disabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setScaleFactor (
    float value
)
```

Parameters

value
A float value specifying the scale factor as percent of the diagram size.

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.setShowScrollbars Method

Sets a value indicating whether the overview control should display scrollbars.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShowScrollbars (
    boolean value
)
```

Parameters

value
true to display scrollbars, otherwise **false**.

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.setTrackingRectPen Method

Sets the Pen object used to draw the tracking rectangle border.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTrackingRectPen (
    Pen value
)
```

Parameters

value
A Pen instance that should be used to draw the tracking rectangle border lines.

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.suspendRepaint Method

Stops repainting the control. This is useful when using the JDiagram API from JavaScript, where the control would be repainted after each script line executes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void suspendRepaint ()
```

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Overview.update Method

Causes the control to recalculate all its internals and repaint its client area.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void update ()
```

See Also

Overview Members
Overview Class
com.mindfusion.diagramming Namespace

Palette Class

A control that displays a palette of diagram items grouped into categories.

Syntax

Java

```
public class Palette extends JPanel
```

Remarks

The **Palette** control represents a tool palette that displays DiagramItem objects grouped into categories. It features an accordion-style user interface where each category is represented by a collapsible pane containing an ItemListView.

Structure

Palette follows the Model-View-Controller pattern. The control's data is managed by a PaletteModel (by default, a DefaultPaletteModel). The UI consists of an Accordion container that dynamically generates AccordionPane instances for each PaletteCategory defined in the model.

Population

The control can be populated using the following methods:

- Categories: Call addCategory to define a new category and create its respective accordion pane.
- Items: Call addItem to add an item to a specific category. If the category does not exist, it will be created automatically.
- Direct Model Access: You can also manipulate the PaletteCategory objects directly through the model's Categories collection.

Behavior and Appearance

The **Palette** exposes properties that govern the behavior and look of all its child list views:

- Sizing: Use IconSize and IconMargin properties to control the list icons, and NewInstanceSize to set the size of items created via drag-and-drop.
- Auto-Connection: The AutoConnectLinks and AutoConnectDistance properties control whether links created from the palette should automatically snap to nearby nodes in the target diagram.

- Expansion: Use AllowMultipleExpands to determine if more than one category can be expanded simultaneously.

Drag-and-Drop

When an item is dragged from a palette category and dropped onto a diagram, the control creates a new instance by calling the source item's clone method. The dimensions of the new item are set to the current NewInstanceSize.

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        javax.swing.JPanel
          com.mindfusion.diagramming.Palette

See Also

Palette Members
com.mindfusion.diagramming Namespace

Palette Members

A control that displays a palette of diagram items grouped into categories.

The following tables list the members exposed by the Palette type.

Public Constructors

	Name	Description
	Palette	Initializes a new instance of the Palette class.

Public Methods

	Name	Description
	addCategory	Overloaded.
	addItem	Overloaded.
	getAllowMultipleExpands	Gets a value indicating whether more than one category can be expanded at a time.
	getAutoConnectDistance	Gets the maximum distance within which a link dropped from the palette will attempt to auto-connect to a nearby node.
	getAutoConnectLinks	Gets a value indicating whether links should be automatically connected to nearby nodes when dropped from the palette.
	getIconMargin	Gets the margin space around icons.
	getIconSize	Gets the size of items displayed in the palette.
	getModel	Gets the data model for the palette.

	getNewInstanceSize	Gets the default size of items created by drag-and-drop from this palette.
	setAllowMultipleExpands	Sets a value indicating whether more than one category can be expanded at a time.
	setAutoConnectDistance	Sets the maximum distance within which a link dropped from the palette will attempt to auto-connect to a nearby node.
	setAutoConnectLinks	Sets a value indicating whether links should be automatically connected to nearby nodes when dropped from the palette.
	setIconMargin	Sets the margin space around icons.
	setIconSize	Sets the size of items displayed in the palette.
	setModel	Sets the data model for the palette.
	setNewInstanceSize	Sets the default size of items created by drag-and-drop from this palette.

See Also

Palette Class
com.mindfusion.diagramming Namespace

Palette Constructor

Initializes a new instance of the Palette class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Palette ()`

See Also

Palette Class
com.mindfusion.diagramming Namespace

Palette Methods

Palette.addCategory Method

Overload List

Name	Description
Palette.addCategory (String)	Adds a new category to the palette.

Palette.addCategory (String, Icon)	Adds a new category to the palette.

See Also

Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.addCategory Method (String)

Adds a new category to the palette.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PaletteCategory addCategory (
    String title
)
```

Parameters

title
The title text of the category.

Return Value

The newly created category.

See Also

addCategory Method Overload List
Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.addCategory Method (String, Icon)

Adds a new category to the palette.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PaletteCategory addCategory (
    String title,
    Icon icon
)
```

Parameters

title
The title text of the category.

icon
An optional icon to display in the category header.

Return Value

The newly created category.

See Also

addCategory Method Overload List
Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.addItem Method

Overload List

Name	Description
Palette.addItem (DiagramItem, PaletteCategory)	Adds a diagram item to the specified category.
Palette.addItem (DiagramItem, PaletteCategory, String)	Adds a diagram item to the specified category.
Palette.addItem (DiagramItem, String)	Adds a diagram item to the category with the specified title. If the category does not exist, it will be created.
Palette.addItem (DiagramItem, String, String)	Adds a diagram item to the category with the specified title. If the category does not exist, it will be created.

See Also

Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.addItem Method (DiagramItem, PaletteCategory)

Adds a diagram item to the specified category.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addItem (
    DiagramItem item,
    PaletteCategory category
)
```

Parameters

item
The DiagramItem to add.

category
The target PaletteCategory.

See Also

addItem Method Overload List
Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.addItem Method (DiagramItem, PaletteCategory, String)

Adds a diagram item to the specified category.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addItem (
    DiagramItem item,
    PaletteCategory category,
    String caption
)
```

Parameters

item
The DiagramItem to add.

category
The target PaletteCategory.

caption
An optional caption to display for the item in the palette.

See Also

addItem Method Overload List
Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.addItem Method (DiagramItem, String)

Adds a diagram item to the category with the specified title. If the category does not exist, it will be created.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addItem (
    DiagramItem item,
    String categoryTitle
)
```

Parameters

item
The DiagramItem to add.

categoryTitle
The title of the target category.

See Also

addItem Method Overload List
Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.addItem Method (DiagramItem, String, String)

Adds a diagram item to the category with the specified title. If the category does not exist, it will be created.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addItem (
    DiagramItem item,
    String categoryTitle,
    String caption
)
```

Parameters

item
The DiagramItem to add.

categoryTitle
The title of the target category.

caption
An optional caption to display for the item in the palette.

See Also

addItem Method Overload List
Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.getAllowMultipleExpands Method

Gets a value indicating whether more than one category can be expanded at a time.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowMultipleExpands ()
```

Return Value

true to allow multiple expanded categories; otherwise, false.

See Also

Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.getAutoConnectDistance Method

Gets the maximum distance within which a link dropped from the palette will attempt to auto-connect to a nearby node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getAutoConnectDistance ()
```

Return Value

The auto-connect distance.

See Also

Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.getAutoConnectLinks Method

Gets a value indicating whether links should be automatically connected to nearby nodes when dropped from the palette.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAutoConnectLinks ()
```

Return Value

true to auto-connect links; otherwise, false.

See Also

Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.getIconMargin Method

Gets the margin space around icons.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension getIconMargin ()
```

Return Value

A Dimension instance specifying the icon margins.

See Also

Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.getIconSize Method

Gets the size of items displayed in the palette.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension getIconSize ()
```

Return Value

A Dimension instance specifying the icon size.

See Also

Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.getModel Method

Gets the data model for the palette.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public PaletteModel getModel ()
```

Return Value

The current PaletteModel.

See Also

Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.getNewInstanceSize Method

Gets the default size of items created by drag-and-drop from this palette.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Dimension2D getNewInstanceSize ()
```

Return Value

A Dimension2D instance specifying the size of created items.

See Also

Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.setAllowMultipleExpands Method

Sets a value indicating whether more than one category can be expanded at a time.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAllowMultipleExpands (
    boolean allowMultipleExpands
)
```

Parameters

allowMultipleExpands
true to allow multiple expanded categories; otherwise, false.

See Also

Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.setAutoConnectDistance Method

Sets the maximum distance within which a link dropped from the palette will attempt to auto-connect to a nearby node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAutoConnectDistance (
    float autoConnectDistance
)
```

Parameters

autoConnectDistance
The auto-connect distance.

See Also

Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.setAutoConnectLinks Method

Sets a value indicating whether links should be automatically connected to nearby nodes when dropped from the palette.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void setAutoConnectLinks (
    boolean autoConnectLinks
)
```

Parameters

autoConnectLinks
true to auto-connect links; otherwise, false.

See Also

Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.setIconMargin Method

Sets the margin space around icons.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void setIconMargin (
    Dimension iconMargin
)
```

Parameters

iconMargin
A Dimension instance specifying the icon margins.

See Also

Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.setIconSize Method

Sets the size of items displayed in the palette.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void setIconSize (
    Dimension iconSize
)
```

Parameters

iconSize
A Dimension instance specifying the icon size.

See Also

Palette Members
Palette Class
com.mindfusion.diagramming Namespace

Palette.setModel Method

Sets the data model for the palette.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setModel (
    PaletteModel model
)
```

Parameters

model
The new PaletteModel.

See Also

Palette Members
Palette Class
com.mindfusion.diagramming Namespace
DefaultPaletteModel Class

Palette.setNewInstanceSize Method

Sets the default size of items created by drag-and-drop from this palette.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setNewInstanceSize (
    Dimension2D newInstanceSize
)
```

Parameters

newInstanceSize
A Dimension2D instance specifying the size of created items.

See Also

Palette Members
Palette Class
com.mindfusion.diagramming Namespace

PaletteCategory Class

Represents a category in a Palette control.

Syntax

Java
`public class PaletteCategory`

Remarks

The **PaletteCategory** class represents a single logical group or folder within a Palette control. It holds a collection of DiagramItem objects (accessible via getItems) that belong to that specific category.

In the user interface, each category is rendered as a collapsible pane within the palette's accordion. The class provides properties such as Title, Icon, and Expanded state to control the appearance and behavior of its corresponding pane header.

PaletteCategory acts as a standard Java Bean; it utilizes **PropertyChangeSupport** to notify the parent **Palette** of any modifications. This ensures that changing a category's title, icon, or expanded state programmatically will automatically update the UI.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.PaletteCategory

See Also

PaletteCategory Members
com.mindfusion.diagramming Namespace

PaletteCategory Members

Represents a category in a Palette control.

The following tables list the members exposed by the PaletteCategory type.

Public Constructors

	Name	Description
	PaletteCategory	Overloaded.

Public Methods

	Name	Description

	addPropertyChangeListener	Adds a PropertyChangeListener to the listener list.
	getIcon	Gets the category icon.
	getItems	Gets the items in this category.
	getTitle	Gets the category title.
	isExpanded	Gets a value indicating whether the category is expanded.
	removePropertyChangeListener	Removes a PropertyChangeListener from the listener list.
	setExpanded	Sets a value indicating whether the category is expanded.
	setIcon	Sets the category icon.
	setTitle	Sets the category title.

See Also

PaletteCategory Class
com.mindfusion.diagramming Namespace

PaletteCategory Constructor

Overload List

Name	Description
PaletteCategory (String)	Initializes a new instance of the PaletteCategory class.
PaletteCategory (String, Icon)	Initializes a new instance of the PaletteCategory class.

See Also

PaletteCategory Class
com.mindfusion.diagramming Namespace

PaletteCategory Constructor (String)

Initializes a new instance of the PaletteCategory class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PaletteCategory (
    String title
)
```

Parameters

title

The category title.

See Also

PaletteCategory Constructor Overload List
PaletteCategory Class
com.mindfusion.diagramming Namespace

PaletteCategory Constructor (String, Icon)

Initializes a new instance of the PaletteCategory class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PaletteCategory (
    String title,
    Icon icon
)
```

Parameters

title
The category title.

icon
The category icon.

See Also

PaletteCategory Constructor Overload List
PaletteCategory Class
com.mindfusion.diagramming Namespace

PaletteCategory Methods

PaletteCategory.addPropertyChangeListener Method

Adds a PropertyChangeListener to the listener list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addPropertyChangeListener (
    PropertyChangeListener listener
)
```

Parameters

listener
The listener to add.

See Also

PaletteCategory Members
PaletteCategory Class
com.mindfusion.diagramming Namespace

PaletteCategory.getIcon Method

Gets the category icon.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Icon getIcon ()
```

Return Value

The icon.

See Also

PaletteCategory Members
PaletteCategory Class
com.mindfusion.diagramming Namespace

PaletteCategory.getItems Method

Gets the items in this category.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public List<DiagramItem> getItems ()
```

Return Value

A list of diagram items.

See Also

PaletteCategory Members
PaletteCategory Class
com.mindfusion.diagramming Namespace

PaletteCategory.getTitle Method

Gets the category title.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getTitle ()
```

Return Value

The title text.

See Also

PaletteCategory Members
PaletteCategory Class
com.mindfusion.diagramming Namespace

PaletteCategory.isExpanded Method

Gets a value indicating whether the category is expanded.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean isExpanded ()
```

Return Value

true if the category is expanded; otherwise, false.

See Also

PaletteCategory Members
PaletteCategory Class
com.mindfusion.diagramming Namespace

PaletteCategory.removePropertyChangeListener Method

Removes a PropertyChangeListener from the listener list.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removePropertyChangeListener (
    PropertyChangeListener listener
)
```

Parameters

listener
The listener to remove.

See Also

PaletteCategory Members
PaletteCategory Class
com.mindfusion.diagramming Namespace

PaletteCategory.setExpanded Method

Sets a value indicating whether the category is expanded.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setExpanded (
    boolean expanded
)
```

Parameters

expanded
true if the category is expanded; otherwise, false.

See Also

PaletteCategory Members
PaletteCategory Class
com.mindfusion.diagramming Namespace

PaletteCategory.setIcon Method

Sets the category icon.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIcon (
    Icon icon
)
```

Parameters

icon
The icon.

See Also

PaletteCategory Members
PaletteCategory Class
com.mindfusion.diagramming Namespace

PaletteCategory.setTitle Method

Sets the category title.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTitle (
    String title
)
```

Parameters

title
The title text.

See Also

PaletteCategory Members
PaletteCategory Class
com.mindfusion.diagramming Namespace

PaletteModel Interface

Defines the data model for a Palette control.

Syntax

Java

```
public interface PaletteModel
```

Remarks

The **PaletteModel** interface defines the data contract for a Palette control. It provides a structured way to manage a collection of PaletteCategory objects, which in turn contain the DiagramItem instances displayed in the UI.

By implementing this interface, developers can create custom data sources for the palette, such as models that load categories dynamically from XML, database, or remote services. The **Palette** control uses this model to automatically generate its accordion panes and child list views.

For standard use cases, the library provides DefaultPaletteModel, a ready-to-use implementation that stores categories in an internal list.

Inheritors

com.mindfusion.diagramming.DefaultPaletteModel

See Also

PaletteModel Members
com.mindfusion.diagramming Namespace

PaletteModel Members

Defines the data model for a Palette control.

The following tables list the members exposed by the PaletteModel type.

Public Methods

	Name	Description
	addListDataListener	Adds a listener for changes in the model.
	getCategories	Gets all categories in the model.
	getElementAt	Gets the category at the specified index.
	getSize	Gets the number of categories in the model.
	removeListDataListener	Removes a listener for changes in the model.

See Also

PaletteModel Interface
com.mindfusion.diagramming Namespace

PaletteModel Methods

PaletteModel.addListDataListener Method

Adds a listener for changes in the model.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void addListDataListener (
    ListDataListener l
)
```

Parameters

l

The **ListDataListener** to add.

See Also

PaletteModel Members
PaletteModel Interface
com.mindfusion.diagramming Namespace

PaletteModel.getCategories Method

Gets all categories in the model.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
List<PaletteCategory> getCategories ()
```

Return Value

A list of all PaletteCategory objects.

See Also

PaletteModel Members
PaletteModel Interface
com.mindfusion.diagramming Namespace

PaletteModel.getElementAt Method

Gets the category at the specified index.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
PaletteCategory getElementAt (
    int index
)
```

Parameters

index
The index of the category.

Return Value

The PaletteCategory at the specified index.

See Also

PaletteModel Members
PaletteModel Interface

PaletteModel.getSize Method

Gets the number of categories in the model.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
int getSize ()
```

Return Value

The number of categories.

See Also

PaletteModel Members
PaletteModel Interface
com.mindfusion.diagramming Namespace

PaletteModel.removeListDataListener Method

Removes a listener for changes in the model.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void removeListDataListener (
    ListDataListener l
)
```

Parameters

l
The **ListDataListener** to remove.

See Also

PaletteModel Members
PaletteModel Interface
com.mindfusion.diagramming Namespace

PanBehavior Class

Implements the Behavior.Pan behavior.

Syntax

Java
`public class PanBehavior extends BehaviorBase`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.PanBehavior

See Also

PanBehavior Members
com.mindfusion.diagramming Namespace

PanBehavior Members

Implements the Behavior.Pan behavior.

The following tables list the members exposed by the PanBehavior type.

Public Constructors

	Name	Description
	PanBehavior	Initializes a new instance of the PanBehavior class.

Protected Fields

	Name	Description
	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	BehaviorBase.pointerDown override.
	pointerMove	BehaviorBase.pointerMove override.
	pointerOver	BehaviorBase.pointerOver override.
	pointerUp	BehaviorBase.pointerUp override.

Protected Methods

	Name	Description

	createLink	(Inherited from BehaviorBase.)
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	
	startDraw	
	startDrawCommon	

See Also

PanBehavior Class
com.mindfusion.diagramming Namespace

PanBehavior Constructor

Initializes a new instance of the PanBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PanBehavior (
    DiagramView diagramView,
    boolean supportsModify
)
```

Parameters

diagramView
A DiagramView instance.

supportsModify

See Also

PanBehavior Class
com.mindfusion.diagramming Namespace

PanBehavior Methods

PanBehavior.pointerDown Method

BehaviorBase.pointerDown override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void pointerDown (
    Point pointerPosition,
    MouseEvent e
)
```

Parameters

mousePosition

e

See Also

PanBehavior Members
PanBehavior Class
com.mindfusion.diagramming Namespace

PanBehavior.pointerMove Method

BehaviorBase.pointerMove override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void pointerMove (
    Point pointerPosition,
    MouseEvent e
)
```

Parameters

mousePosition

e

See Also

PanBehavior Members
PanBehavior Class
com.mindfusion.diagramming Namespace

PanBehavior.pointerOver Method

BehaviorBase.pointerOver override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void pointerOver (
    Point mousePosition,
    MouseEvent e
)
```

Parameters

mousePosition

e

See Also

PanBehavior Members
PanBehavior Class
com.mindfusion.diagramming Namespace

PanBehavior.pointerUp Method

BehaviorBase.pointerUp override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void pointerUp (
    Point pointerPosition,
    MouseEvent e
)
```

Parameters

mousePosition

e

See Also

PanBehavior Members
PanBehavior Class
com.mindfusion.diagramming Namespace

PanBehavior.setMouseCursor Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected CursorHint setMouseCursor (
    Point2D point,
    ByRef<Boolean> startInteraction
)
```

Parameters

point

startInteraction

Return Value

See Also

PanBehavior Members
PanBehavior Class
com.mindfusion.diagramming Namespace

PanBehavior.startDraw Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected InteractionState startDraw (
    Point2D point,
    MouseEvent e
)
```

Parameters

point

e

Return Value

See Also

PanBehavior Members
PanBehavior Class
com.mindfusion.diagramming Namespace

PanBehavior.startDrawCommon Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected InteractionState startDrawCommon (
    Point2D point,
    MouseEvent e
)
```

Parameters

point

e

Return Value

See Also

PanBehavior Members
PanBehavior Class
com.mindfusion.diagramming Namespace

Path Class

Represents a series of connected nodes and links.

Syntax

Java
`public class Path`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Path

See Also

Path Members
com.mindfusion.diagramming Namespace

Path Members

Represents a series of connected nodes and links.

The following tables list the members exposed by the Path type.

Public Methods

	Name	Description
	getItems	Gets a list of all nodes and links in the path.
	getLength	Gets the number of links in the path.
	getLinks	Gets a list of all links in the path.
	getNodes	Gets a list of all nodes in the path.
	getWeight	Gets the total weight of this path.

See Also

Path Methods

Path.getItems Method

Gets a list of all nodes and links in the path.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramItemList getItems ()
```

Return Value

A DiagramItemList containing the path nodes and links.

See Also

Path Members
Path Class
com.mindfusion.diagramming Namespace

Path.getLength Method

Gets the number of links in the path.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getLength ()
```

Return Value

An integer value specifying the number of links.

See Also

Path Members
Path Class
com.mindfusion.diagramming Namespace

Path.getLinks Method

Gets a list of all links in the path.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramLinkList getLinks ()
```

Return Value

An DiagramLinkList containing the path links.

See Also

Path Members
Path Class
com.mindfusion.diagramming Namespace

Path.getNodes Method

Gets a list of all nodes in the path.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramNodeList getNodes ()
```

Return Value

A DiagramNodeList containing the path nodes.

See Also

Path Members
Path Class
com.mindfusion.diagramming Namespace

Path.getWeight Method

Gets the total weight of this path.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getWeight (
    boolean includeNodes,
    boolean includeLinks
)
```

Parameters

includeNodes
true to include node weights in the total weight sum, otherwise **false**.

includeLinks
true to include link weights in the total weight sum, otherwise **false**.

Return Value

A float value specifying the path weight.

See Also

Path Members
Path Class
com.mindfusion.diagramming Namespace

PathFinder Class

Provides methods that help you find paths and cycles in a graph.

Syntax

Java
`public class PathFinder`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.PathFinder

See Also

PathFinder Members
com.mindfusion.diagramming Namespace

PathFinder Members

Provides methods that help you find paths and cycles in a graph.

The following tables list the members exposed by the PathFinder type.

Public Constructors

	Name	Description
	PathFinder	Overloaded.

Public Methods

	Name	Description
	findAllCycles	Finds all cycles in the underlying diagram.

	findAllPaths	Overloaded.
S	findCycle	Overloaded.
S	findLongestPath	Overloaded.
S	findShortestPath	Overloaded.

See Also

PathFinder Class
com.mindfusion.diagramming Namespace

PathFinder Constructor

Overload List

Name	Description
PathFinder (Diagram)	Initializes a new instance of the PathFinder class. Path-finding will depend on the direction of links.
PathFinder (Diagram, boolean)	Initializes a new instance of the PathFinder class, optionally ignoring the link direction.

See Also

PathFinder Class
com.mindfusion.diagramming Namespace

PathFinder Constructor (Diagram)

Initializes a new instance of the PathFinder class. Path-finding will depend on the direction of links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PathFinder (
    Diagram diagram
)
```

Parameters

diagram
An instance of the Diagram class in which to look for paths or cycles.

See Also

PathFinder Constructor Overload List
PathFinder Class
com.mindfusion.diagramming Namespace

PathFinder Constructor (Diagram, boolean)

Initializes a new instance of the PathFinder class, optionally ignoring the link direction.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PathFinder (
    Diagram diagram,
    boolean ignoreDirection
)
```

Parameters

diagram
A Diagram instance in which to look for paths or cycles.

ignoreDirection
Specifies whether the direction of links should be considered when looking for paths or cycles.

See Also

PathFinder Constructor Overload List
PathFinder Class
com.mindfusion.diagramming Namespace

PathFinder Methods

PathFinder.findAllCycles Method

Finds all cycles in the underlying diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PathList findAllCycles ()
```

Return Value

A PathList containing the found cycles; if no cycles are detected, the list is empty.

See Also

PathFinder Members
PathFinder Class

PathFinder.findAllPaths Method

Overload List

Name	Description
PathFinder.findAllPaths (DiagramNode, DiagramNode)	Finds and returns all paths that exist between two DiagramNode objects. The returned Path instances include the *from* an *to* nodes.
PathFinder.findAllPaths (DiagramNode, DiagramNode, int)	Finds and returns all paths that exist between two **DiagramNode** objects. The returned Path instances include the *from* an *to* nodes.

See Also

PathFinder Members
PathFinder Class
com.mindfusion.diagramming Namespace

PathFinder.findAllPaths Method (DiagramNode, DiagramNode)

Finds and returns all paths that exist between two DiagramNode objects. The returned Path instances include the *from* an *to* nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PathList findAllPaths (
    DiagramNode from,
    DiagramNode to
)
```

Parameters

from
The DiagramNode where the path should start.

to
The **DiagramNode** where the path should end.

Return Value

A collection of Path objects; if no paths are found, the collection is empty.

See Also

findAllPaths Method Overload List
PathFinder Members

PathFinder.findAllPaths Method (DiagramNode, DiagramNode, int)

Finds and returns all paths that exist between two DiagramNode objects. The returned Path instances include the *from* an *to* nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PathList findAllPaths (
    DiagramNode from,
    DiagramNode to,
    int maxPaths
)
```

Parameters

from
The DiagramNode where the path should start.

to
The **DiagramNode** where the path should end.

maxPaths
The maximum number of paths to find.

Return Value

A collection of Path objects; if no paths are found, the collection is empty.

See Also

findAllPaths Method Overload List
PathFinder Members
PathFinder Class
com.mindfusion.diagramming Namespace

PathFinder.findCycle Method

Overload List

Name	Description
PathFinder.findCycle ()	Detects whether there is a cycle in the diagram.
PathFinder.findCycle (DiagramNode)	Detects whether the specified DiagramNode participates in a cycle.

See Also

PathFinder Members
PathFinder Class
com.mindfusion.diagramming Namespace

PathFinder.findCycle Method ()

Detects whether there is a cycle in the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Path findCycle ()
```

Return Value

A Path object representing the first cycle found in the graph, or null if the graph does not contain any cycles.

See Also

findCycle Method Overload List
PathFinder Members
PathFinder Class
com.mindfusion.diagramming Namespace

PathFinder.findCycle Method (DiagramNode)

Detects whether the specified DiagramNode participates in a cycle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Path findCycle (
    DiagramNode participant
)
```

Parameters

participant
A DiagramNode that should be in the cycle.

Return Value

A Path object representing the cycle that containsthe specified node, or null if the node is not in a cycle.

See Also

PathFinder.findLongestPath Method

Overload List

Name	Description
PathFinder.findLongestPath ()	Finds the longest path in the graph.
PathFinder.findLongestPath (DiagramNode, DiagramNode)	Finds the longest path between the specified DiagramNode objects.
PathFinder.findLongestPath (long)	Finds the longest path in the diagram. The time limit specifies the maximal duration of the search process in milliseconds.

See Also

PathFinder Members
PathFinder Class
com.mindfusion.diagramming Namespace

PathFinder.findLongestPath Method ()

Finds the longest path in the graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Path findLongestPath ()
```

Return Value

A Path object representing the found path, or null if there aren't any linked nodes in the graph.

See Also

findLongestPath Method Overload List
PathFinder Members
PathFinder Class
com.mindfusion.diagramming Namespace

PathFinder.findLongestPath Method (DiagramNode, DiagramNode)

Finds the longest path between the specified DiagramNode objects.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public Path findLongestPath (
    DiagramNode from,
    DiagramNode to
)
```

Parameters

from
The DiagramNode where the path should start.

to
The **DiagramNode** where the path should end.

Return Value

A Path object representing the found path, or null if there isn't any path connecting the specified nodes.

See Also

findLongestPath Method Overload List
PathFinder Members
PathFinder Class
com.mindfusion.diagramming Namespace

PathFinder.findLongestPath Method (long)

Finds the longest path in the diagram. The time limit specifies the maximal duration of the search process in milliseconds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public Path findLongestPath (
    long timeLimit
)
```

Parameters

timeLimit
Specifies the maximal amount of time the algorithm is allowed to run.

Return Value

A Path object representing the found path, or null if there aren't any linked nodes in the graph.

See Also

PathFinder.findShortestPath Method

Overload List

Name	Description
PathFinder.findShortestPath (DiagramNode, DiagramNode)	Finds and returns the shortest Path between the specified DiagramNode objects.
PathFinder.findShortestPath (DiagramNode, DiagramNode, boolean, boolean)	Finds and returns the shortest path between two **DiagramNode** elements, considering the Weight of the nodes, the **Weight** of the links or both.

See Also

PathFinder Members
PathFinder Class
com.mindfusion.diagramming Namespace

PathFinder.findShortestPath Method (DiagramNode, DiagramNode)

Finds and returns the shortest Path between the specified DiagramNode objects.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Path findShortestPath (
    DiagramNode from,
    DiagramNode to
)
```

Parameters

from
The DiagramNode where the path should start.

to
The **DiagramNode** where the path should end.

Return Value

A Path instance that represents the shortest path found; null, if there is no path connecting from and to.

See Also

findShortestPath Method Overload List
PathFinder Members

PathFinder.findShortestPath Method (DiagramNode, DiagramNode, boolean, boolean)

Finds and returns the shortest path between two DiagramNode elements, considering the Weight of the nodes, the **Weight** of the links or both.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Path findShortestPath (
    DiagramNode from,
    DiagramNode to,
    boolean useNodeWeights,
    boolean useLinkWeights
)
```

Parameters

from
The DiagramNode where the path should start.

to
The **DiagramNode** where the path should end.

useNodeWeights
true if the Weight attribute of nodes should be considered, otherwise **false**.

useLinkWeights
true if the **Weight** attribute of links should be considered, otherwise **false**.

Return Value

A Path object representing the found path, or **null** if there isn't any path connecting the specified nodes.

See Also

findShortestPath Method Overload List
PathFinder Members
PathFinder Class
com.mindfusion.diagramming Namespace

PathList Class

A strongly typed list of Path objects.

Syntax

Java

```
public class PathList extends BaseList<E>
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.BaseList(E)
        com.mindfusion.diagramming.PathList

See Also

PathList Members
com.mindfusion.diagramming Namespace

PathList Members

A strongly typed list of Path objects.

The following tables list the members exposed by the PathList type.

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)
	listEvent	(Inherited from BaseList.)
	notifyParent	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	Adds a new element to the list. (Inherited from BaseList.)
	clear	Removes all elements from the list. (Inherited from BaseList.)
	contains	Determines if this list contains the specified element. (Inherited from BaseList.)
	first	Gets the first element of this list. (Inherited from BaseList.)
	get	Gets the element at the specified position in this list. (Inherited from BaseList.)
	last	Gets the last element of this list. (Inherited from BaseList.)
	readExternal	Loads the list's contents. (Inherited from BaseList.)
	remove	Overloaded. (Inherited from BaseList.)
	removeRange	Removes a range of elements from this list. (Inherited from BaseList.)
	set	Sets the element at the specified position in this list. (Inherited from BaseList.)
	size	Gets the number of elements in this list. (Inherited from BaseList.)

	writeExternal	Saves the list's contents. (Inherited from BaseList.)

Protected Methods

	Name	Description
	raiseAdding	Raises the adding event. (Inherited from BaseList.)
	raiseClearing	Raises the clearing event. (Inherited from BaseList.)
	raiseRemoving	Raises the removing event. (Inherited from BaseList.)

See Also

PathList Class
com.mindfusion.diagramming Namespace

PatternRouter Class

Routes links by applying patterns of segment and turn sequences and accepting them when resulting paths do not cross nodes.

Syntax

Java

```
public class PatternRouter implements LinkRouter
```

Remarks

You can add custom patterns to the Patterns list, or replace the standard patterns altogether. Patterns are defined using RoutePattern and RouteStep objects.

Example

The following code defines a Z-like link route that will be accepted if it does not cross Obstacle nodes, nor passes by them within MinimumDistance.

Java

```
RoutePattern rightZigzag = new RoutePattern();
rightZigzag.getSteps().add(
    new RouteStep(RouteStepKind.AdvanceRelative, 0.5f));
rightZigzag.getSteps().add(
    new RouteStep(RouteStepKind.TurnRight));
rightZigzag.getSteps().add(
    new RouteStep(RouteStepKind.AdvanceRelative, 1));
rightZigzag.getSteps().add(
    new RouteStep(RouteStepKind.TurnLeft));
rightZigzag.getSteps().add(
    new RouteStep(RouteStepKind.AdvanceRelative, 0.5f));
router.getPatterns().add(rightZigzag);

// this can be defined in shorter form using a pattern string
// RoutePattern rightZigzag2 = new RoutePattern(
//     "ADR0.5 TRR ADR1 TRL ADR0.5");
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.PatternRouter

See Also

PatternRouter Members
com.mindfusion.diagramming Namespace

PatternRouter Members

Routes links by applying patterns of segment and turn sequences and accepting them when resulting paths do not cross nodes.

The following tables list the members exposed by the PatternRouter type.

Public Constructors

	Name	Description
	PatternRouter	Overloaded.

Public Methods

	Name	Description
	getDiagram	Gets the Diagram whose links will be routed.
	getMinimizeCrossings	Gets a value indicating whether to minimize crossings with other links.
	getMinimumDistance	Gets the minimum allowed distance from obstacles for a route to be accepted.
	getObstacles	Gets a list of obstacle nodes.
	getPatterns	Gets a list of RoutePattern objects representing the routing patterns.
	getPreferredDistance	Gets the preferred distance from link's bend points to the link's nodes.
	routeLink	Implements LinkRouter.routeLink.
	routeLinks	Implements LinkRouter.routeLinks.
	setDiagram	Sets the **Diagram** whose links will be routed.
	setMinimizeCrossings	Sets a value indicating whether to minimize crossings with other links.
	setMinimumDistance	Sets the minimum allowed distance from obstacles for a route to be accepted.
	setObstacles	Sets a list of obstacle nodes.
	setPatterns	Sets a list of **RoutePattern** objects representing the routing patterns.
	setPreferredDistance	Sets the preferred distance from link's bend points to the link's nodes.

See Also

PatternRouter Class
com.mindfusion.diagramming Namespace

PatternRouter Constructor

Overload List

Name	Description
PatternRouter ()	Initializes a new instance of the PatternRouter class.
PatternRouter (Diagram)	Initializes a new instance of the **PatternRouter** class.
PatternRouter (Diagram, List)	Initializes a new instance of the **PatternRouter** class.

See Also

PatternRouter Class
com.mindfusion.diagramming Namespace

PatternRouter Constructor ()

Initializes a new instance of the PatternRouter class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PatternRouter ()
```

See Also

PatternRouter Constructor Overload List
PatternRouter Class
com.mindfusion.diagramming Namespace

PatternRouter Constructor (Diagram)

Initializes a new instance of the PatternRouter class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PatternRouter (
    Diagram diagram
```

```
)
```

Parameters

diagram
The Diagram whose links will be routed.

See Also

PatternRouter Constructor Overload List
PatternRouter Class
com.mindfusion.diagramming Namespace

PatternRouter Constructor (Diagram, List<RoutePattern>)

Initializes a new instance of the PatternRouter class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PatternRouter (
    Diagram diagram,
    List<RoutePattern> patterns
)
```

Parameters

diagram
The Diagram whose links will be routed.

patterns
A list of RoutePattern objects.

See Also

PatternRouter Constructor Overload List
PatternRouter Class
com.mindfusion.diagramming Namespace

PatternRouter Methods

PatternRouter.getDiagram Method

Gets the Diagram whose links will be routed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Diagram getDiagram ()
```

Return Value

A Diagram instance.

See Also

PatternRouter Members
PatternRouter Class
com.mindfusion.diagramming Namespace

PatternRouter.getMinimizeCrossings Method

Gets a value indicating whether to minimize crossings with other links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getMinimizeCrossings ()
```

Return Value

true to minimize crossings, or **false** otherwise. The default value is **false**.

Remarks

If this property is enabled, the algorithm runs an additional loop to count link crossings, which may affect performance for large diagrams.

See Also

PatternRouter Members
PatternRouter Class
com.mindfusion.diagramming Namespace

PatternRouter.getMinimumDistance Method

Gets the minimum allowed distance from obstacles for a route to be accepted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getMinimumDistance ()
```

Return Value

A **float** value specifying minimum distance. The default value is 4 millimeters.

See Also

PatternRouter.getObstacles Method

Gets a list of obstacle nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramNodeList getObstacles ()
```

Return Value

A list of obstacles.

Remarks

If this value is set, the router ignores diagram's Nodes and only considers nodes from specified list.

See Also

PatternRouter Members
PatternRouter Class
com.mindfusion.diagramming Namespace

PatternRouter.getPatterns Method

Gets a list of RoutePattern objects representing the routing patterns.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public List<RoutePattern> getPatterns ()
```

Return Value

A list of RoutePattern objects defining link route templates.

See Also

PatternRouter Members
PatternRouter Class
com.mindfusion.diagramming Namespace

PatternRouter.getPreferredDistance Method

Gets the preferred distance from link's bend points to the link's nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getPreferredDistance ()
```

Return Value

A **float** value specifying preferred distance.

Remarks

The value of this property can be used in route templates using an AdvancePreferred RouteStep.

See Also

PatternRouter Members
PatternRouter Class
com.mindfusion.diagramming Namespace
MinimumDistance Property

PatternRouter.routeLink Method

Implements LinkRouter.routeLink.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean routeLink (
    DiagramLink link,
    ConnectionPoint originConnection,
    ConnectionPoint destinationConnection,
    boolean nowCreating
)
```

Parameters

link
The DiagramLink to route.

originConnection
Represents connection to Origin node, potentially different from link's stored connection when modifying first control point.

destinationConnection
Represents connection to Destination node, potentially different from link's stored connection when modifying last control point.

nowCreating

Indicates whether link is currently being created.

Return Value

true if a path has been found successfully, otherwise **false**.

See Also

PatternRouter Members
PatternRouter Class
com.mindfusion.diagramming Namespace

PatternRouter.routeLinks Method

Implements LinkRouter.routeLinks.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLinkList routeLinks (
    DiagramLinkList links
)
```

Parameters

links
A list of DiagramLink objects that should be routed.

Return Value

A list of links that were not routed successfully.

See Also

PatternRouter Members
PatternRouter Class
com.mindfusion.diagramming Namespace

PatternRouter.setDiagram Method

Sets the Diagram whose links will be routed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDiagram (
    Diagram value
)
```

Parameters

value
A Diagram instance.

See Also

PatternRouter Members
PatternRouter Class
com.mindfusion.diagramming Namespace

PatternRouter.setMinimizeCrossings Method

Sets a value indicating whether to minimize crossings with other links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMinimizeCrossings (
    boolean value
)
```

Parameters

value
true to minimize crossings, or **false** otherwise.

Remarks

If this property is enabled, the algorithm runs an additional loop to count link crossings, which may affect performance for large diagrams.

See Also

PatternRouter Members
PatternRouter Class
com.mindfusion.diagramming Namespace

PatternRouter.setMinimumDistance Method

Sets the minimum allowed distance from obstacles for a route to be accepted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMinimumDistance (
    float value
)
```

Parameters

value
A **float** value specifying minimum distance.

See Also

PatternRouter Members
PatternRouter Class
com.mindfusion.diagramming Namespace
PreferredDistance Property

PatternRouter.setObstacles Method

Sets a list of obstacle nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setObstacles (
    DiagramNodeList value
)
```

Parameters

value
A list of obstacles.

Remarks

If this value is set, the router ignores diagram's Nodes and only considers nodes from specified list.

See Also

PatternRouter Members
PatternRouter Class
com.mindfusion.diagramming Namespace

PatternRouter.setPatterns Method

Sets a list of RoutePattern objects representing the routing patterns.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPatterns (
    List<RoutePattern> value
)
```

Parameters

value
A list of RoutePattern objects defining link route templates.

See Also

PatternRouter Members
PatternRouter Class
com.mindfusion.diagramming Namespace

PatternRouter.setPreferredDistance Method

Sets the preferred distance from link's bend points to the link's nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPreferredDistance (
    float value
)
```

Parameters

value
A **float** value specifying preferred distance.

Remarks

The value of this property can be used in route templates using an AdvancePreferred RouteStep.

See Also

PatternRouter Members
PatternRouter Class
com.mindfusion.diagramming Namespace

PolylineRouting Enumeration

Defines values that indicate how Polyline links should be routed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public enum PolylineRouting
```

Members

	Member name	Description

	AllOrthogonal	Keep all segments orthogonal to node's sides and each other.
	EndSegmentsOrthogonal	Keep the end segments orthogonal to node's sides, and allow interior segments to be inclined.
	UnrestrictedInclined	Allow any segment to be inclined by non-multiple of 90 angles.

See Also

com.mindfusion.diagramming Namespace

PrintOptions Class

Defines the attributes of a printed diagram. Use the PrintOptions object returned by the DiagramView.getPrintOptions method to set the attributes of a specific diagram.

Syntax

Java
`public class PrintOptions extends RenderOptions`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.RenderOptions
    com.mindfusion.diagramming.PrintOptions

See Also

PrintOptions Members
com.mindfusion.diagramming Namespace

PrintOptions Members

Defines the attributes of a printed diagram. Use the PrintOptions object returned by the DiagramView.getPrintOptions method to set the attributes of a specific diagram.

The following tables list the members exposed by the PrintOptions type.

Public Constructors

	Name	Description
	PrintOptions	Initializes a new PrintOptions instance.

Public Methods

	Name	Description
	getAntiAlias	(Inherited from RenderOptions.)

	getDocumentName	Gets the document name.
	getEnableAnchors	Gets a value indicating whether anchor point marks will be printed. (Inherited from RenderOptions.)
	getEnableBackground	Gets a value indicating whether the diagram background will be filled using the Diagram.getBackBrush background brush. (Inherited from RenderOptions.)
	getEnableBackgroundImage	Gets a value indicating whether the diagram's background image will be printed. (Inherited from RenderOptions.)
	getEnableEffects	Gets a value indicating whether to render special node effects. (Inherited from RenderOptions.)
	getEnableFitToPage	
	getEnableGrid	Gets a value indicating whether the alignment grid is rendered. (Inherited from RenderOptions.)
	getEnableImages	Gets a value indicating whether images that are displayed inside nodes will be printed. (Inherited from RenderOptions.)
	getEnableInterior	Gets a value indicating whether the nodes will be filled when printed. (Inherited from RenderOptions.)
	getEnableShadows	Gets a value indicating whether item shadows will be printed. (Inherited from RenderOptions.)
	getEnableText	(Inherited from RenderOptions.)
	getHeaderFont	Gets the font used to draw the page header string.
	getHeaderFormat	Gets the page header format string.
	getHyperLinkStyle	(Inherited from RenderOptions.)
	getHyperLinkTarget	(Inherited from RenderOptions.)
	getMeasureUnit	Gets the diagram's measure unit. (Inherited from RenderOptions.)
	getRenderTarget	(Inherited from RenderOptions.)
	getScale	Gets the scale of the printed diagram relatively to the original on-screen size of the diagram. (Inherited from RenderOptions.)
	getScrollX	(Inherited from RenderOptions.)
	getScrollY	(Inherited from RenderOptions.)
	getTargetView	(Inherited from RenderOptions.)
	getTextAntiAlias	(Inherited from RenderOptions.)
	getVisibleRect	(Inherited from RenderOptions.)
	setAntiAlias	(Inherited from RenderOptions.)
	setDocumentName	Sets the document name.
	setEnableAnchors	Sets a value indicating whether anchor point marks should be printed. (Inherited from RenderOptions.)

	setEnableBackground	Sets a value indicating whether the diagram background should be filled using the **Diagram.getBackBrush** background brush. (Inherited from RenderOptions.)
	setEnableBackgroundImage	Sets a value indicating whether the diagram's background image should be printed. (Inherited from RenderOptions.)
	setEnableEffects	Sets a value indicating whether to render special node effects. (Inherited from RenderOptions.)
	setEnableFitToPage	
	setEnableGrid	Gets a value indicating whether the alignment grid is rendered. (Inherited from RenderOptions.)
	setEnableImages	Sets a value indicating whether images that are displayed inside nodes should be printed. (Inherited from RenderOptions.)
	setEnableInterior	Sets a value indicating whether the nodes should be filled when printed. (Inherited from RenderOptions.)
	setEnableShadows	Sets a value indicating whether item shadows should be printed. (Inherited from RenderOptions.)
	setEnableText	(Inherited from RenderOptions.)
	setHeaderFont	Sets the font used to draw the page header string.
	setHeaderFormat	Sets the page header format string.
	setHyperLinkStyle	(Inherited from RenderOptions.)
	setHyperLinkTarget	(Inherited from RenderOptions.)
	setMeasureUnit	Sets the diagram's measure unit. (Inherited from RenderOptions.)
	setRenderTarget	(Inherited from RenderOptions.)
	setScale	Sets the scale of the printed diagram relatively to the original on-screen size of the diagram. (Inherited from RenderOptions.)
	setScrollX	(Inherited from RenderOptions.)
	setScrollY	(Inherited from RenderOptions.)
	setTargetView	(Inherited from RenderOptions.)
	setTextAntiAlias	(Inherited from RenderOptions.)
	setVisibleRect	(Inherited from RenderOptions.)

See Also

PrintOptions Class
com.mindfusion.diagramming Namespace

PrintOptions Constructor

Initializes a new PrintOptions instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public PrintOptions (
    DiagramView diagramView
)
```

Parameters

diagramView

See Also

PrintOptions Class
com.mindfusion.diagramming Namespace

PrintOptions Methods

PrintOptions.getDocumentName Method

Gets the document name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getDocumentName ()
```

Return Value

A String containing the document name.

See Also

PrintOptions Members
PrintOptions Class
com.mindfusion.diagramming Namespace

PrintOptions.getEnableFitToPage Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getEnableFitToPage ()
```

Return Value

See Also

PrintOptions Members
PrintOptions Class
com.mindfusion.diagramming Namespace

PrintOptions.getHeaderFont Method

Gets the font used to draw the page header string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Font getHeaderFont ()
```

Return Value

A Font instance.

See Also

PrintOptions Members
PrintOptions Class
com.mindfusion.diagramming Namespace
setHeaderFont Method

PrintOptions.getHeaderFormat Method

Gets the page header format string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getHeaderFormat ()
```

Return Value

A String containing formatting attributes for the page headers.

See Also

PrintOptions Members
PrintOptions Class
com.mindfusion.diagramming Namespace

PrintOptions.setDocumentName Method

Sets the document name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDocumentName (
    String value
)
```

Parameters

value
A String containing the document name.

See Also

PrintOptions Members
PrintOptions Class
com.mindfusion.diagramming Namespace

PrintOptions.setEnableFitToPage Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableFitToPage (
    boolean value
)
```

Parameters

value

See Also

PrintOptions Members
PrintOptions Class
com.mindfusion.diagramming Namespace

PrintOptions.setHeaderFont Method

Sets the font used to draw the page header string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHeaderFont (
    Font value
)
```

Parameters

value
A Font instance.

See Also

PrintOptions Members
PrintOptions Class
com.mindfusion.diagramming Namespace
getHeaderFont Method
setHeaderFormat Method

PrintOptions.setHeaderFormat Method

Sets the page header format string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHeaderFormat (
    String value
)
```

Parameters

value
A **String** containing formatting attributes for the page headers.

Remarks

The header format string can contain fixed text and format specifiers. Currently, there are three format specifiers supported:

- %D is a placeholder for the document title;
- %P is a placeholder for the page number;
- %T is a placeholder for the total number of pages;

See Also

PrintOptions Members
PrintOptions Class
com.mindfusion.diagramming Namespace
getHeaderFormat Method
setHeaderFont Method

PrintPreview Class

Implements a print preview window.

Syntax

Java
`public class PrintPreview extends JFrame`

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      java.awt.Window
        java.awt.Frame
          javax.swing.JFrame
            com.mindfusion.diagramming.PrintPreview

See Also

PrintPreview Members
com.mindfusion.diagramming Namespace

PrintPreview Members

Implements a print preview window.

The following tables list the members exposed by the PrintPreview type.

Public Constructors

	Name	Description
	PrintPreview	Overloaded.

Public Methods

	Name	Description
	addPages	
	createPrintPreview	
	FitToPage	
	getPage	
	InitializeComponent	
	onBtnActPrint	
	onBtnArrowZoomScale	
	onBtnClose	

	onBtnFirstPage	
	onBtnFourPages	
	onBtnLastPage	
	onBtnNextPage	
	onBtnOnePage	
	onBtnPrevPage	
	onBtnSixPages	
	onBtnThreePages	
	onBtnTwoPages	
	onBtnZoomAuto	
	onMenu10	
	onMenu100	
	onMenu150	
	onMenu200	
	onMenu25	
	onMenu50	
	onMenu500	
	onMenu75	
	onMenuZoomAuto	
	PageOrientation	
	windowChanged	
	ZoomDisplay	

Protected Methods

	Name	Description
	createImageIcon	

See Also

PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview Constructor

Overload List

Name	Description
PrintPreview (DiagramView)	
PrintPreview (DiagramView, PageFormat)	

See Also

PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview Constructor (DiagramView)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PrintPreview (
    DiagramView diagramView
)
```

Parameters

diagramView

See Also

PrintPreview Constructor Overload List
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview Constructor (DiagramView, PageFormat)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PrintPreview (
    DiagramView diagramView,
    PageFormat pageFormat
)
```

Parameters

diagramView

pageFormat

See Also

PrintPreview Constructor Overload List
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview Methods

PrintPreview.addPages Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void addPages (
    int p
)
```

Parameters

p

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.createImageIcon Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected ImageIcon createImageIcon (
    String path
)
```

Parameters

path

Return Value

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.createPrintPreview Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void createPrintPreview ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.FitToPage Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void FitToPage ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.getPage Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void getPage ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.InitializeComponent Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void InitializeComponent (
    DiagramView diagramView
)
```

Parameters

diagramView
A DiagramView object.

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onBtnActPrint Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void onBtnActPrint ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onBtnArrowZoomScale Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void onBtnArrowZoomScale ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onBtnClose Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onBtnClose ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onBtnFirstPage Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onBtnFirstPage ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onBtnFourPages Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onBtnFourPages ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onBtnLastPage Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onBtnLastPage ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onBtnNextPage Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onBtnNextPage ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onBtnOnePage Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onBtnOnePage ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onBtnPrevPage Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onBtnPrevPage ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onBtnSixPages Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onBtnSixPages ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onBtnThreePages Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onBtnThreePages ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onBtnTwoPages Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void onBtnTwoPages ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onBtnZoomAuto Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void onBtnZoomAuto ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onMenu10 Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void onMenu10 ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onMenu100 Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onMenu100 ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onMenu150 Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onMenu150 ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onMenu200 Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onMenu200 ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onMenu25 Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void onMenu25 ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onMenu50 Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void onMenu50 ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onMenu500 Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void onMenu500 ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onMenu75 Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void onMenu75 ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.onMenuZoomAuto Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void onMenuZoomAuto ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.PageOrientation Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void PageOrientation ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.windowChanged Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void windowChanged ()
```

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

PrintPreview.ZoomDisplay Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void ZoomDisplay (
    double zoomFactor,
    JCheckBoxMenuItem selectedMenu
)
```

Parameters

zoomFactor

selectedMenu

See Also

PrintPreview Members
PrintPreview Class
com.mindfusion.diagramming Namespace

QuickRouter Class

Implements a very fast link routing algorithm that uses a tree to represent the free and occupied regions in the diagram.

Syntax

Java
`public class QuickRouter implements LinkRouter`

Remarks

To use this class for link routing, assign its instance to the LinkRouter property of the Diagram class.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.QuickRouter

See Also

QuickRouter Members
com.mindfusion.diagramming Namespace

QuickRouter Members

Implements a very fast link routing algorithm that uses a tree to represent the free and occupied regions in the diagram.

The following tables list the members exposed by the QuickRouter type.

Public Constructors

	Name	Description
	QuickRouter	Initializes a new instance of the QuickRouter class.

Public Methods

	Name	Description
	getDiagram	
	getGranularity	Gets the granularity of the obstacles map generated by **QuickRouter**.
	getTurnCost	Gets a value added to the total cost of a route if it makes a turn.
	getUBendMaxLen	Gets the maximum U-bend length.
	routeAllLinks	Routes all links in the diagram.
	routeLink	Implements LinkRouter.routeLink.
	routeLinks	Implements LinkRouter.routeLinks.
	setDiagram	
	setGranularity	Sets the granularity of the obstacles map generated by **QuickRouter**.
	setTurnCost	Sets a value added to the total cost of a route if it makes a turn.

	setUBendMaxLen	Sets the maximum U-bend length.

See Also

QuickRouter Class
com.mindfusion.diagramming Namespace

QuickRouter Constructor

Initializes a new instance of the QuickRouter class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public QuickRouter (
    Diagram diagram
)
```

Parameters

diagram
The Diagram whose links will be routed.

See Also

QuickRouter Class
com.mindfusion.diagramming Namespace

QuickRouter Methods

QuickRouter.getDiagram Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Diagram getDiagram ()
```

Return Value

See Also

QuickRouter Members
QuickRouter Class
com.mindfusion.diagramming Namespace

QuickRouter.getGranularity Method

Gets the granularity of the obstacles map generated by QuickRouter.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Granularity getGranularity ()
```

Return Value

A member of the Granularity enumeration. The default value is **CoarseGrained**.

Remarks

A CoarseGrained obstacle map leads to faster path finding, however the found paths might be longer than necessary in a small percent of the cases. The coarse-grained map also takes slightly more time to build, so you might disable it if there are aren't many links in the diagram.

See Also

QuickRouter Members
QuickRouter Class
com.mindfusion.diagramming Namespace

QuickRouter.getTurnCost Method

Gets a value added to the total cost of a route if it makes a turn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getTurnCost ()
```

Return Value

See Also

QuickRouter Members
QuickRouter Class
com.mindfusion.diagramming Namespace

QuickRouter.getUBendMaxLen Method

Gets the maximum U-bend length.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getUBendMaxLen ()
```

Return Value

A float value specifying the maximum length of U-bends. The default is 30.

See Also

QuickRouter Members
QuickRouter Class
com.mindfusion.diagramming Namespace

QuickRouter.routeAllLinks Method

Routes all links in the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void routeAllLinks ()
```

See Also

QuickRouter Members
QuickRouter Class
com.mindfusion.diagramming Namespace

QuickRouter.routeLink Method

Implements LinkRouter.routeLink.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean routeLink (
    DiagramLink link,
    ConnectionPoint originConnection,
    ConnectionPoint destinationConnection,
    boolean nowCreating
)
```

Parameters

link
The DiagramLink to route.

originConnection
Represents connection to Origin node, potentially different from link's stored connection when modifying first control point.

destinationConnection
Represents connection to Destination node, potentially different from link's stored connection when modifying last control point.

nowCreating
Indicates whether link is currently being created.

Return Value

true if a path has been found successfully, otherwise **false**.

See Also

QuickRouter Members
QuickRouter Class
com.mindfusion.diagramming Namespace

QuickRouter.routeLinks Method

Implements LinkRouter.routeLinks.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLinkList routeLinks (
    DiagramLinkList links
)
```

Parameters

links
A list of DiagramLink objects that should be routed.

Return Value

A list of links that were not routed successfully.

See Also

QuickRouter Members
QuickRouter Class
com.mindfusion.diagramming Namespace

QuickRouter.setDiagram Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDiagram (
    Diagram value
)
```

Parameters

value

See Also

QuickRouter Members
QuickRouter Class
com.mindfusion.diagramming Namespace

QuickRouter.setGranularity Method

Sets the granularity of the obstacles map generated by QuickRouter.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setGranularity (
    Granularity value
)
```

Parameters

value
A member of the Granularity enumeration.

Remarks

A CoarseGrained obstacle map leads to faster path finding, however the found paths might be longer than necessary in a small percent of the cases. The coarse-grained map also takes slightly more time to build, so you might disable it if there are aren't many links in the diagram.

See Also

QuickRouter Members
QuickRouter Class
com.mindfusion.diagramming Namespace

QuickRouter.setTurnCost Method

Sets a value added to the total cost of a route if it makes a turn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTurnCost (
    float value
)
```

Parameters

value

See Also

QuickRouter Members
QuickRouter Class
com.mindfusion.diagramming Namespace

QuickRouter.setUBendMaxLen Method

Sets the maximum U-bend length.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setUBendMaxLen (
    float uBendMaxLen
)
```

Parameters

uBendMaxLen
A float value specifying the maximum length of U-bends. The default is 30.

See Also

QuickRouter Members
QuickRouter Class
com.mindfusion.diagramming Namespace

ReadOnlyDiagramNodeList Class

Represents a read-only wrapper of a node list.

Syntax

Java

```
public class ReadOnlyDiagramNodeList extends ReadOnlyList<E>
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)

java.util.AbstractList(E)
com.mindfusion.diagramming.ReadOnlyList(E)
com.mindfusion.diagramming.ReadOnlyDiagramNodeList

See Also

ReadOnlyDiagramNodeList Members
com.mindfusion.diagramming Namespace

ReadOnlyDiagramNodeList Members

Represents a read-only wrapper of a node list.

The following tables list the members exposed by the ReadOnlyDiagramNodeList type.

Public Constructors

	Name	Description
	ReadOnlyDiagramNodeList	

Public Methods

	Name	Description
	get	(Inherited from ReadOnlyList.)
	size	(Inherited from ReadOnlyList.)

See Also

ReadOnlyDiagramNodeList Class
com.mindfusion.diagramming Namespace

ReadOnlyDiagramNodeList Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ReadOnlyDiagramNodeList (
    AbstractList<DiagramNode> innerList
)
```

Parameters

innerList

See Also

ReadOnlyList<E> Class

Represents a generic read-only list.

Syntax

Java
`public class ReadOnlyList<E> extends AbstractList<E>`

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.ReadOnlyList(E)
        com.mindfusion.diagramming.ReadOnlyDiagramNodeList

See Also

ReadOnlyList(E) Members
com.mindfusion.diagramming Namespace

ReadOnlyList(E) Members

Represents a generic read-only list.

The following tables list the members exposed by the ReadOnlyList(E) type.

Public Constructors

	Name	Description
	ReadOnlyList	Initializes a new instance of the **ReadOnlyList** class.

Public Methods

	Name	Description
	get	
	size	

See Also

ReadOnlyList<E> Class
com.mindfusion.diagramming Namespace

ReadOnlyList(E) Constructor

Initializes a new instance of the ReadOnlyList class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ReadOnlyList (
    AbstractList<E> innerList
)
```

Parameters

innerList

See Also

ReadOnlyList<E> Class
com.mindfusion.diagramming Namespace

ReadOnlyList(E) Methods

ReadOnlyList(E).get Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public E get (
    int index
)
```

Parameters

index

Return Value

See Also

ReadOnlyList(E) Members
ReadOnlyList<E> Class
com.mindfusion.diagramming Namespace

ReadOnlyList(E).size Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public int size ()`

Return Value

See Also

ReadOnlyList(E) Members
ReadOnlyList<E> Class
com.mindfusion.diagramming Namespace

RedimTableCmd Class

Represents an action that changes the number of columns or rows in a table.

Syntax

Java
`public class RedimTableCmd extends Command`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.RedimTableCmd

See Also

RedimTableCmd Members
com.mindfusion.diagramming Namespace

RedimTableCmd Members

Represents an action that changes the number of columns or rows in a table.

The following tables list the members exposed by the RedimTableCmd type.

Public Constructors

	Name	Description
	RedimTableCmd	Initializes a new RedimTableCmd instance.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)

	execute	This method is called internally by JDiagram when changing the number of rows or columns of a table.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTable	Returns the table related to this command.
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	This method is called by the UndoManager when redoing actions.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	This method is called by the **UndoManager** when undoing actions.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

RedimTableCmd Class
com.mindfusion.diagramming Namespace

RedimTableCmd Constructor

Initializes a new RedimTableCmd instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RedimTableCmd (
    TableNode table,
    String title
)
```

Parameters

table
The TableNode affected by this command.

title
A String containing the command title.

See Also

RedimTableCmd Class
com.mindfusion.diagramming Namespace

RedimTableCmd Methods

RedimTableCmd.execute Method

This method is called internally by JDiagram when changing the number of rows or columns of a table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled
true if the undo manager is enabledat this time, otherwise false.

See Also

RedimTableCmd Members
RedimTableCmd Class
com.mindfusion.diagramming Namespace

RedimTableCmd.getTable Method

Returns the table related to this command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TableNode getTable ()
```

Return Value

A TableNode instance.

See Also

RedimTableCmd Members
RedimTableCmd Class
com.mindfusion.diagramming Namespace

RedimTableCmd.redo Method

This method is called by the UndoManager when redoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void redo ()`

See Also

RedimTableCmd Members
RedimTableCmd Class
com.mindfusion.diagramming Namespace

RedimTableCmd.undo Method

This method is called by the UndoManager when undoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void undo ()`

See Also

RedimTableCmd Members
RedimTableCmd Class
com.mindfusion.diagramming Namespace

Relationship Enumeration

The members of this enumeration specify how table rows should be related. They can be used as parameters of the addRelation method of the TableNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum Relationship`

Members

	Member name	Description

	ManyToOne	The specified row is at the "many" end of a one-to-many relation.
	OneToMany	The specified row is at the "one" end of a one-to-many relation.

See Also

com.mindfusion.diagramming Namespace

RelativeToLink Enumeration

The members of this enumeration specify how the link labels are positioned.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum RelativeToLink`

Members

	Member name	Description
	ControlPoint	Indicates that the link labels are positioned relative to a specified control point.
	LinkLength	Indicates that the link labels are positioned relative to the link.
	Segment	Indicates that the link labels are positioned relative to a specified segment.

See Also

com.mindfusion.diagramming Namespace

RelativeToNode Enumeration

The members of this enumeration specify how labels are positioned relative to their node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum RelativeToNode`

Members

	Member name	Description
	Center	Indicates that the node labels are positioned relative to the node center.
	Corner	Indicates that the node labels are positioned relative to a specified corner point.
	Edge	Indicates that the node labels are positioned relative to a specified edge.

See Also

com.mindfusion.diagramming Namespace
NodeLabel Class

RemoveFromContainerCmd Class

Undoable command that implements removal of nodes from a container.

Syntax

Java
`public class RemoveFromContainerCmd extends Command`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.RemoveFromContainerCmd

See Also

RemoveFromContainerCmd Members
com.mindfusion.diagramming Namespace

RemoveFromContainerCmd Members

Undoable command that implements removal of nodes from a container.

The following tables list the members exposed by the RemoveFromContainerCmd type.

Protected Constructors

	Name	Description
	RemoveFromContainerCmd	Intializes a new instance of the **RemoveFromContainerCmd** class.

Public Methods

	Name	Description

	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	Carries out the command action.
	getContainer	Gets the ContainerNode object associated with the command.
	getNode	Gets the DiagramNode instance associated with the command.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	Redoes the command.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	Undoes the command.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related.
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

RemoveFromContainerCmd Class
com.mindfusion.diagramming Namespace

RemoveFromContainerCmd Constructor

Intializes a new instance of the RemoveFromContainerCmd class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected RemoveFromContainerCmd (
    ContainerNode container,
    DiagramNode node,
    boolean interactive
)
```

Parameters

container

A ContainerNode object.

node

A DiagramNode object.

interactive

See Also

RemoveFromContainerCmd Class
com.mindfusion.diagramming Namespace

RemoveFromContainerCmd Methods

RemoveFromContainerCmd.adopt Method

Merges adjacent commands in the history queue if they are related.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean adopt (
    Command command
)
```

Parameters

command

The Command that might be adopted by this command.

Return Value

true if the specified command has been adopted; otherwise, **false**.

See Also

RemoveFromContainerCmd Members
RemoveFromContainerCmd Class
com.mindfusion.diagramming Namespace

RemoveFromContainerCmd.execute Method

Carries out the command action.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled

See Also

RemoveFromContainerCmd Members
RemoveFromContainerCmd Class
com.mindfusion.diagramming Namespace

RemoveFromContainerCmd.getContainer Method

Gets the ContainerNode object associated with the command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ContainerNode getContainer ()
```

Return Value

See Also

RemoveFromContainerCmd Members
RemoveFromContainerCmd Class
com.mindfusion.diagramming Namespace

RemoveFromContainerCmd.getNode Method

Gets the DiagramNode instance associated with the command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramNode getNode ()
```

Return Value

A DiagramNode object.

See Also

RemoveFromContainerCmd Members
RemoveFromContainerCmd Class
com.mindfusion.diagramming Namespace

RemoveFromContainerCmd.redo Method

Redoes the command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void redo ()
```

See Also

RemoveFromContainerCmd Members
RemoveFromContainerCmd Class
com.mindfusion.diagramming Namespace

RemoveFromContainerCmd.undo Method

Undoes the command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void undo ()
```

See Also

RemoveFromContainerCmd Members
RemoveFromContainerCmd Class
com.mindfusion.diagramming Namespace

RemoveGroupCmd Class

Represents an action that destroys a group.

Syntax

Java

```
public class RemoveGroupCmd extends Command
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.RemoveGroupCmd

See Also

RemoveGroupCmd Members

Represents an action that destroys a group.

The following tables list the members exposed by the RemoveGroupCmd type.

Public Constructors

	Name	Description
	RemoveGroupCmd	Initializes a new RemoveGroupCmd instance.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	Overloaded.
	getGroup	Gets the group related to this command.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	This method is called by the UndoManager when redoing actions.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	This method is called by the **UndoManager** when undoing actions.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

RemoveGroupCmd Class
com.mindfusion.diagramming Namespace

RemoveGroupCmd Constructor

Initializes a new RemoveGroupCmd instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RemoveGroupCmd (
    Group group,
    DiagramItem item
)
```

Parameters

group
A Group destroyed by this command.

item
The master DiagramItem of the group.

See Also

RemoveGroupCmd Class
com.mindfusion.diagramming Namespace

RemoveGroupCmd Methods

RemoveGroupCmd.execute Method

Overload List

Name	Description
RemoveGroupCmd.execute ()	Removes the group from the flowchart.
RemoveGroupCmd.execute (boolean)	This method is called internally by JDiagram when destroying a group.

See Also

RemoveGroupCmd Members
RemoveGroupCmd Class
com.mindfusion.diagramming Namespace

RemoveGroupCmd.execute Method ()

Removes the group from the flowchart.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void execute ()
```

See Also

execute Method Overload List
RemoveGroupCmd Members
RemoveGroupCmd Class
com.mindfusion.diagramming Namespace

RemoveGroupCmd.execute Method (boolean)

This method is called internally by JDiagram when destroying a group.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled
true if the undo manager is enabledat this time, otherwise false.

See Also

execute Method Overload List
RemoveGroupCmd Members
RemoveGroupCmd Class
com.mindfusion.diagramming Namespace

RemoveGroupCmd.getGroup Method

Gets the group related to this command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Group getGroup ()
```

Return Value

A Group object.

See Also

RemoveGroupCmd Members
RemoveGroupCmd Class
com.mindfusion.diagramming Namespace

RemoveGroupCmd.redo Method

This method is called by the UndoManager when redoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void redo ()
```

See Also

RemoveGroupCmd Members
RemoveGroupCmd Class
com.mindfusion.diagramming Namespace

RemoveGroupCmd.undo Method

This method is called by the UndoManager when undoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void undo ()
```

See Also

RemoveGroupCmd Members
RemoveGroupCmd Class
com.mindfusion.diagramming Namespace

RemoveItemCmd Class

Represents an action that removes an item from the diagram.

Syntax

```
Java
public class RemoveItemCmd extends Command
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.Command
com.mindfusion.diagramming.RemoveItemCmd

See Also

RemoveItemCmd Members
com.mindfusion.diagramming Namespace

RemoveItemCmd Members

Represents an action that removes an item from the diagram.

The following tables list the members exposed by the RemoveItemCmd type.

Public Constructors

	Name	Description
	RemoveItemCmd	Initializes a new RemoveItemCmd instance.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	Overloaded.
	getItem	Gets the item removed by this command.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	This method is called by the UndoManager when redoing actions.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	This method is called by the **UndoManager** when undoing actions.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

RemoveItemCmd Class
com.mindfusion.diagramming Namespace

RemoveItemCmd Constructor

Initializes a new RemoveItemCmd instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RemoveItemCmd (
    DiagramItem item
)
```

Parameters

item
The DiagramItem removed from the diagram by this command.

See Also

RemoveItemCmd Class
com.mindfusion.diagramming Namespace

RemoveItemCmd Methods

RemoveItemCmd.execute Method

Overload List

Name	Description
RemoveItemCmd.execute ()	Removes the item from the diagram.
RemoveItemCmd.execute (boolean)	This method is called internally by JDiagram when removing an item.

See Also

RemoveItemCmd Members
RemoveItemCmd Class
com.mindfusion.diagramming Namespace

RemoveItemCmd.execute Method ()

Removes the item from the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void execute ()
```

See Also

execute Method Overload List
RemoveItemCmd Members
RemoveItemCmd Class
com.mindfusion.diagramming Namespace

RemoveItemCmd.execute Method (boolean)

This method is called internally by JDiagram when removing an item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled
true if the undo manager is enabledat this time, otherwise false.

See Also

execute Method Overload List
RemoveItemCmd Members
RemoveItemCmd Class
com.mindfusion.diagramming Namespace

RemoveItemCmd.getItem Method

Gets the item removed by this command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramItem getItem ()
```

Return Value

An DiagramItem -derived object.

See Also

RemoveItemCmd Members
RemoveItemCmd Class
com.mindfusion.diagramming Namespace

RemoveItemCmd.redo Method

This method is called by the UndoManager when redoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void redo ()
```

See Also

RemoveItemCmd Members
RemoveItemCmd Class
com.mindfusion.diagramming Namespace

RemoveItemCmd.undo Method

This method is called by the UndoManager when undoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void undo ()
```

See Also

RemoveItemCmd Members
RemoveItemCmd Class
com.mindfusion.diagramming Namespace

RenderCallback<T> Interface

This functional interface declares the prototype of drawing callbacks called by various icon Renderers.

Syntax

Java

```
public interface RenderCallback<T>
```

See Also

RenderCallback(T) Members
com.mindfusion.diagramming Namespace

RenderCallback(T) Members

This functional interface declares the prototype of drawing callbacks called by various icon Renderers.

The following tables list the members exposed by the RenderCallback(T) type.

Public Methods

	Name	Description
	render	Called to render a node's icon using Graphics2D API.

See Also

RenderCallback<T> Interface
com.mindfusion.diagramming Namespace

RenderCallback(T) Methods

RenderCallback(T).render Method

Called to render a node's icon using Graphics2D API.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
boolean render (
    T item,
    Graphics2D graphics,
    Rectangle2D bounds
)
```

Parameters

item
The diagram item that invokes the callback.

graphics
A Graphics2D object representing the drawing canvas.

bounds
The icon's bounding rectangle.

Return Value

true to prevent standard icon rendering, or **false** to apply it.

See Also

RenderCallback(T) Members
RenderCallback<T> Interface
com.mindfusion.diagramming Namespace

Renderers Class

This class lets you set icons for shared diagram elements such as expand / collapse and fold / unfold buttons, or provide callbacks that draws them using **Graphics2D** code.

Syntax

Java
`public class Renderers`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Renderers

See Also

Renderers Members
com.mindfusion.diagramming Namespace

Renderers Members

This class lets you set icons for shared diagram elements such as expand / collapse and fold / unfold buttons, or provide callbacks that draws them using **Graphics2D** code.

The following tables list the members exposed by the Renderers type.

Public Constructors

	Name	Description
	Renderers	

Public Methods

	Name	Description
	getExpandIconRenderer	Gets an ExpandIconRenderer instance used to draw expand / collapse buttons for Expandable nodes.
	getFoldIconRenderer	Gets a FoldIconRenderer instance used to draw fold and unfold buttons in ContainerNode caption bar.
	getScrollIconRenderer	Gets a ScrollIconRenderer instance used to draw scroll arrows in TableNode caption bar.

	setExpandIconRenderer	Sets an **ExpandIconRenderer** instance used to draw expand / collapse buttons for **Expandable** nodes.
	setFoldIconRenderer	Sets a **FoldIconRenderer** instance used to draw fold and unfold buttons in **ContainerNode** caption bar.
	setScrollIconRenderer	Sets a **ScrollIconRenderer** instance used to draw scroll arrows in **TableNode** caption bar.

See Also

Renderers Class
com.mindfusion.diagramming Namespace

Renderers Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Renderers ()
```

See Also

Renderers Class
com.mindfusion.diagramming Namespace

Renderers Methods

Renderers.getExpandIconRenderer Method

Gets an ExpandIconRenderer instance used to draw expand / collapse buttons for Expandable nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static ExpandIconRenderer getExpandIconRenderer ()
```

Return Value

An ExpandIconRenderer instance. The default value is **null**, which applies default icons.

See Also

Renderers Members
Renderers Class
com.mindfusion.diagramming Namespace

Renderers.getFoldIconRenderer Method

Gets a FoldIconRenderer instance used to draw fold and unfold buttons in ContainerNode caption bar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static FoldIconRenderer getFoldIconRenderer ()
```

Return Value

A FoldIconRenderer instance. The default value is **null**, which applies default icons.

See Also

Renderers Members
Renderers Class
com.mindfusion.diagramming Namespace

Renderers.getScrollIconRenderer Method

Gets a ScrollIconRenderer instance used to draw scroll arrows in TableNode caption bar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static ScrollIconRenderer getScrollIconRenderer ()
```

Return Value

A ScrollIconRenderer instance. The default value is **null**, which applies default icons.

See Also

Renderers Members
Renderers Class
com.mindfusion.diagramming Namespace

Renderers.setExpandIconRenderer Method

Sets an ExpandIconRenderer instance used to draw expand / collapse buttons for Expandable nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void setExpandIconRenderer (
    ExpandIconRenderer value
)
```

Parameters

value
An ExpandIconRenderer instance. The default value is **null**, which applies default icons.

See Also

Renderers Members
Renderers Class
com.mindfusion.diagramming Namespace

Renderers.setFoldIconRenderer Method

Sets a FoldIconRenderer instance used to draw fold and unfold buttons in ContainerNode caption bar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void setFoldIconRenderer (
    FoldIconRenderer value
)
```

Parameters

value
A FoldIconRenderer instance. The default value is **null**, which applies default icons.

See Also

Renderers Members
Renderers Class
com.mindfusion.diagramming Namespace

Renderers.setScrollIconRenderer Method

Sets a ScrollIconRenderer instance used to draw scroll arrows in TableNode caption bar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void setScrollIconRenderer (
    ScrollIconRenderer value
)
```

Parameters

value
A ScrollIconRenderer instance. The default value is **null**, which applies default icons.

See Also

Renderers Members
Renderers Class
com.mindfusion.diagramming Namespace

RenderOptions Class

Defines the attributes of a printed diagram. Use the PrintOptions object returned by the DiagramView.getPrintOptions method to set the attributes of a specific diagram.

Syntax

Java
`public class RenderOptions`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.RenderOptions
    com.mindfusion.diagramming.PrintOptions

See Also

RenderOptions Members
com.mindfusion.diagramming Namespace

RenderOptions Members

Defines the attributes of a printed diagram. Use the PrintOptions object returned by the DiagramView.getPrintOptions method to set the attributes of a specific diagram.

The following tables list the members exposed by the RenderOptions type.

Public Constructors

	Name	Description
	RenderOptions	Initializes a new RenderOptions instance.

Public Methods

	Name	Description

	getAntiAlias	
	getDocumentName	Gets the document name.
	getEnableAnchors	Gets a value indicating whether anchor point marks will be printed.
	getEnableBackground	Gets a value indicating whether the diagram background will be filled using the Diagram.getBackBrush background brush.
	getEnableBackgroundImage	Gets a value indicating whether the diagram's background image will be printed.
	getEnableEffects	Gets a value indicating whether to render special node effects.
	getEnableFitToPage	
	getEnableGrid	Gets a value indicating whether the alignment grid is rendered.
	getEnableImages	Gets a value indicating whether images that are displayed inside nodes will be printed.
	getEnableInterior	Gets a value indicating whether the nodes will be filled when printed.
	getEnableShadows	Gets a value indicating whether item shadows will be printed.
	getEnableText	
	getHeaderFormat	Gets the page header format string.
	getHyperLinkStyle	
	getHyperLinkTarget	
	getMeasureUnit	Gets the diagram's measure unit.
	getRenderTarget	
	getScale	Gets the scale of the printed diagram relatively to the original on-screen size of the diagram.
	getScrollX	
	getScrollY	
	getTargetView	
	getTextAntiAlias	
	getVisibleRect	
	setAntiAlias	
	setDocumentName	Sets the document name.
	setEnableAnchors	Sets a value indicating whether anchor point marks should be printed.
	setEnableBackground	Sets a value indicating whether the diagram background should be filled using the **Diagram.getBackBrush** background brush.

	setEnableBackgroundImage	Sets a value indicating whether the diagram's background image should be printed.
	setEnableEffects	Sets a value indicating whether to render special node effects.
	setEnableFitToPage	
	setEnableGrid	Gets a value indicating whether the alignment grid is rendered.
	setEnableImages	Sets a value indicating whether images that are displayed inside nodes should be printed.
	setEnableInterior	Sets a value indicating whether the nodes should be filled when printed.
	setEnableShadows	Sets a value indicating whether item shadows should be printed.
	setEnableText	
	setHeaderFormat	Sets the page header format string.
	setHyperLinkStyle	
	setHyperLinkTarget	
	setMeasureUnit	Sets the diagram's measure unit.
	setRenderTarget	
	setScale	Sets the scale of the printed diagram relatively to the original on-screen size of the diagram.
	setScrollX	
	setScrollY	
	setTargetView	
	setTextAntiAlias	
	setVisibleRect	

See Also

RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions Constructor

Initializes a new RenderOptions instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RenderOptions ()
```

See Also

RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions Methods

RenderOptions.getAntiAlias Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SmoothingMode getAntiAlias ()
```

Return Value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getDocumentName Method

Gets the document name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getDocumentName ()
```

Return Value

A String containing the document name.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getEnableAnchors Method

Gets a value indicating whether anchor point marks will be printed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getEnableAnchors ()
```

Return Value

true if anchor point marks will be printed,otherwise **false**.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getEnableBackground Method

Gets a value indicating whether the diagram background will be filled using the Diagram.getBackBrush background brush.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getEnableBackground ()
```

Return Value

true if the background will be filled when printing, otherwise **false**.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getEnableBackgroundImage Method

Gets a value indicating whether the diagram's background image will be printed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getEnableBackgroundImage ()
```

Return Value

true if the background image will be printed,otherwise **false**.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getEnableEffects Method

Gets a value indicating whether to render special node effects.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getEnableEffects ()
```

Return Value

true if node effects should be rendered; otherwise, **false**.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getEnableFitToPage Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getEnableFitToPage ()
```

Return Value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getEnableGrid Method

Gets a value indicating whether the alignment grid is rendered.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getEnableGrid ()
```

Return Value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getEnableImages Method

Gets a value indicating whether images that are displayed inside nodes will be printed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getEnableImages ()
```

Return Value

true if images will be printed,otherwise **false**.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getEnableInterior Method

Gets a value indicating whether the nodes will be filled when printed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getEnableInterior ()
```

Return Value

true if nodes will be filled, otherwise **false**.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getEnableShadows Method

Gets a value indicating whether item shadows will be printed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getEnableShadows ()
```

Return Value

true if shadows will be printed, otherwise **false**.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getEnableText Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getEnableText ()
```

Return Value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getHeaderFormat Method

Gets the page header format string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getHeaderFormat ()
```

Return Value

A String containing formatting attributes for the page headers.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getHyperLinkStyle Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public HyperLinkStyle getHyperLinkStyle ()
```

Return Value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getHyperLinkTarget Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getHyperLinkTarget ()
```

Return Value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getMeasureUnit Method

Gets the diagram's measure unit.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GraphicsUnit getMeasureUnit ()
```

Return Value

A member of the GraphicsUnit enumeration.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getRenderTarget Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RenderTarget getRenderTarget ()
```

Return Value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getScale Method

Gets the scale of the printed diagram relatively to the original on-screen size of the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getScale ()
```

Return Value

A float value specifying percents of the original diagram size.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getScrollX Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public double getScrollX ()
```

Return Value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getScrollY Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public double getScrollY ()
```

Return Value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getTargetView Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object getTargetView ()
```

Return Value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getTextAntiAlias Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SmoothingMode getTextAntiAlias ()
```

Return Value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.getVisibleRect Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getVisibleRect ()
```

Return Value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setAntiAlias Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAntiAlias (
    SmoothingMode smoothingMode
)
```

Parameters

smoothingMode
A SmoothingMode object.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setDocumentName Method

Sets the document name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDocumentName (
    String value
)
```

Parameters

value
A String containing the document name.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setEnableAnchors Method

Sets a value indicating whether anchor point marks should be printed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableAnchors (
    boolean value
)
```

Parameters

value
true if anchor point marks should be printed,otherwise false.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setEnableBackground Method

Sets a value indicating whether the diagram background should be filled using the Diagram.getBackBrush background brush.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableBackground (
    boolean value
)
```

Parameters

value
true if the background should be filled whenprinting, otherwise false.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setEnableBackgroundImage Method

Sets a value indicating whether the diagram's background image should be printed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void setEnableBackgroundImage (
    boolean value
)
```

Parameters

value
true if the background image should be printed,otherwise false.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setEnableEffects Method

Sets a value indicating whether to render special node effects.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void setEnableEffects (
    boolean value
)
```

Parameters

value
true if node effects should be rendered; otherwise, false.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setEnableFitToPage Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableFitToPage (
    boolean value
)
```

Parameters

value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setEnableGrid Method

Gets a value indicating whether the alignment grid is rendered.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableGrid (
    boolean value
)
```

Parameters

value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setEnableImages Method

Sets a value indicating whether images that are displayed inside nodes should be printed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableImages (
    boolean value
)
```

Parameters

value
true if images should be printed,otherwise false.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setEnableInterior Method

Sets a value indicating whether the nodes should be filled when printed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableInterior (
    boolean value
)
```

Parameters

value
true if nodes should be filled,otherwise false.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setEnableShadows Method

Sets a value indicating whether item shadows should be printed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableShadows (
    boolean value
)
```

Parameters

value
true if shadows should be printed,otherwise false.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setEnableText Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableText (
    boolean value
)
```

Parameters

value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setHeaderFormat Method

Sets the page header format string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHeaderFormat (
    String value
)
```

Parameters

value
A String containing formatting attributesfor the page headers.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setHyperLinkStyle Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void setHyperLinkStyle (
    HyperLinkStyle value
)
```

Parameters

value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setHyperLinkTarget Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void setHyperLinkTarget (
    String value
)
```

Parameters

value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setMeasureUnit Method

Sets the diagram's measure unit.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void setMeasureUnit (
    GraphicsUnit value
```

```
)
```

Parameters

value
A member of the GraphicsUnit enumeration.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setRenderTarget Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRenderTarget (
    RenderTarget renderTarget
)
```

Parameters

renderTarget

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setScale Method

Sets the scale of the printed diagram relatively to the original on-screen size of the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setScale (
    float value
)
```

Parameters

value
A float value specifying percents of the original diagram size. The default value is 100.

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setScrollX Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setScrollX (
    double value
)
```

Parameters

value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setScrollY Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setScrollY (
    double value
)
```

Parameters

value

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setTargetView Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTargetView (
    Object targetView
)
```

Parameters

targetView

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setTextAntiAlias Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextAntiAlias (
    SmoothingMode textAntiAlias
)
```

Parameters

textAntiAlias

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderOptions.setVisibleRect Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setVisibleRect (
    Rectangle2D visibleRect
)
```

Parameters

visibleRect

See Also

RenderOptions Members
RenderOptions Class
com.mindfusion.diagramming Namespace

RenderTarget Enumeration

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum RenderTarget`

Members

	Member name	Description
	BackBuffer	
	Display	
	Printer	

See Also

com.mindfusion.diagramming Namespace

RepaintEvent Class

Specifies the coordinates of the area that should be repainted by views when the Repaint event is raised.

Syntax

Java
`public class RepaintEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject

com.mindfusion.diagramming.RepaintEvent

See Also

RepaintEvent Members
com.mindfusion.diagramming Namespace

RepaintEvent Members

Specifies the coordinates of the area that should be repainted by views when the Repaint event is raised.

The following tables list the members exposed by the RepaintEvent type.

Public Constructors

	Name	Description
	RepaintEvent	Overloaded.

Public Methods

	Name	Description
	getInvalidRect	Gets the rectangular area in the diagram document that should be repainted.
	getRedrawCacheImage	Gets a value indicating whether the back-buffer cache image should be repainted as well.
	setInvalidRect	Sets the rectangular area in the diagram document that should be repainted.

See Also

RepaintEvent Class
com.mindfusion.diagramming Namespace

RepaintEvent Constructor

Overload List

Name	Description
RepaintEvent (Object, Rectangle2D)	
RepaintEvent (Object, Rectangle2D, boolean)	Initializes a new instance of the RepaintEvent class

See Also

RepaintEvent Class
com.mindfusion.diagramming Namespace

RepaintEvent Constructor (Object, Rectangle2D)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RepaintEvent (
    Object source,
    Rectangle2D invalidRect
)
```

Parameters

source

invalidRect

See Also

RepaintEvent Constructor Overload List
RepaintEvent Class
com.mindfusion.diagramming Namespace

RepaintEvent Constructor (Object, Rectangle2D, boolean)

Initializes a new instance of the RepaintEvent class

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RepaintEvent (
    Object source,
    Rectangle2D invalidRect,
    boolean redrawCacheImage
)
```

Parameters

source
The source of the event.

invalidRect
A **Rectangle2D** object representing the rectangle that should be repainted.

redrawCacheImage
A boolean value specifying whether the diagram cache image used during modification should be re-created.

See Also

RepaintEvent Constructor Overload List
RepaintEvent Class
com.mindfusion.diagramming Namespace

RepaintEvent Methods

RepaintEvent.getInvalidRect Method

Gets the rectangular area in the diagram document that should be repainted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Rectangle2D getInvalidRect ()
```

Return Value

A **Rectangle2D** instance specifying the invalid rectangle. A null value indicates that the whole view should be repainted.

See Also

RepaintEvent Members
RepaintEvent Class
com.mindfusion.diagramming Namespace

RepaintEvent.getRedrawCacheImage Method

Gets a value indicating whether the back-buffer cache image should be repainted as well.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getRedrawCacheImage ()
```

Return Value

true to redraw the back-buffer image; otherwise, false.

See Also

RepaintEvent Members
RepaintEvent Class
com.mindfusion.diagramming Namespace

RepaintEvent.setInvalidRect Method

Sets the rectangular area in the diagram document that should be repainted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setInvalidRect (
    Rectangle2D invalidRect
)
```

Parameters

invalidRect
A **Rectangle2D** instance specifying the invalid rectangle.

See Also

RepaintEvent Members
RepaintEvent Class
com.mindfusion.diagramming Namespace

RerouteLinks Enumeration

The members of this enumeration specify in what circumstances JDiagram should automatically re-route links. An EnumSet of **RerouteLinks** values can be used as a parameter of the setTriggerRerouting method of the RoutingOptions class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public enum RerouteLinks
```

Members

	Member name	Description
	WhenIntersectNode	Look for a new link route only if the link intersects a node.
	WhenModified	Look for a new link route each time an end point of the link is moved.
	WhileCreating	Looks for link route while the link is being initially drawn by the user.
	WhileModifying	Route links while the user modifies them or drags their incident nodes.

See Also

ResizeTableColumnCmd Class

Implements resizing of table's columns. Instances of this class are implicitly created by MindFusion.Diagramming in response to resizing table's columns interactively. References to those instances are passed to handlers of the actionRecorded, actionUndone and actionRedone events.

Syntax

Java
`public class ResizeTableColumnCmd extends Command`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.ResizeTableColumnCmd

See Also

ResizeTableColumnCmd Members
com.mindfusion.diagramming Namespace

ResizeTableColumnCmd Members

Implements resizing of table's columns. Instances of this class are implicitly created by MindFusion.Diagramming in response to resizing table's columns interactively. References to those instances are passed to handlers of the actionRecorded, actionUndone and actionRedone events.

The following tables list the members exposed by the ResizeTableColumnCmd type.

Public Constructors

	Name	Description
	ResizeTableColumnCmd	Initializes a new instance of the ResizeTableColumnCmd class.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	Carries out the command action.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTable	Gets a reference to table affected by this operation.
	getTitle	Gets the title of this command. (Inherited from Command.)

	redo	Redoes the command action.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	Undoes the command.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

ResizeTableColumnCmd Class
com.mindfusion.diagramming Namespace

ResizeTableColumnCmd Constructor

Initializes a new instance of the ResizeTableColumnCmd class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ResizeTableColumnCmd (
    TableNode tableNode,
    Column column
)
```

Parameters

tableNode
A TableNode instance.

column
The Column being resized.

See Also

ResizeTableColumnCmd Class
com.mindfusion.diagramming Namespace

ResizeTableColumnCmd Methods

ResizeTableColumnCmd.execute Method

Carries out the command action.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled

See Also

ResizeTableColumnCmd Members
ResizeTableColumnCmd Class
com.mindfusion.diagramming Namespace

ResizeTableColumnCmd.getTable Method

Gets a reference to table affected by this operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TableNode getTable ()
```

Return Value

See Also

ResizeTableColumnCmd Members
ResizeTableColumnCmd Class
com.mindfusion.diagramming Namespace

ResizeTableColumnCmd.redo Method

Redoes the command action.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void redo ()
```

See Also

ResizeTableColumnCmd Members
ResizeTableColumnCmd Class
com.mindfusion.diagramming Namespace

ResizeTableColumnCmd.undo Method

Undoes the command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void undo ()
```

See Also

ResizeTableColumnCmd Members
ResizeTableColumnCmd Class
com.mindfusion.diagramming Namespace

ResizeTableRowCmd Class

Implements resizing of table's rows. Instances of this class are implicitly created by MindFusion.Diagramming in response to resizing table's rows interactively. References to those instances are passed to handlers of the actionRecorded, actionUndone and actionRedone events.

Syntax

Java

```
public class ResizeTableRowCmd extends Command
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.ResizeTableRowCmd

See Also

ResizeTableRowCmd Members
com.mindfusion.diagramming Namespace

ResizeTableRowCmd Members

Implements resizing of table's rows. Instances of this class are implicitly created by MindFusion.Diagramming in response to resizing table's rows interactively. References to those instances are passed to handlers of the actionRecorded, actionUndone and actionRedone events.

The following tables list the members exposed by the ResizeTableRowCmd type.

Public Constructors

	Name	Description
	ResizeTableRowCmd	Initializes a new instance of the ResizeTableRowCmd class.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	Carries out the command action.
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTable	Gets a reference to table affected by this operation.
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	Redoes the command action.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	Undoes the command.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

ResizeTableRowCmd Class
com.mindfusion.diagramming Namespace

ResizeTableRowCmd Constructor

Initializes a new instance of the ResizeTableRowCmd class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ResizeTableRowCmd (
    TableNode tableNode,
    Row row
)
```

Parameters

tableNode
A TableNode instance.

row
The Row being resized.

See Also

ResizeTableRowCmd Class
com.mindfusion.diagramming Namespace

ResizeTableRowCmd Methods

ResizeTableRowCmd.execute Method

Carries out the command action.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled

See Also

ResizeTableRowCmd Members
ResizeTableRowCmd Class
com.mindfusion.diagramming Namespace

ResizeTableRowCmd.getTable Method

Gets a reference to table affected by this operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public TableNode getTable ()`

Return Value

See Also

ResizeTableRowCmd Members
ResizeTableRowCmd Class
com.mindfusion.diagramming Namespace

ResizeTableRowCmd.redo Method

Redoes the command action.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void redo ()`

See Also

ResizeTableRowCmd Members
ResizeTableRowCmd Class
com.mindfusion.diagramming Namespace

ResizeTableRowCmd.undo Method

Undoes the command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void undo ()`

See Also

ResizeTableRowCmd Members
ResizeTableRowCmd Class
com.mindfusion.diagramming Namespace

RestrictToBounds Enumeration

The members of this enumeration specify whether JDiagram lets users drag items outside of the currently define document bounds. They can be used as parameters of the setRestrictItemsToBounds method of the Diagram class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum RestrictToBounds`

Members

	Member name	Description
	InsideOnly	The items should be always inside the document area.
	Intersection	Let users drag items outside of the scrollable area as long as there is some part of them still inside.
	NoRestriction	Do not prevent users from dragging items outside of the document scrollable area.

See Also

com.mindfusion.diagramming Namespace

RoundRectangleTemplate Class

Represents a straight line segment in a Shape definition.

Syntax

Java
`public class RoundRectangleTemplate extends ElementTemplate`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ElementTemplate
    com.mindfusion.diagramming.RoundRectangleTemplate

See Also

RoundRectangleTemplate Members
com.mindfusion.diagramming Namespace

RoundRectangleTemplate Members

Represents a straight line segment in a Shape definition.

The following tables list the members exposed by the RoundRectangleTemplate type.

Public Constructors

	Name	Description
	RoundRectangleTemplate	Overloaded.

Public Methods

	Name	Description
	getBounds	
	getColor	Gets the color of this element. (Inherited from ElementTemplate.)
	getDashStyle	(Inherited from ElementTemplate.)
	getRadius	
	getWidth	(Inherited from ElementTemplate.)
	setColor	(Inherited from ElementTemplate.)
	setDashStyle	(Inherited from ElementTemplate.)
	setRadius	
	setWidth	(Inherited from ElementTemplate.)
	toDOM	

Protected Methods

	Name	Description
	getElementPen	Gets a pen used to render the element. If no pen properties are explicitly specified for this element, returns the pen passed as an argument. (Inherited from ElementTemplate.)

See Also

RoundRectangleTemplate Class
com.mindfusion.diagramming Namespace

RoundRectangleTemplate Constructor

Overload List

Name	Description

RoundRectangleTemplate (float, float, float, float, float)	Initializes a new instance of RoundRectangleTemplate.
RoundRectangleTemplate (float, float, float, float, float, Color, DashStyle, float)	Initializes a new instance of RoundRectangleTemplate.

See Also

RoundRectangleTemplate Class
com.mindfusion.diagramming Namespace

RoundRectangleTemplate Constructor (float, float, float, float, float)

Initializes a new instance of RoundRectangleTemplate.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RoundRectangleTemplate (
    float x,
    float y,
    float w,
    float h,
    float r
)
```

Parameters

x
x coordinate of the upper left corner of the rectangle

y
y coordinate of the upper left corner of the rectangle

w
width of the rectangle

h
height of the rectangle

r
the radius of the rounded corners of this element.

See Also

RoundRectangleTemplate Constructor Overload List
RoundRectangleTemplate Class
com.mindfusion.diagramming Namespace

RoundRectangleTemplate Constructor (float, float, float, float, float, Color, DashStyle, float)

Initializes a new instance of RoundRectangleTemplate.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RoundRectangleTemplate (
    float x,
    float y,
    float w,
    float h,
    float r,
    Color color,
    DashStyle dashStyle,
    float width
)
```

Parameters

x
x coordinate of the upper left corner of the rectangle

y
y coordinate of the upper left corner of the rectangle

w
width of the rectangle

h
height of the rectangle

r
the radius of the rounded corners of this element.

color
The color of this segment.

dashStyle
The dash style of this segment.

width
The width of this segment.

See Also

RoundRectangleTemplate Constructor Overload List
RoundRectangleTemplate Class
com.mindfusion.diagramming Namespace

RoundRectangleTemplate Methods

RoundRectangleTemplate.getBounds Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getBounds ()
```

Return Value

See Also

RoundRectangleTemplate Members
RoundRectangleTemplate Class
com.mindfusion.diagramming Namespace

RoundRectangleTemplate.getRadius Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getRadius ()
```

Return Value

See Also

RoundRectangleTemplate Members
RoundRectangleTemplate Class
com.mindfusion.diagramming Namespace

RoundRectangleTemplate.setRadius Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRadius (
    float value
)
```

Parameters

value

See Also

RoundRectangleTemplate Members
RoundRectangleTemplate Class
com.mindfusion.diagramming Namespace

RoundRectangleTemplate.toDOM Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element toDOM (
    Document doc
)
```

Parameters

doc

Return Value

See Also

RoundRectangleTemplate Members
RoundRectangleTemplate Class
com.mindfusion.diagramming Namespace

RoutePattern Class

Represents a template from which routes are created.

Syntax

Java

```
public class RoutePattern
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.RoutePattern

See Also

RoutePattern Members
com.mindfusion.diagramming Namespace

RoutePattern Members

Represents a template from which routes are created.

The following tables list the members exposed by the RoutePattern type.

Public Constructors

	Name	Description

	RoutePattern	Overloaded.

Public Methods

	Name	Description
	getSteps	Gets the list of RouteStep objects that generate a route.
	setSteps	Sets the list of **RouteStep** objects that generate a route.

See Also

RoutePattern Class
com.mindfusion.diagramming Namespace

RoutePattern Constructor

Overload List

Name	Description
RoutePattern ()	Initializes a new instance of the RoutePattern class.
RoutePattern (String)	Initializes a new instance of the **RoutePattern** class.

See Also

RoutePattern Class
com.mindfusion.diagramming Namespace

RoutePattern Constructor ()

Initializes a new instance of the RoutePattern class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public RoutePattern ()`

See Also

RoutePattern Constructor Overload List
RoutePattern Class
com.mindfusion.diagramming Namespace

RoutePattern Constructor (String)

Initializes a new instance of the RoutePattern class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RoutePattern (
    String data
)
```

Parameters

data
A string representing a sequence of RouteSteps.

Remarks

Members of the RouteStepKind enumeration are represented by three-character acronyms, with a numerical value appended to advance- steps.

Example

The following route can be represented by "ADR0.5 TRR ADR1 TRL ADR0.5" string.

Java

```
RoutePattern rightZigzag = new RoutePattern();
rightZigzag.getSteps().add(
    new RouteStep(RouteStepKind.AdvanceRelative, 0.5f));
rightZigzag.getSteps().add(
    new RouteStep(RouteStepKind.TurnRight));
rightZigzag.getSteps().add(
    new RouteStep(RouteStepKind.AdvanceRelative, 1));
rightZigzag.getSteps().add(
    new RouteStep(RouteStepKind.TurnLeft));
rightZigzag.getSteps().add(
    new RouteStep(RouteStepKind.AdvanceRelative, 0.5f));
router.getPatterns().add(rightZigzag);

// this can be defined in shorter form using a pattern string
// RoutePattern rightZigzag2 = new RoutePattern(
//     "ADR0.5 TRR ADR1 TRL ADR0.5");
```

See Also

RoutePattern Constructor Overload List
RoutePattern Class
com.mindfusion.diagramming Namespace

RoutePattern Methods

RoutePattern.getSteps Method

Gets the list of RouteStep objects that generate a route.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public List<RouteStep> getSteps ()
```

Return Value

A List<RouteStep> instance.

See Also

RoutePattern Members
RoutePattern Class
com.mindfusion.diagramming Namespace

RoutePattern.setSteps Method

Sets the list of RouteStep objects that generate a route.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setSteps (
    List<RouteStep> value
)
```

Parameters

value
A List<RouteStep> instance.

See Also

RoutePattern Members
RoutePattern Class
com.mindfusion.diagramming Namespace

RouteStep Class

Represents segments or turns in routing patterns.

Syntax

```
Java
public class RouteStep
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.RouteStep

See Also

RouteStep Members
com.mindfusion.diagramming Namespace

RouteStep Members

Represents segments or turns in routing patterns.

The following tables list the members exposed by the RouteStep type.

Public Constructors

	Name	Description
	RouteStep	Overloaded.

See Also

RouteStep Class
com.mindfusion.diagramming Namespace

RouteStep Constructor

Overload List

Name	Description
RouteStep (RouteStepKind)	Initializes a new instance of the RouteStep class.
RouteStep (RouteStepKind, float)	Initializes a new instance of the **RouteStep** class.

See Also

RouteStep Class
com.mindfusion.diagramming Namespace

RouteStep Constructor (RouteStepKind)

Initializes a new instance of the RouteStep class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RouteStep (
    RouteStepKind kind
)
```

Parameters

kind
A member of the RouteStepKind enumeration.

See Also

RouteStep Constructor Overload List
RouteStep Class
com.mindfusion.diagramming Namespace

RouteStep Constructor (RouteStepKind, float)

Initializes a new instance of the RouteStep class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RouteStep (
    RouteStepKind kind,
    float amount
)
```

Parameters

kind
A member of the RouteStepKind enumeration.

amount
The distance to add when step kind is Advance*.

See Also

RouteStep Constructor Overload List
RouteStep Class
com.mindfusion.diagramming Namespace

RouteStepKind Enumeration

Represents parts of a route template.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public enum RouteStepKind
```

Members

	Member name	Description

	AdvanceAbsolute	Advance by the specified absolute distance. Corresponds to "ADA" command in pattern strings.
	AdvanceDest	Advance by the specified relative remaining distance to destination node. Corresponds to "ADD" command in pattern strings.
	AdvancePreferred	Advance by PreferredDistance. Corresponds to "ADP" command in pattern strings.
	AdvanceRelative	Advance by the specified relative distance from origin to destination node. Equivalent to "ADR" command in pattern strings.
	AdvanceRemaining	Advance by the specified relative remaining distance to link's end point. Corresponds to "ADM" command in pattern strings.
	AlignToDestination	Advance to align with nearest side of destination node. Corresponds to "ALD" command in pattern strings.
	AlignToEnd	Advance to align with link's end point. Corresponds to "ALE" command in pattern strings.
	AlignToFarBorder	Advance to align with furthest border of both nodes. Corresponds to "AFB" command in pattern strings.
	AlignToOrigin	Advance to align with nearest side of origin node. Corresponds to "ALO" command in pattern strings.
	AlignToStart	Advance to align with link's start point. Corresponds to "ALS" command in pattern strings.
	TurnLeft	Turn 90 degrees to the left. Corresponds to "TRL" command in pattern strings.
	TurnRight	Turn 90 degrees to the right. Corresponds to "TRR" command in pattern strings.

See Also

com.mindfusion.diagramming Namespace

RoutingOptions Class

An instance of this class accessible by the getRoutingOptions method lets you customize the behavior of the link routing algorithm.

Syntax

Java

```
public class RoutingOptions implements RoutingOptions
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.RoutingOptions

See Also

RoutingOptions Members
com.mindfusion.diagramming Namespace

RoutingOptions Members

An instance of this class accessible by the getRoutingOptions method lets you customize the behavior of the link routing algorithm.

The following tables list the members exposed by the RoutingOptions type.

Public Methods

	Name	Description
	getAnchoring	Gets a value indicating whether the routing algorithm should align links to the anchor points of nodes.
	getAvoidOverlaps	Gets whether link segments should be pulled apart when they overlap in initially found routes.
	getCrossingCost	Gets the value added to the total route cost if a link crosses another link.
S	getDistance	Return a heuristic function that returns the real distance sqrt(dx^2 + dy^2) between two pieces of the routing grid.
S	getDistSquare	Returns a heuristic function that returns the square distance dx^2 + dy^2 as a cost evaluation of the distance between two pieces of the routing grid.
	getDontOptimizeLongRoutes	Gets a value indicating whether the algorithm should spend time to optimize long routes.
	getEndOrientation	Gets a value indicating whether routes should end in horizontal or vertical direction.
	getEvaluateFarPoints	Gets a value indicating whether the router should evaluate paths between all sides of connected nodes to find ones with lower overall cost.
	getGridSize	Gets the size of the routing grid.
	getIgnoreAnchoring	For internal use.
	getLengthCost	Gets the value added to the total route cost for each grid square occupied by the link.
S	getMaxAbs	Returns a heuristic function that returns max(dx, dy) as a cost evaluation of the distance between two pieces of the routing grid.
	getNodeVicinityCost	Gets the value added to the total route cost when a link passes through the buffer area around a node.
	getNodeVicinitySize	Gets the size of the buffer area around a node for which link routes are assigned higher costs if they pass through that area.
	getPolylineRouting	Gets a value indicating whether the end segments of Polyline links should be oriented orthogonally to node's

		borders and each other.
	getRouteHeuristics	Gets the heuristic function used by the routing algorithm to choose next points in the route.
	getStartOrientation	Gets a value indicating whether routes should start in horizontal or vertical direction.
	getTriggerRerouting	Gets a value indicating when JDiagram should look for new link routes.
	getTurnCost	Gets the value added to the total route cost when a link makes a turn.
	setAnchoring	Sets a value indicating whether the routing algorithm should align links to the anchor points of nodes.
	setAvoidOverlaps	Sets whether link segments should be pulled apart when they overlap in initially found routes.
	setCrossingCost	Sets the value added to the total route cost if a link crosses another link.
	setDefaultMode	Sets the routing cost parameters to their default values.
	setDontOptimizeLongRoutes	Sets a value indicating whether the algorithm should spend time to optimize long routes.
	setEndOrientation	Sets a value indicating whether routes should end in horizontal or vertical direction.
	setEvaluateFarPoints	Sets a value indicating whether the router should evaluate paths between all sides of connected nodes to find ones with lower overall cost.
	setGridSize	Sets the size of the routing grid.
	setLengthCost	Sets the value added to the total route cost for each grid square occupied by the link.
	setMinSegmentsMode	Sets the routing costs to values that find routes having low number of segments.
	setNodeVicinityCost	Sets the value added to the total route cost when a link passes through the buffer area around a node.
	setNodeVicinitySize	Sets the size of the buffer area around a node for which link routes are assigned higher costs if they pass through that area.
	setPolylineRouting	Sets a value indicating whether the end segments of **Polyline** links should should be oriented orthogonally to node's borders and each other.
	setQuickMode	Sets the routing costs to values that quickly find routes, however with a lower route quality.
	setRouteHeuristics	Sets the heuristic function used by the routing algorithm to choose next points in the route.
	setStartOrientation	Sets a value indicating whether routes should start in horizontal or vertical direction.
	setTriggerRerouting	Sets a value indicating when JDiagram should look for new link routes.

	setTurnCost	Sets the value added to the total route cost when a link makes a turn.

See Also

RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions Methods

RoutingOptions.getAnchoring Method

Gets a value indicating whether the routing algorithm should align links to the anchor points of nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Anchoring getAnchoring ()
```

Return Value

A member of the Anchoring enumeration.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getAvoidOverlaps Method

Gets whether link segments should be pulled apart when they overlap in initially found routes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAvoidOverlaps ()
```

Return Value

true to pull apart overlapping segments, or **false** otherwise. The default value is **true**.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getCrossingCost Method

Gets the value added to the total route cost if a link crosses another link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public short getCrossingCost ()
```

Return Value

An integer value added to the cost of a route when a link crosses another link.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getDistance Method

Return a heuristic function that returns the real distance sqrt(dx^2 + dy^2) between two pieces of the routing grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static RouteHeuristics getDistance ()
```

Return Value

A predefined RouteHeuristics object.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getDistSquare Method

Returns a heuristic function that returns the square distance dx^2 + dy^2 as a cost evaluation of the distance between two pieces of the routing grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static RouteHeuristics getDistSquare ()
```

Return Value

A predefined RouteHeuristics object.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getDontOptimizeLongRoutes Method

Gets a value indicating whether the algorithm should spend time to optimize long routes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getDontOptimizeLongRoutes ()
```

Return Value

true if the shape of long routes should not be optimized, otherwise **false**.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getEndOrientation Method

Gets a value indicating whether routes should end in horizontal or vertical direction.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Orientation getEndOrientation ()
```

Return Value

A member of the Orientation enumeration.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getEvaluateFarPoints Method

Gets a value indicating whether the router should evaluate paths between all sides of connected nodes to find ones with lower overall cost.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getEvaluateFarPoints ()
```

Return Value

true to evaluate more distant pairs of node sides, or **false** otherwise. The default value is **false**.

Remarks

By default, routers evaluate paths only between the current start and end points of a link. Set this property to **true** to evaluate all combinations of anchor points or node sides. Note that enabling this property increases processing time.

Currently, EvaluateFarPoints is supported by GridRouter and PatternRouter.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getGridSize Method

Gets the size of the routing grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getGridSize ()
```

Return Value

A float value specifying the size of the routing grid pieces.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getIgnoreAnchoring Method

For internal use.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getIgnoreAnchoring ()
```

Return Value

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getLengthCost Method

Gets the value added to the total route cost for each grid square occupied by the link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public short getLengthCost ()
```

Return Value

An integer value added to the cost of a route for each routing grid square through which the link passes.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getMaxAbs Method

Returns a heuristic function that returns max(dx, dy) as a cost evaluation of the distance between two pieces of the routing grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static RouteHeuristics getMaxAbs ()
```

Return Value

A predefined RouteHeuristics object.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getNodeVicinityCost Method

Gets the value added to the total route cost when a link passes through the buffer area around a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public short getNodeVicinityCost ()
```

Return Value

An integer value added to the cost of a route when the link passes near a node.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getNodeVicinitySize Method

Gets the size of the buffer area around a node for which link routes are assigned higher costs if they pass through that area.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getNodeVicinitySize ()
```

Return Value

A float value specifying the size of the buffer zone around a node where a penalty cost is added to the cost of a passing link.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getPolylineRouting Method

Gets a value indicating whether the end segments of Polyline links should be oriented orthogonally to node's borders and each other.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public PolylineRouting getPolylineRouting ()
```

Return Value

A member of the PolylineRouting enumeration. The default value is **AllOrthogonal**.

Remarks

This property is valid only for links whose Shape is set to Polyline.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getRouteHeuristics Method

Gets the heuristic function used by the routing algorithm to choose next points in the route.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RouteHeuristics getRouteHeuristics ()
```

Return Value

A RouteHeuristics object used to predict the route cost.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getStartOrientation Method

Gets a value indicating whether routes should start in horizontal or vertical direction.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Orientation getStartOrientation ()
```

Return Value

A member of the Orientation enumeration.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getTriggerRerouting Method

Gets a value indicating when JDiagram should look for new link routes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public EnumSet<RerouteLinks> getTriggerRerouting ()
```

Return Value

A combination of RerouteLinks members.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.getTurnCost Method

Gets the value added to the total route cost when a link makes a turn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public short getTurnCost ()
```

Return Value

An integer value added to the cost of a route when the link makes a turn.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setAnchoring Method

Sets a value indicating whether the routing algorithm should align links to the anchor points of nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAnchoring (
    Anchoring value
)
```

Parameters

value
A member of the Anchoring enumeration.

Remarks

By default, the routing algorithm ignores anchor points. To make it align link ends to the points specified through calling the setAnchorPattern method of nodes, invoke **setAnchoring** by passing Keep or **Reassign**. **Keep** specifies that the routing algorithm should not change the positions of link end points. **Reassign** lets the routing algorithm choose new end points for a link from the ones specified in the **setAnchorPattern** of its origin and destination nodes.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setAvoidOverlaps Method

Sets whether link segments should be pulled apart when they overlap in initially found routes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAvoidOverlaps (
    boolean value
)
```

Parameters

value
true to pull apart overlapping segments, or **false** otherwise.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setCrossingCost Method

Sets the value added to the total route cost if a link crosses another link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setCrossingCost (
    short value
)
```

Parameters

value
An integer value added to the cost of a route when a link crosses another link.

Remarks

The routing algorithm aims to find paths that have a minimal cost, so assigning a greater value through **setCrossingCost** leads to fewer link intersections.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setDefaultMode Method

Sets the routing cost parameters to their default values.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDefaultMode ()
```

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setDontOptimizeLongRoutes Method

Sets a value indicating whether the algorithm should spend time to optimize long routes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDontOptimizeLongRoutes (
    boolean value
)
```

Parameters

value
true if the shape of long routes should not be optimized, otherwise **false**. The default value is **false**.

Remarks

Segment optimization done on routed links might need much processing time. The control allows disabling that optimization for long links. That would make the found routes have a "staircase" pattern when they run diagonally.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setEndOrientation Method

Sets a value indicating whether routes should end in horizontal or vertical direction.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEndOrientation (
    Orientation value
)
```

Parameters

value
A member of the Orientation enumeration.

Remarks

For some diagrams, it might be desirable that first and last segments of links always have a specific direction. For example, in database ER diagrams links usually connect to table rows on the left- or right-hand sides of tables; in that case their end segments must be horizontal. The **setEndOrientation** method specifies what orientation of links' last segments to be applied by the routing algorithm.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setEvaluateFarPoints Method

Sets a value indicating whether the router should evaluate paths between all sides of connected nodes to find ones with lower overall cost.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEvaluateFarPoints (
    boolean value
)
```

Parameters

value
true to evaluate more distant pairs of node sides, or **false** otherwise.

Remarks

By default, routers evaluate paths only between the current start and end points of a link. Set this property to **true** to evaluate all combinations of anchor points or node sides. Note that enabling this property increases processing time.

Currently, **EvaluateFarPoints** is supported by GridRouter and PatternRouter.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setGridSize Method

Sets the size of the routing grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setGridSize (
    float value
)
```

Parameters

value
A float value specifying the size of the routing grid pieces.

Remarks

A smaller size of routing grid pieces helps finding more precise paths, however since the number of pieces increases, there would be more time needed to find a path.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setLengthCost Method

Sets the value added to the total route cost for each grid square occupied by the link.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLengthCost (
    short value
)
```

Parameters

value
An integer value added to the cost of a route for each routing grid square through which the link passes.

Remarks

This is a penalty value added to the total cost of an evaluated link route for each piece of the routing grid it occupies. The routing algorithm aims to find paths that have a minimal cost, so assigning a greater value through **setLengthCost** leads to generating shorter paths.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setMinSegmentsMode Method

Sets the routing costs to values that find routes having low number of segments.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMinSegmentsMode ()
```

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setNodeVicinityCost Method

Sets the value added to the total route cost when a link passes through the buffer area around a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setNodeVicinityCost (
    short value
)
```

Parameters

value
An integer value added to the cost of a route when the link passes near a node.

Remarks

This is a penalty value added to the total cost of an evaluated link route if it passes too close to a node. The routing algorithm aims to find paths that have a minimal cost, so assigning a greater value through **setNodeVicinityCost** makes links avoid passing close to nodes. The size of the buffer area around nodes in which passing links get a penalty cost is specified by means of setNodeVicinitySize.

See Also

RoutingOptions Members
RoutingOptions Class

RoutingOptions.setNodeVicinitySize Method

Sets the size of the buffer area around a node for which link routes are assigned higher costs if they pass through that area.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setNodeVicinitySize (
    float value
)
```

Parameters

value
A float value specifying the size of the buffer zone around a node where a penalty cost is added to the cost of a passing link.

Remarks

The pieces of the routing grid that are closest to a node have the value passed through the setNodeVicinityCost method assigned as their cost. The outer pieces of the buffer zone are assigned a portion of NodeVicinityCost proportional to their distance to the node.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setPolylineRouting Method

Sets a value indicating whether the end segments of Polyline links should should be oriented orthogonally to node's borders and each other.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setPolylineRouting (
    PolylineRouting value
)
```

Parameters

value
A member of the PolylineRouting enumeration.

Remarks

This property is valid only for links whose Shape is set to Polyline.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setQuickMode Method

Sets the routing costs to values that quickly find routes, however with a lower route quality.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setQuickMode ()
```

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setRouteHeuristics Method

Sets the heuristic function used by the routing algorithm to choose next points in the route.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRouteHeuristics (
    RouteHeuristics value
)
```

Parameters

value
A RouteHeuristics object used to predict the route cost.

Remarks

While generating a path, the routing algorithm evaluates pieces of the routing grid adjacent to the current one. It takes into account the cost for passing trough a piece and adds to that cost a heuristic value calculated by **setRouteHeuristics**. So the smaller heuristic value a piece has, the greater the chance the found route to go through that piece.

There are three predefined heuristic functions that can be assigned through **setRouteHeuristics**: Distance, DistSquare and MaxAbs. All of them assign to pieces heuristic values that are larger for larger distances to the target. Thus of the four pieces adjacent to the current one, the piece closest to the target has the smallest value and the route generation continues through it.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setStartOrientation Method

Sets a value indicating whether routes should start in horizontal or vertical direction.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setStartOrientation (
    Orientation value
)
```

Parameters

value
A member of the Orientation enumeration.

Remarks

For some diagrams, it might be desirable that first and last segments of links always have a specific direction. For example, in database ER diagrams links usually connect to table rows on the left- or right-hand sides of tables; in that case their end segments must be horizontal. **setStartOrientation** specifies what orientation of links' first segments to be applied by the routing algorithm.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setTriggerRerouting Method

Sets a value indicating when JDiagram should look for new link routes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTriggerRerouting (
    EnumSet<RerouteLinks> value
)
```

Parameters

value
A combination of RerouteLinks member.

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

RoutingOptions.setTurnCost Method

Sets the value added to the total route cost when a link makes a turn.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTurnCost (
    short value
)
```

Parameters

value
An integer value added to the cost of a route when the link makes a turn.

Remarks

This is a penalty value added to the total cost of an evaluated link route for each turn it makes. The routing algorithm aims to find paths that have a minimal cost, so assigning a greater value to **TurnCost** leads paths that make less turns (hence they have less segments).

See Also

RoutingOptions Members
RoutingOptions Class
com.mindfusion.diagramming Namespace

Row Class

Represents a row of cells in a table. Rows are the entity to which links related to a table are connected.

Syntax

Java

```
public class Row implements Cloneable, Externalizable
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Row

See Also

Row Members
com.mindfusion.diagramming Namespace

Row Members

Represents a row of cells in a table. Rows are the entity to which links related to a table are connected.

The following tables list the members exposed by the Row type.

Public Constructors

	Name	Description
	Row	Overloaded.

Public Methods

	Name	Description
	clone	Copies the row attributes to a new **Row** instance.
	getAnchorPattern	Gets the AnchorPattern assigned to this row.
	getExpanded	Gets a value indicating whether the section of rows below this header row is expanded or collapsed.
	getHeader	Gets a value indicating whether this row is the header of a section of rows.
	getHeight	Gets the height of this row.
	getIncomingLinks	Gets a list of all links coming into this row.
	getOutgoingLinks	Gets a list of all links going out of this row.
	readExternal	Implements Externalizable.
	setAnchorPattern	Sets the **AnchorPattern** to whose point links should be aligned when connecting to this row.
	setExpanded	Expands or collapses the section of rows below this header row.
	setHeader	Sets a value indicating whether this row should be the header of a section of rows.
	setHeight	Sets the height of this row and all cells inside it.
	writeExternal	Implements Externalizable.

Protected Methods

	Name	Description
	loadFromJson	Loads the row from a JSON object.
	loadFromXml	Loads the row attributes from an XML element.
	saveToJson	Saves the row as a JSON object.
	saveToXml	Saves the row attributes into an XML element.

See Also

Row Class
com.mindfusion.diagramming Namespace

Row Constructor

Overload List

Name	Description
Row ()	Used internally to implement serialization functionality.
Row (TableNode)	Initializes a new instance of the Row class and assigns the specified table as its parent.

See Also

Row Class
com.mindfusion.diagramming Namespace

Row Constructor ()

Used internally to implement serialization functionality.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Row ()`

See Also

Row Constructor Overload List
Row Class
com.mindfusion.diagramming Namespace

Row Constructor (TableNode)

Initializes a new instance of the Row class and assigns the specified table as its parent.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Row (
    TableNode table
)
```

Parameters

table
The TableNode that contains this row.

See Also

Row Constructor Overload List
Row Class
com.mindfusion.diagramming Namespace

Row Methods

Row.clone Method

Copies the row attributes to a new Row instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object clone ()
```

Return Value

The new Row object.

See Also

Row Members
Row Class
com.mindfusion.diagramming Namespace

Row.getAnchorPattern Method

Gets the AnchorPattern assigned to this row.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public AnchorPattern getAnchorPattern ()
```

Return Value

An AnchorPattern object defining the row's anchor points.

Remarks

getAnchorPattern specifies a set of locations where links connected to a row are allowed to connect. When a link is connected to a row, the respective end of the link is aligned to the nearest AnchorPoint assigned to that row. If a row does not have associated anchor points of the appropriate type (incoming/outgoing), the link will be connected to the nearest row that has such anchors defined. If none of the rows of a table has an associated anchor pattern, links are connected to the middle of the left or right side of the pointed row.

See Also

Row Members
Row Class
com.mindfusion.diagramming Namespace

Row.getExpanded Method

Gets a value indicating whether the section of rows below this header row is expanded or collapsed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getExpanded ()
```

Return Value

true if the section of rows that starts from a header row is expanded, otherwise **false**.

Remarks

This property can be set only if the row is a Header. Links connected to the rows of a collapsed table section appear to be connected to the section header row.

See Also

Row Members
Row Class
com.mindfusion.diagramming Namespace

Row.getHeader Method

Gets a value indicating whether this row is the header of a section of rows.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getHeader ()
```

Return Value

true if this row is a header of an expandable section of table rows, otherwise **false**.

Remarks

Each header row defines a section of the table that includes all non-header rows after the header. Such sections can be expanded or collapsed, that is, the rows included in them can be shown or hidden. This can be done interactively by pressing the [±] button displayed in header rows, or programmatically by calling the setExpanded method. The tableSectionCollapsed and tableSectionExpanded events are raised when a user clicks the [±] button.

See Also

Row Members
Row Class
com.mindfusion.diagramming Namespace

Row.getHeight Method

Gets the height of this row.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getHeight ()
```

Return Value

A float value specifying the row height.

Remarks

The user can resize rows interactively when table's AllowResizeRows property is enabled.

See Also

Row Members
Row Class
com.mindfusion.diagramming Namespace

Row.getIncomingLinks Method

Gets a list of all links coming into this row.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLinkList getIncomingLinks ()
```

Return Value

An DiagramLinkList containing the incoming links.

Remarks

The method returns a collection of all links that point to this table row. Use it to access the links or get their number.

See Also

Row Members
Row Class
com.mindfusion.diagramming Namespace

Row.getOutgoingLinks Method

Gets a list of all links going out of this row.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLinkList getOutgoingLinks ()
```

Return Value

A DiagramLinkList containing the outgoing links.

Remarks

The method returns a collection of all links that start from this table row. Use it to access the links or get their number.

See Also

Row Members
Row Class
com.mindfusion.diagramming Namespace

Row.loadFromJson Method

Loads the row from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the row's data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

Row Members
Row Class
com.mindfusion.diagramming Namespace

Row.loadFromXml Method

Loads the row attributes from an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An **XmlElement** containing the row's data.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

Row Members
Row Class

Row.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

Row Members
Row Class
com.mindfusion.diagramming Namespace

Row.saveToJson Method

Saves the row as a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject instance to contain the serialized data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

Row Members
Row Class
com.mindfusion.diagramming Namespace

Row.saveToXml Method

Saves the row attributes into an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An XmlElement the row's data should be stored into.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

Row Members
Row Class
com.mindfusion.diagramming Namespace

Row.setAnchorPattern Method

Sets the AnchorPattern to whose point links should be aligned when connecting to this row.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAnchorPattern (
    AnchorPattern value
)
```

Parameters

value
An AnchorPattern object defining the row's anchor points.

Remarks

setAnchorPattern defines a set of locations where links connected to a row are allowed to connect. When a link is connected to a row, the respective end of the link is aligned to the nearest AnchorPoint assigned to that row. If a row does not have associated anchor points of the appropriate type (incoming/outgoing), the link will be connected to the nearest row that has such anchors defined. If none of the rows of a table has an associated anchor pattern, links are connected to the middle of the left or right side of the pointed row.

See Also

Row Members
Row Class
com.mindfusion.diagramming Namespace

Row.setExpanded Method

Expands or collapses the section of rows below this header row.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setExpanded (
    boolean value
)
```

Parameters

value
true if the section of rows that starts from a header row should be expanded, otherwise **false**.

Remarks

This property can be set only if the row is a Header. Links connected to the rows of a collapsed table section appear to be connected to the section header row.

See Also

Row Members
Row Class
com.mindfusion.diagramming Namespace

Row.setHeader Method

Sets a value indicating whether this row should be the header of a section of rows.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHeader (
    boolean value
)
```

Parameters

value
true if this row is a header of an expandable section of table rows, otherwise **false**.

Remarks

Setting the row as a header will automatically create a section of table rows spanning to the next header. Such sections can be collapsed so that only their header row will be visible.

See Also

Row Members
Row Class
com.mindfusion.diagramming Namespace

Row.setHeight Method

Sets the height of this row and all cells inside it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHeight (
    float value
)
```

Parameters

value
A float value specifying the row height.

Remarks

The user can resize rows interactively when table's AllowResizeRows property is enabled.

See Also

Row Members
Row Class
com.mindfusion.diagramming Namespace

Row.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

Row Members
Row Class
com.mindfusion.diagramming Namespace

RowEvent Class

Contains the arguments passed to handlers of table row-related events.

Syntax

Java
`public class RowEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.RowEvent

See Also

RowEvent Members
com.mindfusion.diagramming Namespace

RowEvent Members

Contains the arguments passed to handlers of table row-related events.

The following tables list the members exposed by the RowEvent type.

Public Constructors

	Name	Description
	RowEvent	Contains the arguments passed to handlers of table row-related events.

Public Methods

	Name	Description
	getRowIndex	Gets the index of the table row for which the event has been raised.
	getTable	Get the table for which the event has been raised.

See Also

RowEvent Class
com.mindfusion.diagramming Namespace

RowEvent Constructor

Contains the arguments passed to handlers of table row-related events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RowEvent (
    Object source,
    TableNode table,
    int rowIndex
)
```

Parameters

source
The source of the event.

table
The TableNode containing the event data.

rowIndex
The index of the row containing the event data.

See Also

RowEvent Class
com.mindfusion.diagramming Namespace

RowEvent Methods

RowEvent.getRowIndex Method

Gets the index of the table row for which the event has been raised.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getRowIndex ()
```

Return Value

An integer value specifying the row's index.

See Also

RowEvent Members
RowEvent Class
com.mindfusion.diagramming Namespace

RowEvent.getTable Method

Get the table for which the event has been raised.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public TableNode getTable ()
```

Return Value

An instance of the TableNode class

See Also

RowEvent Members
RowEvent Class
com.mindfusion.diagramming Namespace

RowList Class

A strongly typed list of Row objects.

Syntax

```
Java
public class RowList extends BaseList<E> implements Cloneable
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.BaseList(E)
        com.mindfusion.diagramming.RowList

See Also

RowList Members
com.mindfusion.diagramming Namespace

RowList Members

A strongly typed list of Row objects.

The following tables list the members exposed by the RowList type.

Public Constructors

	Name	Description
	RowList	

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)
	listEvent	(Inherited from BaseList.)
	notifyParent	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	Adds a new element to the list. (Inherited from BaseList.)
	clear	Removes all elements from the list. (Inherited from BaseList.)
	clone	
	contains	Determines if this list contains the specified element. (Inherited from BaseList.)
	first	Gets the first element of this list. (Inherited from BaseList.)
	get	Gets the element at the specified position in this list. (Inherited from BaseList.)
	last	Gets the last element of this list. (Inherited from BaseList.)
	readExternal	Loads the list's contents. (Inherited from BaseList.)
	remove	Overloaded. (Inherited from BaseList.)
	removeRange	Removes a range of elements from this list. (Inherited from BaseList.)
	set	Sets the element at the specified position in this list. (Inherited from BaseList.)
	size	Gets the number of elements in this list. (Inherited from BaseList.)
	writeExternal	Saves the list's contents. (Inherited from BaseList.)

Protected Methods

	Name	Description
	raiseAdding	Raises the adding event. (Inherited from BaseList.)
	raiseClearing	Raises the clearing event. (Inherited from BaseList.)
	raiseRemoving	Raises the removing event. (Inherited from BaseList.)

See Also

RowList Class
com.mindfusion.diagramming Namespace

RowList Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public RowList ()
```

See Also

RowList Class
com.mindfusion.diagramming Namespace

RowList Methods

RowList.clone Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Object clone ()
```

Return Value

See Also

RowList Members
RowList Class
com.mindfusion.diagramming Namespace

Ruler Class

The **Ruler** control provides horizontal and vertical scales that help users measure diagram items.

Syntax

```
Java
public class Ruler extends JComponent
```

Remarks

To specify which DiagramView instance is shown in the ruler, call the setDiagramView method.

The ruler tracks mouse movements and modifications being performed on an item, and displays markers over the scales indicating the current position in diagram's coordinate system. The colors of these markers can be changed using the setPointerColor and setProjectionColor methods.

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        com.mindfusion.diagramming.Ruler

See Also

Ruler Members
com.mindfusion.diagramming Namespace

Ruler Members

The Ruler control provides horizontal and vertical scales that help users measure diagram items.

The following tables list the members exposed by the **Ruler** type.

Public Constructors

	Name	Description
	Ruler	Initializes a new instance of the Ruler class.

Public Methods

	Name	Description
	getDiagramView	Gets the DiagramView document this ruler is associated with.
	getGuideColor	Gets the color of alignment guides.
	getHorizontalScaleAlignment	Gets the alignment of the horizontal scale of the ruler.
	getHorizontalScaleVisible	Gets a value specifying whether the horizontal scale is visible.
	getPointerColor	Gets the color of mouse pointer's projections.
	getProjectionColor	Gets the color used to paint the projections of the active node on the ruler scales.
	getProjectRotatedBounds	Gets whether the projection of nodes on ruler's scales rotates with them.
	getScaleColor	Gets the color used to paint the color of the ruler scales.
	getTextColor	Gets the color used to paint texts in the ruler.

	getUnit	Gets the measure units displayed by the ruler.
	getVerticalScaleAlignment	Gets the alignment of the vertical scale of the ruler.
	getVerticalScaleVisible	Gets a value specifying whether the vertical scale is visible.
	setDiagramView	Sets the **DiagramView** document this ruler is associated with.
	setGuideColor	Sets the color of alignment guides.
	setHorizontalScaleAlignment	Sets the alignment of the horizontal scale of the ruler.
	setHorizontalScaleVisible	Sets a value specifying whether the horizontal scale is visible.
	setPointerColor	Sets the color of mouse pointer's projections.
	setProjectionColor	Sets the color used to paint the projections of the active node on the ruler scales.
	setProjectRotatedBounds	Sets whether the projection of nodes rotates with them or not.
	setScaleColor	Sets the color used to paint the color of the ruler scales.
	setTextColor	Sets the color used to paint texts in the ruler.
	setUnit	Sets the measure units displayed by the ruler.
	setVerticalScaleAlignment	Sets the alignment of the vertical scale.
	setVerticalScaleVisible	Sets a value specifying whether the vertval scale is visible.

Protected Methods

	Name	Description
	createImageIcon	

See Also

Ruler Class
com.mindfusion.diagramming Namespace

Ruler Constructor

Initializes a new instance of the Ruler class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Ruler ()
```

See Also

Ruler Methods

Ruler.createImageIcon Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected ImageIcon createImageIcon (
    String path
)
```

Parameters

path

Return Value

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.getDiagramView Method

Gets the DiagramView document this ruler is associated with.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramView getDiagramView ()
```

Return Value

An instance of the DiagramView class.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.getGuideColor Method

Gets the color of alignment guides.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getGuideColor ()
```

Return Value

the color used to paint guides.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.getHorizontalScaleAlignment Method

Gets the alignment of the horizontal scale of the ruler.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getHorizontalScaleAlignment ()
```

Return Value

the alignment of the horizontal scale.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.getHorizontalScaleVisible Method

Gets a value specifying whether the horizontal scale is visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getHorizontalScaleVisible ()
```

Return Value

a value specifying whether the horizontal scale is visible.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.getPointerColor Method

Gets the color of mouse pointer's projections.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getPointerColor ()
```

Return Value

A Color instance specifying the color of the pointer projection lines. The default is Color.red.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.getProjectionColor Method

Gets the color used to paint the projections of the active node on the ruler scales.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getProjectionColor ()
```

Return Value

the color used to paint the projection of the active node.

See Also

Ruler Members
Ruler Class

Ruler.getProjectRotatedBounds Method

Gets whether the projection of nodes on ruler's scales rotates with them.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getProjectRotatedBounds ()
```

Return Value

true if node's projection should match the boundaries of rotated node shape, or **false** to ignore rotation and project only the coordinates of node's Bounds.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.getScaleColor Method

Gets the color used to paint the color of the ruler scales.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getScaleColor ()
```

Return Value

A Color used to fill the ruler scales. The default is white.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.getTextColor Method

Gets the color used to paint texts in the ruler.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Color getTextColor ()
```

Return Value

the color used to paint texts in the ruler.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.getUnit Method

Gets the measure units displayed by the ruler.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public MeasureUnit getUnit ()
```

Return Value

the measure unit used by the ruler.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.getVerticalScaleAlignment Method

Gets the alignment of the vertical scale of the ruler.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getVerticalScaleAlignment ()
```

Return Value

the alignment of the vertical scale.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.getVerticalScaleVisible Method

Gets a value specifying whether the vertical scale is visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getVerticalScaleVisible ()
```

Return Value

a value specifying whether the vertical scale is visible.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.setDiagramView Method

Sets the DiagramView document this ruler is associated with.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDiagramView (
    DiagramView diagramView
)
```

Parameters

diagramView
An instance of the DiagramView class.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.setGuideColor Method

Sets the color of alignment guides.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setGuideColor (
    Color color
)
```

Parameters

color
the color used to paint guides.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.setHorizontalScaleAlignment Method

Sets the alignment of the horizontal scale of the ruler.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHorizontalScaleAlignment (
    int align
)
```

Parameters

align
the alignment of the horizontal scale.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.setHorizontalScaleVisible Method

Sets a value specifying whether the horizontal scale is visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setHorizontalScaleVisible (
    boolean value
)
```

Parameters

value
a value specifying whether the horizontal scale is visible.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.setPointerColor Method

Sets the color of mouse pointer's projections.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setPointerColor (
    Color color
)
```

Parameters

color
a Color instance specifying the color of the pointer projection lines. The default is Color.red.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.setProjectionColor Method

Sets the color used to paint the projections of the active node on the ruler scales.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public void setProjectionColor (
    Color color
)
```

Parameters

color
the color used to paint the projection of the active node.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.setProjectRotatedBounds Method

Sets whether the projection of nodes rotates with them or not.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setProjectRotatedBounds (
    boolean value
)
```

Parameters

value
true if node's projection should match the boundaries of rotated node shape, or **false** to ignore rotation and project only the coordinates of node's Bounds. The default value is **true**.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.setScaleColor Method

Sets the color used to paint the color of the ruler scales.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setScaleColor (
    Color color
)
```

Parameters

color
A Color used to fill the ruler scales. The default is white.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.setTextColor Method

Sets the color used to paint texts in the ruler.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextColor (
    Color color
)
```

Parameters

color
the color used to paint texts in the ruler.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.setUnit Method

Sets the measure units displayed by the ruler.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setUnit (
    MeasureUnit unit
)
```

Parameters

unit
the measure unit used by the ruler.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.setVerticalScaleAlignment Method

Sets the alignment of the vertical scale.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setVerticalScaleAlignment (
    int align
)
```

Parameters

align
the alignment of the vertical scale.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

Ruler.setVerticalScaleVisible Method

Sets a value specifying whether the vertval scale is visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setVerticalScaleVisible (
    boolean value
)
```

Parameters

value
a value specifying whether the vertical scale is visible.

See Also

Ruler Members
Ruler Class
com.mindfusion.diagramming Namespace

SaveToStringFormat Enumeration

The members of this enumeration specify in what format to save the diagram when generating a string using the Diagram.saveToString method.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public enum SaveToStringFormat
```

Members

	Member name	Description
	Base64	Indicates Base64 ASCII encoding.
	CompressedXml	Indicates compressed XML output.
	Json	Indicates a JSON output.
	Xml	Indicates non-compressed XML output.

See Also

com.mindfusion.diagramming Namespace

ScrollBar Class

Syntax

```
Java
public class ScrollBar extends Manipulator
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Manipulator
    com.mindfusion.diagramming.ScrollBar

See Also

ScrollBar Members
com.mindfusion.diagramming Namespace

ScrollBar Members

The following tables list the members exposed by the ScrollBar type.

Protected Constructors

	Name	Description
	ScrollBar	

Protected Fields

	Name	Description
	item	(Inherited from Manipulator.)

Public Methods

	Name	Description
	cancel	Called when the manipulator should cancel the current manipulation. (Inherited from Manipulator.)
	drawsInLocalCoordinates	Returns whether the manipulator object draws in local or global coordinates. (Inherited from Manipulator.)
	getEnabled	Gets or sets a value indicating whether the control can respond to user interaction.
	getItem	(Inherited from Manipulator.)
	getLargeChange	
	getValue	
	needsPointerMessages	Returns whether the manipulator object needs to track mouse events.
	onGotFocus	Called when the manipulator receives input focus. (Inherited from Manipulator.)
	onLostFocus	Called when the manipulator loses the input focus. (Inherited from Manipulator.)
	onPointerDown	Manipulator.onPointerDown override.
	onPointerMove	Manipulator.onPointerMove override.
	onPointerUp	Manipulator.onPointerUp override.
	setEnabled	
	setLargeChange	
	setMaximum	
	setMinimum	
	setMouseCursor	(Inherited from Manipulator.)
	setSmallChange	

	setValue	

Protected Methods

	Name	Description
	refresh	

See Also

ScrollBar Class
com.mindfusion.diagramming Namespace

ScrollBar Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected ScrollBar (
    DiagramNode node,
    boolean vertical
)
```

Parameters

node

vertical

See Also

ScrollBar Class
com.mindfusion.diagramming Namespace

ScrollBar Methods

ScrollBar.getEnabled Method

Gets or sets a value indicating whether the control can respond to user interaction.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getEnabled ()
```

Return Value

See Also

ScrollBar Members
ScrollBar Class
com.mindfusion.diagramming Namespace

ScrollBar.getLargeChange Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public float getLargeChange ()`

Return Value

See Also

ScrollBar Members
ScrollBar Class
com.mindfusion.diagramming Namespace

ScrollBar.getValue Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public float getValue ()`

Return Value

See Also

ScrollBar Members
ScrollBar Class
com.mindfusion.diagramming Namespace

ScrollBar.needsPointerMessages Method

Returns whether the manipulator object needs to track mouse events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean needsPointerMessages (
    Point2D point
)
```

Parameters

point

Return Value

true to track mouse events; otherwise, **false**.

See Also

ScrollBar Members
ScrollBar Class
com.mindfusion.diagramming Namespace

ScrollBar.onPointerDown Method

Manipulator.onPointerDown override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onPointerDown (
    Point2D pointerPosition
)
```

Parameters

mousePosition

See Also

ScrollBar Members
ScrollBar Class
com.mindfusion.diagramming Namespace

ScrollBar.onPointerMove Method

Manipulator.onPointerMove override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onPointerMove (
    Point2D pointerPosition
)
```

Parameters

e

See Also

ScrollBar Members
ScrollBar Class
com.mindfusion.diagramming Namespace

ScrollBar.onPointerUp Method

Manipulator.onPointerUp override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void onPointerUp (
    Point2D pointerPosition
)
```

Parameters

e

See Also

ScrollBar Members
ScrollBar Class
com.mindfusion.diagramming Namespace

ScrollBar.refresh Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void refresh ()
```

See Also

ScrollBar Members
ScrollBar Class
com.mindfusion.diagramming Namespace

ScrollBar.setEnabled Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnabled (
    boolean value
)
```

Parameters

value

See Also

ScrollBar Members
ScrollBar Class
com.mindfusion.diagramming Namespace

ScrollBar.setLargeChange Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLargeChange (
    float value
)
```

Parameters

value

See Also

ScrollBar Members
ScrollBar Class
com.mindfusion.diagramming Namespace

ScrollBar.setMaximum Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMaximum (
    float max
)
```

Parameters

max

See Also

ScrollBar Members
ScrollBar Class
com.mindfusion.diagramming Namespace

ScrollBar.setMinimum Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMinimum (
    float min
)
```

Parameters

min

See Also

ScrollBar Members
ScrollBar Class
com.mindfusion.diagramming Namespace

ScrollBar.setSmallChange Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSmallChange (
    float smallChange
)
```

Parameters

smallChange

See Also

ScrollBar Members
ScrollBar Class
com.mindfusion.diagramming Namespace

ScrollBar.setValue Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setValue (
    float value
)
```

Parameters

value

See Also

ScrollBar Members
ScrollBar Class
com.mindfusion.diagramming Namespace

ScrollContainerCmd Class

Implements support for undo of ContainerNode scroll operations.

Syntax

Java

```
public class ScrollContainerCmd extends ModifyItemCmd
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.ModifyItemCmd
      com.mindfusion.diagramming.ScrollContainerCmd

See Also

ScrollContainerCmd Members
com.mindfusion.diagramming Namespace

ScrollContainerCmd Members

Implements support for undo of ContainerNode scroll operations.

The following tables list the members exposed by the ScrollContainerCmd type.

Public Constructors

	Name	Description
	ScrollContainerCmd	Initializes a new instance of the ScrollContainerCmd class.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	Command.execute override.
	getContainer	Gets a reference to the ContainerNode affected by this operation.
	getItem	Gets a reference to the modified item. (Inherited from ModifyItemCmd.)
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	Command.redo override.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	Command.undo override.

Protected Methods

	Name	Description
	adopt	(Inherited from ModifyItemCmd.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

ScrollContainerCmd Class
com.mindfusion.diagramming Namespace

ScrollContainerCmd Constructor

Initializes a new instance of the ScrollContainerCmd class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ScrollContainerCmd (
    ContainerNode node
)
```

Parameters

node
The related ContainerNode.

See Also

ScrollContainerCmd Class
com.mindfusion.diagramming Namespace

ScrollContainerCmd Methods

ScrollContainerCmd.execute Method

Command.execute override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled
Specifies whether undo/redo is enabled.

See Also

ScrollContainerCmd Members
ScrollContainerCmd Class
com.mindfusion.diagramming Namespace

ScrollContainerCmd.getContainer Method

Gets a reference to the ContainerNode affected by this operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ContainerNode getContainer ()
```

Return Value

A ContainerNode object.

See Also

ScrollContainerCmd Members
ScrollContainerCmd Class
com.mindfusion.diagramming Namespace

ScrollContainerCmd.redo Method

Command.redo override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void redo ()
```

See Also

ScrollContainerCmd Members
ScrollContainerCmd Class
com.mindfusion.diagramming Namespace

ScrollContainerCmd.undo Method

Command.undo override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void undo ()
```

See Also

ScrollContainerCmd Members
ScrollContainerCmd Class
com.mindfusion.diagramming Namespace

ScrollIconRenderer Class

Draws scroll arrows in TableNode caption bar.

Syntax

Java
`public class ScrollIconRenderer`

Remarks

You can assign an instance of this class to Renderers.ScrollIconRenderer to override the default appearance of scroll arrows.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ScrollIconRenderer

See Also

ScrollIconRenderer Members
com.mindfusion.diagramming Namespace

ScrollIconRenderer Members

Draws scroll arrows in TableNode caption bar.

The following tables list the members exposed by the ScrollIconRenderer type.

Public Constructors

	Name	Description
	ScrollIconRenderer	Overloaded.

Public Methods

	Name	Description
	getWidth	Gets a float value specifying scroll arrows' width in diagram's MeasureUnit.
	setWidth	Sets a float value specifying scroll arrows' width in diagram's **MeasureUnit**.

See Also

ScrollIconRenderer Class
com.mindfusion.diagramming Namespace

ScrollIconRenderer Constructor

Overload List

Name	Description
ScrollIconRenderer (Image, Image)	Initializes a new instance of the ScrollIconRenderer class that renders scroll arrow icons provided as bitmaps.

ScrollIconRenderer (Image, Image, Image, Image)	Initializes a new instance of the **ScrollIconRenderer** class that renders scroll arrow icons provided as bitmaps.
ScrollIconRenderer (RenderCallback)	Initializes a new instance of the **ScrollIconRenderer** class.
ScrollIconRenderer (SvgContent, SvgContent)	Initializes a new instance of the **ScrollIconRenderer** class that renders collapse / expand icons provided as SVG drawings.
ScrollIconRenderer (SvgContent, SvgContent, SvgContent, SvgContent)	Initializes a new instance of the **ScrollIconRenderer** class that renders collapse / expand icons provided as SVG drawings.

See Also

ScrollIconRenderer Class
com.mindfusion.diagramming Namespace

ScrollIconRenderer Constructor (Image, Image)

Initializes a new instance of the ScrollIconRenderer class that renders scroll arrow icons provided as bitmaps.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ScrollIconRenderer (
    Image scrollUpIcon,
    Image scrollDownIcon
)
```

Parameters

scrollUpIcon
A **java.awt.Image** representing the scroll-up icon.

scrollDownIcon
A **java.awt.Image** representing the scroll-down icon.

See Also

ScrollIconRenderer Constructor Overload List
ScrollIconRenderer Class
com.mindfusion.diagramming Namespace

ScrollIconRenderer Constructor (Image, Image, Image, Image)

Initializes a new instance of the ScrollIconRenderer class that renders scroll arrow icons provided as bitmaps.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ScrollIconRenderer (
    Image scrollUpIcon,
    Image scrollDownIcon,
    Image disabledScrollUpIcon,
    Image disabledScrollDownIcon
)
```

Parameters

scrollUpIcon
A **java.awt.Image** representing the scroll-up icon.

scrollDownIcon
A **java.awt.Image** representing the scroll-down icon.

disabledScrollUpIcon
A **java.awt.Image** representing disabled scroll-up icon.

disabledScrollDownIcon
A **java.awt.Image** representing disabled scroll-down icon.

See Also

ScrollIconRenderer Constructor Overload List
ScrollIconRenderer Class
com.mindfusion.diagramming Namespace

ScrollIconRenderer Constructor (RenderCallback<TableNode>)

Initializes a new instance of the ScrollIconRenderer class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ScrollIconRenderer (
    RenderCallback<TableNode> renderCallback
)
```

Parameters

renderCallback
A callback function that draws the icon using **Graphics2D** API.

See Also

ScrollIconRenderer Constructor Overload List
ScrollIconRenderer Class
com.mindfusion.diagramming Namespace

ScrollIconRenderer Constructor (SvgContent, SvgContent)

Initializes a new instance of the ScrollIconRenderer class that renders collapse / expand icons provided as SVG drawings.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ScrollIconRenderer (
    SvgContent scrollUpIcon,
    SvgContent scrollDownIcon
)
```

Parameters

scrollUpIcon
An SvgContent representing the scroll-up icon.

scrollDownIcon
An **SvgContent** representing the scroll-down icon.

See Also

ScrollIconRenderer Constructor Overload List
ScrollIconRenderer Class
com.mindfusion.diagramming Namespace

ScrollIconRenderer Constructor (SvgContent, SvgContent, SvgContent, SvgContent)

Initializes a new instance of the ScrollIconRenderer class that renders collapse / expand icons provided as SVG drawings.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ScrollIconRenderer (
    SvgContent scrollUpIcon,
    SvgContent scrollDownIcon,
    SvgContent disabledScrollUpIcon,
    SvgContent disabledScrollDownIcon
)
```

Parameters

scrollUpIcon
An SvgContent representing the scroll-up icon.

scrollDownIcon
An **SvgContent** representing the scroll-down icon.

disabledScrollUpIcon
An **SvgContent** representing disabled scroll-up icon.

disabledScrollDownIcon
An **SvgContent** representing disabled scroll-down icon.

See Also

ScrollIconRenderer Constructor Overload List
ScrollIconRenderer Class
com.mindfusion.diagramming Namespace

ScrollIconRenderer Methods

ScrollIconRenderer.getWidth Method

Gets a float value specifying scroll arrows' width in diagram's MeasureUnit.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Float getWidth ()
```

Return Value

A **Float** value that lets you override the icon width. The default value is **null**.

Remarks

If this property is not set, scroll arrows are rendered using default unit-independent width (their height depends on CaptionHeight).

See Also

ScrollIconRenderer Members
ScrollIconRenderer Class
com.mindfusion.diagramming Namespace

ScrollIconRenderer.setWidth Method

Sets a float value specifying scroll arrows' width in diagram's MeasureUnit.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setWidth (
    Float value
)
```

Parameters

value
A **Float** value that lets you override the icon width. The default value is **null**.

Remarks

If this property is not set, scroll arrows are rendered using default unit-independent width (their height depends on CaptionHeight).

See Also

ScrollIconRenderer Members
ScrollIconRenderer Class
com.mindfusion.diagramming Namespace

ScrollTableCmd Class

Represents an action that scrolls table rows up or down.

Syntax

Java
`public class ScrollTableCmd extends Command`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.ScrollTableCmd

See Also

ScrollTableCmd Members
com.mindfusion.diagramming Namespace

ScrollTableCmd Members

Represents an action that scrolls table rows up or down.

The following tables list the members exposed by the ScrollTableCmd type.

Public Constructors

	Name	Description
	ScrollTableCmd	Initializes a new ScrollTableCmd instance.

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	This method is called internally by JDiagram when scrolling tables.

	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTable	Gets the table related to this command.
	getTitle	Gets the title of this command. (Inherited from Command.)
	redo	This method is called by the UndoManager when redoing actions.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	This method is called by the **UndoManager** when undoing actions.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

ScrollTableCmd Class
com.mindfusion.diagramming Namespace

ScrollTableCmd Constructor

Initializes a new ScrollTableCmd instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ScrollTableCmd (
    TableNode table
)
```

Parameters

table
The TableNode that is scrolled through this command.

See Also

ScrollTableCmd Class
com.mindfusion.diagramming Namespace

ScrollTableCmd Methods

ScrollTableCmd.execute Method

This method is called internally by JDiagram when scrolling tables.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled
true if the undo manager is enabledat this time, otherwise false.

See Also

ScrollTableCmd Members
ScrollTableCmd Class
com.mindfusion.diagramming Namespace

ScrollTableCmd.getTable Method

Gets the table related to this command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public TableNode getTable ()
```

Return Value

A TableNode object.

See Also

ScrollTableCmd Members
ScrollTableCmd Class
com.mindfusion.diagramming Namespace

ScrollTableCmd.redo Method

This method is called by the UndoManager when redoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void redo ()
```

See Also

ScrollTableCmd Members
ScrollTableCmd Class
com.mindfusion.diagramming Namespace

ScrollTableCmd.undo Method

This method is called by the UndoManager when undoing actions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void undo ()
```

See Also

ScrollTableCmd Members
ScrollTableCmd Class
com.mindfusion.diagramming Namespace

ScrollTreeViewCmd Class

Syntax

```
Java
public class ScrollTreeViewCmd extends Command
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Command
    com.mindfusion.diagramming.ScrollTreeViewCmd

See Also

ScrollTreeViewCmd Members
com.mindfusion.diagramming Namespace

ScrollTreeViewCmd Members

The following tables list the members exposed by the ScrollTreeViewCmd type.

Public Constructors

	Name	Description
	ScrollTreeViewCmd	

Public Methods

	Name	Description
	addSubCmd	Adds a command object to a compound command. (Inherited from Command.)
	execute	
	getSubCommands	Gets a collection of all command objects contained within the composite one. (Inherited from Command.)
	getTitle	Gets the title of this command. (Inherited from Command.)
	getTreeViewNode	Gets a reference to the TreeViewNode affected by this operation.
	redo	Command.redo override.
	setTitle	Sets the command title. (Inherited from Command.)
	undo	Command.undo override.

Protected Methods

	Name	Description
	adopt	Merges adjacent commands in the history queue if they are related. (Inherited from Command.)
	getContext	Gets the command's context. (Inherited from Command.)
	isContainerOf	Determines whether a command has been initiated by this command and should be treated as a derivative. (Inherited from Command.)

See Also

ScrollTreeViewCmd Class
com.mindfusion.diagramming Namespace

ScrollTreeViewCmd Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ScrollTreeViewCmd (
    TreeViewNode node
)
```

Parameters

node

See Also

ScrollTreeViewCmd Class
com.mindfusion.diagramming Namespace

ScrollTreeViewCmd Methods

ScrollTreeViewCmd.execute Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void execute (
    boolean undoEnabled
)
```

Parameters

undoEnabled

See Also

ScrollTreeViewCmd Members
ScrollTreeViewCmd Class
com.mindfusion.diagramming Namespace

ScrollTreeViewCmd.getTreeViewNode Method

Gets a reference to the TreeViewNode affected by this operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeViewNode getTreeViewNode ()
```

Return Value

See Also

ScrollTreeViewCmd Members
ScrollTreeViewCmd Class
com.mindfusion.diagramming Namespace

ScrollTreeViewCmd.redo Method

Command.redo override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void redo ()
```

See Also

ScrollTreeViewCmd Members
ScrollTreeViewCmd Class
com.mindfusion.diagramming Namespace

ScrollTreeViewCmd.undo Method

Command.undo override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void undo ()
```

See Also

ScrollTreeViewCmd Members
ScrollTreeViewCmd Class
com.mindfusion.diagramming Namespace

Selection Class

Represents a selection of multiple items. Each Diagram has its own **Selection** instance, which can be accessed by the getSelection method.

Syntax

```
Java
public class Selection extends DiagramItem
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.DiagramItem
com.mindfusion.diagramming.Selection

See Also

Selection Members
com.mindfusion.diagramming Namespace

Selection Members

Represents a selection of multiple items. Each Diagram has its own Selection instance, which can be accessed by the getSelection method.

The following tables list the members exposed by the **Selection** type.

Public Constructors

	Name	Description
	Selection	Initializes a new **Selection** instance.

Protected Fields

	Name	Description
	brush	(Inherited from DiagramItem.)
	cycleDetected	(Inherited from DiagramItem.)
	cycleProtect	(Inherited from DiagramItem.)
	modifyDX	(Inherited from DiagramItem.)
	modifyDY	(Inherited from DiagramItem.)
	modifyHandle	(Inherited from DiagramItem.)
	modifying	(Inherited from DiagramItem.)
	pen	(Inherited from DiagramItem.)
	ptEnd	(Inherited from DiagramItem.)
	ptMdfLast	(Inherited from DiagramItem.)
	ptOrg	(Inherited from DiagramItem.)
	ptSavedEnd	(Inherited from DiagramItem.)
	ptSavedOrg	(Inherited from DiagramItem.)
	subordinateGroup	(Inherited from DiagramItem.)

Public Methods

	Name	Description
	addItem	Adds the specified item to the selection.

as	Down-casts the item to specified type. (Inherited from DiagramItem.)
change	Changes the selection to the specified item. That means that the item gets selected and all other items are unselected.
clear	Removes all items from the selection.
clone	Creates a copy of this item. (Inherited from DiagramItem.)
containsPoint	Overloaded.
getAllowMultipleSelection	Gets a value indicating whether users are allowed to select multiple items.
getBounds	Gets the smallest rectangle that bounds all selected items.
getBrush	Gets the brush used to fill the item's interior. (Inherited from DiagramItem.)
getEffectiveBrush	Gets the effective brush of the item. (Inherited from DiagramItem.)
getEffectiveFont	Gets the currently effective font of the item. This property returns getFont if it is not null, or a font with the DiagramItemStyle.getFontFamily, DiagramItemStyle.getFontSize, and DiagramItemStyle.getFontStyle properties of the item's style. (Inherited from DiagramItem.)
getEffectivePen	Gets the effective pen of the item. (Inherited from DiagramItem.)
getEffectiveShadowBrush	Creates a Brush object representing the currently effective shadow brush of the item. This method returns a system brush corresponding to the item's getShadowBrush if the item's **getShadowBrush** is not null, or a system brush corresponding to the DiagramItemStyle.getShadowBrush property of the item's style. (Inherited from DiagramItem.)
getEffectiveTextBrush	Gets the effective text brush of the item. (Inherited from DiagramItem.)
getFont	Gets the font used to draw the text of an item. (Inherited from DiagramItem.)
getHandlesStyle	Gets a value indicating how multiple selection is drawn on the screen.
getHyperLink	Gets the hyperlink associated with an item. (Inherited from DiagramItem.)
getId	Gets user-defined identifier associated with this item. (Inherited from DiagramItem.)
getIgnoreLayout	Gets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
getIncludeItemsIfIntersect	Gets a value indicating which items are selected when drawing a selection rectangle.
getItems	Gets a list of all selected items.

	getLayerIndex	Gets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	getLayoutTraits	Returns a hashtable containing properties specific to layout algorithms. (Inherited from DiagramItem.)
	getLinks	Gets a list of all selected links.
	getLocked	Gets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	getMasterGroup	Gets the hierarchical group in which this item is a subordinate. (Inherited from DiagramItem.)
	getNodes	Gets a list of all selected boxes.
	getOffsetUnconnectedLinks	Specifies whether to translate all points of selected unconnected links when moving multiple selection.
	getOpacity	Gets the opacity of this item. (Inherited from DiagramItem.)
	getParent	Gets the diagram that contains this item. (Inherited from DiagramItem.)
	getPen	Gets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	getPrintable	Gets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	getRuntimeIndex	For internal use. (Inherited from DiagramItem.)
	getSelected	Gets a value indicating whether this item is selected. (Inherited from DiagramItem.)
	getSetsDirtyFlag	Gets a value indicating whether the diagram's Dirty flag should be set when selection changes.
	getShadowBrush	Gets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	getShadowOffsetX	Gets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getShadowOffsetY	Gets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getStyle	Gets the style associated with the item. (Inherited from DiagramItem.)
	getSubordinateGroup	Gets the group of subordinated items attached to this one. (Inherited from DiagramItem.)
	getTag	Gets user-defined data assigned to an item. (Inherited from DiagramItem.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	getTextPadding	Gets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)

	getToolTip	Gets the tooltip text displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	getVisible	Gets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	getWeight	Gets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	getZIndex	Gets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	hasSubordinates	Checks whether there are any nodes attached to this item. (Inherited from DiagramItem.)
	hitTest	Returns the diagram item that contains the specified point. (Inherited from DiagramItem.)
	hitTestHandle	DiagramItem.hitTestHandle override.
	itemInSelection	Determines whether the specified item is selected.
	labelFromPoint	Returns the label whose layout rectangle contains the specified point. (Inherited from DiagramItem.)
	query	Returns the items that can be reached from this item by following the path specified in the given query expression. (Inherited from DiagramItem.)
	readExternal	Implements Externalizable.
	removeItem	Removes the specified item from the selection.
	setAllowMultipleSelection	Sets a value indicating whether users are allowed to select multiple items.
	setBrush	Sets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	setFont	Sets the font used to draw the text of an item. (Inherited from DiagramItem.)
	setHandlesStyle	Sets a value indicating how multiple selection should be drawn on the screen.
	setHyperLink	Sets the hyperlink associated with an item. (Inherited from DiagramItem.)
	setId	Assigns user-defined identifier to this item. (Inherited from DiagramItem.)
	setIgnoreLayout	Sets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	setIncludeItemsIfIntersect	Sets a value indicating which items are selected when drawing a selection rectangle.
	setLayerIndex	Sets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	setLocked	Sets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)

	setOffsetUnconnectedLinks	Specifies whether to translate all points of selected unconnected links when moving multiple selection.
	setOpacity	Sets the opacity of this item. (Inherited from DiagramItem.)
	setPen	Sets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	setPrintable	Sets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	setSelected	Selects or deselects an item. (Inherited from DiagramItem.)
	setSetsDirtyFlag	Sets a value indicating whether the diagram's Dirty flag should be set when selection changes.
	setShadowBrush	Sets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	setShadowOffsetX	Sets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShadowOffsetY	Sets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setStyle	Sets the style associated with the item. (Inherited from DiagramItem.)
	setTag	Assigns user-defined data to an item. If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event. (Inherited from DiagramItem.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	setTextPadding	Sets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	setToolTip	Sets the tooltip text that should be displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	setVisible	Sets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	setWeight	Sets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	setZIndex	Sets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	size	Returns the number of selected items.
	toggle	Toggles the selection state of the specified item.
	writeExternal	Implements Externalizable.
	zBottom	Moves an item to the bottom of the Z order. (Inherited from DiagramItem.)
	zLevelDown	Moves an item down in the Z order. (Inherited from DiagramItem.)

	zLevelUp	Moves an item up in the Z order. (Inherited from DiagramItem.)
	zTop	Moves an item to the top of the Z order. (Inherited from DiagramItem.)

Protected Methods

	Name	Description
	allowCreate	
	allowModify	
	cancelModify	
	completeCreate	
	completeModify	
	createProperties	Creates an item property set corresponding to the type of this diagram item. This method is invoked by the undo/redo subsystem when creating a ChangeItemCmd instance. (Inherited from DiagramItem.)
	createState	Creates an item state corresponding to the type of this diagram item. (Inherited from DiagramItem.)
	draw	
	drawShadow	
	getMeasureUnit	(Inherited from DiagramItem.)
	getRepaintRect	DiagramItem.getRepaintRect override.
	getValue	Gets the effective value of the style property with the specified name. (Inherited from DiagramItem.)
	loadFromJson	Loads the item from a JSON object. (Inherited from DiagramItem.)
	loadFromXml	Loads the item content from an XML element. (Inherited from DiagramItem.)
	onAdd	Called when an item is added to a **Diagram**, either by the user, programmatically or by undo / redo. (Inherited from DiagramItem.)
	onChangeFont	(Inherited from DiagramItem.)
	onChangeTextPadding	(Inherited from DiagramItem.)
	onChildModified	Called when a group child node has been modified. Override this method if you need to know when a node from the **SubordinateGroup** is modified. (Inherited from DiagramItem.)
	onClick	Invoked when the user clicks this item. (Inherited from DiagramItem.)
	onDoubleClick	Invoked when the user double-clicks this item. (Inherited from DiagramItem.)

	onLoad	Called when this item is loaded from a file. (Inherited from DiagramItem.)
	onMeasureUnitChanged	Called when the diagram's MeasureUnit changes. (Inherited from DiagramItem.)
	onRemove	Called when an item is removed from a **Diagram**, either by the user, programmatically or by undo / redo. (Inherited from DiagramItem.)
	onStyleChanged	Invoked when the associated style or theme have changed. (Inherited from DiagramItem.)
	onStyleFontChanged	Invoked when font property values of an associated style change. (Inherited from DiagramItem.)
	putSelected	(Inherited from DiagramItem.)
	repaint	Overloaded. (Inherited from DiagramItem.)
	restoreProperties	Restores the properties of this diagram item. This method is invoked by the undo/redo subsystem when undoing or redoing a **ChangeItemCmd** instance. (Inherited from DiagramItem.)
	restoreState	Restores the state of this diagram item. (Inherited from DiagramItem.)
	saveProperties	Saves the properties of this diagram item. This method is invoked by the undo/redo subsystem when saving a **ChangeItemCmd** instance. (Inherited from DiagramItem.)
	saveState	Saves the state of this diagram item. (Inherited from DiagramItem.)
	saveToJson	Saves the item as a JSON object. (Inherited from DiagramItem.)
	saveToXml	Saves the item content into an XML element. (Inherited from DiagramItem.)
	setDiagramDirty	Marks the diagram as changed. (Inherited from DiagramItem.)
	shouldRender	Determines whether the item is rendered in the current context. (Inherited from DiagramItem.)
	startCreate	
	startModify	DiagramItem.startModify override.
	updateCreate	
	updateModify	

See Also

Selection Class
com.mindfusion.diagramming Namespace

Selection Constructor

Initializes a new Selection instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Selection ()
```

See Also

Selection Class
com.mindfusion.diagramming Namespace

Selection Methods

Selection.addItem Method

Adds the specified item to the selection.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addItem (
    DiagramItem item
)
```

Parameters

item
An DiagramItem that should be added to the multiple selection.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.allowCreate Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean allowCreate (
    Point2D current,
    InteractionState ist
)
```

Parameters

current

ist

Return Value

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.allowModify Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean allowModify (
    Point2D current,
    InteractionState ist
)
```

Parameters

current

ist

Return Value

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.cancelModify Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void cancelModify (
    InteractionState ist
)
```

Parameters

ist

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.change Method

Changes the selection to the specified item. That means that the item gets selected and all other items are unselected.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void change (
    DiagramItem item
)
```

Parameters

item
The DiagramItem that should be selected.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.clear Method

Removes all items from the selection.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void clear ()
```

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.completeCreate Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void completeCreate (
    Point2D end
)
```

Parameters

end

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.completeModify Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void completeModify (
    Point2D end,
    InteractionState ist
)
```

Parameters

end

ist

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.containsPoint Method

Overload List

Name	Description
Selection.containsPoint (Point2D)	DiagramItem.containsPoint override.
Selection.containsPoint (Point2D, float)	DiagramItem.containsPoint override.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.containsPoint Method (Point2D)

DiagramItem.containsPoint override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean containsPoint (
    Point2D point
)
```

Parameters

point
The point to check.

Return Value

true it any selected item contains the specified point; otherwise, **false**.

See Also

containsPoint Method Overload List
Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.containsPoint Method (Point2D, float)

DiagramItem.containsPoint override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean containsPoint (
    Point2D point,
    float threshold
)
```

Parameters

point
A **Point2D** value specifying the logical coordinates of a diagram point.

threshold
Specifies the size of the area around the item outlines where the point is still considered inside the item.

Return Value

true it any selected item contains the specified point; otherwise, **false**.

See Also

containsPoint Method Overload List
Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.draw Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void draw (
    Graphics2D g,
    RenderOptions options
)
```

Parameters

g

options

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.drawShadow Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void drawShadow (
    Graphics2D g,
    RenderOptions options
)
```

Parameters

g

options

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.getAllowMultipleSelection Method

Gets a value indicating whether users are allowed to select multiple items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowMultipleSelection ()
```

Return Value

true if users are allowed to selectmultiple items, otherwise false.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.getBounds Method

Gets the smallest rectangle that bounds all selected items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D.Float getBounds ()
```

Return Value

A **Rectangle2D.Float** object representingthe rectangle that bounds all selected items.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.getHandlesStyle Method

Gets a value indicating how multiple selection is drawn on the screen.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SelectionStyle getHandlesStyle ()
```

Return Value

A member of the SelectionStyle enumeration.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.getIncludeItemsIfIntersect Method

Gets a value indicating which items are selected when drawing a selection rectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getIncludeItemsIfIntersect ()
```

Return Value

true to select items which intersect the selection rectangle, or **false** to select only items that are entirely within the rectangle.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.getItems Method

Gets a list of all selected items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItemList getItems ()
```

Return Value

An DiagramItemList containing the selected items.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.getLinks Method

Gets a list of all selected links.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLinkList getLinks ()
```

Return Value

A DiagramLinkList containing the selected links.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.getNodes Method

Gets a list of all selected boxes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramNodeList getNodes ()
```

Return Value

A DiagramNodeList containing the selected boxes.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.getOffsetUnconnectedLinks Method

Specifies whether to translate all points of selected unconnected links when moving multiple selection.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getOffsetUnconnectedLinks ()
```

Return Value

true to offset all control points of unconnected links, or **false** otherwise.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.getRepaintRect Method

DiagramItem.getRepaintRect override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Rectangle2D getRepaintRect (
    boolean connected
)
```

Parameters

connected

Return Value

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.getSetsDirtyFlag Method

Gets a value indicating whether the diagram's Dirty flag should be set when selection changes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getSetsDirtyFlag ()
```

Return Value

true if the Dirty flag is set when selection changes, otherwise, **false**.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.hitTestHandle Method

DiagramItem.hitTestHandle override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AdjustmentHandle hitTestHandle (
    Point2D point
)
```

Parameters

point
A **Point2D** instance specifying the location where to look for adjustment handles.

Return Value

Returns an AdjustmentHandle instance representing the adjustment handle found at the specified location, or **null** if there is none.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.itemInSelection Method

Determines whether the specified item is selected.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean itemInSelection (
    DiagramItem item
)
```

Parameters

item
The DiagramItem whose selection state to check.

Return Value

true if the item is selected,otherwise false.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.removeItem Method

Removes the specified item from the selection.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean removeItem (
    DiagramItem item
)
```

Parameters

item
The DiagramItem that should be deselected.

Return Value

false if the specified item was not selected,otherwise true.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.setAllowMultipleSelection Method

Sets a value indicating whether users are allowed to select multiple items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowMultipleSelection (
    boolean value
)
```

Parameters

value
true if users are allowed to selectmultiple items, otherwise false.

See Also

Selection Members
Selection Class

Selection.setHandlesStyle Method

Sets a value indicating how multiple selection should be drawn on the screen.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHandlesStyle (
    SelectionStyle value
)
```

Parameters

value
A member of the SelectionStyle enumeration.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.setIncludeItemsIfIntersect Method

Sets a value indicating which items are selected when drawing a selection rectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIncludeItemsIfIntersect (
    boolean value
)
```

Parameters

value
true to select items which intersect the selection rectangle, or **false** to select only items that are entirely within the rectangle.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.setOffsetUnconnectedLinks Method

Specifies whether to translate all points of selected unconnected links when moving multiple selection.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOffsetUnconnectedLinks (
    boolean value
)
```

Parameters

value
true to offset all control points of unconnected links, or **false** otherwise.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.setSetsDirtyFlag Method

Sets a value indicating whether the diagram's Dirty flag should be set when selection changes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSetsDirtyFlag (
    boolean value
)
```

Parameters

value
true to set the Dirty flag when selection changes, otherwise, **false**.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.size Method

Returns the number of selected items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int size ()
```

Return Value

An integer value specifying the number of selected items.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.startCreate Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void startCreate (
    Point2D org
)
```

Parameters

org

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.startModify Method

DiagramItem.startModify override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void startModify (
    Point2D org,
    AdjustmentHandle handle,
    InteractionState ist
)
```

Parameters

org

handle

ist

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.toggle Method

Toggles the selection state of the specified item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void toggle (
    DiagramItem item
)
```

Parameters

item
An DiagramItem whose selection state should be toggled.

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.updateCreate Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void updateCreate (
    Point2D current
)
```

Parameters

current

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.updateModify Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void updateModify (
    Point2D current,
    InteractionState ist
)
```

Parameters

current

ist

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

Selection.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

Selection Members
Selection Class
com.mindfusion.diagramming Namespace

SelectionCopy Class

Used internally in the implementation of copy/paste functions.

Syntax

Java
`public class SelectionCopy`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.SelectionCopy

See Also

SelectionCopy Members
com.mindfusion.diagramming Namespace

SelectionCopy Members

Used internally in the implementation of copy/paste functions.

The following tables list the members exposed by the SelectionCopy type.

Public Constructors

	Name	Description
	SelectionCopy	Initializes a new instance of the **SelectionCopy** class. This constructor supports the JDiagram infrastructure and is not intended to be used directly from your code.

Public Methods

	Name	Description
	getGroups	Gets the underlying collection of groups.
	getItems	Gets the underlying collection of items.
	getOriginalItems	Gets a collection of the original items.

See Also

SelectionCopy Class
com.mindfusion.diagramming Namespace

SelectionCopy Constructor

Initializes a new instance of the SelectionCopy class. This constructor supports the JDiagram infrastructure and is not intended to be used directly from your code.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public SelectionCopy (
    DiagramItemList items,
    DiagramItemList originalItems,
    GroupList groups
)
```

Parameters

items
A collection containing the item copies.

originalItems
A collection containing the original items.

groups
A collection containing the group copies.

See Also

SelectionCopy Class
com.mindfusion.diagramming Namespace

SelectionCopy Methods

SelectionCopy.getGroups Method

Gets the underlying collection of groups.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public GroupList getGroups ()
```

Return Value

A GroupList containing the related Group objects.

See Also

SelectionCopy Members
SelectionCopy Class
com.mindfusion.diagramming Namespace

SelectionCopy.getItems Method

Gets the underlying collection of items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramItemList getItems ()
```

Return Value

A DiagramItemList containing the cloned items.

See Also

SelectionCopy Members
SelectionCopy Class
com.mindfusion.diagramming Namespace

SelectionCopy.getOriginalItems Method

Gets a collection of the original items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramItemList getOriginalItems ()
```

Return Value

A DiagramItemList containing the original items.

See Also

SelectionCopy Members
SelectionCopy Class
com.mindfusion.diagramming Namespace

SelectionEvent Class

Contains information passed to the selection events defined in DiagramListener.

Syntax

```
Java
public class SelectionEvent extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.SelectionEvent
      com.mindfusion.diagramming.SelectionValidationEvent

See Also

SelectionEvent Members
com.mindfusion.diagramming Namespace

SelectionEvent Members

Contains information passed to the selection events defined in DiagramListener.

The following tables list the members exposed by the SelectionEvent type.

Public Constructors

	Name	Description
	SelectionEvent	Overloaded.

Public Methods

	Name	Description
	getAdjustmentHandle	Gets the adjustment handle being moved by the user.
	getBounds	Gets the rectangular bounds of the drawn lasso.
	getPointerPosition	Gets the current mouse pointer position.
	getSelection	

See Also

SelectionEvent Class
com.mindfusion.diagramming Namespace

SelectionEvent Constructor

Overload List

Name	Description
SelectionEvent (Object, Point2D, AdjustmentHandle)	Initializes a new instance of the SelectionEvent class.
SelectionEvent (Object, Rectangle2D)	Initializes a new instance of the **SelectionEvent** class with specified bounds.

See Also

SelectionEvent Class
com.mindfusion.diagramming Namespace

SelectionEvent Constructor (Object, Point2D, AdjustmentHandle)

Initializes a new instance of the SelectionEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SelectionEvent (
    Object source,
    Point2D mousePosition,
    AdjustmentHandle adjustmentHandle
)
```

Parameters

source
The source of the event.

mousePosition
The position of the mouse cursor, in document coordinates.

adjustmentHandle
The adjustment handle being moved by the user.

See Also

SelectionEvent Constructor Overload List
SelectionEvent Class
com.mindfusion.diagramming Namespace

SelectionEvent Constructor (Object, Rectangle2D)

Initializes a new instance of the SelectionEvent class with specified bounds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SelectionEvent (
    Object source,
    Rectangle2D bounds
)
```

Parameters

source
The source of the event.

bounds
A Rectangle2D specifying lasso coordinates.

See Also

SelectionEvent Constructor Overload List
SelectionEvent Class
com.mindfusion.diagramming Namespace

SelectionEvent Methods

SelectionEvent.getAdjustmentHandle Method

Gets the adjustment handle being moved by the user.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AdjustmentHandle getAdjustmentHandle ()
```

Return Value

Gets the adjustment handle being moved by the user.

See Also

SelectionEvent Members
SelectionEvent Class
com.mindfusion.diagramming Namespace

SelectionEvent.getBounds Method

Gets the rectangular bounds of the drawn lasso.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getBounds ()
```

Return Value

A **java.awt.geom.Rectangle2D** instance.

See Also

SelectionEvent Members
SelectionEvent Class
com.mindfusion.diagramming Namespace
lassoDrawn Event

SelectionEvent.getPointerPosition Method

Gets the current mouse pointer position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D getPointerPosition ()
```

Return Value

A **Point2D** object specifying the current mouse position.

See Also

SelectionEvent Members
SelectionEvent Class
com.mindfusion.diagramming Namespace

SelectionEvent.getSelection Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Selection getSelection ()
```

Return Value

See Also

SelectionEvent Members
SelectionEvent Class
com.mindfusion.diagramming Namespace

SelectionStyle Enumeration

The members of this enumeration specify what a multiple selection of items should look like. They can be used as parameters of the setHandlesStyle method of the Selection class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public enum SelectionStyle
```

Members

	Member name	Description
	Rectangle	Draw a rectangular selection frame that bounds all selected items.
	SelectionHandles	All items in the multiple selection are drawn with selection handles around them.
	SemiTransparent	Draw a semi-transparent rectangle that bounds all selected items.

See Also

com.mindfusion.diagramming Namespace

SelectionValidationEvent Class

Contains information passed to the selection validation events defined in DiagramListener.

Syntax

Java
`public class SelectionValidationEvent extends SelectionEvent`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.SelectionEvent
      com.mindfusion.diagramming.SelectionValidationEvent

See Also

SelectionValidationEvent Members
com.mindfusion.diagramming Namespace

SelectionValidationEvent Members

Contains information passed to the selection validation events defined in DiagramListener.

The following tables list the members exposed by the SelectionValidationEvent type.

Public Constructors

	Name	Description
	SelectionValidationEvent	Initializes a new **SelectionValidationEvent** instance.

Public Methods

	Name	Description

	cancelDrag	Immediately cancels the item's creation or modification. This differs from calling setValid(false), which would only change the cursor to indicate to users that they cannot complete the modification at the current mouse position.
	getAdjustmentHandle	Gets the adjustment handle being moved by the user. (Inherited from SelectionEvent.)
	getBounds	Gets the rectangular bounds of the drawn lasso. (Inherited from SelectionEvent.)
	getCancel	Gets a value indicating whether to prevent the user from completing the operation.
	getPointerPosition	Gets the current mouse pointer position. (Inherited from SelectionEvent.)
	getSelection	(Inherited from SelectionEvent.)
	setCancel	Sets a value indicating whether to prevent the user from completing the operation

See Also

SelectionValidationEvent Class
com.mindfusion.diagramming Namespace

SelectionValidationEvent Constructor

Initializes a new SelectionValidationEvent instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SelectionValidationEvent (
    Object source,
    Point2D mousePosition,
    AdjustmentHandle adjustmentHandle
)
```

Parameters

source
The source of the event.

mousePosition

adjustmentHandle
The adjustment handle being moved by the user.

See Also

SelectionValidationEvent Class
com.mindfusion.diagramming Namespace

SelectionValidationEvent Methods

SelectionValidationEvent.cancelDrag Method

Immediately cancels the item's creation or modification. This differs from calling setValid(false), which would only change the cursor to indicate to users that they cannot complete the modification at the current mouse position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void cancelDrag ()
```

See Also

SelectionValidationEvent Members
SelectionValidationEvent Class
com.mindfusion.diagramming Namespace

SelectionValidationEvent.getCancel Method

Gets a value indicating whether to prevent the user from completing the operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getCancel ()
```

Return Value

true to cancel the operation; **false** to approve it.

See Also

SelectionValidationEvent Members
SelectionValidationEvent Class
com.mindfusion.diagramming Namespace

SelectionValidationEvent.setCancel Method

Sets a value indicating whether to prevent the user from completing the operation

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public void setCancel (`
`    boolean cancel`
`)`

Parameters

cancel

true to cancel the operation; **false** to approve it.

See Also

SelectionValidationEvent Members
SelectionValidationEvent Class
com.mindfusion.diagramming Namespace

SelectOnlyBehavior Class

Implements the Behavior.SelectOnly behavior.

Syntax

Java
`public class SelectOnlyBehavior extends BehaviorBase`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Interaction
    com.mindfusion.diagramming.BehaviorBase
      com.mindfusion.diagramming.SelectOnlyBehavior

See Also

SelectOnlyBehavior Members
com.mindfusion.diagramming Namespace

SelectOnlyBehavior Members

Implements the Behavior.SelectOnly behavior.

The following tables list the members exposed by the SelectOnlyBehavior type.

Public Constructors

	Name	Description
	SelectOnlyBehavior	Initializes a new instance of the **SelectOnlyBehavior** class.

Protected Fields

	Name	Description

	currentCursor	(Inherited from BehaviorBase.)
	diagramView	(Inherited from BehaviorBase.)

Public Methods

	Name	Description
	cancelDrag	Invoked when the operation should be canceled. (Inherited from Interaction.)
	pointerDown	Interaction.pointerDown override. Invoked in response to system pointer down events. (Inherited from BehaviorBase.)
	pointerMove	Interaction.pointerMove override. Invoked when the pointer moves. (Inherited from BehaviorBase.)
	pointerOver	Invoked when the mouse moves. (Inherited from BehaviorBase.)
	pointerUp	Interaction.pointerUp override. Invoked in response to system pointer up events. (Inherited from BehaviorBase.)

Protected Methods

	Name	Description
	createLink	(Inherited from BehaviorBase.)
	getDiagram	(Inherited from BehaviorBase.)
	getDiagramView	(Inherited from BehaviorBase.)
	setModfCursor	Updates the current cursor according to the specified cursor position and diagram state. (Inherited from BehaviorBase.)
	setMouseCursor	BehaviorBase.setMouseCursor override.
	startDraw	BehaviorBase.startDraw override.
	startDrawCommon	BehaviorBase.startDrawCommon override.

See Also

SelectOnlyBehavior Class
com.mindfusion.diagramming Namespace

SelectOnlyBehavior Constructor

Initializes a new instance of the SelectOnlyBehavior class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected SelectOnlyBehavior (
    DiagramView diagramView
)
```

Parameters

diagramView
The DiagramView associated with this behavior.

See Also

SelectOnlyBehavior Class
com.mindfusion.diagramming Namespace

SelectOnlyBehavior Methods

SelectOnlyBehavior.setMouseCursor Method

BehaviorBase.setMouseCursor override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected CursorHint setMouseCursor (
    Point2D point,
    ByRef<Boolean> startInteraction
)
```

Parameters

point
A Point2D instance that specifies the position of the mouse cursor.

startInteraction
true if the user is going to create, delete, modify or select a DiagramItem; **false** if mouse behavior is not considered; in this case the mouse pointer is set to a default cursor according to the background LaneGrid.

Return Value

A member of the CursorHint enumeration.

See Also

SelectOnlyBehavior Members
SelectOnlyBehavior Class
com.mindfusion.diagramming Namespace

SelectOnlyBehavior.startDraw Method

BehaviorBase.startDraw override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected InteractionState startDraw (
    Point2D point,
    MouseEvent e
)
```

Parameters

point

e

Return Value

See Also

SelectOnlyBehavior Members
SelectOnlyBehavior Class
com.mindfusion.diagramming Namespace

SelectOnlyBehavior.startDrawCommon Method

BehaviorBase.startDrawCommon override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected InteractionState startDrawCommon (
    Point2D point,
    MouseEvent e
)
```

Parameters

point

e

Return Value

See Also

SelectOnlyBehavior Members
SelectOnlyBehavior Class
com.mindfusion.diagramming Namespace

Serialization Class

Syntax

Java
`public class Serialization`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Serialization

See Also

Serialization Members
com.mindfusion.diagramming Namespace

Serialization Members

The following tables list the members exposed by the Serialization type.

Public Constructors

	Name	Description
	Serialization	

Public Methods

	Name	Description
	readAnchorPattern	
	readPoint	
	readRect	
	readShape	
	readTag	
	readTextFormat	
	writeAnchorPattern	
	writePoint	
	writeRect	
	writeShape	
	writeTag	
	writeTextFormat	

See Also

Serialization Class
com.mindfusion.diagramming Namespace

Serialization Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Serialization ()
```

See Also

Serialization Class
com.mindfusion.diagramming Namespace

Serialization Methods

Serialization.readAnchorPattern Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static AnchorPattern readAnchorPattern (
    ObjectInput in
)
```

Parameters

in

Return Value

See Also

Serialization Members
Serialization Class
com.mindfusion.diagramming Namespace

Serialization.readPoint Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Point2D.Float readPoint (
    ObjectInput in
)
```

Parameters

in

Return Value

See Also

Serialization Members
Serialization Class
com.mindfusion.diagramming Namespace

Serialization.readRect Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Rectangle2D.Float readRect (
    ObjectInput in
)
```

Parameters

in

Return Value

See Also

Serialization Members
Serialization Class
com.mindfusion.diagramming Namespace

Serialization.readShape Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape readShape (
    ObjectInput in
)
```

Parameters

in

Return Value

See Also

Serialization Members
Serialization Class
com.mindfusion.diagramming Namespace

Serialization.readTag Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Object readTag (
    ObjectInput in
)
```

Parameters

in

Return Value

See Also

Serialization Members
Serialization Class
com.mindfusion.diagramming Namespace

Serialization.readTextFormat Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static TextFormat readTextFormat (
    ObjectInput in
)
```

Parameters

in

Return Value

See Also

Serialization Members
Serialization Class
com.mindfusion.diagramming Namespace

Serialization.writeAnchorPattern Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void writeAnchorPattern (
    ObjectOutput out,
    AnchorPattern ap
)
```

Parameters

out

ap

See Also

Serialization Members
Serialization Class
com.mindfusion.diagramming Namespace

Serialization.writePoint Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void writePoint (
    ObjectOutput out,
    Point2D point
)
```

Parameters

out

point

See Also

Serialization Members
Serialization Class
com.mindfusion.diagramming Namespace

Serialization.writeRect Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void writeRect (
    ObjectOutput out,
    Rectangle2D rect
)
```

Parameters

out

rect

See Also

Serialization Members
Serialization Class
com.mindfusion.diagramming Namespace

Serialization.writeShape Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void writeShape (
    ObjectOutput out,
    Shape shape
)
```

Parameters

out

shape

See Also

Serialization Members
Serialization Class
com.mindfusion.diagramming Namespace

Serialization.writeTag Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void writeTag (
    ObjectOutput out,
    Object tag
)
```

Parameters

out

tag

See Also

Serialization Members
Serialization Class
com.mindfusion.diagramming Namespace

Serialization.writeTextFormat Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void writeTextFormat (
    ObjectOutput out,
    TextFormat textFormat
)
```

Parameters

out

textFormat

See Also

Serialization Members
Serialization Class
com.mindfusion.diagramming Namespace

SerializeTagEvent Class

Contains information passed to the tag serialization related events in DiagramListener.

Syntax

Java
`public class SerializeTagEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.SerializeTagEvent

See Also

SerializeTagEvent Members
com.mindfusion.diagramming Namespace

SerializeTagEvent Members

Contains information passed to the tag serialization related events in DiagramListener.

The following tables list the members exposed by the SerializeTagEvent type.

Public Constructors

	Name	Description
	SerializeTagEvent	Initializes a new instance of the ItemTagEvent class.

Public Methods

	Name	Description
	getContext	
	getHandled	
	getItem	Gets the object whose tag should be serialized.
	getPropertyName	Gets the name of the property being serialized.
	getTag	Gets the tag object that should be serialized.
	getTagElement	Gets XML element under which the tag data should be written or from which the tag must be loaded.
	setHandled	
	setTag	Sets the tag after deserializing it.

See Also

SerializeTagEvent Class
com.mindfusion.diagramming Namespace

SerializeTagEvent Constructor

Initializes a new instance of the ItemTagEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SerializeTagEvent (
    Object source,
    Object item,
    Object tag,
    String propertyName,
    Element tagElement,
    XmlPersistContext context
)
```

Parameters

source
The sender of this event.

item
The object whose tag should be serialized.

tag
The tag value.

propertyName

tagElement
The XML element where the tag should be saved or loaded.

context
An XmlPersistContext object providing more information about the serialization process.

See Also

SerializeTagEvent Class
com.mindfusion.diagramming Namespace

SerializeTagEvent Methods

SerializeTagEvent.getContext Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public XmlPersistContext getContext ()
```

Return Value

See Also

SerializeTagEvent Members
SerializeTagEvent Class
com.mindfusion.diagramming Namespace

SerializeTagEvent.getHandled Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getHandled ()
```

Return Value

See Also

SerializeTagEvent Members
SerializeTagEvent Class
com.mindfusion.diagramming Namespace

SerializeTagEvent.getItem Method

Gets the object whose tag should be serialized.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Object getItem ()
```

Return Value

An object that refers to an DiagramItem, Diagram, Group or AnchorPoint.

See Also

SerializeTagEvent Members
SerializeTagEvent Class
com.mindfusion.diagramming Namespace

SerializeTagEvent.getPropertyName Method

Gets the name of the property being serialized.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getPropertyName ()
```

Return Value

See Also

SerializeTagEvent Members
SerializeTagEvent Class
com.mindfusion.diagramming Namespace

SerializeTagEvent.getTag Method

Gets the tag object that should be serialized.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object getTag ()
```

Return Value

The Tag object.

See Also

SerializeTagEvent Members
SerializeTagEvent Class
com.mindfusion.diagramming Namespace

SerializeTagEvent.getTagElement Method

Gets XML element under which the tag data should be written or from which the tag must be loaded.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element getTagElement ()
```

Return Value

An org.w3c.dom.Element object.

See Also

SerializeTagEvent Members
SerializeTagEvent Class

com.mindfusion.diagramming Namespace

SerializeTagEvent.setHandled Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHandled (
    boolean value
)
```

Parameters

value

See Also

SerializeTagEvent Members
SerializeTagEvent Class
com.mindfusion.diagramming Namespace

SerializeTagEvent.setTag Method

Sets the tag after deserializing it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTag (
    Object value
)
```

Parameters

value
The object that should be used as item's tag.

See Also

SerializeTagEvent Members
SerializeTagEvent Class
com.mindfusion.diagramming Namespace

ShadowsStyle Enumeration

The members of this enumeration specify how JDiagram should draw the shadows of items. They can be used as parameters of the setShadowsStyle method of the Diagram class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum ShadowsStyle`

Members

	Member name	Description
	None	Do not draw shadows.
	OneLevel	Draw all shadows at one level at the bottom of the Z order.
	ZOrder	Draw each shadow right below its item pertaining to the Z order.

See Also

com.mindfusion.diagramming Namespace

Shape Class

A **Shape** object describes a shape consisting of a series of straight lines, arcs and Bezier curves. The main component of a shape definition is its outline, which describes the shape region that will be filled in color, and used for hit-testing and aligning links to the shape. A shape can also contain decorations - lines, arcs or Bezier curves that are drawn with the shape but do not influence the fill or hit testing.

A shape is used by applying it to a ShapeNode instance by calling the setShape method.

Syntax

Java
`public class Shape`

Remarks

Shape Definitions

The **Shape** class provides the means for defining complex node shapes. You can design any shape composed of lines, arcs and Bézier-curves. A shape template must always contain an outline to be used for hit testing, clipping and finding intersections with other items.

Predefined Shapes

JDiagram provides a set of about 100 predefined shape templates accessible by the static Shapes collection and the fromId method of Shape. A shape template can be applied to a node through the setShape method.

Custom Shapes

There are several Shape constructor overrides you might choose from, depending on the complexity of the shapes you want to create. They take arrays of ElementTemplate objects as arguments, which define the outline, decorations and text region definitions. Templates are described with coordinates expressed as percents of a shape node's area. It is also possible to associate an image with a shape definition by setImage and to define the area in which the image is displayed by setImageRectangle.

Shape Libraries

The ShapeDesigner tool included in the JDiagram suite lets you draw custom shapes and store them in shape libraries. A library file can be loaded into your application using the ShapeLibrary class. The definitions loaded from a shape library are automatically added to the Shapes collection and can be accessed through the FromId method, just as the predefined shapes.

Link Arrowheads

A **Shape** instance can be set as a link's arrowhead through the setHeadShape, setBaseShape or setIntermediateShape methods of DiagramLink. When used for arrowheads, position (50, 0) in the shape definition corresponds to the arrowhead's tip point. The link segment adjacent to an arrowhead connects to the point calculated from LinkSegmentInset. Several predefined arrowhead shapes are provided as static properties of the ArrowHeads class.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Shape

See Also

Shape Members
com.mindfusion.diagramming Namespace

Shape Members

A Shape object describes a shape consisting of a series of straight lines, arcs and Bezier curves. The main component of a shape definition is its outline, which describes the shape region that will be filled in color, and used for hit-testing and aligning links to the shape. A shape can also contain decorations - lines, arcs or Bezier curves that are drawn with the shape but do not influence the fill or hit testing.

A shape is used by applying it to a ShapeNode instance by calling the setShape method.

The following tables list the members exposed by the **Shape** type.

Public Constructors

	Name	Description
	Shape	Overloaded.

Public Methods

	Name	Description
	draw	Draws this shape on the specified **Graphics2D** surface.
S	fromId	Returns the shape that has the specified identifier.
S	fromXmlElement	Creates a **Shape** from xml shape element

S	fromXmlElements	
	getAnchorPattern	Gets the anchor pattern to use for nodes using this shape, if their anchor pattern is set to **null**.
	getDecorations	Gets a list of all decorations of this shape.
	getDisplayName	
	getHitPath	
	getId	Returns the shape identifier.
	getImage	Gets an image that is displayed by default in all instances of this shape.
	getImageLocation	Get the image location. Will be null if the image was set with setImage, which does not provide location, or if there is no image.
	getImageRectangle	Gets the location of the shape image relatively to the bounding rectangles of boxes of this shape.
	getIsArrowhead	Gets a value indicating if this shape is used as arrowhead.
	getLinkSegmentInset	Gets what length of link's line segment is drawn inside the arrowhead shape, expressed as percents of arrowhead size.
	getOutline	Gets the outline of this shape.
	getRenderPath	
S	getShapes	Returns a list of all shapes definitions.
	getTextArea	Gets the outline of the text area of this shape.
	initData	
	isEllipse	Gets a value indicating whether this shape is elliptic.
	setAnchorPattern	Sets the anchor pattern to use for nodes using this shape, if their anchor pattern is set to **null**.
	setDisplayName	
	setId	
	setImage	Sets an image that should be displayed by default in all instances of this shape.
	setImageLocation	Accepted are absolute URLs, and relative paths with both back and forward slashes.
	setImageRectangle	Sets the location of the shape image relatively to the bounding rectangles of boxes of this shape.
	setLinkSegmentInset	Sets what length of link's line segment is drawn inside the arrowhead shape, expressed as percents of arrowhead size.
	setTextArea	Sets the outline of the text area of this shape.
	toDOM	
S	toDOM	

See Also

Shape Class
com.mindfusion.diagramming Namespace

Shape Constructor

Overload List

Name	Description
Shape (ElementTemplate[], ElementTemplate[], ElementTemplate[], int, String)	Initializes a new Shape instance by setting its outline, decorations, text area, fill rule and shape identifier.
Shape (ElementTemplate[], ElementTemplate[], ElementTemplate[], int, String, ShapeDecoration[])	
Shape (ElementTemplate[], int, String)	Initializes a new **Shape** instance by setting its outline, fill rule and shape identifier.
Shape (short[], String)	Initializes a new instance of the Shape class with the specified outline and id. The specified array should contain even number of values. Each odd value represents the x-coordinate and each even value represents the y-coordinate of the corresponding point in the shape outline.

See Also

Shape Class
com.mindfusion.diagramming Namespace

Shape Constructor (ElementTemplate[], ElementTemplate[], ElementTemplate[], int, String)

Initializes a new Shape instance by setting its outline, decorations, text area, fill rule and shape identifier.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Shape (
    ElementTemplate[] outline,
    ElementTemplate[] decorations,
    ElementTemplate[] textArea,
    int windingRule,
    String id
)
```

Parameters

outline

An array of ElementTemplate objects representing the shape outline, which specifies what region of a node is filled, used for hit-testing and for aligning link end point to the node.

decorations
An array of **ElementTemplate** objects representing the shape decoration lines.

textArea
An array of **ElementTemplate** objects representing the region of the shape where box' text is laid out.

windingRule
GeneralPath.WIND_EVEN_ODD or GeneralPath.WIND_NON_ZERO.

id
An unique String identifier of this shape.

See Also

Shape Constructor Overload List
Shape Class
com.mindfusion.diagramming Namespace

Shape Constructor (ElementTemplate[], ElementTemplate[], ElementTemplate[], int, String, ShapeDecoration[])

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Shape (
    ElementTemplate[] elements,
    ElementTemplate[] decorations,
    ElementTemplate[] textArea,
    int windingRule,
    String id,
    ShapeDecoration[] closedDecorations
)
```

Parameters

elements

decorations

textArea

windingRule

id

closedDecorations

See Also

Shape Constructor Overload List
Shape Class
com.mindfusion.diagramming Namespace

Shape Constructor (ElementTemplate[], int, String)

Initializes a new Shape instance by setting its outline, fill rule and shape identifier.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Shape (
    ElementTemplate[] outline,
    int windingRule,
    String id
)
```

Parameters

outline
An array of ElementTemplate objects representing the shape outline, which specifies what region of a node is filled,used for hit-testing and for aligning link end point to the node.

windingRule
GeneralPath.WIND_EVEN_ODD or GeneralPath.WIND_NON_ZERO.

id
An unique String identifier of this shape.

See Also

Shape Constructor Overload List
Shape Class
com.mindfusion.diagramming Namespace

Shape Constructor (short[], String)

Initializes a new instance of the Shape class with the specified outline and id. The specified array should contain even number of values. Each odd value represents the x-coordinate and each even value represents the y-coordinate of the corresponding point in the shape outline.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Shape (
    short[] outline,
    String id
)
```

Parameters

outline
An array containing even number of coordinate values, which define the points of the shape outline.

id
The string identifier of the new shape.

See Also

Shape Constructor Overload List
Shape Class
com.mindfusion.diagramming Namespace

Shape Methods

Shape.draw Method

Draws this shape on the specified **Graphics2D** surface.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void draw (
    Graphics2D drawingContext,
    Brush brush,
    Pen pen,
    boolean shadow
)
```

Parameters

graphics
The Graphics2D surface on which to draw the shape.

brush
A Brush used to fill the shape.

pen
A Pen used to draw the shape outline.

shadow
When shadow is true the brush and pen parameters have higher priority over shape's brush and pen.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.fromId Method

Returns the shape that has the specified identifier.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape fromId (
    String id
```

```
)
```

Parameters

id
The identifier of the looked-for shape.

Return Value

The Shape identified by the specified string.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.fromXmlElement Method

Creates a Shape from xml shape element

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape fromXmlElement (
    Element e
)
```

Parameters

e

Return Value

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.fromXmlElements Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Shape[] fromXmlElements (
    Element shapes
)
```

Parameters

shapes

Return Value

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.getAnchorPattern Method

Gets the anchor pattern to use for nodes using this shape, if their anchor pattern is set to **null**.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPattern getAnchorPattern ()
```

Return Value

An AnchorPattern instance.

Remarks

If the AnchorPattern of a ShapeNode is set, it overrides the one associated with the Shape definition.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.getDecorations Method

Gets a list of all decorations of this shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ElementTemplate[] getDecorations ()
```

Return Value

An array of ElementTemplate objects specifying the decorations of this shape.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.getDisplayName Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getDisplayName ()
```

Return Value

The name displayed for this shape in user interface.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.getHitPath Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GeneralPath getHitPath (
    Rectangle2D rect,
    boolean flipX,
    boolean flipY,
    double rotationAngle
)
```

Parameters

rect

flipX

flipY

rotationAngle

Return Value

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.getId Method

Returns the shape identifier.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getId ()
```

Return Value

A String object containing the shape identifier.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.getImage Method

Gets an image that is displayed by default in all instances of this shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Image getImage ()
```

Return Value

An instance of the **java.awt.Image** class that should be displayed inside nodes with this shape.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.getImageLocation Method

Get the image location. Will be null if the image was set with setImage, which does not provide location, or if there is no image.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public String getImageLocation ()`

Return Value

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.getImageRectangle Method

Gets the location of the shape image relatively to the bounding rectangles of boxes of this shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Rectangle2D.Float getImageRectangle ()`

Return Value

A **Rectangle2D** object specifying the image coordinates as percents of the box bounds.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.getIsArrowhead Method

Gets a value indicating if this shape is used as arrowhead.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public boolean getIsArrowhead ()`

Return Value

true if this shape is used as arrowhead, otherwise **false**.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.getLinkSegmentInset Method

Gets what length of link's line segment is drawn inside the arrowhead shape, expressed as percents of arrowhead size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getLinkSegmentInset ()
```

Return Value

A **float** value specifying percentage of arrowhead size.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.getOutline Method

Gets the outline of this shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ElementTemplate[] getOutline ()
```

Return Value

An array of ElementTemplate objects specifying the outline of the shape.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.getRenderPath Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public GeneralPath getRenderPath (
    ShapeData data,
    boolean flipX,
    boolean flipY,
    double rotationAngle
)
```

Parameters

data

flipX

flipY

rotationAngle

Return Value

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.getShapes Method

Returns a list of all shapes definitions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static ShapeList getShapes ()
```

Return Value

A ShapeList that contains all shape definitions.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.getTextArea Method

Gets the outline of the text area of this shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ElementTemplate[] getTextArea ()
```

Return Value

An array of ElementTemplate objects specifying the text area of this shape.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.initData Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ShapeData initData (
    Rectangle2D rc,
    double rotation
)
```

Parameters

rc

rotation

Return Value

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.isEllipse Method

Gets a value indicating whether this shape is elliptic.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
```

Java

```
public boolean isEllipse ()
```

Return Value

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.setAnchorPattern Method

Sets the anchor pattern to use for nodes using this shape, if their anchor pattern is set to **null**.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAnchorPattern (
    AnchorPattern value
)
```

Parameters

value
An AnchorPattern instance.

Remarks

If the AnchorPattern of a ShapeNode is set, it overrides the one associated with the Shape definition.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.setDisplayName Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDisplayName (
    String displayName
)
```

Parameters

displayName
The name that should be displayed for this shape in user interface, for example in the ShapeListBox.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.setId Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setId (
    String value
)
```

Parameters

value

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.setImage Method

Sets an image that should be displayed by default in all instances of this shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImage (
    Image image
)
```

Parameters

image
An instance of the **java.awt.Image** class that should be displayed inside boxes with this shape.

See Also

Shape Members
Shape Class

Shape.setImageLocation Method

Accepted are absolute URLs, and relative paths with both back and forward slashes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImageLocation (
    String url
)
```

Parameters

url

Remarks

The ShapeEditor tool may produce absolute filesystem image paths when the images are on different drive than the shape library xml, and they will not work on java. Workaround: copy images to the same drive.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.setImageRectangle Method

Sets the location of the shape image relatively to the bounding rectangles of boxes of this shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImageRectangle (
    Rectangle2D.Float imageRectangle
)
```

Parameters

imageRectangle
A **Rectangle2D** object specifying the image coordinates as percents of the box bounds.

See Also

Shape Members
Shape Class

Shape.setLinkSegmentInset Method

Sets what length of link's line segment is drawn inside the arrowhead shape, expressed as percents of arrowhead size.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkSegmentInset (
    float value
)
```

Parameters

value
A **float** value specifying percentage of arrowhead size.

Remarks

The inset value matters when using transparent or semi-transparent arrowhead brush, or when the link's Pen is thicker than one pixel and its cap might extend beyond the arrowhead outline. **LinkSegmentInset** is set to appropriate values for all shapes from the ArrowHeads class. You might want to set it when using custom arrowhead shapes for which the link's end segment should not reach all the way to the arrowhead tip.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.setTextArea Method

Sets the outline of the text area of this shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextArea (
    ElementTemplate[] value
)
```

Parameters

value
An array of ElementTemplate objects specifying the text area of this shape.

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.toDOM Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Element[] toDOM (
    Shape[] shapes,
    Document owner
)
```

Parameters

shapes

owner

Return Value

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

Shape.toDOM Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element toDOM (
    Document owner
)
```

Parameters

owner

Return Value

See Also

Shape Members
Shape Class
com.mindfusion.diagramming Namespace

ShapeConverter Class

Converts strings to Shape.

Syntax

```
Java
public class ShapeConverter
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ShapeConverter

See Also

ShapeConverter Members
com.mindfusion.diagramming Namespace

ShapeConverter Members

Converts strings to Shape.

The following tables list the members exposed by the ShapeConverter type.

Public Constructors

	Name	Description
	ShapeConverter	

Public Methods

	Name	Description
S	convertFromString	

See Also

ShapeConverter Class
com.mindfusion.diagramming Namespace

ShapeConverter Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ShapeConverter ()
```

See Also

ShapeConverter Class
com.mindfusion.diagramming Namespace

ShapeConverter Methods

ShapeConverter.convertFromString Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static Shape convertFromString (
    String value
)
```

Parameters

value

Return Value

See Also

ShapeConverter Members
ShapeConverter Class
com.mindfusion.diagramming Namespace

ShapeData Class

Syntax

```
Java
public class ShapeData
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.ShapeData

See Also

ShapeData Members

The following tables list the members exposed by the ShapeData type.

Public Constructors

	Name	Description
	ShapeData	

Public Methods

	Name	Description
	clone	
	getBounds	
	getData	
	initData	
	setBounds	
	setData	

See Also

ShapeData Class
com.mindfusion.diagramming Namespace

ShapeData Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeData (
    int numElements
)
```

Parameters

numElements

See Also

ShapeData Methods

ShapeData.clone Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Object clone ()`

Return Value

See Also

ShapeData Members
ShapeData Class
com.mindfusion.diagramming Namespace

ShapeData.getBounds Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Rectangle2D getBounds ()`

Return Value

See Also

ShapeData Members
ShapeData Class
com.mindfusion.diagramming Namespace

ShapeData.getData Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public double[] getData (
    int num
)
```

Parameters

num

Return Value

See Also

ShapeData Members
ShapeData Class
com.mindfusion.diagramming Namespace

ShapeData.initData Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void initData (
    int num,
    double[] elementData
)
```

Parameters

num

elementData

See Also

ShapeData Members
ShapeData Class
com.mindfusion.diagramming Namespace

ShapeData.setBounds Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBounds (
    Rectangle2D bounds
)
```

Parameters

bounds

See Also

ShapeData Members
ShapeData Class
com.mindfusion.diagramming Namespace

ShapeData.setData Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setData (
    int num,
    double[] element
)
```

Parameters

num

element

See Also

ShapeData Members
ShapeData Class
com.mindfusion.diagramming Namespace

ShapeDecoration Class

That class contained an array of shape template elements that define shape decorations. Can contain lines, arcs and Bezier curves. The shape is closed and filled.

Syntax

Java

```
public class ShapeDecoration
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ShapeDecoration

See Also

ShapeDecoration Members
com.mindfusion.diagramming Namespace

ShapeDecoration Members

That class contained an array of shape template elements that define shape decorations. Can contain lines, arcs and Bezier curves. The shape is closed and filled.

The following tables list the members exposed by the ShapeDecoration type.

Public Constructors

	Name	Description
	ShapeDecoration	Initializes a new instance of the ShapeDecoration class with the specified outline, brush, pen and rule.

Public Methods

	Name	Description
	draw	
S	fromXmlElement	
	getBrush	Gets the brush used to fill the interior of this shape.
	getFillMode	Gets a value indicating how the area is filled.
	getPen	Gets the pen used to paint the frame of the shape.
	setBrush	Sets the brush used to fill the interior of this shape.
	setFillMode	Sets a value indicating how the area is filled.
	setPen	Sets the pen used to paint the frame of the shape.
S	toDOM	

See Also

ShapeDecoration Class
com.mindfusion.diagramming Namespace

ShapeDecoration Constructor

Initializes a new instance of the ShapeDecoration class with the specified outline, brush, pen and rule.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeDecoration (
    ElementTemplate[] elements,
    Brush brush,
    int fillMode,
    Pen pen
)
```

Parameters

elements
An array of shape template elements that define shape decoration.

brush
Used to fill the interior of the shape.

fillMode
Specifies how areas are filled.

pen
Used to paint the frame of the shape.

See Also

ShapeDecoration Class
com.mindfusion.diagramming Namespace

ShapeDecoration Methods

ShapeDecoration.draw Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void draw (
    Graphics2D graphics,
    double rotation
)
```

Parameters

graphics

rotation

See Also

ShapeDecoration Members
ShapeDecoration Class
com.mindfusion.diagramming Namespace

ShapeDecoration.fromXmlElement Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static ShapeDecoration fromXmlElement (
    Element e
)
```

Parameters

e

Return Value

See Also

ShapeDecoration Members
ShapeDecoration Class
com.mindfusion.diagramming Namespace

ShapeDecoration.getBrush Method

Gets the brush used to fill the interior of this shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getBrush ()
```

Return Value

An instance of a Brush -derived class.

See Also

ShapeDecoration Members
ShapeDecoration Class
com.mindfusion.diagramming Namespace

ShapeDecoration.getFillMode Method

Gets a value indicating how the area is filled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getFillMode ()
```

Return Value

GeneralPath.WIND_EVEN_ODD or GeneralPath.WIND_NON_ZERO.

See Also

ShapeDecoration Members
ShapeDecoration Class
com.mindfusion.diagramming Namespace

ShapeDecoration.getPen Method

Gets the pen used to paint the frame of the shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Pen getPen ()
```

Return Value

A Pen instance.

See Also

ShapeDecoration Members
ShapeDecoration Class
com.mindfusion.diagramming Namespace

ShapeDecoration.setBrush Method

Sets the brush used to fill the interior of this shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBrush (
    Brush brush
)
```

Parameters

brush
An instance of a Brush -derived class.

See Also

ShapeDecoration Members
ShapeDecoration Class
com.mindfusion.diagramming Namespace

ShapeDecoration.setFillMode Method

Sets a value indicating how the area is filled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setFillMode (
    int fillMode
)
```

Parameters

fillMode
GeneralPath.WIND_EVEN_ODD or GeneralPath.WIND_NON_ZERO.

See Also

ShapeDecoration Members
ShapeDecoration Class
com.mindfusion.diagramming Namespace

ShapeDecoration.setPen Method

Sets the pen used to paint the frame of the shape.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setPen (
    Pen pen
)
```

Parameters

pen
A Pen instance.

See Also

ShapeDecoration Members
ShapeDecoration Class
com.mindfusion.diagramming Namespace

ShapeDecoration.toDOM Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public static Element toDOM (`
`    ShapeDecoration decoration,`
`    Document owner`
`)`

Parameters

decoration

owner

Return Value

See Also

ShapeDecoration Members
ShapeDecoration Class
com.mindfusion.diagramming Namespace

ShapeEvent Class

Syntax

Java
`public class ShapeEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.ShapeEvent

See Also

ShapeEvent Members
com.mindfusion.diagramming Namespace

ShapeEvent Members

The following tables list the members exposed by the ShapeEvent type.

Public Constructors

	Name	Description
	ShapeEvent	Overloaded.

Public Methods

	Name	Description

	getIndex	
	getOldName	
	getShape	

See Also

ShapeEvent Class
com.mindfusion.diagramming Namespace

ShapeEvent Constructor

Overload List

Name	Description
ShapeEvent (Object, Shape)	Initializes a new instance of the ShapeEvent class.
ShapeEvent (Object, Shape, int)	
ShapeEvent (Object, Shape, int, String)	Initializes a new ShapeEvent instance.

See Also

ShapeEvent Class
com.mindfusion.diagramming Namespace

ShapeEvent Constructor (Object, Shape)

Initializes a new instance of the ShapeEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeEvent (
    Object source,
    Shape shape
)
```

Parameters

source

shape
The Shape related to the event.

See Also

ShapeEvent Constructor Overload List
ShapeEvent Class
com.mindfusion.diagramming Namespace

ShapeEvent Constructor (Object, Shape, int)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeEvent (
    Object source,
    Shape shape,
    int index
)
```

Parameters

source

shape

index

See Also

ShapeEvent Constructor Overload List
ShapeEvent Class
com.mindfusion.diagramming Namespace

ShapeEvent Constructor (Object, Shape, int, String)

Initializes a new ShapeEvent instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeEvent (
    Object source,
    Shape shape,
    int index,
    String oldName
)
```

Parameters

source
The source of the event.

shape
The Shape related to the event.

index

The zero-based index of the shape within its containing collection.

oldName
The old identifier of the shape.

See Also

ShapeEvent Constructor Overload List
ShapeEvent Class
com.mindfusion.diagramming Namespace

ShapeEvent Methods

ShapeEvent.getIndex Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getIndex ()
```

Return Value

See Also

ShapeEvent Members
ShapeEvent Class
com.mindfusion.diagramming Namespace

ShapeEvent.getOldName Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getOldName ()
```

Return Value

See Also

ShapeEvent Members
ShapeEvent Class
com.mindfusion.diagramming Namespace

ShapeEvent.getShape Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Shape getShape ()`

Return Value

See Also

ShapeEvent Members
ShapeEvent Class
com.mindfusion.diagramming Namespace

ShapeFormulaParam Class

Represents the position of a ShapeControlPoint, passed as parameter to shape formulas.

Syntax

Java
`public class ShapeFormulaParam`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ShapeFormulaParam

See Also

ShapeFormulaParam Members
com.mindfusion.diagramming Namespace

ShapeFormulaParam Members

Represents the position of a ShapeControlPoint, passed as parameter to shape formulas.

The following tables list the members exposed by the ShapeFormulaParam type.

Public Constructors

	Name	Description
	ShapeFormulaParam	Overloaded.

Public Methods

	Name	Description
	clone	Creates a copy of this **ShapeFormulaParam**.

	getX	Gets the horizontal position of the control point.
	getY	Gets the vertical position of the control point.
	loadFromXml	Loads the formula parameter from the specified XML element.
	saveToXml	Saves the formula parameter into the specified XML element.
	setX	Sets the horizontal position of the control point.
	setY	Sets the vertical position of the control point.

See Also

ShapeFormulaParam Class
com.mindfusion.diagramming Namespace

ShapeFormulaParam Constructor

Overload List

Name	Description
ShapeFormulaParam ()	Initializes a new instance of the ShapeFormulaParam class.
ShapeFormulaParam (float, float)	Initializes a new instance of the **ShapeFormulaParam** class.

See Also

ShapeFormulaParam Class
com.mindfusion.diagramming Namespace

ShapeFormulaParam Constructor ()

Initializes a new instance of the ShapeFormulaParam class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public ShapeFormulaParam ()`

See Also

ShapeFormulaParam Constructor Overload List
ShapeFormulaParam Class
com.mindfusion.diagramming Namespace

ShapeFormulaParam Constructor (float, float)

Initializes a new instance of the ShapeFormulaParam class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeFormulaParam (
    float x,
    float y
)
```

Parameters

x
Horizontal position of the control point.

y
Vertical position of the control point.

See Also

ShapeFormulaParam Constructor Overload List
ShapeFormulaParam Class
com.mindfusion.diagramming Namespace

ShapeFormulaParam Methods

ShapeFormulaParam.clone Method

Creates a copy of this ShapeFormulaParam.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeFormulaParam clone ()
```

Return Value

A new ShapeFormulaParam object that is a copy of the current instance.

See Also

ShapeFormulaParam Members
ShapeFormulaParam Class
com.mindfusion.diagramming Namespace

ShapeFormulaParam.getX Method

Gets the horizontal position of the control point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getX ()
```

Return Value

A **float** value specifying X coordinate.

See Also

ShapeFormulaParam Members
ShapeFormulaParam Class
com.mindfusion.diagramming Namespace

ShapeFormulaParam.getY Method

Gets the vertical position of the control point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getY ()
```

Return Value

A **float** value specifying Y coordinate.

See Also

ShapeFormulaParam Members
ShapeFormulaParam Class
com.mindfusion.diagramming Namespace

ShapeFormulaParam.loadFromXml Method

Loads the formula parameter from the specified XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

An XmlElement instance.

context

An XmlPersistContext instance.

See Also

ShapeFormulaParam Members
ShapeFormulaParam Class
com.mindfusion.diagramming Namespace

ShapeFormulaParam.saveToXml Method

Saves the formula parameter into the specified XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

An Element instance.

context

An XmlPersistContext instance.

See Also

ShapeFormulaParam Members
ShapeFormulaParam Class
com.mindfusion.diagramming Namespace

ShapeFormulaParam.setX Method

Sets the horizontal position of the control point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setX (
    float value
)
```

Parameters

value
A **float** value specifying X coordinate.

See Also

ShapeFormulaParam Members
ShapeFormulaParam Class
com.mindfusion.diagramming Namespace

ShapeFormulaParam.setY Method

Sets the vertical position of the control point.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setY (
    float value
)
```

Parameters

value
A **float** value specifying Y coordinate.

See Also

ShapeFormulaParam Members
ShapeFormulaParam Class
com.mindfusion.diagramming Namespace

ShapeLibrary Class

The **ShapeLibrary** class represents a collection of shape definitions stored together.

Syntax

Java

```
public class ShapeLibrary
```

Remarks

Shape libraries can be created using the ShapeDesigner tool that comes with JDiagram. Use the loadFrom method to load a shape library from a file. The loaded shapes can be accessed through the getShapes method. They will be automatically added to the shared list of shapes kept in the Shape class, which lets you access them by the fromId method. A shape library can be saved into a file in XML based format using the saveTo method.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ShapeLibrary

See Also

ShapeLibrary Members
com.mindfusion.diagramming Namespace

ShapeLibrary Members

The ShapeLibrary class represents a collection of shape definitions stored together.

The following tables list the members exposed by the **ShapeLibrary** type.

Public Constructors

	Name	Description
	ShapeLibrary	

Public Methods

	Name	Description
	fromXmlElement	Creates a **ShapeLibrary** from a DOM tree.
	getShapes	Gets the shapes contained in this library.
	loadFrom	Overloaded.
	makeImagesRelativeTo	Makes image locations relative to specified shapeLibraryPath so that the shape library can be moved/distributed. This method is supposed to be called before serialization.
	saveTo	Saves the shape library to the specified file.
	setShapes	Sets the shape library shapes.
	toDOM	Converts the ShapeLibrary to a DOM element.

See Also

ShapeLibrary Class
com.mindfusion.diagramming Namespace

ShapeLibrary Fields

ShapeLibrary Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeLibrary (
    Shape[] shapes
)
```

Parameters

shapes

See Also

ShapeLibrary Class
com.mindfusion.diagramming Namespace

ShapeLibrary Methods

ShapeLibrary.fromXmlElement Method

Creates a ShapeLibrary from a DOM tree.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static ShapeLibrary fromXmlElement (
    Element shapes
)
```

Parameters

shapes
An XML element containing the shape library data.

Return Value

The new ShapeLibrary instance.

See Also

ShapeLibrary Members
ShapeLibrary Class
com.mindfusion.diagramming Namespace

ShapeLibrary.getShapes Method

Gets the shapes contained in this library.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Shape[] getShapes ()`

Return Value

An array of Shape objects.

See Also

ShapeLibrary Members
ShapeLibrary Class
com.mindfusion.diagramming Namespace

ShapeLibrary.loadFrom Method

Overload List

Name	Description
ShapeLibrary.loadFrom (File)	Loads (creates) a ShapeLibrary object from the specified file.
ShapeLibrary.loadFrom (InputSource)	Loads (creates) a ShapeLibrary object from the specified XML source.

See Also

ShapeLibrary Members
ShapeLibrary Class
com.mindfusion.diagramming Namespace

ShapeLibrary.loadFrom Method (File)

Loads (creates) a ShapeLibrary object from the specified file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public static ShapeLibrary loadFrom (`
`  File file`
`)`

Parameters

file
A File object that contains the shape library data.

Return Value

The new ShapeLibrary instance.

See Also

loadFrom Method Overload List
ShapeLibrary Members
ShapeLibrary Class
com.mindfusion.diagramming Namespace

ShapeLibrary.loadFrom Method (InputSource)

Loads (creates) a ShapeLibrary object from the specified XML source.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static ShapeLibrary loadFrom (
    InputSource source
)
```

Parameters

source
An InputSource object that contains the shape library data.

Return Value

The new ShapeLibrary instance.

See Also

loadFrom Method Overload List
ShapeLibrary Members
ShapeLibrary Class
com.mindfusion.diagramming Namespace

ShapeLibrary.makeImagesRelativeTo Method

Makes image locations relative to specified shapeLibraryPath so that the shape library can be moved/distributed. This method is supposed to be called before serialization.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void makeImagesRelativeTo (
    String shapeLibraryPath
)
```

Parameters

shapeLibraryPath

See Also

ShapeLibrary Members
ShapeLibrary Class
com.mindfusion.diagramming Namespace

ShapeLibrary.saveTo Method

Saves the shape library to the specified file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveTo (
    String filename
)
```

Parameters

filename
The name of the file where the library should be saved.

See Also

ShapeLibrary Members
ShapeLibrary Class
com.mindfusion.diagramming Namespace

ShapeLibrary.setShapes Method

Sets the shape library shapes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShapes (
    Shape[] shapes
)
```

Parameters

shapes
An array of Shape objects.

See Also

ShapeLibrary Members
ShapeLibrary Class
com.mindfusion.diagramming Namespace

ShapeLibrary.toDOM Method

Converts the ShapeLibrary to a DOM element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element toDOM (
    Document owner
)
```

Parameters

owner
The XML document.

Return Value

An XML element containing the shape library data.

See Also

ShapeLibrary Members
ShapeLibrary Class
com.mindfusion.diagramming Namespace

ShapeList Class

A strongly-typed list of Shape objects.

Syntax

Java

```
public class ShapeList extends BaseList<E>
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.BaseList(E)
        com.mindfusion.diagramming.ShapeList

See Also

ShapeList Members
com.mindfusion.diagramming Namespace

ShapeList Members

A strongly-typed list of Shape objects.

The following tables list the members exposed by the ShapeList type.

Public Constructors

	Name	Description
	ShapeList	Overloaded.

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)
	listEvent	(Inherited from BaseList.)
	notifyParent	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	Adds a new element to the list. (Inherited from BaseList.)
	clear	Removes all elements from the list. (Inherited from BaseList.)
	contains	Determines if this list contains the specified element. (Inherited from BaseList.)
	first	Gets the first element of this list. (Inherited from BaseList.)
	get	Gets the element at the specified position in this list. (Inherited from BaseList.)
	last	Gets the last element of this list. (Inherited from BaseList.)
	readExternal	Loads the list's contents. (Inherited from BaseList.)
	remove	Overloaded. (Inherited from BaseList.)
	removeRange	Removes a range of elements from this list. (Inherited from BaseList.)
	set	Sets the element at the specified position in this list. (Inherited from BaseList.)
	size	
	writeExternal	Saves the list's contents. (Inherited from BaseList.)

Protected Methods

	Name	Description
	raiseAdding	Raises the adding event. (Inherited from BaseList.)
	raiseClearing	Raises the clearing event. (Inherited from BaseList.)
	raiseRemoving	Raises the removing event. (Inherited from BaseList.)

See Also

ShapeList Class
com.mindfusion.diagramming Namespace

ShapeList Constructor

Overload List

Name	Description
ShapeList ()	
ShapeList (Collection)	
ShapeList (Shape[])	

See Also

ShapeList Class
com.mindfusion.diagramming Namespace

ShapeList Constructor ()

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public ShapeList ()`

See Also

ShapeList Constructor Overload List
ShapeList Class
com.mindfusion.diagramming Namespace

ShapeList Constructor (Collection<Shape>)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeList (
    Collection<Shape> col
)
```

Parameters

col

See Also

ShapeList Constructor Overload List
ShapeList Class
com.mindfusion.diagramming Namespace

ShapeList Constructor (Shape[])

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeList (
    Shape[] array
)
```

Parameters

array

See Also

ShapeList Constructor Overload List
ShapeList Class
com.mindfusion.diagramming Namespace

ShapeList Methods

ShapeList.size Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int size ()
```

Return Value

See Also

ShapeList Members
ShapeList Class
com.mindfusion.diagramming Namespace

ShapeListBox Class

The **ShapeListBox** control displays a set of shapes defined in the Shape class.

Syntax

Java

```
public class ShapeListBox extends JList<E>
```

Remarks

Shapes from the list box can be dragged to the Diagram drawing canvas to create new nodes. Changing the shape of an existing node can be implemented by handling the shapeSelected event and assigning the selected shape to a node by calling setShape.

Initially, the **ShapeListBox** displays all shapes accessible through fromId. You can limit the list to only a subset of the available shapes by calling the setShapeFilter method. It is also possible to load a shape library from a file using the ShapeLibrary class, and display the loaded shapes as shown below:

Java

```
ShapeLibrary lib = ShapeLibrary.loadFrom("shapeLib.shl");
shapeListBox.setShapes(lib.getShapes());
```

The control creates an icon image for each shape added. The size of an icon displayed in the list box can be defined by calling the setIconSize method, and setIconMargin specifies the horizontal and vertical margin of the icon.

If the setAllowRename method is called, users can press the F2 key and rename a shape in the list box. When a shape is renamed, the shapeRenamed event is raised. If setAllowRemove is called, list box items can be deleted by pressing the Del key. When a shape is removed, the shapeRemoved event is raised.

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        javax.swing.JList(E)
          com.mindfusion.diagramming.ShapeListBox

See Also

ShapeListBox Members
com.mindfusion.diagramming Namespace

ShapeListBox Members

The ShapeListBox control displays a set of shapes defined in the Shape class.

The following tables list the members exposed by the **ShapeListBox** type.

Public Constructors

	Name	Description
	ShapeListBox	Initializes a new instance of the **ShapeListBox** class.

Public Methods

	Name	Description
	addShape	Adds a single **Shape** to the list box.
	addShapeListener	Adds a listener for select, rename and delete events.
	addShapes	Overloaded.
	clearShapes	Removes all shapes from the **ShapeListBox**, leaving it empty.
	getAllowRemove	Gets a value indicating whether deletion of listbox items by pressing DEL is allowed. Only the list box items are deleted, but not the **Shape** definitions themselves.
	getAllowRename	Gets a value indicating whether inline renaming of listbox items is allowed. Currently the list box displays shape identifiers as names.
	getDefaultShapeSize	Gets the size of the shape that is created when dragging items from the list box to the diagram.
	getIconMargin	Gets the horizontal and vertical margins of the shape icons in the ListBox.
	getIconSize	Gets the size of the shape icons displayed in the ListBox.
	getShapeAt	Returns the **Shape** at the specified index.
	getShapeCount	Returns the number of shapes after filtering.
	getShapeFillColor	Gets the fill color of the shapes in the list box.
	getShapeFilter	Gets the identifiers of the shapes that should be displayed in the list box.
	getShapes	Retrieves all shapes visible in the list box after filtering.
	getShowLabels	Gets a value indicating whether to show text labels along with icons for each list item.
	invalidateShapeAt	Invalidates the specified shape, causing its icon to be recreated and redrawn. Call this method when a shape definition changes.
	removeShapeAt	Removes a shape from the list box.
	removeShapeListener	Removes previously added listener for select, rename and delete events.

	resumeRepaint	Resumes repainting the control after a suspendRepaint call.
	setAllowRemove	Sets a value specifying whether removing of listbox items is allowed.
	setAllowRename	Sets a value specifying whether inline renaming of listbox items is allowed. Items can be renamed by pressing F2. Currently the list box displays shape identifiers as names.
	setDefaultShapeSize	Sets the size of the shape that is created when dragging items from the list box to the flowchart.
	setIconMargin	Sets the horizontal and vertical margins of the shape icons in the **ListBox**.
	setIconSize	Sets the size of the shape icons displayed in the **ListBox**.
	setShapeAt	Sets the shape at the specified position.
	setShapeFillColor	Sets the fill color of the shapes in the list box.
	setShapeFilter	Sets the identifiers of the shapes that should be displayed in the list box.
	setShapes	Replaces all current shapes with the specified ones.
	setShowLabels	
	startInlineEdit	Initiates inline editing of shape id.
	suspendRepaint	Stops repainting the control. This is useful when using the JDiagram API from JavaScript, where the control would be repainted after each script line executes.

Protected Methods

	Name	Description
	fireShapeRemoved	
	fireShapeRenamed	
	fireShapeSelected	
	onKeyDown	
	paintComponent	

See Also

ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox Constructor

Initializes a new instance of the ShapeListBox class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ShapeListBox ()
```

See Also

ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox Methods

ShapeListBox.addShape Method

Adds a single Shape to the list box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void addShape (
    Shape shape
)
```

Parameters

shape
The Shape that should be added to the list.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.addShapeListener Method

Adds a listener for select, rename and delete events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void addShapeListener (
    ShapeListBoxListener l
)
```

Parameters

l
A ShapeListBoxListener object.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.addShapes Method

Overload List

Name	Description
ShapeListBox.addShapes (Shape[])	Adds an array of Shape objects to the list box.
ShapeListBox.addShapes (ShapeList)	Adds a list of **Shape** objects to the list box.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.addShapes Method (Shape[])

Adds an array of Shape objects to the list box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addShapes (
    Shape[] shapes
)
```

Parameters

shapes
The shapes that should be added to the list.

See Also

addShapes Method Overload List
ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.addShapes Method (ShapeList)

Adds a list of Shape objects to the list box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void addShapes (
    ShapeList shapes
)
```

Parameters

shapes
A ShapeList containing the shapes that should be added to the list.

See Also

addShapes Method Overload List
ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.clearShapes Method

Removes all shapes from the ShapeListBox, leaving it empty.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void clearShapes ()
```

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.fireShapeRemoved Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

protected void fireShapeRemoved (
    Shape shape,
    int index
)
```

Parameters

shape

index

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.fireShapeRenamed Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void fireShapeRenamed (
    Shape shape,
    int i,
    String oldName
)
```

Parameters

shape

i

oldName

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.fireShapeSelected Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void fireShapeSelected (
    Shape shape,
    int index
)
```

Parameters

shape

index

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.getAllowRemove Method

Gets a value indicating whether deletion of listbox items by pressing DEL is allowed. Only the list box items are deleted, but not the Shape definitions themselves.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowRemove ()
```

Return Value

true if deletion is allowed, otherwise **false**.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.getAllowRename Method

Gets a value indicating whether inline renaming of listbox items is allowed. Currently the list box displays shape identifiers as names.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowRename ()
```

Return Value

true if renaming is allowed, otherwise **false**.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.getDefaultShapeSize Method

Gets the size of the shape that is created when dragging items from the list box to the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D getDefaultShapeSize ()
```

Return Value

A Point2D object representing the default ShapeNode size.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.getIconMargin Method

Gets the horizontal and vertical margins of the shape icons in the ListBox.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension getIconMargin ()
```

Return Value

A Dimension object specifying the margins size.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.getIconSize Method

Gets the size of the shape icons displayed in the ListBox.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension getIconSize ()
```

Return Value

A Dimension object specifying the icon size.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.getShapeAt Method

Returns the Shape at the specified index.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Shape getShapeAt (
    int index
)
```

Parameters

index
The shape position in the list.

Return Value

The shape found at the specified position.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.getShapeCount Method

Returns the number of shapes after filtering.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getShapeCount ()
```

Return Value

The number of shapes displayed in the list box.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.getShapeFillColor Method

Gets the fill color of the shapes in the list box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color getShapeFillColor ()
```

Return Value

A Color object representing the shapes color.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.getShapeFilter Method

Gets the identifiers of the shapes that should be displayed in the list box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String[] getShapeFilter ()
```

Return Value

An array of strings containing the shape identifiers.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.getShapes Method

Retrieves all shapes visible in the list box after filtering.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Shape[] getShapes ()
```

Return Value

An array of Shape objects.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.getShowLabels Method

Gets a value indicating whether to show text labels along with icons for each list item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getShowLabels ()
```

Return Value

true if labels are shown.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.invalidateShapeAt Method

Invalidates the specified shape, causing its icon to be recreated and redrawn. Call this method when a shape definition changes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void invalidateShapeAt (
    int i
)
```

Parameters

i

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.onKeyDown Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onKeyDown (
    KeyEvent e
)
```

Parameters

e

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.paintComponent Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void paintComponent (
    Graphics g
)
```

Parameters

g

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.removeShapeAt Method

Removes a shape from the list box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeShapeAt (
    int i
)
```

Parameters

i
The shape position in the list.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.removeShapeListener Method

Removes previously added listener for select, rename and delete events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeShapeListener (
    ShapeListBoxListener l
)
```

Parameters

l

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.resumeRepaint Method

Resumes repainting the control after a suspendRepaint call.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void resumeRepaint ()
```

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.setAllowRemove Method

Sets a value specifying whether removing of listbox items is allowed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowRemove (
    boolean value
)
```

Parameters

value
true if deletion is allowed, otherwise **false**.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.setAllowRename Method

Sets a value specifying whether inline renaming of listbox items is allowed. Items can be renamed by pressing F2. Currently the list box displays shape identifiers as names.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowRename (
    boolean value
)
```

Parameters

value
true if renaming is allowed, otherwise **false**.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.setDefaultShapeSize Method

Sets the size of the shape that is created when dragging items from the list box to the flowchart.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDefaultShapeSize (
    Point2D.Float value
)
```

Parameters

value
A Point2D object representing the default ShapeNode size.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.setIconMargin Method

Sets the horizontal and vertical margins of the shape icons in the ListBox.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIconMargin (
    Dimension value
)
```

Parameters

value
A **Dimension** object specifying the margins size.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.setIconSize Method

Sets the size of the shape icons displayed in the ListBox.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIconSize (
    Dimension value
)
```

Parameters

value
A Dimension object specifying the icon size.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.setShapeAt Method

Sets the shape at the specified position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShapeAt (
    int index,
    Shape shape
)
```

Parameters

index
The shape position in the list.

shape
The Shape that should be added to the list.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.setShapeFillColor Method

Sets the fill color of the shapes in the list box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShapeFillColor (
    Color value
)
```

Parameters

value
A Color object representing the shapes color.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.setShapeFilter Method

Sets the identifiers of the shapes that should be displayed in the list box.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShapeFilter (
    String[] value
)
```

Parameters

value
An array of strings containing the shape identifiers.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.setShapes Method

Replaces all current shapes with the specified ones.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShapes (
    Shape[] shapes
)
```

Parameters

shapes
An array of Shape objects.

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.setShowLabels Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShowLabels (
    boolean value
)
```

Parameters

value

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.startInlineEdit Method

Initiates inline editing of shape id.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void startInlineEdit ()
```

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBox.suspendRepaint Method

Stops repainting the control. This is useful when using the JDiagram API from JavaScript, where the control would be repainted after each script line executes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void suspendRepaint ()
```

See Also

ShapeListBox Members
ShapeListBox Class
com.mindfusion.diagramming Namespace

ShapeListBoxListener Interface

Defines signatures for shape select, rename and delete events in ShapeListBox.

Syntax

Java

```
public interface ShapeListBoxListener
```

See Also

ShapeListBoxListener Members
com.mindfusion.diagramming Namespace

ShapeListBoxListener Members

Defines signatures for shape select, rename and delete events in ShapeListBox.

The following tables list the members exposed by the ShapeListBoxListener type.

Public Methods

	Name	Description
	shapeRemoved	Raised when the user removes a Shape from the ListBox.
	shapeRenamed	Raised when the user renames a Shape in the ListBox.
	shapeSelected	Called when the user selects a Shape in the ListBox.

See Also

ShapeListBoxListener Interface
com.mindfusion.diagramming Namespace

ShapeListBoxListener Methods

ShapeListBoxListener.shapeRemoved Method

Raised when the user removes a Shape from the ListBox.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void shapeRemoved (
    Shape shape,
    int oldIndex
)
```

Parameters

shape

oldIndex

See Also

ShapeListBoxListener Members
ShapeListBoxListener Interface
com.mindfusion.diagramming Namespace

ShapeListBoxListener.shapeRenamed Method

Raised when the user renames a Shape in the ListBox.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
void shapeRenamed (
    Shape shape,
    int index,
    String oldName
)
```

Parameters

shape
A Shape object.

index

oldName

See Also

ShapeListBoxListener Members
ShapeListBoxListener Interface
com.mindfusion.diagramming Namespace

ShapeListBoxListener.shapeSelected Method

Called when the user selects a Shape in the ListBox.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
void shapeSelected (
    Shape shape,
    int index
)
```

Parameters

shape

index

See Also

ShapeListBoxListener Members
ShapeListBoxListener Interface
com.mindfusion.diagramming Namespace

ShapeNode Class

ShapeNode objects represent nodes in graphs, tree, process diagrams, and so on.

Syntax

Java
`public class ShapeNode extends DiagramNode implements RenderTextCallback, InplaceEditable`

Remarks

Use the setShape method to specify the shape of a node. There are many predefined shapes provided by the Shape class, which also lets you define your custom shapes.

ShapeNodes can be rotated, either interactively using the rotation handle above a node, or programmatically using the setRotationAngle method.

Nodes can display images and text. Use the setImage method to specify an image that should be painted inside a node. The position and alignment of an image within the node are set by the setImageAlign method. To make a node as big as its image, call resizeToFitImage.

To set the node's text, call setText. The text attributes can be changed through the setTextColor and setTextFormat methods. To get even richer text formatting, call setEnableStyledText to true and embed HTML-like formatting tags in the raw text. To make a node big enough to display its text without clipping, call resizeToFitText.

Call setTransparent to make a shape node transparent, so that only its text and image will be drawn.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItem
    com.mindfusion.diagramming.DiagramNode
      com.mindfusion.diagramming.ShapeNode
        com.mindfusion.diagramming.SvgNode

See Also

ShapeNode Members
com.mindfusion.diagramming Namespace

ShapeNode Members

ShapeNode objects represent nodes in graphs, tree, process diagrams, and so on.

The following tables list the members exposed by the **ShapeNode** type.

Public Constructors

	Name	Description
	ShapeNode	Overloaded.

Protected Fields

	Name	Description
	allowIncomingLinks	(Inherited from DiagramNode.)
	allowOutgoingLinks	(Inherited from DiagramNode.)
	anchorPattern	(Inherited from DiagramNode.)
	AV_Cancel	(Inherited from DiagramNode.)

	AV_EndModIncoming	(Inherited from DiagramNode.)
	AV_EndModOutgoing	(Inherited from DiagramNode.)
	AV_StartModIncoming	(Inherited from DiagramNode.)
	AV_StartModOutgoing	(Inherited from DiagramNode.)
	AV_UpdateIncoming	(Inherited from DiagramNode.)
	AV_UpdateOutgoing	(Inherited from DiagramNode.)
	AV_UpdIntscIncoming	(Inherited from DiagramNode.)
	AV_UpdIntscOutgoing	(Inherited from DiagramNode.)
	AV_UpdPosIncoming	(Inherited from DiagramNode.)
	AV_UpdPosOutgoing	(Inherited from DiagramNode.)
	bounds	(Inherited from DiagramNode.)
	brush	(Inherited from DiagramItem.)
	cycleDetected	(Inherited from DiagramItem.)
	cycleProtect	(Inherited from DiagramItem.)
	enabledHandles	(Inherited from DiagramNode.)
	handlesStyle	(Inherited from DiagramNode.)
	incomingLinks	(Inherited from DiagramNode.)
	masterGroup	(Inherited from DiagramNode.)
	modifyDX	(Inherited from DiagramItem.)
	modifyDY	(Inherited from DiagramItem.)
	modifyHandle	(Inherited from DiagramItem.)
	modifying	(Inherited from DiagramItem.)
	obstacle	(Inherited from DiagramNode.)
	outgoingLinks	(Inherited from DiagramNode.)
	pen	(Inherited from DiagramItem.)
	ptEnd	(Inherited from DiagramItem.)
	ptMdfLast	(Inherited from DiagramItem.)
	ptOrg	(Inherited from DiagramItem.)
	ptSavedEnd	(Inherited from DiagramItem.)
	ptSavedOrg	(Inherited from DiagramItem.)
	savedBounds	(Inherited from DiagramNode.)
	subordinateGroup	(Inherited from DiagramItem.)

Public Methods

	Name	Description
	addLabel	Overloaded. (Inherited from DiagramNode.)
	as	Down-casts the item to specified type. (Inherited from DiagramItem.)
	attachTo	Overloaded. (Inherited from DiagramNode.)
	clone	Creates a copy of this item. (Inherited from DiagramItem.)
	containsPoint	Overloaded.
	detach	Detaches a node from its master group. (Inherited from DiagramNode.)
	getAllIncomingLinks	Gets a collection of all links entering this node. (Inherited from DiagramNode.)
	getAllLinks	Gets all links connected to this node. (Inherited from DiagramNode.)
	getAllOutgoingLinks	Gets a collection of all links going out of this node. (Inherited from DiagramNode.)
	getAllowFlip	Gets a value indicating whether the node's shape flips when an edge is dragged over its opposite edge.
	getAllowIncomingLinks	Gets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	getAllowOutgoingLinks	Gets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	getAnchorPattern	Gets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)
	getBounds	Gets the node location and size. (Inherited from DiagramNode.)
	getBrush	Gets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	getCenter	Returns the center point of this node. (Inherited from DiagramNode.)
	getConstraints	Gets the movement and size constraints applied to a node. (Inherited from DiagramNode.)
	getContainer	Gets the parent ContainerNode containing this node. (Inherited from DiagramNode.)
	getCustomDraw	Gets a value indicating what type of custom drawing to perform on a node.
	getEditRect	Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).
	getEffectiveBrush	Gets the effective brush of the item. (Inherited from DiagramItem.)
	getEffectiveFont	Gets the currently effective font of the item. This property returns getFont if it is not null, or a font with the

		DiagramItemStyle.getFontFamily, DiagramItemStyle.getFontSize, and DiagramItemStyle.getFontStyle properties of the item's style. (Inherited from DiagramItem.)
	getEffectivePen	Gets the effective pen of the item. (Inherited from DiagramItem.)
	getEffectiveShadowBrush	Creates a Brush object representing the currently effective shadow brush of the item. This method returns a system brush corresponding to the item's getShadowBrush if the item's **getShadowBrush** is not null, or a system brush corresponding to the DiagramItemStyle.getShadowBrush property of the item's style. (Inherited from DiagramItem.)
	getEffectiveTextBrush	Gets the effective text brush of the item. (Inherited from DiagramItem.)
	getEffects	Gets a collection with all effects applied to this node. (Inherited from DiagramNode.)
	getEnabledHandles	Gets a combination of NodeHandleType members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	getEnableStyledText	Gets a value indicating whether the text of a node contains formatting tags which should be processed by JDiagram.
	getExpandable	Gets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	getExpanded	Gets a value indicating whether the tree branch that starts from a node is expanded or collapsed. (Inherited from DiagramNode.)
	getFlipX	Gets a value indicating whether the node's shape is flipped horizontally.
	getFlipY	Gets a value indicating whether the node's shape is flipped vertically.
	getFont	Gets the font used to draw the text label of a node.
	getHandlesStyle	Gets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	getHyperLink	Gets the hyperlink associated with an item. (Inherited from DiagramItem.)
	getId	Gets user-defined identifier associated with this item. (Inherited from DiagramItem.)
	getIgnoreLayout	Gets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	getImage	Gets the image displayed inside this node.
	getImageAlign	Gets the alignment of the node's image.

	getImagePadding	Gets the padding distance between node's borders and **Image**.
	getImageUrl	Gets a URL used to load an image into this cell.
	getIncomingLinks	Gets the links coming into a node. (Inherited from DiagramNode.)
	getLabels	Returns the list of supplementary labels displayed by this node. (Inherited from DiagramNode.)
	getLayerIndex	Gets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	getLayoutTraits	Returns a hashtable containing properties specific to layout algorithms. (Inherited from DiagramItem.)
	getLocalCenter	(Inherited from DiagramNode.)
	getLocked	Gets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	getMasterGroup	Gets the hierarchical group in which this node is a subordinate item. (Inherited from DiagramNode.)
	getMasterItem	Returns the node's **Container** or main item of **MasterGroup**. (Inherited from DiagramNode.)
	getNearestBorderPoint	Returns a point that lies on the outline of this node, at the shortest distance from the specified point. (Inherited from DiagramNode.)
	getObstacle	Gets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	getOpacity	Gets the opacity of this item. (Inherited from DiagramItem.)
	getOutgoingLinks	Gets the links going out from a node. (Inherited from DiagramNode.)
	getParent	Gets the diagram that contains this item. (Inherited from DiagramItem.)
	getPen	Gets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	getPlainText	Gets the plain text extracted from the formatted text by removing the formatting tags.
	getPrintable	Gets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	getRotatedBounds	Gets the bounding rectangle of this node, when it is rotated at the specified angle around the specified pivot. (Inherited from DiagramNode.)
	getRotateImage	Gets a value indicating whether the image displayed inside a node should rotate together with the node.
	getRotateText	Gets a value indicating whether the text displayed inside a node should rotate together with the node.

	getRotationAngle	Gets the rotation angle of this node. (Inherited from DiagramNode.)
	getRuntimeIndex	For internal use. (Inherited from DiagramItem.)
	getSelected	Gets a value indicating whether this item is selected. (Inherited from DiagramItem.)
	getShadowBrush	Gets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	getShadowOffsetX	Gets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getShadowOffsetY	Gets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getShape	Gets the shape of a node.
	getShapeOrientation	Gets an orientation angle applied to the shape definition before the shape points are mapped to the node's bounding rectangle.
	getStyle	Gets the style associated with the item. (Inherited from DiagramItem.)
	getSubordinateGroup	Gets the group of subordinated items attached to this one. (Inherited from DiagramItem.)
	getTag	Gets user-defined data assigned to an item. (Inherited from DiagramItem.)
	getText	Gets the text displayed inside this node.
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	getTextFormat	Gets a TextFormat object specifying how to format and align the text of this node.
	getTextPadding	Gets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	getTextToEdit	Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when this node is edited in-place.
	getToolTip	Gets the tooltip text displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	getTransparent	Gets a value indicating whether only the text and image of a node should be drawn on the screen.
	getVisible	Gets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	getWeight	Gets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	getZIndex	Gets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	hasSubordinates	Checks whether there are any nodes attached to this item. (Inherited from DiagramItem.)

	hitTest	Returns the diagram item that contains the specified point. (Inherited from DiagramItem.)
	hitTestHandle	DiagramItem.hitTestHandle override. (Inherited from DiagramNode.)
	init	Returns a ShapeNodeBuilder object used to configure this ShapeNode instance.
	labelFromPoint	Returns the label whose layout rectangle contains the specified point. (Inherited from DiagramNode.)
	moveTo	Moves a node to the specified location. (Inherited from DiagramNode.)
	nodesIntersect	Determines whether two nodes intersect. (Inherited from DiagramNode.)
	onDragOut	Invoked when a diagram item is being dragged out of this node. (Inherited from DiagramNode.)
	onDragOver	Invoked when a diagram item is being dragged over this node. (Inherited from DiagramNode.)
	onDropOver	Invoked when a diagram item is dropped over this node. (Inherited from DiagramNode.)
	query	Returns the items that can be reached from this item by following the path specified in the given query expression. (Inherited from DiagramItem.)
	readExternal	Implements Externalizable.
	removeLabel	Removes the specified label from this node. (Inherited from DiagramNode.)
	renderText	
	resize	Sets the size of a node. (Inherited from DiagramNode.)
	resizeToFitImage	Resizes a node so that it will be as big as the image displayed in the node.
	resizeToFitText	Makes a node big enough to display its text without clipping.
	setAllowFlip	Sets a value indicating whether the node's shape flips when an edge is dragged over its opposite edge.
	setAllowIncomingLinks	Sets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	setAllowOutgoingLinks	Sets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	setAnchorPattern	Sets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)
	setBounds	Overloaded. (Inherited from DiagramNode.)
	setBoundsDirect	For internal use. (Inherited from DiagramNode.)

	setBrush	Sets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	setConstraints	Sets constraints to the node size and movement direction. The constraints are applied when a user modifies the node interactively. They are not checked when the position of a node is set programmatically. (Inherited from DiagramNode.)
	setCustomDraw	Sets a value indicating what type of custom drawing to perform on a node.
	setEditedText	Implements InplaceEditable.setEditedText. Assigns the edited text to this node after in-place edit operation completes successfully.
	setEnabledHandles	Sets a combination of **NodeHandleType** members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	setEnableStyledText	Sets a value indicating whether the text of a node contains formatting tags which should be processed by JDiagram.
	setExpandable	Sets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	setExpanded	Expands or collapses the tree branch that starts from a node. (Inherited from DiagramNode.)
	setExpandedFlag	Changes the "expanded" flag without actually expanding or collapsing the tree branch that starts from a node. (Inherited from DiagramNode.)
	setFlipX	Sets a value indicating whether the node's shape is flipped horizontally.
	setFlipY	Sets a value indicating whether the node's shape is flipped vertically.
	setFont	Sets the font used to draw the text label of a node.
	setHandlesStyle	Sets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	setHyperLink	Sets the hyperlink associated with an item. (Inherited from DiagramItem.)
	setId	Assigns user-defined identifier to this item. (Inherited from DiagramItem.)
	setIgnoreLayout	Sets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	setImage	Sets the image that should be displayed inside the node.
	setImageAlign	Sets the alignment of the node's image.
	setImagePadding	Sets the padding distance between node's borders and **Image**.

	setImageUrl	Sets a URL used to load an image into this cell.
	setLayerIndex	Sets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	setLocked	Sets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	setObstacle	Sets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	setOpacity	Sets the opacity of this item. (Inherited from DiagramItem.)
	setPen	Sets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	setPrintable	Sets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	setRotateImage	Sets a value indicating whether the image displayed inside a node should rotate together with the node.
	setRotateText	Sets a value indicating whether the text displayed inside a node should rotate together with the node.
	setRotationAngle	Sets the rotation angle of a node. (Inherited from DiagramNode.)
	setSelected	Selects or deselects an item. (Inherited from DiagramItem.)
	setShadowBrush	Sets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	setShadowOffsetX	Sets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShadowOffsetY	Sets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShape	Sets the shape of a node to the specified Shape instance. The initial shape of a node is the one set by the setDefaultShape method.
	setShapeOrientation	Sets an orientation angle applied to the shape definition before the shape points are mapped to the node's bounding rectangle.
	setStyle	Sets the style associated with the item. (Inherited from DiagramItem.)
	setTag	Assigns user-defined data to an item. If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event. (Inherited from DiagramItem.)
	setText	Sets the text label displayed inside this node.
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItem.)

	setTextFormat	Sets a **TextFormat** object specifying how to format and align the text of this node.
	setTextPadding	Sets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	setToolTip	Sets the tooltip text that should be displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	setTransparent	Sets a value indicating whether only the text and image of a node should be drawn on the screen.
	setVisible	Sets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	setWeight	Sets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	setZIndex	Sets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
S	with	Returns a ShapeNodeBuilder object used to configure and create new ShapeNode instances.
	writeExternal	Implements Externalizable.
	zBottom	Moves an item to the bottom of the Z order. (Inherited from DiagramItem.)
	zLevelDown	Moves an item down in the Z order. (Inherited from DiagramItem.)
	zLevelUp	Moves an item up in the Z order. (Inherited from DiagramItem.)
	zTop	Moves an item to the top of the Z order. (Inherited from DiagramItem.)

Protected Methods

	Name	Description
	allowCreate	DiagramItem.allowCreate override. (Inherited from DiagramNode.)
	allowModify	(Inherited from DiagramNode.)
	allowModifyImpl	(Inherited from DiagramNode.)
	cancelModify	
	completeCreate	DiagramItem.completeCreate override. (Inherited from DiagramNode.)
	completeModify	(Inherited from DiagramNode.)
	constraintsInfringed	(Inherited from DiagramNode.)
	createConnectionPoint	
	createProperties	DiagramItem.createProperties override.
	createState	

	draw	DiagramItem.draw override. (Inherited from DiagramNode.)
	drawLocal	DiagramNode.drawLocal override.
	drawShadow	DiagramItem.drawShadow override. (Inherited from DiagramNode.)
	drawShadowLocal	DiagramNode.drawShadowLocal override.
	getImageRect	
	getLocalBounds	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getLocalBoundsD	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getMeasureUnit	(Inherited from DiagramItem.)
	getRepaintRect	DiagramItem.getRepaintRect override.
	getValue	Gets the effective value of the style property with the specified name. (Inherited from DiagramItem.)
	groupContains	(Inherited from DiagramNode.)
	loadFromJson	Loads the node from a JSON object.
	loadFromXml	
	move	(Inherited from DiagramNode.)
	onAdd	DiagramItem.onAdd override.
	onChangeFont	(Inherited from DiagramItem.)
	onChangeTextPadding	Called when the value of **TextPadding** changes.
	onChildModified	Called when a group child node has been modified. Override this method if you need to know when a node from the **SubordinateGroup** is modified. (Inherited from DiagramItem.)
	onClick	Invoked when the user clicks this item. (Inherited from DiagramItem.)
	onDoubleClick	Invoked when the user double-clicks this item. (Inherited from DiagramItem.)
	onLoad	DiagramItem.onLoad override.
	onMeasureUnitChanged	Called when the diagram's MeasureUnit changes. (Inherited from DiagramItem.)
	onModify	Called when an item is modified (Inherited from DiagramNode.)
	onRemove	Called when an item is removed from a Diagram, either by the user, programmatically or by undo / redo. (Inherited from DiagramNode.)
	onRotationAngleChanged	DiagramNode.onRotationAngleChanged override.
	onStyleChanged	Invoked when the associated style or theme have changed. (Inherited from DiagramItem.)

	onStyleFontChanged	DiagramItem.onStyleFontChanged override.
	onUpdateBounds	
	parentConstraintsInfringed	(Inherited from DiagramNode.)
	putExpandable	(Inherited from DiagramNode.)
	putSelected	(Inherited from DiagramItem.)
	rectFromPoints	(Inherited from DiagramNode.)
	repaint	Overloaded. (Inherited from DiagramItem.)
	resizeToFitImage	(Inherited from DiagramNode.)
	restoreProperties	DiagramItem.restoreProperties override.
	restoreState	
	saveProperties	DiagramItem.saveProperties override.
	saveState	
	saveToJson	Saves the node as a JSON object.
	saveToXml	
	scaleElements	Scales the node's elements by specified amount. (Inherited from DiagramNode.)
	setDiagramDirty	Marks the diagram as changed. (Inherited from DiagramItem.)
	setReflexive	Invoked to let a node set the shape of a reflexive link connected to it. (Inherited from DiagramNode.)
	shouldRender	Determines whether the item is rendered in the current context. (Inherited from DiagramItem.)
	shouldRenderAnchors	Determines whether the node should render its anchor points. (Inherited from DiagramNode.)
	startCreate	DiagramItem.startCreate override. (Inherited from DiagramNode.)
	startModify	DiagramItem.startModify override. Invoked when the user starts modifying this node interactively. (Inherited from DiagramNode.)
	updateCreate	DiagramItem.updateCreate override. (Inherited from DiagramNode.)
	updateLinkPositions	(Inherited from DiagramNode.)
	updateModify	

See Also

ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode Constructor

Overload List

Name	Description
ShapeNode ()	Initializes a new instance of the ShapeNode class.
ShapeNode (Diagram)	Initializes a new ShapeNode instance by setting its properties to the default values specified in the diagram.
ShapeNode (ShapeNode)	Initializes a new ShapeNode instance by copying the attribute values from the specified prototype node.

See Also

ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode Constructor ()

Initializes a new instance of the ShapeNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeNode ()
```

See Also

ShapeNode Constructor Overload List
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode Constructor (Diagram)

Initializes a new ShapeNode instance by setting its properties to the default values specified in the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeNode (
    Diagram parent
)
```

Parameters

parent

A Diagram instance whose default node attributes are copied to this node.

See Also

ShapeNode Constructor Overload List
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode Constructor (ShapeNode)

Initializes a new ShapeNode instance by copying the attribute values from the specified prototype node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeNode (
    ShapeNode prototype
)
```

Parameters

prototype
A ShapeNode instance whose attributes are copied to this node.

See Also

ShapeNode Constructor Overload List
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode Methods

ShapeNode.cancelModify Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void cancelModify (
    InteractionState ist
)
```

Parameters

ist

See Also

ShapeNode.containsPoint Method

Overload List

Name	Description
ShapeNode.containsPoint (Point2D)	ShapeNode.containsPoint override.
ShapeNode.containsPoint (Point2D, float)	ShapeNode.containsPoint override.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.containsPoint Method (Point2D)

ShapeNode.containsPoint override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean containsPoint (
    Point2D point
)
```

Parameters

point

Return Value

See Also

containsPoint Method Overload List
ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.containsPoint Method (Point2D, float)

ShapeNode.containsPoint override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean containsPoint (
    Point2D point,
    float threshold
)
```

Parameters

point

threshold

Return Value

See Also

containsPoint Method Overload List
ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.createConnectionPoint Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected ConnectionPoint createConnectionPoint (
    DiagramLink link,
    Point2D point,
    boolean incoming
)
```

Parameters

link
A DiagramLink that should be connected to this node.

point

incoming
true if the link is an incoming link; otherwise, **false**.

Return Value

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.createProperties Method

DiagramItem.createProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramItemProperties createProperties ()
```

Return Value

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.createState Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramItemState createState ()
```

Return Value

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.drawLocal Method

DiagramNode.drawLocal override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void drawLocal (
    Graphics2D graphics,
    RenderOptions options
)
```

Parameters

graphics

options

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.drawShadowLocal Method

DiagramNode.drawShadowLocal override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void drawShadowLocal (
    Graphics2D graphics,
    RenderOptions options
)
```

Parameters

graphics

options

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getAllowFlip Method

Gets a value indicating whether the node's shape flips when an edge is dragged over its opposite edge.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowFlip ()
```

Return Value

true to let users flip the shape, or **false** otherwise. The default value is **false**.

See Also

ShapeNode.getCustomDraw Method

Gets a value indicating what type of custom drawing to perform on a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CustomDraw getCustomDraw ()
```

Return Value

A member of the CustomDraw enumeration.

Remarks

This property allows invoking custom painting code for a shape node. That code must execute in response to the drawNode event. There are several modes of custom painting, allowing the custom code to paint the shape node entirely, or do that in addition to what JDiagram paints by default. The following CustomDraw members can be assigned to this property to specify the custom painting mode:

Member Name	Description
None	Do not perform custom drawing, let all painting be done by JDiagram.
Additional	The custom painting code executes after the node interior and frame are painted by JDiagram, but before text is rendered. In this mode, the **Graphics** instance passed to the custom drawing event handler has a clipping region applied to it.
Full	The component does not do any standard drawing, the entire painting of the node is done by the application.
ShadowOnly	Only the shadow of the node is painted by custom code, the node itself is drawn by the component.
Additional2	The custom painting code executes after all parts of the node are painted by JDiagram. In this mode, the **Graphics** instance passed to the custom drawing event handler doesn't have a clipping region applied to it.

See Also

ShapeNode.getEditRect Method

Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getEditRect (
    DiagramItem item,
    Point2D mousePosition
)
```

Parameters

item

A reference to this node.

mousePosition

A **Point2D** instance specifying the current pointer position.

Return Value

A **Rectangle2D** specifying where the edit box should be placed.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getEnableStyledText Method

Gets a value indicating whether the text of a node contains formatting tags which should be processed by JDiagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getEnableStyledText ()
```

Return Value

true if JDiagram should process formatting tagswhen rendering the node label, otherwise **false**.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getFlipX Method

Gets a value indicating whether the node's shape is flipped horizontally.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getFlipX ()
```

Return Value

true if the shape is flipped horizontally, or **false** otherwise.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getFlipY Method

Gets a value indicating whether the node's shape is flipped vertically.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getFlipY ()
```

Return Value

true if the shape is flipped vertically, or **false** otherwise.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getFont Method

Gets the font used to draw the text label of a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Font getFont ()
```

Return Value

A java.awt.Font object representing the label font.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getImage Method

Gets the image displayed inside this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Image getImage ()
```

Return Value

An instance of the **java.awt.Image** class.

Remarks

If a node should display multiple images, you could add and arrange them using NodeLabel objects.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getImageAlign Method

Gets the alignment of the node's image.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ImageAlign getImageAlign ()
```

Return Value

A member of the ImageAlign enumeration.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getImagePadding Method

Gets the padding distance between node's borders and Image.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Thickness getImagePadding ()
```

Return Value

A Thickness value specifying padding distance. The default value is **null**.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getImageRect Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Rectangle2D getImageRect (
    boolean inLocal
)
```

Parameters

inLocal

Return Value

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getImageUrl Method

Gets a URL used to load an image into this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getImageUrl ()
```

Return Value

a String containing the URL.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getPlainText Method

Gets the plain text extracted from the formatted text by removing the formatting tags.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getPlainText ()
```

Return Value

A String containing the label text stripped fromformatting tags.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getRepaintRect Method

DiagramItem.getRepaintRect override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
protected Rectangle2D getRepaintRect (
    boolean includeConnected
)
```

Parameters

includeConnected

Return Value

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getRotateImage Method

Gets a value indicating whether the image displayed inside a node should rotate together with the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getRotateImage ()
```

Return Value

true if the node image rotates when the node is rotated, otherwise **false**.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getRotateText Method

Gets a value indicating whether the text displayed inside a node should rotate together with the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getRotateText ()
```

Return Value

true if the node text rotates when the node is rotated, otherwise **false**.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getShape Method

Gets the shape of a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Shape getShape ()
```

Return Value

A Shape object representing the node's shape.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getShapeOrientation Method

Gets an orientation angle applied to the shape definition before the shape points are mapped to the node's bounding rectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getShapeOrientation ()
```

Return Value

A float value specifying the shape definition orientation.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getText Method

Gets the text displayed inside this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getText ()
```

Return Value

A String containing the label text.

Remarks

This property defines node's main text content. You can add more text labels by calling the addLabel method, and customize their position and appearance via the various members of returned NodeLabel object.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace
Font Property
TextFormat Property
TextBrush Property

ShapeNode.getTextFormat Method

Gets a TextFormat object specifying how to format and align the text of this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TextFormat getTextFormat ()
```

Return Value

A TextFormat object specifying the text format and alignment.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace
Text Property
Font Property

ShapeNode.getTextToEdit Method

Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when this node is edited in-place.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getTextToEdit ()
```

Return Value

A **String** that represents the initial contents of the in-place edit box.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.getTransparent Method

Gets a value indicating whether only the text and image of a node should be drawn on the screen.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getTransparent ()
```

Return Value

true to display only the node text and image, otherwise **false**.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.init Method

Returns a ShapeNodeBuilder object used to configure this ShapeNode instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public ShapeNodeBuilder init ()
```

Return Value

A **ShapeNodeBuilder** instance.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.loadFromJson Method

Loads the node from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the node's data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.loadFromXml Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An **XmlElement** containing the ShapeNode's data.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.onAdd Method

DiagramItem.onAdd override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onAdd ()
```

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.onChangeTextPadding Method

Called when the value of TextPadding changes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onChangeTextPadding ()
```

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.onLoad Method

DiagramItem.onLoad override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void onLoad (
    Diagram diagram
)
```

Parameters

diagram
The Diagram whose content is being loaded.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.onRotationAngleChanged Method

DiagramNode.onRotationAngleChanged override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void onRotationAngleChanged ()
```

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.onStyleFontChanged Method

DiagramItem.onStyleFontChanged override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void onStyleFontChanged ()
```

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.onUpdateBounds Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onUpdateBounds (
    Rectangle2D oldBounds
)
```

Parameters

oldBounds

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.renderText Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void renderText (
    String text,
    Rectangle2D dest,
    DrawTextHint hint
)
```

Parameters

text

dest

hint

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.resizeToFitImage Method

Resizes a node so that it will be as big as the image displayed in the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void resizeToFitImage ()
```

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.resizeToFitText Method

Makes a node big enough to display its text without clipping.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean resizeToFitText (
    FitSize fit
```

```
)
```

Parameters

fit
A member of the FitSize enumeration specifying whether the width or height of the node should remain unchanged.

Return Value

true if the node is resized successfully; otherwise **false**.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.restoreProperties Method

DiagramItem.restoreProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void restoreProperties (
    DiagramItemProperties props
)
```

Parameters

props

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.restoreState Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void restoreState (
    DiagramItemState state
)
```

Parameters

state

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.saveProperties Method

DiagramItem.saveProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveProperties (
    DiagramItemProperties props
)
```

Parameters

props

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.saveState Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveState (
    DiagramItemState state
)
```

Parameters

state

See Also

ShapeNode Members
ShapeNode Class

ShapeNode.saveToJson Method

Saves the node as a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject instance to contain the serialized data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.saveToXml Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An **XmlElement** the ShapeNode's data are stored.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.setAllowFlip Method

Sets a value indicating whether the node's shape flips when an edge is dragged over its opposite edge.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowFlip (
    boolean value
)
```

Parameters

value
true to let users flip the shape, or **false** otherwise. The default value is **false**.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace
FlipX Property
FlipY Property

ShapeNode.setCustomDraw Method

Sets a value indicating what type of custom drawing to perform on a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCustomDraw (
    CustomDraw value
)
```

Parameters

value
A member of the CustomDraw enumeration.

Remarks

This property allows invoking custom painting code for a shape node. That code must execute in response to the drawNode event. There are several modes of custom painting, allowing the custom code

to paint the shape node entirely, or do that in addition to what JDiagram paints by default. The following CustomDraw members can be assigned to this property to specify the custom painting mode:

Member Name	Description
None	Do not perform custom drawing, let all painting be done by JDiagram.
Additional	The custom painting code executes after the node interior and frame are painted by JDiagram, but before text is rendered. In this mode, the **Graphics** instance passed to the custom drawing event handler has a clipping region applied to it.
Full	The component does not do any standard drawing, the entire painting of the node is done by the application.
ShadowOnly	Only the shadow of the node is painted by custom code, the node itself is drawn by the component.
Additional2	The custom painting code executes after all parts of the node are painted by JDiagram. In this mode, the **Graphics** instance passed to the custom drawing event handler doesn't have a clipping region applied to it.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.setEditedText Method

Implements InplaceEditable.setEditedText. Assigns the edited text to this node after in-place edit operation completes successfully.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEditedText (
    String newText
)
```

Parameters

newText
The new text of this node.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.setEnableStyledText Method

Sets a value indicating whether the text of a node contains formatting tags which should be processed by JDiagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableStyledText (
    boolean value
)
```

Parameters

value
true if JDiagram should process formatting tags when rendering the node label, otherwise **false**.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.setFlipX Method

Sets a value indicating whether the node's shape is flipped horizontally.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFlipX (
    boolean value
)
```

Parameters

value
true if the shape is flipped horizontally, or **false** otherwise.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

FlipY Property
AllowFlip Property

ShapeNode.setFlipY Method

Sets a value indicating whether the node's shape is flipped vertically.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFlipY (
    boolean value
)
```

Parameters

value
true if the shape is flipped vertically, or **false** otherwise.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace
FlipX Property
AllowFlip Property

ShapeNode.setFont Method

Sets the font used to draw the text label of a node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFont (
    Font value
)
```

Parameters

value
A **java.awt.Font** object representing the label font.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

Text Property
TextBrush Property

ShapeNode.setImage Method

Sets the image that should be displayed inside the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImage (
    Image value
)
```

Parameters

value
An instance of the **java.awt.Image** class.

Remarks

If a node should display multiple images, you could add and arrange them using NodeLabel objects.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace
setImageAlign Method
setImagePadding Method

ShapeNode.setImageAlign Method

Sets the alignment of the node's image.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImageAlign (
    ImageAlign value
)
```

Parameters

value
A member of the ImageAlign enumeration.

Remarks

This property specifies how the Image is aligned to the bounding rectangle of this node. The image is aligned relatively to the rectangle specified in the ImageRectangle attribute of the Shape definition.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace
setImagePadding Method

ShapeNode.setImagePadding Method

Sets the padding distance between node's borders and Image.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImagePadding (
    Thickness value
)
```

Parameters

value
A Thickness value specifying padding distance.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace
setImageAlign Method

ShapeNode.setImageUrl Method

Sets a URL used to load an image into this cell.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImageUrl (
    String value
)
```

Parameters

value
A String containing the URL

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.setRotateImage Method

Sets a value indicating whether the image displayed inside a node should rotate together with the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRotateImage (
    boolean value
)
```

Parameters

value
true to rotate the node image when the node is rotated, otherwise **false**.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.setRotateText Method

Sets a value indicating whether the text displayed inside a node should rotate together with the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRotateText (
    boolean value
)
```

Parameters

value
true to rotate the node text whenthe node is rotated, otherwise false.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.setShape Method

Sets the shape of a node to the specified Shape instance. The initial shape of a node is the one set by the setDefaultShape method.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShape (
    Shape value
)
```

Parameters

value
A Shape object representing the node's shape.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace
AllowFlip Property

ShapeNode.setShapeOrientation Method

Sets an orientation angle applied to the shape definition before the shape points are mapped to the node's bounding rectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShapeOrientation (
    float value
)
```

Parameters

value
A float value specifying the shape definition orientation.

See Also

ShapeNode Members
ShapeNode Class

ShapeNode.setText Method

Sets the text label displayed inside this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setText (
    String value
)
```

Parameters

value
A String containing the label text.

Remarks

This property defines node's main text content. You can add more text labels by calling the addLabel method, and customize their position and appearance via the various members of returned NodeLabel object.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace
Font Property
TextFormat Property
TextBrush Property

ShapeNode.setTextFormat Method

Sets a TextFormat object specifying how to format and align the text of this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextFormat (
    TextFormat value
)
```

Parameters

value
A TextFormat object specifying the text format and alignment.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace
Text Property
Font Property

ShapeNode.setTransparent Method

Sets a value indicating whether only the text and image of a node should be drawn on the screen.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTransparent (
    boolean value
)
```

Parameters

value
true to display only the node text and image,otherwise **false**.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.updateModify Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void updateModify (
    Point2D current,
    InteractionState ist
)
```

Parameters

current

ist

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.with Method

Returns a ShapeNodeBuilder object used to configure and create new ShapeNode instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static ShapeNodeBuilder with ()
```

Return Value

A **ShapeNodeBuilder** instance.

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNode.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

ShapeNode Members
ShapeNode Class
com.mindfusion.diagramming Namespace

ShapeNodeList Class

A strongly-typed list of ShapeNode objects.

Syntax

Java
`public class ShapeNodeList extends BaseList<E>`

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.BaseList(E)
        com.mindfusion.diagramming.ShapeNodeList

See Also

ShapeNodeList Members
com.mindfusion.diagramming Namespace

ShapeNodeList Members

A strongly-typed list of ShapeNode objects.

The following tables list the members exposed by the ShapeNodeList type.

Public Constructors

	Name	Description
	ShapeNodeList	

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)
	listEvent	(Inherited from BaseList.)
	notifyParent	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	Adds a new element to the list. (Inherited from BaseList.)
	clear	Removes all elements from the list. (Inherited from BaseList.)
	clone	
	contains	Determines if this list contains the specified element. (Inherited from BaseList.)
	first	Gets the first element of this list. (Inherited from BaseList.)

	get	Gets the element at the specified position in this list. (Inherited from BaseList.)
	last	Gets the last element of this list. (Inherited from BaseList.)
	readExternal	Loads the list's contents. (Inherited from BaseList.)
	remove	Overloaded. (Inherited from BaseList.)
	removeRange	Removes a range of elements from this list. (Inherited from BaseList.)
	set	Sets the element at the specified position in this list. (Inherited from BaseList.)
	size	Gets the number of elements in this list. (Inherited from BaseList.)
	writeExternal	Saves the list's contents. (Inherited from BaseList.)

Protected Methods

	Name	Description
	raiseAdding	Raises the adding event. (Inherited from BaseList.)
	raiseClearing	Raises the clearing event. (Inherited from BaseList.)
	raiseRemoving	Raises the removing event. (Inherited from BaseList.)

See Also

ShapeNodeList Class
com.mindfusion.diagramming Namespace

ShapeNodeList Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public ShapeNodeList ()`

See Also

ShapeNodeList Class
com.mindfusion.diagramming Namespace

ShapeNodeList Methods

ShapeNodeList.clone Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Object clone ()
```

Return Value

See Also

ShapeNodeList Members
ShapeNodeList Class
com.mindfusion.diagramming Namespace

ShapeNodeProperties Class

Stores the values of ShapeNode properties during undo / redo operations. If you need to implement undo support for the additional properties defined by a class derived from **ShapeNode**, do so by deriving from ShapeNodeProperties and overriding the ShapeNode.saveProperties, ShapeNode.restoreProperties, and ShapeNode.createProperties methods.

Syntax

```
Java
public class ShapeNodeProperties extends DiagramNodeProperties
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItemProperties
    com.mindfusion.diagramming.DiagramNodeProperties
      com.mindfusion.diagramming.ShapeNodeProperties
        com.mindfusion.diagramming.SvgNodeProperties

See Also

ShapeNodeProperties Members
com.mindfusion.diagramming Namespace

ShapeNodeProperties Members

Stores the values of ShapeNode properties during undo / redo operations. If you need to implement undo support for the additional properties defined by a class derived from **ShapeNode**, do so by deriving from ShapeNodeProperties and overriding the ShapeNode.saveProperties, ShapeNode.restoreProperties, and ShapeNode.createProperties methods.

The following tables list the members exposed by the ShapeNodeProperties type.

Public Constructors

	Name	Description
	ShapeNodeProperties	

Public Fields

	Name	Description
	textPadding	(Inherited from DiagramItemProperties.)

See Also

ShapeNodeProperties Class
com.mindfusion.diagramming Namespace

ShapeNodeProperties Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public ShapeNodeProperties ()`

See Also

ShapeNodeProperties Class
com.mindfusion.diagramming Namespace

ShapeNodeState Class

Syntax

Java
`public class ShapeNodeState extends DiagramNodeState`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItemState
    com.mindfusion.diagramming.DiagramNodeState
      com.mindfusion.diagramming.ShapeNodeState

See Also

ShapeNodeState Members
com.mindfusion.diagramming Namespace

ShapeNodeState Members

The following tables list the members exposed by the ShapeNodeState type.

Public Constructors

	Name	Description
	ShapeNodeState	

Protected Fields

	Name	Description
	item	(Inherited from DiagramItemState.)

See Also

ShapeNodeState Class
com.mindfusion.diagramming Namespace

ShapeNodeState Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeNodeState (
    ShapeNode node
)
```

Parameters

node

See Also

ShapeNodeState Class
com.mindfusion.diagramming Namespace

ShapeNodeStyle Class

Represents a reusable set of properties that define the appearance of shape nodes.

Syntax

Java

```
public class ShapeNodeStyle extends DiagramNodeStyle
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Style
    com.mindfusion.diagramming.DiagramItemStyle
      com.mindfusion.diagramming.DiagramNodeStyle
        com.mindfusion.diagramming.ShapeNodeStyle

See Also

ShapeNodeStyle Members
com.mindfusion.diagramming Namespace

ShapeNodeStyle Members

Represents a reusable set of properties that define the appearance of shape nodes.

The following tables list the members exposed by the ShapeNodeStyle type.

Public Constructors

	Name	Description
	ShapeNodeStyle	Initializes a new instance of the **ShapeNodeStyle** class.

Public Methods

	Name	Description
	addPropertyChangeListener	(Inherited from Style.)
	getBrush	Gets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	getEffects	Gets a list of the effects applied to the node. (Inherited from DiagramNodeStyle.)
	getFontFamily	Gets the font family of the item text. (Inherited from DiagramItemStyle.)
	getFontSize	Gets the font size of the item text. (Inherited from DiagramItemStyle.)
	getFontStyle	Gets the font style of the item text. (Inherited from DiagramItemStyle.)
	getFontUnit	Gets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	getShadowBrush	Gets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	getStroke	Gets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	getStrokeThickness	Gets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)

	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
	init	Returns a ShapeNodeStyleBuilder object used to configure this ShapeNodeStyle instance.
	readExternal	**Externalizable.readExternal** implementation. (Inherited from Style.)
S	registerType	Associates a type with an alias. The alias is used when saving and loading objects of the specified type during style serialization and deserialization. (Inherited from Style.)
	removePropertyChangeListener	(Inherited from Style.)
	setBrush	Sets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	setFontFamily	Sets the font family of the item text. (Inherited from DiagramItemStyle.)
	setFontSize	Sets the font size of the item text. (Inherited from DiagramItemStyle.)
	setFontStyle	Sets the font style of the item text. (Inherited from DiagramItemStyle.)
	setFontUnit	Sets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	setShadowBrush	Sets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	setStroke	Sets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	setStrokeThickness	Sets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
S	with	Returns a ShapeNodeStyleBuilder object used to configure and create new ShapeNodeStyle instances.
	writeExternal	**Externalizable.writeExternal** implementation. (Inherited from Style.)

Protected Methods

	Name	Description
	getValue	Gets the value of the specified property. (Inherited from Style.)
	isPropertySet	Checks whether the specified property has a value. (Inherited from Style.)
	loadFromJson	Loads the style content from a JsonObject. (Inherited from DiagramNodeStyle.)

	loadFromXml	Loads the style content from an XML element. (Inherited from Style.)
	registerProperty	Registers a new property with the specified name and type. (Inherited from Style.)
	saveToJson	Saves the style content into a JsonObject. (Inherited from DiagramNodeStyle.)
	saveToXml	Saves the style content into an XML element. (Inherited from Style.)
	setValue	Sets the value of the specified property. (Inherited from Style.)
	unsetValue	Clears the value of the specified property. (Inherited from Style.)

See Also

ShapeNodeStyle Class
com.mindfusion.diagramming Namespace

ShapeNodeStyle Constructor

Initializes a new instance of the ShapeNodeStyle class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeNodeStyle ()
```

See Also

ShapeNodeStyle Class
com.mindfusion.diagramming Namespace

ShapeNodeStyle Methods

ShapeNodeStyle.init Method

Returns a ShapeNodeStyleBuilder object used to configure this ShapeNodeStyle instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ShapeNodeStyleBuilder init ()
```

Return Value

A **ShapeNodeStyleBuilder** instance.

See Also

ShapeNodeStyle Members
ShapeNodeStyle Class
com.mindfusion.diagramming Namespace

ShapeNodeStyle.with Method

Returns a ShapeNodeStyleBuilder object used to configure and create new ShapeNodeStyle instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static ShapeNodeStyleBuilder with ()`

Return Value

A **ShapeNodeStyleBuilder** instance.

See Also

ShapeNodeStyle Members
ShapeNodeStyle Class
com.mindfusion.diagramming Namespace

ShowAnchors Enumeration

The members of this enumeration specify whether JDiagram should display marks at the anchor points positions. They can be assigned to the ShowAnchors property of Diagram class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum ShowAnchors`

Members

	Member name	Description
	Always	Always display anchor point marks.
	Auto	Automatically display anchor points when there is a node under the mouse.

	Never	Never display anchor point marks.
	Selected	Display anchor points marks for selected nodes.
	SelectedAndAuto	Display anchor points marks for selected and pointed nodes.

See Also

com.mindfusion.diagramming Namespace

SimpleShape Enumeration

The members of this enumeration specify the shape of a node's outline. They can be used as parameters of the setShape method of the TableNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum SimpleShape`

Members

	Member name	Description
	Rectangle	The node's shape is a rectangle.
	RoundedRectangle	The node's shape is a rounded rectangle.

See Also

com.mindfusion.diagramming Namespace

SmoothingMode Enumeration

Specifies whether smoothing (antialiasing) is applied

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum SmoothingMode`

Members

	Member name	Description
	AntiAlias	

	None	

See Also

com.mindfusion.diagramming Namespace

SnapToAnchor Enumeration

The members of this enumeration specify when a link should be aligned to a node's anchor point. They can be used as parameters of the setSnapToAnchor method of the Diagram class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public enum SnapToAnchor
```

Members

	Member name	Description
	OnCreate	Align to anchor points only when the link is created. Let the user move the link end to any point of the node later.
	OnCreateOrModify	Align to anchor points both when creating or modifying.

See Also

com.mindfusion.diagramming Namespace

SortOrder Class

Syntax

```
Java
public class SortOrder
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.MaxBoundsComparer.SortOrder

See Also

SortOrder Members
com.mindfusion.diagramming Namespace

SortOrder Members

The following tables list the members exposed by the SortOrder type.

Public Constructors

	Name	Description
	SortOrder	Initializes a new **SortOrder** instance.

Public Fields

	Name	Description
	AscendingHeight	
	AscendingSurface	
	AscendingWidth	
	DescendingHeight	
	DescendingSurface	
	DescendingWidth	

See Also

SortOrder Class
com.mindfusion.diagramming Namespace

SortOrder Fields

SortOrder.AscendingHeight Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static final int AscendingHeight`

See Also

SortOrder Members
SortOrder Class
com.mindfusion.diagramming Namespace

SortOrder.AscendingSurface Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static final int AscendingSurface
```

See Also

SortOrder Members
SortOrder Class
com.mindfusion.diagramming Namespace

SortOrder.AscendingWidth Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static final int AscendingWidth
```

See Also

SortOrder Members
SortOrder Class
com.mindfusion.diagramming Namespace

SortOrder.DescendingHeight Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static final int DescendingHeight
```

See Also

SortOrder Members
SortOrder Class
com.mindfusion.diagramming Namespace

SortOrder.DescendingSurface Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static final int DescendingSurface
```

See Also

SortOrder Members
SortOrder Class
com.mindfusion.diagramming Namespace

SortOrder.DescendingWidth Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static final int DescendingWidth
```

See Also

SortOrder Members
SortOrder Class
com.mindfusion.diagramming Namespace

SortOrder Constructor

Initializes a new SortOrder instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public SortOrder ()
```

See Also

SortOrder Class
com.mindfusion.diagramming Namespace

SpringLayout Class

Implements the Spring-Embedder graph layout algorithm.

Syntax

Java
`public class SpringLayout implements Layout`

Remarks

Spring-Embedder produces layouts having uniform distribution of nodes by simulating a physical system in which nodes repulse each other and the links between them act as confining springs. Nodes are moved around in an iterative process. The forces that act on a node are calculated, taking in account the positions of surrounding nodes and links from the previous iteration.

To apply this layout to a diagram, call the arrange method of a **SpringLayout** instance.

If the LayoutTraits value associated with a node through SpringLayoutTraits.Frozen is **true**, SpringLayout considers the repulsion forces exerted by the node on other nodes, but ignores forces acting on the node and keeps it in place.

The final appearance of arranged graphs depends mostly on the values of EnableClusters and NodeDistance properties that specify how nodes are distributed by the layout routine. Enabling the MinimizeCrossings property helps to decrease the number of link crossings, though that makes the algorithm run somewhat slower.

The layout routine runs as much iterations as set in IterationCount, calculating better node positions at each step. When that stage of the algorithm completes, if Anchoring is enabled, link ends are aligned to nodes' anchor points.

The Spring-Embedder layout algorithm produces best results if it can place link ends at arbitrary positions over nodes' outlines, that is, when using the Ignore value. If your application logic requires links to be always attached to anchor points, use the other two values. In such cases Reassign would yield better results.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.SpringLayout

See Also

SpringLayout Members
com.mindfusion.diagramming Namespace

SpringLayout Members

Implements the Spring-Embedder graph layout algorithm.

The following tables list the members exposed by the SpringLayout type.

Public Constructors

	Name	Description
	SpringLayout	Overloaded.

Public Methods

	Name	Description

	arrange	Arranges the specified diagram.
	getAnchoring	Gets a value indicating how links will be aligned to the anchor points of tree nodes.
	getEnableClusters	Gets a value indicating whether the layout algorithm should place nodes into distinct clusters.
	getIterations	Gets the number of iterations that the layout algorithm should run.
	getKeepGroupLayout	Gets a value specifying whether the relative position of nodes within groups should be kept intact.
	getMinimizeCrossings	Gets a value indicating whether the algorithm should try to minimize the number of link crossings.
	getNodeDistance	Gets how much space should be left between adjacent nodes.
	getRandomSeed	Gets the randomization seed used for generating random node positions.
	getRepulsionFactor	Gets a multiplier value applied to the repulsive force between nodes.
	init	Returns a SpringLayoutBuilder object used to configure this SpringLayout instance.
	setAnchoring	Sets a value indicating how links should be aligned to the anchor points of tree nodes.
	setEnableClusters	Sets a value indicating whether the layout algorithm should place nodes into distinct clusters.
	setIterations	Sets the number of iterations that the layout algorithm should run.
	setKeepGroupLayout	Sets a value specifying whether the relative position of nodes within groups should be kept intact.
	setMinimizeCrossings	Sets a value indicating whether the algorithm should try to minimize the number of link crossings.
	setNodeDistance	Sets how much space should be left between adjacent nodes.
	setRandomSeed	Sets the randomization seed that should be used for generating random node positions.
	setRepulsionFactor	Sets a multiplier value applied to the repulsive force between nodes.
	with	Returns a SpringLayoutBuilder object used to configure and create new SpringLayout instances.

See Also

SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout Constructor

Overload List

Name	Description
SpringLayout ()	Initializes a new instance of the SpringLayout class.
SpringLayout (int, float, boolean)	Initializes a new instance of the SpringLayout class.
SpringLayout (int, float, boolean, boolean)	Initializes a new instance of the **SpringLayout** class.

See Also

SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout Constructor ()

Initializes a new instance of the SpringLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SpringLayout ()
```

See Also

SpringLayout Constructor Overload List
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout Constructor (int, float, boolean)

Initializes a new instance of the SpringLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SpringLayout (
    int iterationCount,
    float nodeDistance,
    boolean minimizeCrossings
)
```

Parameters

iterationCount
The number of iterations that the layout algorithm should run.

nodeDistance
The desired distance between nodes.

minimizeCrossings
true to minimize link crossings, otherwise **false**.

See Also

SpringLayout Constructor Overload List
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout Constructor (int, float, boolean, boolean)

Initializes a new instance of the SpringLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SpringLayout (
    int iterationCount,
    float nodeDistance,
    boolean minimizeCrossings,
    boolean keepGroupLayout
)
```

Parameters

iterationCount
The number of iterations that the layout algorithm should run.

nodeDistance
The desired distance between nodes.

minimizeCrossings
true to minimize link crossings, otherwise **false**.

keepGroupLayout
true if the relative position of nodes within groups should be preserved, otherwise **false**.

See Also

SpringLayout Constructor Overload List
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout Methods

SpringLayout.arrange Method

Arranges the specified diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean arrange (
    Diagram chart
)
```

Parameters

chart
The Diagram to arrange.

Return Value

true

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.getAnchoring Method

Gets a value indicating how links will be aligned to the anchor points of tree nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Anchoring getAnchoring ()
```

Return Value

A member of the Anchoring enumeration.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.getEnableClusters Method

Gets a value indicating whether the layout algorithm should place nodes into distinct clusters.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getEnableClusters ()
```

Return Value

true if nodes will be placed in clusters when possible, otherwise false.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.getIterations Method

Gets the number of iterations that the layout algorithm should run.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getIterations ()
```

Return Value

An integer value specifying the number of iterations.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.getKeepGroupLayout Method

Gets a value specifying whether the relative position of nodes within groups should be kept intact.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getKeepGroupLayout ()
```

Return Value

true if the relative position of nodes within groups should be preserved, otherwise **false**.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.getMinimizeCrossings Method

Gets a value indicating whether the algorithm should try to minimize the number of link crossings.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getMinimizeCrossings ()
```

Return Value

true if the layout routine will try to minimize the number of link crossings, otherwise **false**.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.getNodeDistance Method

Gets how much space should be left between adjacent nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getNodeDistance ()
```

Return Value

A float value specifying the desired node distance.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.getRandomSeed Method

Gets the randomization seed used for generating random node positions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getRandomSeed ()
```

Return Value

An integer value specifying the randomization seed.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.getRepulsionFactor Method

Gets a multiplier value applied to the repulsive force between nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public double getRepulsionFactor ()
```

Return Value

A float value by which the repulsive force between nodes is multiplied.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.init Method

Returns a SpringLayoutBuilder object used to configure this SpringLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public SpringLayoutBuilder init ()
```

Return Value

A **SpringLayoutBuilder** instance.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.setAnchoring Method

Sets a value indicating how links should be aligned to the anchor points of tree nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAnchoring (
    Anchoring value
)
```

Parameters

value
A member of the Anchoring enumeration.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.setEnableClusters Method

Sets a value indicating whether the layout algorithm should place nodes into distinct clusters.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableClusters (
    boolean value
)
```

Parameters

value
true if nodes should be placed in clusterswhen possible, otherwise false.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.setIterations Method

Sets the number of iterations that the layout algorithm should run.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIterations (
    int value
)
```

Parameters

value
An integer value specifying the number of iterations.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.setKeepGroupLayout Method

Sets a value specifying whether the relative position of nodes within groups should be kept intact.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setKeepGroupLayout (
    boolean value
)
```

Parameters

value
true if the relative position of nodes within groups should be preserved, otherwise **false**.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.setMinimizeCrossings Method

Sets a value indicating whether the algorithm should try to minimize the number of link crossings.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMinimizeCrossings (
    boolean value
)
```

Parameters

value
true if the layout routine should try to minimize the number of link crossings, otherwise **false**.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.setNodeDistance Method

Sets how much space should be left between adjacent nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setNodeDistance (
    float value
)
```

Parameters

value
A float value specifying the desired node distance.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.setRandomSeed Method

Sets the randomization seed that should be used for generating random node positions.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setRandomSeed (
    int value
)
```

Parameters

value
An integer value specifying the randomization seed.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.setRepulsionFactor Method

Sets a multiplier value applied to the repulsive force between nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setRepulsionFactor (
    double value
)
```

Parameters

value
A float value by which the repulsive force between nodes is multiplied.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

SpringLayout.with Method

Returns a SpringLayoutBuilder object used to configure and create new SpringLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static SpringLayoutBuilder with ()
```

Return Value

A **SpringLayoutBuilder** instance.

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming Namespace

Style Class

Represents an unordered dynamic collection of properties that can be identified by name.

Syntax

Java
`public class Style` `    implements Externalizable, NotifyPropertyChanged`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Style
    com.mindfusion.diagramming.DiagramItemStyle
    com.mindfusion.diagramming.DiagramStyle

See Also

Style Members
com.mindfusion.diagramming Namespace

Style Members

Represents an unordered dynamic collection of properties that can be identified by name.

The following tables list the members exposed by the Style type.

Public Constructors

	Name	Description
	Style	Initializes a new instance of the **Style** class.

Public Methods

	Name	Description
	addPropertyChangeListener	
	readExternal	**Externalizable.readExternal** implementation.
S	registerType	Associates a type with an alias. The alias is used when saving and loading objects of the specified type during

		style serialization and deserialization.
	removePropertyChangeListener	
	writeExternal	**Externalizable.writeExternal** implementation.

Protected Methods

	Name	Description
	getValue	Gets the value of the specified property.
	isPropertySet	Checks whether the specified property has a value.
	loadFromXml	Loads the style content from an XML element.
	registerProperty	Registers a new property with the specified name and type.
	saveToXml	Saves the style content into an XML element.
	setValue	Sets the value of the specified property.
	unsetValue	Clears the value of the specified property.

See Also

Style Class
com.mindfusion.diagramming Namespace

Style Constructor

Initializes a new instance of the Style class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Style ()`

See Also

Style Class
com.mindfusion.diagramming Namespace

Style Methods

Style.addPropertyChangeListener Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addPropertyChangeListener (
    PropertyChangeListener listener
)
```

Parameters

listener

See Also

Style Members
Style Class
com.mindfusion.diagramming Namespace

Style.getValue Method

Gets the value of the specified property.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Object getValue (
    Object property
)
```

Parameters

property
The property to get.

Return Value

The value of the property or null if the property is not defined.

See Also

Style Members
Style Class
com.mindfusion.diagramming Namespace

Style.isPropertySet Method

Checks whether the specified property has a value.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected boolean isPropertySet (
    Object property
)
```

Parameters

property
The property to check.

Return Value

true if the property has a local value; otherwise, false.

See Also

Style Members
Style Class
com.mindfusion.diagramming Namespace

Style.loadFromXml Method

Loads the style content from an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An **Element** containing the style's data.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

Style Members
Style Class
com.mindfusion.diagramming Namespace

Style.readExternal Method

Externalizable.readExternal implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

Style Members
Style Class
com.mindfusion.diagramming Namespace

Style.registerProperty Method

Registers a new property with the specified name and type.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Object registerProperty (
    String name
)
```

Parameters

name
The name of the property.

Return Value

An object that can be used to identify the property in subsequent calls to methods like setValue and getValue.

See Also

Style Members
Style Class
com.mindfusion.diagramming Namespace

Style.registerType Method

Associates a type with an alias. The alias is used when saving and loading objects of the specified type during style serialization and deserialization.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void registerType (
    Class<?> type,
    String alias
)
```

Parameters

type
The type to associate.

alias
The unique alias for the type.

See Also

Style Members
Style Class
com.mindfusion.diagramming Namespace

Style.removePropertyChangeListener Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removePropertyChangeListener (
    PropertyChangeListener listener
)
```

Parameters

listener

See Also

Style Members
Style Class
com.mindfusion.diagramming Namespace

Style.saveToXml Method

Saves the style content into an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
```

```
    XmlPersistContext context
)
```

Parameters

xmlElement
An **Element** the style's data should be stored into.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

Style Members
Style Class
com.mindfusion.diagramming Namespace

Style.setValue Method

Sets the value of the specified property.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void setValue (
    Object property,
    Object value
)
```

Parameters

property
The property to set.

value
The new property value.

See Also

Style Members
Style Class
com.mindfusion.diagramming Namespace

Style.unsetValue Method

Clears the value of the specified property.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void unsetValue (
    Object property
)
```

Parameters

property
The property to clear.

See Also

Style Members
Style Class
com.mindfusion.diagramming Namespace

Style.writeExternal Method

Externalizable.writeExternal implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

Style Members
Style Class
com.mindfusion.diagramming Namespace

SvgNode Class

Represents nodes that can render SVG drawings.

Syntax

Java

```
public class SvgNode
    extends ShapeNode
```

Remarks

The **SvgNode** class represents nodes that can display SVG drawings in addition to the rendering provided by the base ShapeNode class. The SVG drawing is rendered after the associated Image and just before the drawNode event is raised for Additional custom drawing.

The SVG drawing of a node is specified through its Content property. The SVG elements are loaded and associated with the node through an SvgContent object, which should be initialized and then assigned to this property.

The following code illustrates how to load an SVG graphics from a local file and associate it with an existing **SvgNode** (referenced by the svgNode variable):

Java

```
SvgContent content = new SvgContent();
content.parse("drawing.svg");
svgNode.setContent(content);
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItem
    com.mindfusion.diagramming.DiagramNode
      com.mindfusion.diagramming.ShapeNode
        com.mindfusion.diagramming.SvgNode

See Also

SvgNode Members
com.mindfusion.diagramming Namespace

SvgNode Members

Represents nodes that can render SVG drawings.

The following tables list the members exposed by the SvgNode type.

Public Constructors

	Name	Description
	SvgNode	Overloaded.

Protected Fields

	Name	Description
	allowIncomingLinks	(Inherited from DiagramNode.)
	allowOutgoingLinks	(Inherited from DiagramNode.)
	anchorPattern	(Inherited from DiagramNode.)
	AV_Cancel	(Inherited from DiagramNode.)
	AV_EndModIncoming	(Inherited from DiagramNode.)
	AV_EndModOutgoing	(Inherited from DiagramNode.)
	AV_StartModIncoming	(Inherited from DiagramNode.)
	AV_StartModOutgoing	(Inherited from DiagramNode.)
	AV_UpdateIncoming	(Inherited from DiagramNode.)

	AV_UpdateOutgoing	(Inherited from DiagramNode.)
	AV_UpdIntscIncoming	(Inherited from DiagramNode.)
	AV_UpdIntscOutgoing	(Inherited from DiagramNode.)
	AV_UpdPosIncoming	(Inherited from DiagramNode.)
	AV_UpdPosOutgoing	(Inherited from DiagramNode.)
	bounds	(Inherited from DiagramNode.)
	brush	(Inherited from DiagramItem.)
	cycleDetected	(Inherited from DiagramItem.)
	cycleProtect	(Inherited from DiagramItem.)
	enabledHandles	(Inherited from DiagramNode.)
	handlesStyle	(Inherited from DiagramNode.)
	incomingLinks	(Inherited from DiagramNode.)
	masterGroup	(Inherited from DiagramNode.)
	modifyDX	(Inherited from DiagramItem.)
	modifyDY	(Inherited from DiagramItem.)
	modifyHandle	(Inherited from DiagramItem.)
	modifying	(Inherited from DiagramItem.)
	obstacle	(Inherited from DiagramNode.)
	outgoingLinks	(Inherited from DiagramNode.)
	pen	(Inherited from DiagramItem.)
	ptEnd	(Inherited from DiagramItem.)
	ptMdfLast	(Inherited from DiagramItem.)
	ptOrg	(Inherited from DiagramItem.)
	ptSavedEnd	(Inherited from DiagramItem.)
	ptSavedOrg	(Inherited from DiagramItem.)
	savedBounds	(Inherited from DiagramNode.)
	subordinateGroup	(Inherited from DiagramItem.)

Public Methods

	Name	Description
	addLabel	Overloaded. (Inherited from DiagramNode.)
	as	Down-casts the item to specified type. (Inherited from DiagramItem.)
	attachTo	Overloaded. (Inherited from DiagramNode.)

	clone	Creates a copy of this item. (Inherited from DiagramItem.)
	containsPoint	Overloaded. (Inherited from ShapeNode.)
	detach	Detaches a node from its master group. (Inherited from DiagramNode.)
	getAllIncomingLinks	Gets a collection of all links entering this node. (Inherited from DiagramNode.)
	getAllLinks	Gets all links connected to this node. (Inherited from DiagramNode.)
	getAllOutgoingLinks	Gets a collection of all links going out of this node. (Inherited from DiagramNode.)
	getAllowFlip	Gets a value indicating whether the node's shape flips when an edge is dragged over its opposite edge. (Inherited from ShapeNode.)
	getAllowIncomingLinks	Gets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	getAllowOutgoingLinks	Gets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	getAnchorPattern	Gets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)
	getBounds	Gets the node location and size. (Inherited from DiagramNode.)
	getBrush	Gets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	getCenter	Returns the center point of this node. (Inherited from DiagramNode.)
	getConstraints	Gets the movement and size constraints applied to a node. (Inherited from DiagramNode.)
	getContainer	Gets the parent ContainerNode containing this node. (Inherited from DiagramNode.)
	getContent	Gets an SvgContent instance representing the SVG drawing rendered in this node.
	getContentAlign	Gets the alignment of the **SvgContent** displayed in this node.
	getCustomDraw	Gets a value indicating what type of custom drawing to perform on a node. (Inherited from ShapeNode.)
	getEditRect	Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates). (Inherited from ShapeNode.)
	getEffectiveBrush	Gets the effective brush of the item. (Inherited from DiagramItem.)
	getEffectiveFont	Gets the currently effective font of the item. This property returns getFont if it is not null, or a font with the DiagramItemStyle.getFontFamily, DiagramItemStyle.getFontSize, and

		DiagramItemStyle.getFontStyle properties of the item's style. (Inherited from DiagramItem.)
	getEffectivePen	Gets the effective pen of the item. (Inherited from DiagramItem.)
	getEffectiveShadowBrush	Creates a Brush object representing the currently effective shadow brush of the item. This method returns a system brush corresponding to the item's getShadowBrush if the item's **getShadowBrush** is not null, or a system brush corresponding to the DiagramItemStyle.getShadowBrush property of the item's style. (Inherited from DiagramItem.)
	getEffectiveTextBrush	Gets the effective text brush of the item. (Inherited from DiagramItem.)
	getEffects	Gets a collection with all effects applied to this node. (Inherited from DiagramNode.)
	getEnabledHandles	Gets a combination of NodeHandleType members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	getEnableStyledText	Gets a value indicating whether the text of a node contains formatting tags which should be processed by JDiagram. (Inherited from ShapeNode.)
	getExpandable	Gets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	getExpanded	Gets a value indicating whether the tree branch that starts from a node is expanded or collapsed. (Inherited from DiagramNode.)
	getFlipX	Gets a value indicating whether the node's shape is flipped horizontally. (Inherited from ShapeNode.)
	getFlipY	Gets a value indicating whether the node's shape is flipped vertically. (Inherited from ShapeNode.)
	getFont	Gets the font used to draw the text label of a node. (Inherited from ShapeNode.)
	getHandlesStyle	Gets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	getHyperLink	Gets the hyperlink associated with an item. (Inherited from DiagramItem.)
	getId	Gets user-defined identifier associated with this item. (Inherited from DiagramItem.)
	getIgnoreLayout	Gets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	getImage	Gets the image displayed inside this node. (Inherited from ShapeNode.)

	getImageAlign	Gets the alignment of the node's image. (Inherited from ShapeNode.)
	getImagePadding	Gets the padding distance between node's borders and **Image**. (Inherited from ShapeNode.)
	getImageUrl	Gets a URL used to load an image into this cell. (Inherited from ShapeNode.)
	getIncomingLinks	Gets the links coming into a node. (Inherited from DiagramNode.)
	getLabels	Returns the list of supplementary labels displayed by this node. (Inherited from DiagramNode.)
	getLayerIndex	Gets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	getLayoutTraits	Returns a hashtable containing properties specific to layout algorithms. (Inherited from DiagramItem.)
	getLocalCenter	(Inherited from DiagramNode.)
	getLocked	Gets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	getMasterGroup	Gets the hierarchical group in which this node is a subordinate item. (Inherited from DiagramNode.)
	getMasterItem	Returns the node's **Container** or main item of **MasterGroup**. (Inherited from DiagramNode.)
	getNearestBorderPoint	Returns a point that lies on the outline of this node, at the shortest distance from the specified point. (Inherited from DiagramNode.)
	getObstacle	Gets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	getOpacity	Gets the opacity of this item. (Inherited from DiagramItem.)
	getOutgoingLinks	Gets the links going out from a node. (Inherited from DiagramNode.)
	getParent	Gets the diagram that contains this item. (Inherited from DiagramItem.)
	getPen	Gets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	getPlainText	Gets the plain text extracted from the formatted text by removing the formatting tags. (Inherited from ShapeNode.)
	getPrintable	Gets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	getRotatedBounds	Gets the bounding rectangle of this node, when it is rotated at the specified angle around the specified pivot. (Inherited from DiagramNode.)

	getRotateImage	Gets a value indicating whether the image displayed inside a node should rotate together with the node. (Inherited from ShapeNode.)
	getRotateText	Gets a value indicating whether the text displayed inside a node should rotate together with the node. (Inherited from ShapeNode.)
	getRotationAngle	Gets the rotation angle of this node. (Inherited from DiagramNode.)
	getRuntimeIndex	For internal use. (Inherited from DiagramItem.)
	getSelected	Gets a value indicating whether this item is selected. (Inherited from DiagramItem.)
	getShadowBrush	Gets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	getShadowOffsetX	Gets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getShadowOffsetY	Gets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getShape	Gets the shape of a node. (Inherited from ShapeNode.)
	getShapeOrientation	Gets an orientation angle applied to the shape definition before the shape points are mapped to the node's bounding rectangle. (Inherited from ShapeNode.)
	getStyle	Gets the style associated with the item. (Inherited from DiagramItem.)
	getSubordinateGroup	Gets the group of subordinated items attached to this one. (Inherited from DiagramItem.)
	getSvgUrl	Gets a URL used to load an SVG file into this node.
	getTag	Gets user-defined data assigned to an item. (Inherited from DiagramItem.)
	getText	Gets the text displayed inside this node. (Inherited from ShapeNode.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	getTextFormat	Gets a TextFormat object specifying how to format and align the text of this node. (Inherited from ShapeNode.)
	getTextPadding	Gets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	getTextToEdit	Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when this node is edited in-place. (Inherited from ShapeNode.)
	getToolTip	Gets the tooltip text displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	getTransparent	Gets a value indicating whether only the text and image of a node should be drawn on the screen. (Inherited from ShapeNode.)

	getVisible	Gets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	getWeight	Gets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	getZIndex	Gets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	hasSubordinates	Checks whether there are any nodes attached to this item. (Inherited from DiagramItem.)
	hitTest	Returns the diagram item that contains the specified point. (Inherited from DiagramItem.)
	hitTestHandle	DiagramItem.hitTestHandle override. (Inherited from DiagramNode.)
	init	Returns a ShapeNodeBuilder object used to configure this ShapeNode instance. (Inherited from ShapeNode.)
	initSvg	Returns an **SvgNodeBuilder** object used to configure this **SvgNode** instance.
	labelFromPoint	Returns the label whose layout rectangle contains the specified point. (Inherited from DiagramNode.)
	moveTo	Moves a node to the specified location. (Inherited from DiagramNode.)
S	nodesIntersect	Determines whether two nodes intersect. (Inherited from DiagramNode.)
	onDragOut	Invoked when a diagram item is being dragged out of this node. (Inherited from DiagramNode.)
	onDragOver	Invoked when a diagram item is being dragged over this node. (Inherited from DiagramNode.)
	onDropOver	Invoked when a diagram item is dropped over this node. (Inherited from DiagramNode.)
	query	Returns the items that can be reached from this item by following the path specified in the given query expression. (Inherited from DiagramItem.)
	readExternal	Deserializes the object from the specified reader.
	removeLabel	Removes the specified label from this node. (Inherited from DiagramNode.)
	renderText	(Inherited from ShapeNode.)
	resize	Sets the size of a node. (Inherited from DiagramNode.)
	resizeToFitImage	Resizes a node so that it will be as big as the image displayed in the node. (Inherited from ShapeNode.)
	resizeToFitText	Makes a node big enough to display its text without clipping. (Inherited from ShapeNode.)
	setAllowFlip	Sets a value indicating whether the node's shape flips when an edge is dragged over its opposite edge. (Inherited from ShapeNode.)

	setAllowIncomingLinks	Sets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	setAllowOutgoingLinks	Sets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	setAnchorPattern	Sets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)
	setBounds	Overloaded. (Inherited from DiagramNode.)
	setBoundsDirect	For internal use. (Inherited from DiagramNode.)
	setBrush	Sets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	setConstraints	Sets constraints to the node size and movement direction. The constraints are applied when a user modifies the node interactively. They are not checked when the position of a node is set programmatically. (Inherited from DiagramNode.)
	setContent	Sets an **SvgContent** instance representing the SVG drawing rendered in this node.
	setContentAlign	Sets the alignment of the **SvgContent** displayed in this node.
	setCustomDraw	Sets a value indicating what type of custom drawing to perform on a node. (Inherited from ShapeNode.)
	setEditedText	Implements InplaceEditable.setEditedText. Assigns the edited text to this node after in-place edit operation completes successfully. (Inherited from ShapeNode.)
	setEnabledHandles	Sets a combination of **NodeHandleType** members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	setEnableStyledText	Sets a value indicating whether the text of a node contains formatting tags which should be processed by JDiagram. (Inherited from ShapeNode.)
	setExpandable	Sets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	setExpanded	Expands or collapses the tree branch that starts from a node. (Inherited from DiagramNode.)
	setExpandedFlag	Changes the "expanded" flag without actually expanding or collapsing the tree branch that starts from a node. (Inherited from DiagramNode.)
	setFlipX	Sets a value indicating whether the node's shape is flipped horizontally. (Inherited from ShapeNode.)
	setFlipY	Sets a value indicating whether the node's shape is flipped vertically. (Inherited from ShapeNode.)

	setFont	Sets the font used to draw the text label of a node. (Inherited from ShapeNode.)
	setHandlesStyle	Sets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	setHyperLink	Sets the hyperlink associated with an item. (Inherited from DiagramItem.)
	setId	Assigns user-defined identifier to this item. (Inherited from DiagramItem.)
	setIgnoreLayout	Sets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	setImage	Sets the image that should be displayed inside the node. (Inherited from ShapeNode.)
	setImageAlign	Sets the alignment of the node's image. (Inherited from ShapeNode.)
	setImagePadding	Sets the padding distance between node's borders and **Image**. (Inherited from ShapeNode.)
	setImageUrl	Sets a URL used to load an image into this cell. (Inherited from ShapeNode.)
	setLayerIndex	Sets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	setLocked	Sets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	setObstacle	Sets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	setOpacity	Sets the opacity of this item. (Inherited from DiagramItem.)
	setPen	Sets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	setPrintable	Sets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	setRotateImage	Sets a value indicating whether the image displayed inside a node should rotate together with the node. (Inherited from ShapeNode.)
	setRotateText	Sets a value indicating whether the text displayed inside a node should rotate together with the node. (Inherited from ShapeNode.)
	setRotationAngle	Sets the rotation angle of a node. (Inherited from DiagramNode.)
	setSelected	Selects or deselects an item. (Inherited from DiagramItem.)
	setShadowBrush	Sets the brush used to paint the item's shadow. (Inherited from DiagramItem.)

	setShadowOffsetX	Sets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShadowOffsetY	Sets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShape	Sets the shape of a node to the specified Shape instance. The initial shape of a node is the one set by the setDefaultShape method. (Inherited from ShapeNode.)
	setShapeOrientation	Sets an orientation angle applied to the shape definition before the shape points are mapped to the node's bounding rectangle. (Inherited from ShapeNode.)
	setStyle	Sets the style associated with the item. (Inherited from DiagramItem.)
	setSvgUrl	Sets a URL used to load an SVG file into this node.
	setTag	Assigns user-defined data to an item. If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event. (Inherited from DiagramItem.)
	setText	Sets the text label displayed inside this node. (Inherited from ShapeNode.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	setTextFormat	Sets a **TextFormat** object specifying how to format and align the text of this node. (Inherited from ShapeNode.)
	setTextPadding	Sets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	setToolTip	Sets the tooltip text that should be displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	setTransparent	Sets a value indicating whether only the text and image of a node should be drawn on the screen. (Inherited from ShapeNode.)
	setVisible	Sets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	setWeight	Sets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	setZIndex	Sets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	with	Returns a ShapeNodeBuilder object used to configure and create new ShapeNode instances. (Inherited from ShapeNode.)
	withSvg	Returns an **SvgNodeBuilder** object used to configure and create new **SvgNode** instances.
	writeExternal	Serializes the object to the specified writer.

	zBottom	Moves an item to the bottom of the Z order. (Inherited from DiagramItem.)
	zLevelDown	Moves an item down in the Z order. (Inherited from DiagramItem.)
	zLevelUp	Moves an item up in the Z order. (Inherited from DiagramItem.)
	zTop	Moves an item to the top of the Z order. (Inherited from DiagramItem.)

Protected Methods

	Name	Description
	allowCreate	DiagramItem.allowCreate override. (Inherited from DiagramNode.)
	allowModify	(Inherited from DiagramNode.)
	allowModifyImpl	(Inherited from DiagramNode.)
	cancelModify	(Inherited from ShapeNode.)
	completeCreate	DiagramItem.completeCreate override. (Inherited from DiagramNode.)
	completeModify	(Inherited from DiagramNode.)
	constraintsInfringed	(Inherited from DiagramNode.)
	createConnectionPoint	(Inherited from ShapeNode.)
	createProperties	DiagramItem.createProperties override.
	createState	(Inherited from ShapeNode.)
	draw	DiagramItem.draw override. (Inherited from DiagramNode.)
	drawLocal	DiagramNode.drawLocal override. (Inherited from ShapeNode.)
	drawShadow	DiagramItem.drawShadow override. (Inherited from DiagramNode.)
	drawShadowLocal	DiagramNode.drawShadowLocal override. (Inherited from ShapeNode.)
	getImageRect	(Inherited from ShapeNode.)
	getLocalBounds	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getLocalBoundsD	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getMeasureUnit	(Inherited from DiagramItem.)
	getRepaintRect	DiagramItem.getRepaintRect override. (Inherited from ShapeNode.)

	getValue	Gets the effective value of the style property with the specified name. (Inherited from DiagramItem.)
	groupContains	(Inherited from DiagramNode.)
	loadFromJson	Loads the node from a JSON object.
	loadFromXml	Loads the node's content from an XML element.
	move	(Inherited from DiagramNode.)
	onAdd	DiagramItem.onAdd override. (Inherited from ShapeNode.)
	onChangeFont	(Inherited from DiagramItem.)
	onChangeTextPadding	Called when the value of **TextPadding** changes. (Inherited from ShapeNode.)
	onChildModified	Called when a group child node has been modified. Override this method if you need to know when a node from the **SubordinateGroup** is modified. (Inherited from DiagramItem.)
	onClick	Invoked when the user clicks this item. (Inherited from DiagramItem.)
	onDoubleClick	Invoked when the user double-clicks this item. (Inherited from DiagramItem.)
	onLoad	DiagramItem.onLoad override. (Inherited from ShapeNode.)
	onMeasureUnitChanged	Called when the diagram's MeasureUnit changes. (Inherited from DiagramItem.)
	onModify	Called when an item is modified (Inherited from DiagramNode.)
	onRemove	Called when an item is removed from a Diagram, either by the user, programmatically or by undo / redo. (Inherited from DiagramNode.)
	onRotationAngleChanged	DiagramNode.onRotationAngleChanged override. (Inherited from ShapeNode.)
	onStyleChanged	Invoked when the associated style or theme have changed. (Inherited from DiagramItem.)
	onStyleFontChanged	DiagramItem.onStyleFontChanged override. (Inherited from ShapeNode.)
	onUpdateBounds	(Inherited from ShapeNode.)
	parentConstraintsInfringed	(Inherited from DiagramNode.)
	putExpandable	(Inherited from DiagramNode.)
	putSelected	(Inherited from DiagramItem.)
	rectFromPoints	(Inherited from DiagramNode.)
	repaint	Overloaded. (Inherited from DiagramItem.)
	resizeToFitImage	(Inherited from DiagramNode.)
	restoreProperties	DiagramNode.restoreProperties override.

	restoreState	(Inherited from ShapeNode.)
	saveProperties	DiagramNode.saveProperties override.
	saveState	(Inherited from ShapeNode.)
	saveToJson	Saves the node as a JSON object.
	saveToXml	Saves the node's content into an XML element.
	scaleElements	Scales the node's elements by specified amount. (Inherited from DiagramNode.)
	setDiagramDirty	Marks the diagram as changed. (Inherited from DiagramItem.)
	setReflexive	Invoked to let a node set the shape of a reflexive link connected to it. (Inherited from DiagramNode.)
	shouldRender	Determines whether the item is rendered in the current context. (Inherited from DiagramItem.)
	shouldRenderAnchors	Determines whether the node should render its anchor points. (Inherited from DiagramNode.)
	startCreate	DiagramItem.startCreate override. (Inherited from DiagramNode.)
	startModify	DiagramItem.startModify override. Invoked when the user starts modifying this node interactively. (Inherited from DiagramNode.)
	updateCreate	DiagramItem.updateCreate override. (Inherited from DiagramNode.)
	updateLinkPositions	(Inherited from DiagramNode.)
	updateModify	(Inherited from ShapeNode.)

See Also

SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode Constructor

Overload List

Name	Description
SvgNode ()	Initializes a new instance of the SvgNode class.
SvgNode (Diagram)	Initializes a new instance of the **SvgNode** class with default values supplied form the specified Diagram.
SvgNode (SvgNode)	Initializes a new instance of the **SvgNode** class using the specified node as a prototype.

See Also

SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode Constructor ()

Initializes a new instance of the SvgNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgNode ()
```

See Also

SvgNode Constructor Overload List
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode Constructor (Diagram)

Initializes a new instance of the SvgNode class with default values supplied form the specified Diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgNode (
    Diagram parent
)
```

Parameters

parent
The Diagram from which to obtain default values for the node properties.

See Also

SvgNode Constructor Overload List
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode Constructor (SvgNode)

Initializes a new instance of the SvgNode class using the specified node as a prototype.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgNode (
    SvgNode prototype
)
```

Parameters

prototype
The node to use as a prototype. The properties of the new node are initialized from the property values of this node

See Also

SvgNode Constructor Overload List
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode Methods

SvgNode.createProperties Method

DiagramItem.createProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramItemProperties createProperties ()
```

Return Value

An SvgNodeProperties object containing a snapshot of the node's properties.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode.getContent Method

Gets an SvgContent instance representing the SVG drawing rendered in this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgContent getContent ()
```

Return Value

An instance of the com.mindfusion.svg.SvgContent class representing the SVG drawing.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode.getContentAlign Method

Gets the alignment of the SvgContent displayed in this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ImageAlign getContentAlign ()
```

Return Value

A member of the ImageAlign enumeration. The default is **Fit**.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode.getSvgUrl Method

Gets a URL used to load an SVG file into this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getSvgUrl ()
```

Return Value

A String containing file path.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode.initSvg Method

Returns an **SvgNodeBuilder** object used to configure this SvgNode instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgNodeBuilder initSvg ()
```

Return Value

An **SvgNodeBuilder** instance.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode.loadFromJson Method

Loads the node from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj

A JsonObject containing the node's data.

context

A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode.loadFromXml Method

Loads the node's content from an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

An Element containing the item's data.

context

An XmlPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode.readExternal Method

Deserializes the object from the specified reader.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public void readExternal (
    ObjectInput in
)
```

Parameters

in

A BinaryReader object from which to read the item's data.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode.restoreProperties Method

DiagramNode.restoreProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void restoreProperties (
    DiagramItemProperties props
)
```

Parameters

props
A DiagramItemProperties-derived object containing a snapshot of the item's properties.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode.saveProperties Method

DiagramNode.saveProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void saveProperties (
    DiagramItemProperties props
)
```

Parameters

props
A DiagramItemProperties-derived object where the item's properties should be saved.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode.saveToJson Method

Saves the node as a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject instance to contain the serialized data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode.saveToXml Method

Saves the node's content into an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An Element the item's data should be stored into.

context
An XmlPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode.setContent Method

Sets an SvgContent instance representing the SVG drawing rendered in this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setContent (
    SvgContent value
)
```

Parameters

value
An instance of the com.mindfusion.svg.SvgContent class representing the SVG drawing.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode.setContentAlign Method

Sets the alignment of the SvgContent displayed in this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setContentAlign (
    ImageAlign value
)
```

Parameters

value
A member of the ImageAlign enumeration.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode.setSvgUrl Method

Sets a URL used to load an SVG file into this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSvgUrl (
    String value
)
```

Parameters

value
A String containing file path.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode.withSvg Method

Returns an **SvgNodeBuilder** object used to configure and create new SvgNode instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static SvgNodeBuilder withSvg ()
```

Return Value

An **SvgNodeBuilder** instance.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNode.writeExternal Method

Serializes the object to the specified writer.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out
A BinaryWriter object the item's data should be written to.

See Also

SvgNode Members
SvgNode Class
com.mindfusion.diagramming Namespace

SvgNodeProperties Class

Stores the values of SvgNode properties during undo / redo operations. If you need to implement undo support for the additional properties defined by a class derived from **SvgNode**, do so by deriving from **SvgNodeProperties** and overriding the saveProperties, restoreProperties, and createProperties methods.

Syntax

Java

```
public class SvgNodeProperties
    extends ShapeNodeProperties
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItemProperties
    com.mindfusion.diagramming.DiagramNodeProperties
      com.mindfusion.diagramming.ShapeNodeProperties
        com.mindfusion.diagramming.SvgNodeProperties

See Also

SvgNodeProperties Members
com.mindfusion.diagramming Namespace

SvgNodeProperties Members

Stores the values of SvgNode properties during undo / redo operations. If you need to implement undo support for the additional properties defined by a class derived from **SvgNode**, do so by deriving from SvgNodeProperties and overriding the saveProperties, restoreProperties, and createProperties methods.

The following tables list the members exposed by the **SvgNodeProperties** type.

Public Constructors

	Name	Description
	SvgNodeProperties	

Public Fields

	Name	Description
	textPadding	(Inherited from DiagramItemProperties.)

See Also

SvgNodeProperties Class
com.mindfusion.diagramming Namespace

SvgNodeProperties Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgNodeProperties ()
```

See Also

SvgNodeProperties Class
com.mindfusion.diagramming Namespace

SvgNodeStyle Class

Represents a reusable set of properties that define the appearance of SVG nodes.

Syntax

Java

```
public class SvgNodeStyle
    extends DiagramNodeStyle
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Style
    com.mindfusion.diagramming.DiagramItemStyle
      com.mindfusion.diagramming.DiagramNodeStyle
        com.mindfusion.diagramming.SvgNodeStyle

See Also

SvgNodeStyle Members
com.mindfusion.diagramming Namespace

SvgNodeStyle Members

Represents a reusable set of properties that define the appearance of SVG nodes.

The following tables list the members exposed by the SvgNodeStyle type.

Public Constructors

	Name	Description

	SvgNodeStyle	Initializes a new instance of the SvgNodeStyle class.

Public Methods

	Name	Description
	addPropertyChangeListener	(Inherited from Style.)
	getBrush	Gets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	getEffects	Gets a list of the effects applied to the node. (Inherited from DiagramNodeStyle.)
	getFontFamily	Gets the font family of the item text. (Inherited from DiagramItemStyle.)
	getFontSize	Gets the font size of the item text. (Inherited from DiagramItemStyle.)
	getFontStyle	Gets the font style of the item text. (Inherited from DiagramItemStyle.)
	getFontUnit	Gets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	getShadowBrush	Gets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	getStroke	Gets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	getStrokeThickness	Gets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
	init	Returns a SvgNodeStyleBuilder object used to configure this SvgNodeStyle instance.
	readExternal	**Externalizable.readExternal** implementation. (Inherited from Style.)
S	registerType	Associates a type with an alias. The alias is used when saving and loading objects of the specified type during style serialization and deserialization. (Inherited from Style.)
	removePropertyChangeListener	(Inherited from Style.)
	setBrush	Sets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	setFontFamily	Sets the font family of the item text. (Inherited from DiagramItemStyle.)
	setFontSize	Sets the font size of the item text. (Inherited from DiagramItemStyle.)
	setFontStyle	Sets the font style of the item text. (Inherited from DiagramItemStyle.)

	setFontUnit	Sets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	setShadowBrush	Sets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	setStroke	Sets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	setStrokeThickness	Sets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
S	with	Returns a SvgNodeStyleBuilder object used to configure and create new SvgNodeStyle instances.
	writeExternal	**Externalizable.writeExternal** implementation. (Inherited from Style.)

Protected Methods

	Name	Description
	getValue	Gets the value of the specified property. (Inherited from Style.)
	isPropertySet	Checks whether the specified property has a value. (Inherited from Style.)
	loadFromJson	Loads the style content from a JsonObject. (Inherited from DiagramNodeStyle.)
	loadFromXml	Loads the style content from an XML element. (Inherited from Style.)
	registerProperty	Registers a new property with the specified name and type. (Inherited from Style.)
	saveToJson	Saves the style content into a JsonObject. (Inherited from DiagramNodeStyle.)
	saveToXml	Saves the style content into an XML element. (Inherited from Style.)
	setValue	Sets the value of the specified property. (Inherited from Style.)
	unsetValue	Clears the value of the specified property. (Inherited from Style.)

See Also

SvgNodeStyle Class
com.mindfusion.diagramming Namespace

SvgNodeStyle Constructor

Initializes a new instance of the SvgNodeStyle class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public SvgNodeStyle ()
```

See Also

SvgNodeStyle Class
com.mindfusion.diagramming Namespace

SvgNodeStyle Methods

SvgNodeStyle.init Method

Returns a SvgNodeStyleBuilder object used to configure this SvgNodeStyle instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public SvgNodeStyleBuilder init ()
```

Return Value

A **SvgNodeStyleBuilder** instance.

See Also

SvgNodeStyle Members
SvgNodeStyle Class
com.mindfusion.diagramming Namespace

SvgNodeStyle.with Method

Returns a SvgNodeStyleBuilder object used to configure and create new SvgNodeStyle instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static SvgNodeStyleBuilder with ()
```

Return Value

A **SvgNodeStyleBuilder** instance.

See Also

SvgNodeStyle Members
SvgNodeStyle Class
com.mindfusion.diagramming Namespace

SwimlaneGrid Interface

Represents an object which can be used by a SwimlaneLayout to adjust the corresponding swimlane grid.

Syntax

Java
`public interface SwimlaneGrid`

Inheritors

com.mindfusion.diagramming.LaneGrid

See Also

SwimlaneGrid Members
com.mindfusion.diagramming Namespace

SwimlaneGrid Members

Represents an object which can be used by a SwimlaneLayout to adjust the corresponding swimlane grid.

The following tables list the members exposed by the SwimlaneGrid type.

Public Methods

	Name	Description
	getColumnCount	Gets the number of columns in the grid.
	getColumnWidth	Gets the the width of the specified column in the swimlane grid.
	getRowCount	Gets the number of rows in the swimlane grid.
	getRowHeight	Gets the the height of the specified row in the swimlane grid.
	setColumnCount	Sets the number of columns in the swimlane grid.
	setColumnWidth	Sets the the width of the specified column in the swimlane grid.
	setLeftMargin	Sets the left margin of the swimlane grid.
	setRowCount	Sets the number of rows in the swimlane grid.

	setRowHeight	Sets the the height of the specified row in the swimlane grid.
	setTopMargin	Sets the top margin of the swimlane grid.

See Also

SwimlaneGrid Interface
com.mindfusion.diagramming Namespace

SwimlaneGrid Methods

SwimlaneGrid.getColumnCount Method

Gets the number of columns in the grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
int getColumnCount ()
```

Return Value

The number of columns in the grid.

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming Namespace

SwimlaneGrid.getColumnWidth Method

Gets the the width of the specified column in the swimlane grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
float getColumnWidth (
    int index
)
```

Parameters

index
The zero-based index of the column.

Return Value

The width of the column.

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming Namespace

SwimlaneGrid.getRowCount Method

Gets the number of rows in the swimlane grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
int getRowCount ()
```

Return Value

The number of rows in the grid.

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming Namespace

SwimlaneGrid.getRowHeight Method

Gets the the height of the specified row in the swimlane grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
float getRowHeight (
    int index
)
```

Parameters

index
The zero-based index of the row.

Return Value

The height of the row.

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming Namespace

SwimlaneGrid.setColumnCount Method

Sets the number of columns in the swimlane grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void setColumnCount (
    int value
)
```

Parameters

value
A non-negative integer value specifying the number of columns.

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming Namespace

SwimlaneGrid.setColumnWidth Method

Sets the the width of the specified column in the swimlane grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void setColumnWidth (
    int index,
    float value
)
```

Parameters

index
The zero-based index of the column.

value
The new width of the column.

See Also

SwimlaneGrid Members
SwimlaneGrid Interface

SwimlaneGrid.setLeftMargin Method

Sets the left margin of the swimlane grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void setLeftMargin (
    float value
)
```

Parameters

value
The distance between the left side of the grid and the diagram bounds.

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming Namespace

SwimlaneGrid.setRowCount Method

Sets the number of rows in the swimlane grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void setRowCount (
    int value
)
```

Parameters

value
A non-negative integer value specifying the number of rows.

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming Namespace

SwimlaneGrid.setRowHeight Method

Sets the the height of the specified row in the swimlane grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void setRowHeight (
    int index,
    float value
)
```

Parameters

index
The zero-based index of the row.

value
The new height of the row.

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming Namespace

SwimlaneGrid.setTopMargin Method

Sets the top margin of the swimlane grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void setTopMargin (
    float value
)
```

Parameters

value
The distance between the top side of the grid and the diagram bounds.

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming Namespace

SwimlaneLayout Class

Implements an algorithm which arranges nodes in lanes.

Syntax

Java
`public class SwimlaneLayout extends AbstractLayout`

Remarks

This layout algorithm can be used to arrange process diagrams in which nodes representing activities are placed in swimlanes representing resources. The index of the resource allocated to an activity should be assigned to the corresponding node's LayoutTraits via the SwimlaneLayoutTraits.Lane key.

By default, the algorithm works with the diagram's LaneGrid, but its SwimlaneGrid property can be set to any class that implements the SwimlaneGrid interface. This allows applying the layout to a custom-drawn grid rendered through the drawBackground event, or one composed of locked background nodes.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AbstractLayout
    com.mindfusion.diagramming.SwimlaneLayout

See Also

SwimlaneLayout Members
com.mindfusion.diagramming Namespace

SwimlaneLayout Members

Implements an algorithm which arranges nodes in lanes.

The following tables list the members exposed by the SwimlaneLayout type.

Public Constructors

	Name	Description
	SwimlaneLayout	Initializes a new instance of the **SwimlaneLayout** class with the default settings.

Public Methods

	Name	Description
	arrange	Applies the layout on the specified subset of items from the specified Diagram instance.
	getAnchoring	Gets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	getCollapseEmptyLanes	Get or sets a value indicating whether lanes without associated nodes will shrink to zero size. By default, empty

		lanes will have size equal to the value specified through setLaneDistance.
	getCompactNodes	Gets a value indicating whether the nodes within individual lanes are compacted.
	getDirection	Gets the direction of the arranged diagram.
	getGrowToFit	Gets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	getKeepGroupLayout	Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	getKeepLaneSizes	Gets a value indicating whether the layout will attempt to preserve the original sizes of the lanes in the supplied grid.
	getLaneDistance	Gets the spacing between adjacent lanes in the final layout.
	getLayoutLink	Gets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	getLayoutNode	Gets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	getMultipleGraphsPlacement	Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	getNodeDistance	Gets the spacing between adjacent nodes within a lane in the final layout.
	getOrientation	Gets a the orientation of the arranged graph.
	getProgress	Gets the progress callback delegate. (Inherited from AbstractLayout.)
	getSwimlaneGrid	Gets the object through which the layout can manipulate the swimlane grid.
	init	Returns a SwimlaneLayoutBuilder object used to configure this SwimlaneLayout instance.
S	removeMidleSegmentPoint	(Inherited from AbstractLayout.)
	setAnchoring	Sets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	setCollapseEmptyLanes	Set or sets a value indicating whether lanes without associated nodes will shrink to zero size. By default, empty lanes will have size equal to the value specified through **setLaneDistance**. To be able to shrink the lanes of a lane grid to zero size, the MinHeaderSize property of the lane grid must be set to an appropriate value.
	setCompactNodes	Sets a value indicating whether the nodes within individual lanes are compacted.

	setDirection	Sets the direction of the arranged diagram. If the orientation is set to com.mindfusion.diagramming.jlayout.Orientation.Horizontal, com.mindfusion.diagramming.jlayout.Direction.Straight stands for "left to right" and com.mindfusion.diagramming.jlayout.Direction.Reversed for "right to left". If the orientation is set to com.mindfusion.diagramming.jlayout.Orientation.Vertical, com.mindfusion.diagramming.jlayout.Direction.Straight stands for "top to bottom" and com.mindfusion.diagramming.jlayout.Direction.Reversed for "bottom to top".
	setGrowToFit	Sets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	setKeepGroupLayout	Sets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	setKeepLaneSizes	Sets a value indicating whether the layout will attempt to preserve the original sizes of the lanes in the supplied grid.
	setLaneDistance	Sets the spacing between adjacent lanes in the final layout.
	setLayoutLink	Sets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	setLayoutNode	Sets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	setMultipleGraphsPlacement	Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	setNodeDistance	Sets the spacing between adjacent nodes within a lane in the final layout.
	setOrientation	Sets a the orientation of the arranged graph.
	setProgress	Sets the progress callback delegate. (Inherited from AbstractLayout.)
	setSwimlaneGrid	Sets the object through which the layout can manipulate the swimlane grid. If this is null at the time of layout, the layout will operate on the diagram's lane grid.
S	with	Returns a SwimlaneLayoutBuilder object used to configure and create new SwimlaneLayout instances.

See Also

SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout Constructor

Initializes a new instance of the SwimlaneLayout class with the default settings.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SwimlaneLayout ()
```

See Also

SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout Methods

SwimlaneLayout.arrange Method

Applies the layout on the specified subset of items from the specified Diagram instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram diagram,
    DiagramItemList items
)
```

Parameters

diagram
The Diagram that should be arranged.

items
A collection of nodes and links from diagram that define the subgraph to arrange.

Return Value

This method always returns true.

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.getCollapseEmptyLanes Method

Get or sets a value indicating whether lanes without associated nodes will shrink to zero size. By default, empty lanes will have size equal to the value specified through setLaneDistance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public boolean getCollapseEmptyLanes ()`

Return Value

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.getCompactNodes Method

Gets a value indicating whether the nodes within individual lanes are compacted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public boolean getCompactNodes ()`

Return Value

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.getDirection Method

Gets the direction of the arranged diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Direction getDirection ()`

Return Value

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.getKeepLaneSizes Method

Gets a value indicating whether the layout will attempt to preserve the original sizes of the lanes in the supplied grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getKeepLaneSizes ()
```

Return Value

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.getLaneDistance Method

Gets the spacing between adjacent lanes in the final layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getLaneDistance ()
```

Return Value

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.getNodeDistance Method

Gets the spacing between adjacent nodes within a lane in the final layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public float getNodeDistance ()`

Return Value

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.getOrientation Method

Gets a the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Orientation getOrientation ()`

Return Value

A member of the Orientation enumeration.

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.getSwimlaneGrid Method

Gets the object through which the layout can manipulate the swimlane grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public SwimlaneGrid getSwimlaneGrid ()`

Return Value

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.init Method

Returns a SwimlaneLayoutBuilder object used to configure this SwimlaneLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SwimlaneLayoutBuilder init ()
```

Return Value

A **SwimlaneLayoutBuilder** instance.

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.setCollapseEmptyLanes Method

Set or sets a value indicating whether lanes without associated nodes will shrink to zero size. By default, empty lanes will have size equal to the value specified through setLaneDistance. To be able to shrink the lanes of a lane grid to zero size, the MinHeaderSize property of the lane grid must be set to an appropriate value.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCollapseEmptyLanes (
    boolean value
)
```

Parameters

value

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.setCompactNodes Method

Sets a value indicating whether the nodes within individual lanes are compacted.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCompactNodes (
    boolean value
)
```

Parameters

value

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.setDirection Method

Sets the direction of the arranged diagram. If the orientation is set to com.mindfusion.diagramming.jlayout.Orientation.Horizontal, com.mindfusion.diagramming.jlayout.Direction.Straight stands for "left to right" and com.mindfusion.diagramming.jlayout.Direction.Reversed for "right to left". If the orientation is set to com.mindfusion.diagramming.jlayout.Orientation.Vertical, com.mindfusion.diagramming.jlayout.Direction.Straight stands for "top to bottom" and com.mindfusion.diagramming.jlayout.Direction.Reversed for "bottom to top".

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDirection (
    Direction value
)
```

Parameters

value

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.setKeepLaneSizes Method

Sets a value indicating whether the layout will attempt to preserve the original sizes of the lanes in the supplied grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setKeepLaneSizes (
    boolean value
)
```

Parameters

value

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.setLaneDistance Method

Sets the spacing between adjacent lanes in the final layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLaneDistance (
    float value
)
```

Parameters

value

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.setNodeDistance Method

Sets the spacing between adjacent nodes within a lane in the final layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setNodeDistance (
    float value
)
```

Parameters

value

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.setOrientation Method

Sets a the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value
A member of the Orientation enumeration.

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.setSwimlaneGrid Method

Sets the object through which the layout can manipulate the swimlane grid. If this is null at the time of layout, the layout will operate on the diagram's lane grid.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSwimlaneGrid (
    SwimlaneGrid value
)
```

Parameters

value

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

SwimlaneLayout.with Method

Returns a SwimlaneLayoutBuilder object used to configure and create new SwimlaneLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static SwimlaneLayoutBuilder with ()
```

Return Value

A **SwimlaneLayoutBuilder** instance.

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming Namespace

TabbedScrollPane Class

Represents a DiagramView that can display DiagramDocument objects. The individual diagram pages can be activated through the tabs in the tray located at one of the view sides.

Syntax

Java

```
public class TabbedScrollPane extends JComponent implements LayoutManager
```

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        com.mindfusion.diagramming.TabbedScrollPane

See Also

TabbedScrollPane Members
com.mindfusion.diagramming Namespace

TabbedScrollPane Members

Represents a DiagramView that can display DiagramDocument objects. The individual diagram pages can be activated through the tabs in the tray located at one of the view sides.

The following tables list the members exposed by the TabbedScrollPane type.

Public Constructors

	Name	Description
	TabbedScrollPane	Overloaded.

Public Methods

	Name	Description
	addLayoutComponent	LayoutManager.addLayoutComponent implementation.
	addTabbedScrollPaneListener	Registers {@code listener} so that it will receive view events.
	getAllowTabReorder	Gets a value indicating whether tabs can be rearranged interactively.
	getCurrentPage	Gets the currently active page.
	getDiagramView	Gets a reference to the underlying diagram view.
	getDocument	Gets the displayed diagram document.
	getDocumentView	Gets the underlying document view.
	getShowCreateNewTab	Gets a value indicating whether to display the 'Create New Tab' button.
	getShowTabCloseButtons	Gets a value indicating whether to display a close button for each tab.
	getShowTabNavigationButtons	Gets a value indicating whether the tab navigation buttons.
	getShowTabs	Gets a value indicating whether the tabs are visible.
	getTabAlignment	Gets the tabs alignment.
	layoutContainer	LayoutManager.layoutContainer implementation.
	minimumLayoutSize	LayoutManager.minimumLayoutSize implementation.
	preferredLayoutSize	LayoutManager.preferredLayoutSize implementation.
	removeLayoutComponent	LayoutManager.removeLayoutComponent implementation.
	removeTabbedScrollPaneListener	Unregisters {@code listener} so that it will no longer receive view events.

	setAllowTabReorder	Sets a value indicating whether tabs can be rearranged interactively.
	setCurrentPage	Sets the currently active page.
	setDocument	Sets the displayed diagram document.
	setDocumentView	Sets the underlying document view.
	setShowCreateNewTab	Sets a value indicating whether to display the 'Create New Tab' button.
	setShowTabCloseButtons	Sets a value indicating whether to display a close button for each tab.
	setShowTabNavigationButtons	Sets a value indicating whether the tab navigation buttons.
	setShowTabs	Sets a value indicating whether the tabs are visible.
	setTabAlignment	Sets the tabs alignment.

See Also

TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane Constructor

Overload List

Name	Description
TabbedScrollPane ()	Initializes a new instance of the TabbedScrollPane class.
TabbedScrollPane (DocumentView)	Initializes a new instance of the **TabbedScrollPane** class with the specified DocumentView as a view.

See Also

TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane Constructor ()

Initializes a new instance of the TabbedScrollPane class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public TabbedScrollPane ()`

See Also

TabbedScrollPane Constructor Overload List
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane Constructor (DocumentView)

Initializes a new instance of the TabbedScrollPane class with the specified DocumentView as a view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TabbedScrollPane (
    DocumentView view
)
```

Parameters

view

See Also

TabbedScrollPane Constructor Overload List
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane Methods

TabbedScrollPane.addLayoutComponent Method

LayoutManager.addLayoutComponent implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addLayoutComponent (
    String name,
    Component comp
)
```

Parameters

name

comp

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.addTabbedScrollPaneListener Method

Registers {@code listener} so that it will receive view events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addTabbedScrollPaneListener (
    TabbedScrollPaneListener listener
)
```

Parameters

listener
An object implementing the TabbedScrollPaneListener interface.

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.getAllowTabReorder Method

Gets a value indicating whether tabs can be rearranged interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowTabReorder ()
```

Return Value

true to allow interactive tab reordering; otherwise, **false**.

Remarks

Moving a tab also changes the position of its associated DiagramPage within the document's Pages collection.

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.getCurrentPage Method

Gets the currently active page.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramPage getCurrentPage ()
```

Return Value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.getDiagramView Method

Gets a reference to the underlying diagram view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramView getDiagramView ()
```

Return Value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.getDocument Method

Gets the displayed diagram document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramDocument getDocument ()
```

Return Value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.getDocumentView Method

Gets the underlying document view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DocumentView getDocumentView ()
```

Return Value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.getShowCreateNewTab Method

Gets a value indicating whether to display the 'Create New Tab' button.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getShowCreateNewTab ()
```

Return Value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.getShowTabCloseButtons Method

Gets a value indicating whether to display a close button for each tab.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getShowTabCloseButtons ()
```

Return Value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.getShowTabNavigationButtons Method

Gets a value indicating whether the tab navigation buttons.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getShowTabNavigationButtons ()
```

Return Value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.getShowTabs Method

Gets a value indicating whether the tabs are visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getShowTabs ()
```

Return Value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.getTabAlignment Method

Gets the tabs alignment.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getTabAlignment ()
```

Return Value

One of the following constants of the **JTabbedPane** class:

- **JTabbedPane.TOP**
- **JTabbedPane.BOTTOM**
- **JTabbedPane.LEFT**
- **JTabbedPane.RIGHT**

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.layoutContainer Method

LayoutManager.layoutContainer implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void layoutContainer (
    Container parent
)
```

Parameters

parent

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.minimumLayoutSize Method

LayoutManager.minimumLayoutSize implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension minimumLayoutSize (
    Container parent
)
```

Parameters

parent

Return Value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.preferredLayoutSize Method

LayoutManager.preferredLayoutSize implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension preferredLayoutSize (
    Container parent
)
```

Parameters

parent

Return Value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.removeLayoutComponent Method

LayoutManager.removeLayoutComponent implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeLayoutComponent (
    Component comp
)
```

Parameters

comp

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.removeTabbedScrollPaneListener Method

Unregisters {@code listener} so that it will no longer receive view events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeTabbedScrollPaneListener (
    TabbedScrollPaneListener listener
)
```

Parameters

listener
An object implementing the TabbedScrollPaneListener interface.

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.setAllowTabReorder Method

Sets a value indicating whether tabs can be rearranged interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAllowTabReorder (
    boolean value
)
```

Parameters

value
true to allow interactive tab reordering; otherwise, **false**. The default is **false**.

Remarks

Moving a tab also changes the position of its associated DiagramPage within the document's Pages collection.

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.setCurrentPage Method

Sets the currently active page.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setCurrentPage (
    DiagramPage value
)
```

Parameters

value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.setDocument Method

Sets the displayed diagram document.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDocument (
    DiagramDocument value
)
```

Parameters

value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.setDocumentView Method

Sets the underlying document view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDocumentView (
    DocumentView value
)
```

Parameters

value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.setShowCreateNewTab Method

Sets a value indicating whether to display the 'Create New Tab' button.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShowCreateNewTab (
    boolean value
)
```

Parameters

value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.setShowTabCloseButtons Method

Sets a value indicating whether to display a close button for each tab.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShowTabCloseButtons (
    boolean value
)
```

Parameters

value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.setShowTabNavigationButtons Method

Sets a value indicating whether the tab navigation buttons.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShowTabNavigationButtons (
    boolean value
)
```

Parameters

value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.setShowTabs Method

Sets a value indicating whether the tabs are visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShowTabs (
    boolean value
)
```

Parameters

value

See Also

TabbedScrollPane Members
TabbedScrollPane Class
com.mindfusion.diagramming Namespace

TabbedScrollPane.setTabAlignment Method

Sets the tabs alignment.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTabAlignment (
    int value
)
```

Parameters

value

One of the following constants of the **JTabbedPane** class:

- **JTabbedPane.TOP**
- **JTabbedPane.BOTTOM**
- **JTabbedPane.LEFT**
- **JTabbedPane.RIGHT**

See Also

TabbedScrollPane Members
TabbedScrollPane Class

TabbedScrollPaneAdapter Class

Provides empty implementations for the methods defined in the TabbedScrollPaneListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of TabbedScrollPaneListener.

Syntax

Java
`public class TabbedScrollPaneAdapter implements TabbedScrollPaneListener`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.TabbedScrollPaneAdapter

See Also

TabbedScrollPaneAdapter Members
com.mindfusion.diagramming Namespace

TabbedScrollPaneAdapter Members

Provides empty implementations for the methods defined in the TabbedScrollPaneListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of TabbedScrollPaneListener.

The following tables list the members exposed by the TabbedScrollPaneAdapter type.

Public Constructors

	Name	Description
	TabbedScrollPaneAdapter	

Public Methods

	Name	Description
	currentPageChanged	Raised when the currently active page is changed.
	pageAdded	Raised when a new page is added to the pane interactively.
	pageRemoved	Raised when a page is removed interactively.
	pageRemoving	Raised when a page is about to be removed interactively.

See Also

TabbedScrollPaneAdapter Class
com.mindfusion.diagramming Namespace

TabbedScrollPaneAdapter Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TabbedScrollPaneAdapter ()
```

See Also

TabbedScrollPaneAdapter Class
com.mindfusion.diagramming Namespace

TabbedScrollPaneAdapter Methods

TabbedScrollPaneAdapter.currentPageChanged Method

Raised when the currently active page is changed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void currentPageChanged (
    EventObject e
)
```

Parameters

e

See Also

TabbedScrollPaneAdapter Members
TabbedScrollPaneAdapter Class
com.mindfusion.diagramming Namespace

TabbedScrollPaneAdapter.pageAdded Method

Raised when a new page is added to the pane interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void pageAdded (
    DiagramPageEvent e
```

```
)
```

Parameters

e

See Also

TabbedScrollPaneAdapter Members
TabbedScrollPaneAdapter Class
com.mindfusion.diagramming Namespace

TabbedScrollPaneAdapter.pageRemoved Method

Raised when a page is removed interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void pageRemoved (
    DiagramPageEvent e
)
```

Parameters

e

See Also

TabbedScrollPaneAdapter Members
TabbedScrollPaneAdapter Class
com.mindfusion.diagramming Namespace

TabbedScrollPaneAdapter.pageRemoving Method

Raised when a page is about to be removed interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void pageRemoving (
    DiagramPageValidationEvent e
)
```

Parameters

e

See Also

TabbedScrollPaneAdapter Members
TabbedScrollPaneAdapter Class
com.mindfusion.diagramming Namespace

TabbedScrollPaneListener Interface

Defines the events that can be raised by TabbedScrollPane.

Syntax

Java

```
public interface TabbedScrollPaneListener extends EventListener
```

Inheritors

com.mindfusion.diagramming.TabbedScrollPaneAdapter

See Also

TabbedScrollPaneListener Members
com.mindfusion.diagramming Namespace

TabbedScrollPaneListener Members

Defines the events that can be raised by TabbedScrollPane.

The following tables list the members exposed by the TabbedScrollPaneListener type.

Public Methods

	Name	Description
	currentPageChanged	Raised when the currently active page is changed.
	pageAdded	Raised when a new page is added to the pane interactively.
	pageRemoved	Raised when a page is removed interactively.
	pageRemoving	Raised when a page is about to be removed interactively.

See Also

TabbedScrollPaneListener Interface
com.mindfusion.diagramming Namespace

TabbedScrollPaneListener Methods

TabbedScrollPaneListener.currentPageChanged Method

Raised when the currently active page is changed.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void currentPageChanged (
    EventObject e
)
```

Parameters

e
An object providing information about the event.

See Also

TabbedScrollPaneListener Members
TabbedScrollPaneListener Interface
com.mindfusion.diagramming Namespace

TabbedScrollPaneListener.pageAdded Method

Raised when a new page is added to the pane interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void pageAdded (
    DiagramPageEvent e
)
```

Parameters

e
A DiagramPageEvent object providing information about the event.

See Also

TabbedScrollPaneListener Members
TabbedScrollPaneListener Interface
com.mindfusion.diagramming Namespace

TabbedScrollPaneListener.pageRemoved Method

Raised when a page is removed interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void pageRemoved (
    DiagramPageEvent e
)
```

Parameters

e
A DiagramPageEvent object providing information about the event.

See Also

TabbedScrollPaneListener Members
TabbedScrollPaneListener Interface
com.mindfusion.diagramming Namespace

TabbedScrollPaneListener.pageRemoving Method

Raised when a page is about to be removed interactively.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void pageRemoving (
    DiagramPageValidationEvent e
)
```

Parameters

e
A DiagramPageValidationEvent object providing information about the event.

See Also

TabbedScrollPaneListener Members
TabbedScrollPaneListener Interface
com.mindfusion.diagramming Namespace

TableConnectionStyle Enumeration

The members of this enumeration specify whether links drawn by users are connected to tables rows, to tables as integral nodes, or both. They can be used as parameters of the setConnectionStyle method of the TableNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public enum TableConnectionStyle
```

Members

	Member name	Description
	Both	Support both modes.
	Rows	Connect links to individual rows of the table.
	Table	Connect links to the table as an integral node.

See Also

com.mindfusion.diagramming Namespace

TableNode Class

Tables are diagram nodes that can contain multiple cells and can be related to other nodes through their rows.

Syntax

Java

```
public class TableNode extends DiagramNode implements RenderTextCallback, InplaceEditable
```

Remarks

Links can connect either to table rows or to the table as an integral node. Use the setConnectionStyle method to specify whether links drawn by the user should be connected to the table rows or to the table itself.

Tables consist of Cell instances distributed across rows and columns. The number of rows and columns can be set via the setRowCount and setColumnCount methods. The default width of the table columns is specified through setColumnWidth and the default height of the rows through setRowHeight. Cells can be made to span several rows and columns via their Cell.setRowSpan and Cell.setColumnSpan methods.

Rows can be assigned to distinct sections of the table. Each section can be collapsed or expanded, hiding or showing all rows in the section except the header one. To define a section, call the Row.setHeader method. A section consists of all rows after a header row and spans to the next header. Each header row displays a +/- button that allows expanding or collapsing the section interactively. The button appears either on the left of the first cell of a header row or in a separate column, as specified through the setOffsetHeaderRows method. Sections can be collapsed or expanded programmatically using the Row.setExpanded method of their header rows.

The structure of a table can be changed dynamically by adding and deleting rows and columns. This can be done with the addColumn and addRow methods as well with the insertColumn, insertRow and redimTable methods. Use the deleteRow and deleteColumn methods to delete existing rows and columns.

Tables have a caption text, which is set via the setCaption method. The height of the caption and the alignment of the text are specified via the setCaptionHeight and setCaptionFormat methods. To get even richer text formatting, call setEnableStyledText and embed HTML-like formatting tags in the caption.

In order to set an image as tables background, call the setImage method. The alignment of the image in relation to the tables rectangle is set via the setImageAlign method. The table can be resized to fit the size of its image by calling the resizeToFitImage method.

The rows and columns of a table can be accessed through the getRows and getColumns methods. The getCell method lets you access individual table cells.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItem
    com.mindfusion.diagramming.DiagramNode
      com.mindfusion.diagramming.TableNode

See Also

TableNode Members
com.mindfusion.diagramming Namespace

TableNode Members

Tables are diagram nodes that can contain multiple cells and can be related to other nodes through their rows.

The following tables list the members exposed by the TableNode type.

Public Constructors

	Name	Description
	TableNode	Overloaded.

Protected Fields

	Name	Description
	allowIncomingLinks	(Inherited from DiagramNode.)
	allowOutgoingLinks	(Inherited from DiagramNode.)
	anchorPattern	(Inherited from DiagramNode.)
	AV_Cancel	(Inherited from DiagramNode.)
	AV_EndModIncoming	(Inherited from DiagramNode.)
	AV_EndModOutgoing	(Inherited from DiagramNode.)
	AV_StartModIncoming	(Inherited from DiagramNode.)
	AV_StartModOutgoing	(Inherited from DiagramNode.)
	AV_UpdateIncoming	(Inherited from DiagramNode.)
	AV_UpdateOutgoing	(Inherited from DiagramNode.)
	AV_UpdIntscIncoming	(Inherited from DiagramNode.)
	AV_UpdIntscOutgoing	(Inherited from DiagramNode.)
	AV_UpdPosIncoming	(Inherited from DiagramNode.)
	AV_UpdPosOutgoing	(Inherited from DiagramNode.)
	bounds	(Inherited from DiagramNode.)
	brush	(Inherited from DiagramItem.)

	cycleDetected	(Inherited from DiagramItem.)
	cycleProtect	(Inherited from DiagramItem.)
	enabledHandles	(Inherited from DiagramNode.)
	handlesStyle	(Inherited from DiagramNode.)
	incomingLinks	(Inherited from DiagramNode.)
	masterGroup	(Inherited from DiagramNode.)
	modifyDX	(Inherited from DiagramItem.)
	modifyDY	(Inherited from DiagramItem.)
	modifyHandle	(Inherited from DiagramItem.)
	modifying	(Inherited from DiagramItem.)
	obstacle	(Inherited from DiagramNode.)
	outgoingLinks	(Inherited from DiagramNode.)
	pen	(Inherited from DiagramItem.)
	ptEnd	(Inherited from DiagramItem.)
	ptMdfLast	(Inherited from DiagramItem.)
	ptOrg	(Inherited from DiagramItem.)
	ptSavedEnd	(Inherited from DiagramItem.)
	ptSavedOrg	(Inherited from DiagramItem.)
	savedBounds	(Inherited from DiagramNode.)
	subordinateGroup	(Inherited from DiagramItem.)

Public Methods

	Name	Description
	addColumn	Appends a new column to this table.
	addLabel	Overloaded. (Inherited from DiagramNode.)
	addRelation	Creates a new DiagramLink related to this table.
	addRow	Adds a row to the table.
	as	Down-casts the item to specified type. (Inherited from DiagramItem.)
	attachTo	Overloaded. (Inherited from DiagramNode.)
	cellFromPoint	Returns the row and column indices of the cell located at the specified point, taking into consideration the cells span.
	clone	Creates a copy of this item. (Inherited from DiagramItem.)
	containsPoint	Overloaded. (Inherited from DiagramNode.)

	deleteColumn	Deletes the specified column.
	deleteRow	Deletes the specified row from the table.
	detach	Detaches a node from its master group. (Inherited from DiagramNode.)
	getAllIncomingLinks	Gets a collection of all links entering this node. (Inherited from DiagramNode.)
	getAllLinks	Gets all links connected to this node. (Inherited from DiagramNode.)
	getAllOutgoingLinks	Gets a collection of all links going out of this node. (Inherited from DiagramNode.)
	getAllowIncomingLinks	Gets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	getAllowOutgoingLinks	Gets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	getAllowResizeColumns	Gets a value indicating whether users are allowed to resize table columns.
	getAllowResizeRows	Gets a value indicating whether users are allowed to resize table rows.
	getAnchorPattern	Gets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)
	getBounds	Gets the node location and size. (Inherited from DiagramNode.)
	getBrush	Gets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	getCaption	Gets the caption text of a table.
	getCaptionBackBrush	Gets the brush used to paint the caption bar of this table.
	getCaptionBrush	Gets the brush used to draw the table's caption text.
	getCaptionFormat	Gets a TextFormat object specifying how to format and align the caption text.
	getCaptionHeight	Gets the height of the caption bar of the table.
	getCaptionPlainText	Gets the plain text extracted from the formatted caption text by removing the formatting tags.
	getCell	Gets the cell at the specified row and column.
	getCellCustomDraw	Gets the type of custom drawing performed on the table cells.
	getCellFrameStyle	Gets the style of the cell frame lines.
	getCellTextBrush	Gets the brush used to draw the cells' text in this table.
	getCenter	Returns the center point of this node. (Inherited from DiagramNode.)
	getColumnCount	Gets the number of columns of this table.

	getColumns	Gets a list of all columns in the table.
	getColumnWidth	Gets the initial width of the columns of this table.
	getConnectionStyle	Gets a value indicating whether links should connect to the rows of this table or to the table as an integral entity.
	getConstraints	Gets the movement and size constraints applied to a node. (Inherited from DiagramNode.)
	getContainer	Gets the parent ContainerNode containing this node. (Inherited from DiagramNode.)
	getCurrentRow	Gets the index of the current scroll row.
	getCustomDraw	Gets the type of custom drawing performed on this table.
	getDividerPen	Gets the Pen used to draw the the divider line between node's caption bar and content area.
	getEditRect	Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).
	getEffectiveBrush	Gets the effective brush of the item. (Inherited from DiagramItem.)
	getEffectiveCaptionBackBrush	Gets the effective caption back brush of the table.
	getEffectiveCaptionBrush	Returns a Brush object representing the currently effective caption brush of the table. This method returns the table's **CaptionBrush** if it's not **null**, or otherwise the TextBrush property of the current TableNodeStyle.
	getEffectiveCellTextBrush	Creates a Brush object representing the currently effective text brush of the table cells. This method returns a system brush corresponding to the table's **getCellTextBrush** if the table's **getCellTextBrush** is not null, or a system brush corresponding to the TableNodeStyle.getCellTextBrush property of the table's style.
	getEffectiveFont	Gets the currently effective font of the item. This property returns getFont if it is not null, or a font with the DiagramItemStyle.getFontFamily, DiagramItemStyle.getFontSize, and DiagramItemStyle.getFontStyle properties of the item's style. (Inherited from DiagramItem.)
	getEffectivePen	Gets the effective pen of the item. (Inherited from DiagramItem.)
	getEffectiveShadowBrush	Creates a Brush object representing the currently effective shadow brush of the item. This method returns a system brush corresponding to the item's getShadowBrush if the item's **getShadowBrush** is not null, or a system brush corresponding to the DiagramItemStyle.getShadowBrush property of the item's style. (Inherited from DiagramItem.)
	getEffectiveTextBrush	Gets the effective text brush of the item. (Inherited from DiagramItem.)
	getEffects	Gets a collection with all effects applied to this node. (Inherited from DiagramNode.)

	getEnabledHandles	Gets a combination of NodeHandleType members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	getEnableStyledText	Gets a value indicating whether the text displayed inside a table contains formatting tags which should be processed by JDiagram.
	getExpandable	Gets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	getExpanded	Gets a value indicating whether the tree branch that starts from a node is expanded or collapsed. (Inherited from DiagramNode.)
	getFont	Gets the font used to draw the text displayed in this table.
	getHandlesStyle	Gets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	getHyperLink	Gets the hyperlink associated with an item. (Inherited from DiagramItem.)
	getId	Gets user-defined identifier associated with this item. (Inherited from DiagramItem.)
	getIgnoreLayout	Gets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	getImage	Gets the image displayed inside this table.
	getImageAlign	Gets the alignment of the table image relative to the boundaries of the table.
	getImagePadding	Gets the padding distance between node's borders and **Image**.
	getIncomingLinks	Gets the links coming into a node. (Inherited from DiagramNode.)
	getLabels	Returns the list of supplementary labels displayed by this node. (Inherited from DiagramNode.)
	getLayerIndex	Gets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	getLayoutTraits	Returns a hashtable containing properties specific to layout algorithms. (Inherited from DiagramItem.)
	getLocalCenter	(Inherited from DiagramNode.)
	getLocked	Gets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	getMasterGroup	Gets the hierarchical group in which this node is a subordinate item. (Inherited from DiagramNode.)

	getMasterItem	Returns the node's **Container** or main item of **MasterGroup**. (Inherited from DiagramNode.)
	getNearestBorderPoint	Returns a point that lies on the outline of this node, at the shortest distance from the specified point. (Inherited from DiagramNode.)
	getObstacle	Gets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	getOffsetHeaderRows	Gets a value indicating whether the table cells are offset to the right to accommodate for the expand buttons displayed inside header rows.
	getOpacity	Gets the opacity of this item. (Inherited from DiagramItem.)
	getOutgoingLinks	Gets the links going out from a node. (Inherited from DiagramNode.)
	getParent	Gets the diagram that contains this item. (Inherited from DiagramItem.)
	getPen	Gets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	getPrintable	Gets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
S	getRotatedBounds	Gets the bounding rectangle of this node, when it is rotated at the specified angle around the specified pivot. (Inherited from DiagramNode.)
	getRotationAngle	Gets the rotation angle of this node. (Inherited from DiagramNode.)
	getRowAnchorPattern	Gets the default row AnchorPattern.
	getRowCount	Gets the number of rows of this table.
	getRowHeight	Gets the initial height of the rows of this table.
	getRows	Gets a list of all rows in the table.
	getRuntimeIndex	For internal use. (Inherited from DiagramItem.)
	getScrollable	Gets a value indicating whether users are allowed to scroll the table.
	getSelected	Gets a value indicating whether this item is selected. (Inherited from DiagramItem.)
	getShadowBrush	Gets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	getShadowOffsetX	Gets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getShadowOffsetY	Gets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getShape	Gets the shape of this table.

	getStyle	Gets the style associated with the item. (Inherited from DiagramItem.)
	getSubordinateGroup	Gets the group of subordinated items attached to this one. (Inherited from DiagramItem.)
	getTag	Gets user-defined data assigned to an item. (Inherited from DiagramItem.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	getTextPadding	Gets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	getTextToEdit	Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when the table's caption is edited in-place.
	getToolTip	Gets the tooltip text displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	getVisible	Gets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	getWeight	Gets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	getZIndex	Gets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	hasSubordinates	Checks whether there are any nodes attached to this item. (Inherited from DiagramItem.)
	hitTest	Returns the diagram item that contains the specified point. (Inherited from DiagramItem.)
	hitTestHandle	DiagramItem.hitTestHandle override. (Inherited from DiagramNode.)
	init	Returns a TableNodeBuilder object used to configure this TableNode instance.
	insertColumn	Inserts a new column at the specified position.
	insertRow	Inserts a row in the table.
	labelFromPoint	Returns the label whose layout rectangle contains the specified point. (Inherited from DiagramNode.)
	moveTo	Moves a node to the specified location. (Inherited from DiagramNode.)
	nodesIntersect	Determines whether two nodes intersect. (Inherited from DiagramNode.)
	onDragOut	Invoked when a diagram item is being dragged out of this node. (Inherited from DiagramNode.)
	onDragOver	Invoked when a diagram item is being dragged over this node. (Inherited from DiagramNode.)
	onDropOver	Invoked when a diagram item is dropped over this node. (Inherited from DiagramNode.)

	query	Returns the items that can be reached from this item by following the path specified in the given query expression. (Inherited from DiagramItem.)
	readExternal	Implements Externalizable.
	redimTable	Sets the number of rows and columns.
	removeLabel	Removes the specified label from this node. (Inherited from DiagramNode.)
	renderText	
	resize	Sets the size of a node. (Inherited from DiagramNode.)
	resizeToFitImage	Resizes a table so that it will be as big as the image displayed in the table.
	resizeToFitText	Resizes the columns and rows so that the cells are large enough to fit their text.
	setAllowIncomingLinks	Sets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	setAllowOutgoingLinks	Sets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	setAllowResizeColumns	Sets a value indicating whether users are allowed to resize table columns.
	setAllowResizeRows	Sets a value indicating whether users are allowed to resize table rows.
	setAnchorPattern	Sets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)
	setBounds	Overloaded. (Inherited from DiagramNode.)
	setBoundsDirect	For internal use. (Inherited from DiagramNode.)
	setBrush	Sets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	setCaption	Sets the caption text of a table.
	setCaptionBackBrush	Sets the brush used to paint the caption bar of this table.
	setCaptionBrush	Sets the brush used to draw the table's caption text.
	setCaptionFormat	Sets a TextFormat object specifying how to format and align the caption text.
	setCaptionHeight	Sets the height of the caption bar of the table.
	setCellCustomDraw	Sets the type of custom drawing performed on the table cells.
	setCellFrameStyle	Sets the style of the cell frame lines.
	setCellTextBrush	Sets the color used to draw the text in this table.
	setColumnCount	Sets the number of columns of this table.
	setColumnWidth	Sets the initial width of the columns of this table.

	setConnectionStyle	Sets a value indicating whether links should connect to the rows of this table or to the table as an integral entity.
	setConstraints	Sets constraints to the node size and movement direction. The constraints are applied when a user modifies the node interactively. They are not checked when the position of a node is set programmatically. (Inherited from DiagramNode.)
	setCurrentRow	Scrolls the table to the specified row.
	setCustomDraw	Sets the type of custom drawing performed on this table.
	setDividerPen	Sets the **Pen** used to draw the the divider line between node's caption bar and content area.
	setEditedText	Implements InplaceEditable.setEditedText. Assigns the edited text to the table's caption after in-place edit operation completes successfully.
	setEnabledHandles	Sets a combination of **NodeHandleType** members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	setEnableStyledText	Sets a value indicating whether the text displayed inside a table contains formatting tags which should be processed by JDiagram.
	setExpandable	Sets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	setExpanded	Expands or collapses the tree branch that starts from a node. (Inherited from DiagramNode.)
	setExpandedFlag	Changes the "expanded" flag without actually expanding or collapsing the tree branch that starts from a node. (Inherited from DiagramNode.)
	setFont	Sets the font used to draw the text displayed in this table.
	setHandlesStyle	Sets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	setHyperLink	Sets the hyperlink associated with an item. (Inherited from DiagramItem.)
	setId	Assigns user-defined identifier to this item. (Inherited from DiagramItem.)
	setIgnoreLayout	Sets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	setImage	Sets the image that should be displayed inside this table.
	setImageAlign	Sets the alignment of the table image relative to the boundaries of the table.
	setImagePadding	Sets the padding distance between node's borders and **Image**.

	setLayerIndex	Sets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	setLocked	Sets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	setObstacle	Sets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	setOffsetHeaderRows	Sets a value indicating whether the table cells should be offset to the right to accommodate for the expand buttons displayed inside header rows.
	setOpacity	Sets the opacity of this item. (Inherited from DiagramItem.)
	setPen	Sets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	setPrintable	Sets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	setRotationAngle	Sets the rotation angle of a node. (Inherited from DiagramNode.)
	setRowAnchorPattern	Sets the default row **AnchorPattern**. A link is aligned to the points of this pattern if the row the link connects to doesn't have an **AnchorPattern** defined for it.
	setRowCount	Sets the number of rows of this table.
	setRowHeight	Sets the initial height of the rows of this table.
	setScrollable	Sets a value indicating whether users are allowed to scroll the table.
	setSelected	Selects or deselects an item. (Inherited from DiagramItem.)
	setShadowBrush	Sets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	setShadowOffsetX	Sets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShadowOffsetY	Sets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShape	Sets the shape of this table.
	setStyle	Sets the style associated with the item. (Inherited from DiagramItem.)
	setTag	Assigns user-defined data to an item. If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event. (Inherited from DiagramItem.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItem.)

	setTextPadding	Sets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	setToolTip	Sets the tooltip text that should be displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	setVisible	Sets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	setWeight	Sets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	setZIndex	Sets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
S	with	Returns a **TableNodeBuilder** object used to configure and create new **TableNode** instances.
	writeExternal	Implements Externalizable.
	zBottom	Moves an item to the bottom of the Z order. (Inherited from DiagramItem.)
	zLevelDown	Moves an item down in the Z order. (Inherited from DiagramItem.)
	zLevelUp	Moves an item up in the Z order. (Inherited from DiagramItem.)
	zTop	Moves an item to the top of the Z order. (Inherited from DiagramItem.)

Protected Methods

	Name	Description
	allowCreate	DiagramItem.allowCreate override. (Inherited from DiagramNode.)
	allowModify	(Inherited from DiagramNode.)
	allowModifyImpl	(Inherited from DiagramNode.)
	cancelModify	DiagramItem.cancelModify override. Invoked when the interactive modification of this node has been canceled. (Inherited from DiagramNode.)
	completeCreate	DiagramItem.completeCreate override. (Inherited from DiagramNode.)
	completeModify	(Inherited from DiagramNode.)
	constraintsInfringed	(Inherited from DiagramNode.)
	createConnectionPoint	
	createProperties	DiagramItem.createProperties override.
	createState	DiagramItem.createState override. (Inherited from DiagramNode.)
	draw	DiagramItem.draw override. (Inherited from DiagramNode.)

	drawLocal	DiagramNode.drawLocal override.
	drawShadow	DiagramItem.drawShadow override. (Inherited from DiagramNode.)
	drawShadowLocal	DiagramNode.drawShadowLocal override.
	getLocalBounds	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getLocalBoundsD	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getMeasureUnit	(Inherited from DiagramItem.)
	getRepaintRect	DiagramItem.getRepaintRect override.
	getValue	Gets the effective value of the style property with the specified name. (Inherited from DiagramItem.)
	groupContains	(Inherited from DiagramNode.)
	loadFromJson	Loads the node from a JSON object.
	loadFromXml	
	move	(Inherited from DiagramNode.)
	onAdd	Called when an item is added to a Diagram, either by the user, programmatically or by undo / redo. (Inherited from DiagramItem.)
	onChangeFont	(Inherited from DiagramItem.)
	onChangeTextPadding	DiagramItem.onChangeTextPadding override.
	onChildModified	Called when a group child node has been modified. Override this method if you need to know when a node from the **SubordinateGroup** is modified. (Inherited from DiagramItem.)
	onClick	Invoked when the user clicks this item. (Inherited from DiagramItem.)
	onDoubleClick	Invoked when the user double-clicks this item. (Inherited from DiagramItem.)
	onLoad	DiagramItem.onLoad override.
	onMeasureUnitChanged	Called when the diagram's MeasureUnit changes. (Inherited from DiagramItem.)
	onModify	Called when an item is modified (Inherited from DiagramNode.)
	onRemove	Called when an item is removed from a **Diagram**, either by the user, programmatically or by undo / redo. (Inherited from DiagramNode.)
	onRotationAngleChanged	Called when the node's rotation angle changes. (Inherited from DiagramNode.)
	onStyleChanged	Invoked when the associated style or theme have changed. (Inherited from DiagramItem.)

	onStyleFontChanged	DiagramItem.onStyleFontChanged override.
	onUpdateBounds	
	parentConstraintsInfringed	(Inherited from DiagramNode.)
	putExpandable	(Inherited from DiagramNode.)
	putSelected	(Inherited from DiagramItem.)
	rectFromPoints	(Inherited from DiagramNode.)
	repaint	Overloaded. (Inherited from DiagramItem.)
	resizeToFitImage	(Inherited from DiagramNode.)
	restoreProperties	DiagramItem.restoreProperties override.
	restoreState	DiagramItem.restoreState override. (Inherited from DiagramNode.)
	saveProperties	DiagramItem.saveProperties override.
	saveState	DiagramItem.saveState override. (Inherited from DiagramNode.)
	saveToJson	Saves the node as a JSON object.
	saveToXml	
	scaleElements	DiagramNode.scaleElements override.
	setDiagramDirty	Marks the diagram as changed. (Inherited from DiagramItem.)
	setReflexive	Invoked to let a node set the shape of a reflexive link connected to it.
	shouldRender	Determines whether the item is rendered in the current context. (Inherited from DiagramItem.)
	shouldRenderAnchors	Determines whether the node should render its anchor points. (Inherited from DiagramNode.)
	startCreate	DiagramItem.startCreate override. (Inherited from DiagramNode.)
	startModify	DiagramItem.startModify override. Invoked when the user starts modifying this node interactively. (Inherited from DiagramNode.)
	updateCreate	DiagramItem.updateCreate override. (Inherited from DiagramNode.)
	updateLinkPositions	(Inherited from DiagramNode.)
	updateModify	DiagramItem.updateModify override. Invoked during interactive modification of this node. (Inherited from DiagramNode.)

See Also

TableNode Class
com.mindfusion.diagramming Namespace

TableNode Constructor

Overload List

Name	Description
TableNode ()	Initializes a new instance of the TableNode class.
TableNode (Diagram)	Initializes a new instance of the **TableNode** class by setting its attributes to the default values set in the specified diagram.
TableNode (TableNode)	Initializes a new instance of the **TableNode** class by copying the attributes of the specified prototype table.

See Also

TableNode Class
com.mindfusion.diagramming Namespace

TableNode Constructor ()

Initializes a new instance of the TableNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public TableNode ()`

See Also

TableNode Constructor Overload List
TableNode Class
com.mindfusion.diagramming Namespace

TableNode Constructor (Diagram)

Initializes a new instance of the TableNode class by setting its attributes to the default values set in the specified diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TableNode (
    Diagram parent
)
```

Parameters

parent
A Diagram instance whose default table attributes are copied to this table.

See Also

TableNode Constructor Overload List
TableNode Class
com.mindfusion.diagramming Namespace

TableNode Constructor (TableNode)

Initializes a new instance of the TableNode class by copying the attributes of the specified prototype table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TableNode (
    TableNode prototype
)
```

Parameters

prototype
A TableNode instance whose attributes are copied to this table.

See Also

TableNode Constructor Overload List
TableNode Class
com.mindfusion.diagramming Namespace

TableNode Methods

TableNode.addColumn Method

Appends a new column to this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int addColumn ()
```

Return Value

An integer value specifying the index of the new column.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.addRelation Method

Creates a new DiagramLink related to this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLink addRelation (
    int row,
    Relationship rel,
    TableNode table,
    int relRow
)
```

Parameters

row
Index of a row in this table.

rel
A member of the Relationship enumeration.

table
The related table.

relRow
Index of a row in the related table.

Return Value

An DiagramLink object representing the new link.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.addRow Method

Adds a row to the table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int addRow ()
```

Return Value

An integer value specifying the index of the new row.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.cellFromPoint Method

Returns the row and column indices of the cell located at the specified point, taking into consideration the cells span.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean cellFromPoint (
    Point2D point,
    Point cellPos
)
```

Parameters

point
The point to check.

cellPos
Receives the row and column indices if a cell is found at the specified position.

Return Value

true if a cell of this table contains the specified point; otherwise, **false**.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.createConnectionPoint Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected ConnectionPoint createConnectionPoint (
    DiagramLink link,
    Point2D point,
    boolean incoming
)
```

Parameters

link

point

incoming

Return Value

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.createProperties Method

DiagramItem.createProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramItemProperties createProperties ()
```

Return Value

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.deleteColumn Method

Deletes the specified column.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void deleteColumn (
    int col
)
```

Parameters

col
Index of the column that should be deleted.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.deleteRow Method

Deletes the specified row from the table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void deleteRow (
    int row
)
```

Parameters

row
Index of the row that should be deleted.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.drawLocal Method

DiagramNode.drawLocal override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void drawLocal (
    Graphics2D g,
    RenderOptions options
)
```

Parameters

g

options

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.drawShadowLocal Method

DiagramNode.drawShadowLocal override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void drawShadowLocal (
    Graphics2D g,
    RenderOptions options
)
```

Parameters

g

options

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getAllowResizeColumns Method

Gets a value indicating whether users are allowed to resize table columns.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowResizeColumns ()
```

Return Value

true to let users resize columns, or **false** otherwise.

Remarks

A column can be resized by dragging its right border. If the ColumnStyle property of a column is set to AutoWidth, it is automatically reset to FixedWidth when the column is resized. Rightmost columns always fill all remaining space in their tables and cannot be resized.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getAllowResizeRows Method

Gets a value indicating whether users are allowed to resize table rows.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getAllowResizeRows ()
```

Return Value

true to let users resize rows, or **false** otherwise.

Remarks

A row can be resized by dragging its bottom border.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getCaption Method

Gets the caption text of a table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getCaption ()
```

Return Value

A String object containing the caption text.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getCaptionBackBrush Method

Gets the brush used to paint the caption bar of this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getCaptionBackBrush ()
```

Return Value

An instance of a Brush -derived class. The default is **null**.

Remarks

If there is no brush assigned to this property, the caption bar is painted using the Brush property of the TableNode class.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace
CaptionHeight Property
CaptionBrush Property
DividerPen Property

TableNode.getCaptionBrush Method

Gets the brush used to draw the table's caption text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getCaptionBrush ()
```

Return Value

A Brush object representing the color of the caption text.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getCaptionFormat Method

Gets a TextFormat object specifying how to format and align the caption text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public TextFormat getCaptionFormat ()
```

Return Value

A TextFormat object specifying the caption format and alignment.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getCaptionHeight Method

Gets the height of the caption bar of the table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getCaptionHeight ()
```

Return Value

A float value specifying the height of the table caption bar.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getCaptionPlainText Method

Gets the plain text extracted from the formatted caption text by removing the formatting tags.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public String getCaptionPlainText ()
```

Return Value

A String containing the caption text stripped from any formatting tags.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getCell Method

Gets the cell at the specified row and column.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Cell getCell (
    int column,
    int row
)
```

Parameters

column
An integer value specifying the column index.

row
An integer value specifying the row index.

Return Value

A Cell object representing the specified cell.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getCellCustomDraw Method

Gets the type of custom drawing performed on the table cells.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CustomDraw getCellCustomDraw ()
```

Return Value

A member of the CustomDraw enumeration. Initialized with CellCustomDraw value of Diagram class.

Remarks

This property allows running custom painting code for the cells of a table. That code must execute in response to the drawCell event. There are several modes of custom painting, allowing the custom code to paint the cell entirely, or do that in addition to default rendering.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace
setCustomDraw Method
setCellCustomDraw Method

TableNode.getCellFrameStyle Method

Gets the style of the cell frame lines.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CellFrameStyle getCellFrameStyle ()
```

Return Value

A member of the CellFrameStyle enumeration.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getCellTextBrush Method

Gets the brush used to draw the cells' text in this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getCellTextBrush ()
```

Return Value

A Brush object representing the text color.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getColumnCount Method

Gets the number of columns of this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getColumnCount ()
```

Return Value

An integer value specifying the number of columns in this table.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getColumns Method

Gets a list of all columns in the table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ColumnList getColumns ()
```

Return Value

A ColumnList containing the table columns.

See Also

TableNode Members
TableNode Class

TableNode.getColumnWidth Method

Gets the initial width of the columns of this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getColumnWidth ()
```

Return Value

A float value specifying the initial width of columns added to this table.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getConnectionStyle Method

Gets a value indicating whether links should connect to the rows of this table or to the table as an integral entity.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TableConnectionStyle getConnectionStyle ()
```

Return Value

A member of the TableConnectionStyle enumeration.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getCurrentRow Method

Gets the index of the current scroll row.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getCurrentRow ()
```

Return Value

An integer value specifying the index of the top-most visible row in a table.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getCustomDraw Method

Gets the type of custom drawing performed on this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public CustomDraw getCustomDraw ()
```

Return Value

A member of the CustomDraw enumeration. Initialized with value of TableCustomDraw property.

Remarks

This property allows running custom painting code for a table. That code must execute in response to the drawNode event. There are several modes of custom painting, allowing the custom code to paint the table entirely, or do that in addition to default rendering.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace
setCustomDraw Method
setCellCustomDraw Method

TableNode.getDividerPen Method

Gets the Pen used to draw the the divider line between node's caption bar and content area.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
```

Java

```
public Pen getDividerPen ()
```

Return Value

A Pen instance. The default value is **null**.

Remarks

If DividerPen is not set, the divider line is drawn using the pen assigned to Pen property.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace
Pen Property
CaptionBackBrush Property

TableNode.getEditRect Method

Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getEditRect (
    DiagramItem item,
    Point2D mousePosition
)
```

Parameters

item
A reference to this node.

mousePosition
A **Point2D** instance specifying the current pointer position.

Return Value

A **Rectangle2D** specifying where the edit box should be placed.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getEffectiveCaptionBackBrush Method

Gets the effective caption back brush of the table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getEffectiveCaptionBackBrush ()
```

Return Value

An instance of a Brush -derived class.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getEffectiveCaptionBrush Method

Returns a Brush object representing the currently effective caption brush of the table. This method returns the table's CaptionBrush if it's not **null**, or otherwise the TextBrush property of the current TableNodeStyle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getEffectiveCaptionBrush ()
```

Return Value

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getEffectiveCellTextBrush Method

Creates a Brush object representing the currently effective text brush of the table cells. This method returns a system brush corresponding to the table's getCellTextBrush if the table's **getCellTextBrush** is not null, or a system brush corresponding to the TableNodeStyle.getCellTextBrush property of the table's style.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getEffectiveCellTextBrush ()
```

Return Value

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getEnableStyledText Method

Gets a value indicating whether the text displayed inside a table contains formatting tags which should be processed by JDiagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getEnableStyledText ()
```

Return Value

true if JDiagram should process formatting tags when rendering text in this table, otherwise **false**.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getFont Method

Gets the font used to draw the text displayed in this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Font getFont ()
```

Return Value

A **Font** object representing the table font.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getImage Method

Gets the image displayed inside this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Image getImage ()
```

Return Value

An instance of the **java.awt.Image** class.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getImageAlign Method

Gets the alignment of the table image relative to the boundaries of the table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ImageAlign getImageAlign ()
```

Return Value

A member of the ImageAlign enumeration.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getImagePadding Method

Gets the padding distance between node's borders and Image.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Thickness getImagePadding ()
```

Return Value

A Thickness value specifying padding distance. The default value is **null**.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getOffsetHeaderRows Method

Gets a value indicating whether the table cells are offset to the right to accommodate for the expand buttons displayed inside header rows.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getOffsetHeaderRows ()
```

Return Value

true if table cells are offset to the right, otherwise **false**.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getRepaintRect Method

DiagramItem.getRepaintRect override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Rectangle2D getRepaintRect (
    boolean includeConnected
)
```

Parameters

includeConnected

Return Value

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getRowAnchorPattern Method

Gets the default row AnchorPattern.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public AnchorPattern getRowAnchorPattern ()
```

Return Value

An AnchorPattern object representing the set of anchor points used when connecting links to the rows of this table.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getRowCount Method

Gets the number of rows of this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getRowCount ()
```

Return Value

An integer value specifying the number of rows in this table.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getRowHeight Method

Gets the initial height of the rows of this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getRowHeight ()
```

Return Value

A float value specifying the initial height of rows added to this table.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getRows Method

Gets a list of all rows in the table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public RowList getRows ()
```

Return Value

A RowList containing the table rows.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getScrollable Method

Gets a value indicating whether users are allowed to scroll the table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getScrollable ()
```

Return Value

true if users are allowed to scroll the table, otherwise **false**.

Remarks

A button containing up and down arrows appears in the caption bar of a table for which scrolling is enabled. If a user clicks these arrows, table rows scroll up or down. The table can always be scrolled programmatically using the CurrentRow property.

The appearance of the scroll icons can be customized by setting Renderers.ScrollIconRenderer.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getShape Method

Gets the shape of this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SimpleShape getShape ()
```

Return Value

A member of the SimpleShape enumeration.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.getTextToEdit Method

Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when the table's caption is edited in-place.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getTextToEdit ()
```

Return Value

A **String** that represents the initial contents of the in-place edit box.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.init Method

Returns a TableNodeBuilder object used to configure this TableNode instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TableNodeBuilder init ()
```

Return Value

A **TableNodeBuilder** instance.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.insertColumn Method

Inserts a new column at the specified position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void insertColumn (
    int col
)
```

Parameters

col
The position where the new column must be inserted.

See Also

TableNode Members
TableNode Class

TableNode.insertRow Method

Inserts a row in the table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void insertRow (
    int row
)
```

Parameters

row
The position where the new row should be inserted.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.loadFromJson Method

Loads the node from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the node's data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.loadFromXml Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An **XmlElement** containing the TableNode's data.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.onChangeTextPadding Method

DiagramItem.onChangeTextPadding override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onChangeTextPadding ()
```

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.onLoad Method

DiagramItem.onLoad override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void onLoad (
    Diagram diagram
)
```

Parameters

diagram

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.onStyleFontChanged Method

DiagramItem.onStyleFontChanged override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void onStyleFontChanged ()
```

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.onUpdateBounds Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void onUpdateBounds (
    Rectangle2D oldBounds
)
```

Parameters

oldBounds

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.redimTable Method

Sets the number of rows and columns.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void redimTable (
    int cols,
    int rows
)
```

Parameters

cols
The new number of columns.

rows
The new number of rows.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.renderText Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void renderText (
    String text,
    Rectangle2D dest,
    DrawTextHint hint
)
```

Parameters

text

dest

hint

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.resizeToFitImage Method

Resizes a table so that it will be as big as the image displayed in the table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void resizeToFitImage ()
```

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.resizeToFitText Method

Resizes the columns and rows so that the cells are large enough to fit their text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void resizeToFitText (
    boolean ignoreCaption
)
```

Parameters

ignoreCaption
false if the caption bar should be resized too to fit the caption text; otherwise **true**.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.restoreProperties Method

DiagramItem.restoreProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void restoreProperties (
    DiagramItemProperties props
)
```

Parameters

props

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.saveProperties Method

DiagramItem.saveProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
protected void saveProperties (
    DiagramItemProperties props
)
```

Parameters

props

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.saveToJson Method

Saves the node as a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj

A JsonObject instance to contain the serialized data.

context

A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.saveToXml Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An **XmlElement** the TableNode's data are stored.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.scaleElements Method

DiagramNode.scaleElements override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void scaleElements (
    float scale
)
```

Parameters

scale
The value by which to multiply node elements' sizes.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setAllowResizeColumns Method

Sets a value indicating whether users are allowed to resize table columns.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowResizeColumns (
    boolean value
)
```

Parameters

value
true to let users resize columns, or **false** otherwise.

Remarks

A column can be resized by dragging its right border. If the ColumnStyle property of a column is set to AutoWidth, it is automatically reset to FixedWidth when the column is resized. Rightmost columns always fill all remaining space in their tables and cannot be resized.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace
getAllowResizeColumns Method
setAllowResizeRows Method

TableNode.setAllowResizeRows Method

Sets a value indicating whether users are allowed to resize table rows.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAllowResizeRows (
    boolean value
)
```

Parameters

value
true to let users resize rows, or **false** otherwise.

Remarks

A row can be resized by dragging its bottom border.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace
getAllowResizeRows Method
setAllowResizeColumns Method

TableNode.setCaption Method

Sets the caption text of a table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCaption (
    String value
)
```

Parameters

value
A String object containing the caption text.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setCaptionBackBrush Method

Sets the brush used to paint the caption bar of this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCaptionBackBrush (
    Brush value
)
```

Parameters

value
An instance of a Brush -derived class.

Remarks

If there is no brush assigned to this property, the caption bar is painted using the Brush property of the TableNode class.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace
CaptionHeight Property

CaptionBrush Property
DividerPen Property

TableNode.setCaptionBrush Method

Sets the brush used to draw the table's caption text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCaptionBrush (
    Brush value
)
```

Parameters

value
A Brush object representing the color of the caption text.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setCaptionFormat Method

Sets a TextFormat object specifying how to format and align the caption text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCaptionFormat (
    TextFormat value
)
```

Parameters

value
A TextFormat object specifying the caption format and alignment.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setCaptionHeight Method

Sets the height of the caption bar of the table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCaptionHeight (
    float value
)
```

Parameters

value
A float value specifying the height of the table caption bar.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setCellCustomDraw Method

Sets the type of custom drawing performed on the table cells.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCellCustomDraw (
    CustomDraw value
)
```

Parameters

value
A member of the CustomDraw enumeration.

Remarks

This property allows running custom painting code for the cells of a table. That code must execute in response to the drawCell event. There are several modes of custom painting, allowing the custom code to paint the cell entirely, or do that in addition to default rendering.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

getCellCustomDraw Method
setCustomDraw Method

TableNode.setCellFrameStyle Method

Sets the style of the cell frame lines.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCellFrameStyle (
    CellFrameStyle value
)
```

Parameters

value
A member of the CellFrameStyle enumeration.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setCellTextBrush Method

Sets the color used to draw the text in this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCellTextBrush (
    Brush value
)
```

Parameters

value
A Brush object representing the text color.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setColumnCount Method

Sets the number of columns of this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setColumnCount (
    int value
)
```

Parameters

value
An integer value specifying the number of columns in this table.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setColumnWidth Method

Sets the initial width of the columns of this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setColumnWidth (
    float value
)
```

Parameters

value
A **float** value specifying the initial width of columns added to this table.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setConnectionStyle Method

Sets a value indicating whether links should connect to the rows of this table or to the table as an integral entity.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setConnectionStyle (
    TableConnectionStyle value
)
```

Parameters

value
A member of the TableConnectionStyle enumeration.

Remarks

There are three possible ways to relate tables to other nodes. This property specifies how users are allowed to create such relations:

- Rows - relation ends are the rows of a table. A link connected to the table is connected to a particular row. This mode is convenient for database diagrams.
- **Table** - relations target the table as a whole entity, and not any particular row. This mode is convenient for class diagrams.
- **Both** - a mixed mode where links can target either a row of the table or the table itself.

Programmatically, links can be connected to a table in any way, regardless of the ConnectionStyle. **ConnectionStyle** value is considered only when end-users draw links to or from a table. To link to a table as an entity and not to a specific row, pass -1 as row argument of the createDiagramLink method.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setCurrentRow Method

Scrolls the table to the specified row.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setCurrentRow (
    int value
)
```

Parameters

value
An integer value specifying the index of the row that should be scrolled to the top of the table.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setCustomDraw Method

Sets the type of custom drawing performed on this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCustomDraw (
    CustomDraw value
)
```

Parameters

value
A member of the CustomDraw enumeration.

Remarks

This property allows running custom painting code for a table. That code must execute in response to the drawNode event. There are several modes of custom painting, allowing the custom code to paint the table entirely, or do that in addition to default rendering.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace
getCustomDraw Method
setCellCustomDraw Method

TableNode.setDividerPen Method

Sets the Pen used to draw the the divider line between node's caption bar and content area.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDividerPen (
    Pen value
)
```

Parameters

value
A Pen instance.

Remarks

If **DividerPen** is not set, the divider line is drawn using the pen assigned to Pen property.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace
Pen Property
CaptionBackBrush Property

TableNode.setEditedText Method

Implements InplaceEditable.setEditedText. Assigns the edited text to the table's caption after in-place edit operation completes successfully.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEditedText (
    String newText
)
```

Parameters

newText
The new text of the table's caption.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setEnableStyledText Method

Sets a value indicating whether the text displayed inside a table contains formatting tags which should be processed by JDiagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableStyledText (
    boolean value
)
```

Parameters

value
true if JDiagram should process formatting tags when rendering text in this table, otherwise **false**.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setFont Method

Sets the font used to draw the text displayed in this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFont (
    Font value
)
```

Parameters

value
A Font object representing the table font.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setImage Method

Sets the image that should be displayed inside this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImage (
    Image value
)
```

Parameters

value
An instance of the **java.awt.Image** class.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace
setImageAlign Method
setImagePadding Method

TableNode.setImageAlign Method

Sets the alignment of the table image relative to the boundaries of the table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImageAlign (
    ImageAlign value
)
```

Parameters

value
A member of the ImageAlign enumeration.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace
setImage Method
setImagePadding Method

TableNode.setImagePadding Method

Sets the padding distance between node's borders and Image.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setImagePadding (
    Thickness value
)
```

Parameters

value
A Thickness value specifying padding distance.

See Also

TableNode.setOffsetHeaderRows Method

Sets a value indicating whether the table cells should be offset to the right to accommodate for the expand buttons displayed inside header rows.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOffsetHeaderRows (
    boolean value
)
```

Parameters

value
true if table cells should be offset to the right, otherwise **false**.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setReflexive Method

Invoked to let a node set the shape of a reflexive link connected to it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void setReflexive (
    DiagramLink link
)
```

Parameters

link
Reference to the link.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setRowAnchorPattern Method

Sets the default row AnchorPattern. A link is aligned to the points of this pattern if the row the link connects to doesn't have an **AnchorPattern** defined for it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRowAnchorPattern (
    AnchorPattern value
)
```

Parameters

value
An AnchorPattern object representing the set of anchorpoints used when connecting links to the rows of this table.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setRowCount Method

Sets the number of rows of this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRowCount (
    int value
)
```

Parameters

value
An integer value specifying the number of rows in this table.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setRowHeight Method

Sets the initial height of the rows of this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setRowHeight (
    float value
)
```

Parameters

value
A **float** value specifying the initial height of rows added to this table.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setScrollable Method

Sets a value indicating whether users are allowed to scroll the table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setScrollable (
    boolean value
)
```

Parameters

value
true if users are allowed to scroll the table, otherwise **false**.

Remarks

A button containing up and down arrows appears in the caption bar of a table for which scrolling is enabled. If a user clicks these arrows, table rows scroll up or down. The table can always be scrolled programmatically using the CurrentRow property.

The appearance of the scroll icons can be customized by setting Renderers.ScrollIconRenderer.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.setShape Method

Sets the shape of this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShape (
    SimpleShape value
)
```

Parameters

value
A member of the SimpleShape enumeration.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.with Method

Returns a **TableNodeBuilder** object used to configure and create new TableNode instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static TableNodeBuilder with ()
```

Return Value

A **TableNodeBuilder** instance.

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNode.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

TableNode Members
TableNode Class
com.mindfusion.diagramming Namespace

TableNodeProperties Class

Stores the values of TableNode attributes during undo / redo operations. If you need to implement undo support for the additional properties defined by a class derived from **TableNode**, do so by deriving from TableNodeProperties and overriding the saveProperties, restoreProperties, and createProperties methods.

Syntax

```
Java
public class TableNodeProperties extends DiagramNodeProperties
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItemProperties
    com.mindfusion.diagramming.DiagramNodeProperties
      com.mindfusion.diagramming.TableNodeProperties

See Also

TableNodeProperties Members
com.mindfusion.diagramming Namespace

TableNodeProperties Members

Stores the values of TableNode attributes during undo / redo operations. If you need to implement undo support for the additional properties defined by a class derived from **TableNode**, do so by deriving from TableNodeProperties and overriding the saveProperties, restoreProperties, and createProperties methods.

The following tables list the members exposed by the TableNodeProperties type.

Public Constructors

	Name	Description
	TableNodeProperties	Initializes a new **TableNodeProperties** instance.

Public Fields

	Name	Description
	textPadding	(Inherited from DiagramItemProperties.)

See Also

TableNodeProperties Class
com.mindfusion.diagramming Namespace

TableNodeProperties Constructor

Initializes a new TableNodeProperties instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public TableNodeProperties ()
```

See Also

TableNodeProperties Class
com.mindfusion.diagramming Namespace

TableNodeStyle Class

Represents a reusable set of properties that define the appearance of table nodes.

Syntax

```
Java
public class TableNodeStyle extends DiagramNodeStyle
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Style
    com.mindfusion.diagramming.DiagramItemStyle
      com.mindfusion.diagramming.DiagramNodeStyle
        com.mindfusion.diagramming.TableNodeStyle

See Also

TableNodeStyle Members
com.mindfusion.diagramming Namespace

TableNodeStyle Members

Represents a reusable set of properties that define the appearance of table nodes.

The following tables list the members exposed by the TableNodeStyle type.

Public Constructors

	Name	Description
	TableNodeStyle	Initializes a new instance of the **TableNodeStyle** class.

Public Methods

	Name	Description
	addPropertyChangeListener	(Inherited from Style.)
	getBrush	Gets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	getCaptionBackBrush	Gets the brush used to paint the caption bar of this table.
	getCellTextBrush	Gets the brush used to paint texts inside table cells.
	getEffects	Gets a list of the effects applied to the node. (Inherited from DiagramNodeStyle.)
	getFontFamily	Gets the font family of the item text. (Inherited from DiagramItemStyle.)
	getFontSize	Gets the font size of the item text. (Inherited from DiagramItemStyle.)
	getFontStyle	Gets the font style of the item text. (Inherited from DiagramItemStyle.)
	getFontUnit	Gets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	getShadowBrush	Gets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	getStroke	Gets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	getStrokeThickness	Gets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
	init	Returns a TableNodeStyleBuilder object used to configure this TableNodeStyle instance.
	readExternal	**Externalizable.readExternal** implementation. (Inherited from Style.)
S	registerType	Associates a type with an alias. The alias is used when saving and loading objects of the specified type during style serialization and deserialization. (Inherited from Style.)
	removePropertyChangeListener	(Inherited from Style.)

	setBrush	Sets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	setCaptionBackBrush	Sets the brush used to paint the caption bar of this table.
	setCellTextBrush	Gets the brush used to paint texts inside table cells.
	setFontFamily	Sets the font family of the item text. (Inherited from DiagramItemStyle.)
	setFontSize	Sets the font size of the item text. (Inherited from DiagramItemStyle.)
	setFontStyle	Sets the font style of the item text. (Inherited from DiagramItemStyle.)
	setFontUnit	Sets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	setShadowBrush	Sets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	setStroke	Sets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	setStrokeThickness	Sets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
S	with	Returns a TableNodeStyleBuilder object used to configure and create new TableNodeStyle instances.
	writeExternal	**Externalizable.writeExternal** implementation. (Inherited from Style.)

Protected Methods

	Name	Description
	getValue	Gets the value of the specified property. (Inherited from Style.)
	isPropertySet	Checks whether the specified property has a value. (Inherited from Style.)
	loadFromJson	Loads the style content from a JsonObject. (Inherited from DiagramNodeStyle.)
	loadFromXml	Loads the style content from an XML element. (Inherited from Style.)
	registerProperty	Registers a new property with the specified name and type. (Inherited from Style.)
	saveToJson	Saves the style content into a JsonObject. (Inherited from DiagramNodeStyle.)
	saveToXml	Saves the style content into an XML element. (Inherited from Style.)

	setValue	Sets the value of the specified property. (Inherited from Style.)
	unsetValue	Clears the value of the specified property. (Inherited from Style.)

See Also

TableNodeStyle Class
com.mindfusion.diagramming Namespace

TableNodeStyle Constructor

Initializes a new instance of the TableNodeStyle class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TableNodeStyle ()
```

See Also

TableNodeStyle Class
com.mindfusion.diagramming Namespace

TableNodeStyle Methods

TableNodeStyle.getCaptionBackBrush Method

Gets the brush used to paint the caption bar of this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getCaptionBackBrush ()
```

Return Value

See Also

TableNodeStyle Members
TableNodeStyle Class
com.mindfusion.diagramming Namespace

TableNodeStyle.getCellTextBrush Method

Gets the brush used to paint texts inside table cells.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getCellTextBrush ()
```

Return Value

See Also

TableNodeStyle Members
TableNodeStyle Class
com.mindfusion.diagramming Namespace

TableNodeStyle.init Method

Returns a TableNodeStyleBuilder object used to configure this TableNodeStyle instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TableNodeStyleBuilder init ()
```

Return Value

A **TableNodeStyleBuilder** instance.

See Also

TableNodeStyle Members
TableNodeStyle Class
com.mindfusion.diagramming Namespace

TableNodeStyle.setCaptionBackBrush Method

Sets the brush used to paint the caption bar of this table.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCaptionBackBrush (
    Brush value
```

```
)
```

Parameters

value

See Also

TableNodeStyle Members
TableNodeStyle Class
com.mindfusion.diagramming Namespace

TableNodeStyle.setCellTextBrush Method

Gets the brush used to paint texts inside table cells.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCellTextBrush (
    Brush value
)
```

Parameters

value

See Also

TableNodeStyle Members
TableNodeStyle Class
com.mindfusion.diagramming Namespace

TableNodeStyle.with Method

Returns a TableNodeStyleBuilder object used to configure and create new TableNodeStyle instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static TableNodeStyleBuilder with ()
```

Return Value

A **TableNodeStyleBuilder** instance.

See Also

TableSectionExpander Class

Syntax

Java
`public class TableSectionExpander extends Manipulator`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Manipulator
    com.mindfusion.diagramming.TableSectionExpander

See Also

TableSectionExpander Members
com.mindfusion.diagramming Namespace

TableSectionExpander Members

The following tables list the members exposed by the TableSectionExpander type.

Public Constructors

	Name	Description
	TableSectionExpander	

Protected Fields

	Name	Description
	item	(Inherited from Manipulator.)

Public Methods

	Name	Description
	cancel	Called when the manipulator should cancel the current manipulation. (Inherited from Manipulator.)
	drawsInLocalCoordinates	Returns whether the manipulator object draws in local or global coordinates. (Inherited from Manipulator.)
	getItem	(Inherited from Manipulator.)

	needsPointerMessages	Returns whether the manipulator object needs to track mouse events. (Inherited from Manipulator.)
	onGotFocus	Called when the manipulator receives input focus. (Inherited from Manipulator.)
	onLostFocus	Called when the manipulator loses the input focus. (Inherited from Manipulator.)
	onPointerDown	Called when the left mouse button is pressed while the pointer is over this manipulator. (Inherited from Manipulator.)
	onPointerMove	Called when the mouse is moved while this manipulator tracks the mouse events. (Inherited from Manipulator.)
	onPointerUp	Called when the left mouse button is released while this manipulator tracks the mouse events. (Inherited from Manipulator.)
	setMouseCursor	(Inherited from Manipulator.)

See Also

TableSectionExpander Class
com.mindfusion.diagramming Namespace

TableSectionExpander Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TableSectionExpander (
    DiagramItem item,
    int rowIndex
)
```

Parameters

item

rowIndex

See Also

TableSectionExpander Class
com.mindfusion.diagramming Namespace

TextRenderer Class

Syntax

Java
`public class TextRenderer`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.TextRenderer

See Also

TextRenderer Members
com.mindfusion.diagramming Namespace

TextRenderer Members

The following tables list the members exposed by the TextRenderer type.

Public Constructors

	Name	Description
	TextRenderer	

Public Methods

	Name	Description
	drawText	Overloaded.
	measureText	

See Also

TextRenderer Class
com.mindfusion.diagramming Namespace

TextRenderer Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public TextRenderer ()`

See Also

TextRenderer Class
com.mindfusion.diagramming Namespace

TextRenderer Methods

TextRenderer.drawText Method

Overload List

Name	Description
TextRenderer.drawText (Graphics2D, String, Rectangle2D, Font, Align, Align, float)	
TextRenderer.drawText (Graphics2D, String, Rectangle2D, Font, Align, float)	

See Also

TextRenderer Members
TextRenderer Class
com.mindfusion.diagramming Namespace

TextRenderer.drawText Method (Graphics2D, String, Rectangle2D, Font, Align, Align, float)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void drawText (
    Graphics2D graphics,
    String text,
    Rectangle2D rect,
    Font font,
    Align alignment,
    Align verticalAlignment,
    float maxWidth
)
```

Parameters

graphics

text

rect

font

alignment

verticalAlignment

maxWidth

See Also

drawText Method Overload List
TextRenderer Members
TextRenderer Class
com.mindfusion.diagramming Namespace

TextRenderer.drawText Method (Graphics2D, String, Rectangle2D, Font, Align, float)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void drawText (
    Graphics2D graphics,
    String text,
    Rectangle2D rect,
    Font font,
    Align alignment,
    float maxWidth
)
```

Parameters

graphics

text

rect

font

alignment

maxWidth

See Also

drawText Method Overload List
TextRenderer Members
TextRenderer Class
com.mindfusion.diagramming Namespace

TextRenderer.measureText Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static XDimension2D.Double measureText (
    String text,
    float maxWidth,
    Font font
)
```

Parameters

text

maxWidth

font

Return Value

See Also

TextRenderer Members
TextRenderer Class
com.mindfusion.diagramming Namespace

Theme Class

Represents a set of Style objects for different diagram item types.

Syntax

Java
`public class Theme implements Externalizable`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Theme

See Also

Theme Members
com.mindfusion.diagramming Namespace

Theme Members

Represents a set of Style objects for different diagram item types.

The following tables list the members exposed by the Theme type.

Public Constructors

	Name	Description
	Theme	Initializes a new instance of the **Theme** class.

Public Methods

	Name	Description
	addThemeListener	Registers listener so that it will receive events when the theme changes.
	loadFromString	Loads the theme from an XML string.

	loadFromXml	Loads the theme from an XML file.
	readExternal	**Externalizable.readExternal** implementation.
	registerStyle	Registers the specified Style object for the items of the specified type.
	removeThemeListener	Unregisters listener so that it will no longer receive theme events.
	saveToString	Saves the theme into an XML string.
	saveToXml	Saves the theme to an XML file.
	unregisterStyle	Unregisters the Style object associated with the specified type.
	writeExternal	**Externalizable.writeExternal** implementation.

See Also

Theme Class
com.mindfusion.diagramming Namespace

Theme Constructor

Initializes a new instance of the Theme class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Theme ()
```

See Also

Theme Class
com.mindfusion.diagramming Namespace

Theme Methods

Theme.addThemeListener Method

Registers listener so that it will receive events when the theme changes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addThemeListener (
    ThemeListener listener
```

```
)
```

Parameters

listener
An object implementing the ThemeListener interface.

See Also

Theme Members
Theme Class
com.mindfusion.diagramming Namespace

Theme.loadFromString Method

Loads the theme from an XML string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromString (
    String xml
)
```

Parameters

xml
The string to load from.

See Also

Theme Members
Theme Class
com.mindfusion.diagramming Namespace

Theme.loadFromXml Method

Loads the theme from an XML file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void loadFromXml (
    String fileName
)
```

Parameters

fileName

The name of the file to load from.

See Also

Theme Members
Theme Class
com.mindfusion.diagramming Namespace

Theme.readExternal Method

Externalizable.readExternal implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

Theme Members
Theme Class
com.mindfusion.diagramming Namespace

Theme.registerStyle Method

Registers the specified Style object for the items of the specified type.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void registerStyle (
    Class<?> type,
    Style style
)
```

Parameters

type
The runtime type to register.

style
The style to associate with the specified type. The previously associated style, if any, is discarded.

See Also

Theme Members
Theme Class
com.mindfusion.diagramming Namespace

Theme.removeThemeListener Method

Unregisters listener so that it will no longer receive theme events.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeThemeListener (
    ThemeListener listener
)
```

Parameters

listener
An object implementing the ThemeListener interface.

See Also

Theme Members
Theme Class
com.mindfusion.diagramming Namespace

Theme.saveToString Method

Saves the theme into an XML string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String saveToString ()
```

Return Value

The serialized string.

See Also

Theme Members
Theme Class
com.mindfusion.diagramming Namespace

Theme.saveToXml Method

Saves the theme to an XML file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void saveToXml (
    String fileName
)
```

Parameters

fileName
The name of the file to save to.

See Also

Theme Members
Theme Class
com.mindfusion.diagramming Namespace

Theme.unregisterStyle Method

Unregisters the Style object associated with the specified type.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void unregisterStyle (
    Class<?> type
)
```

Parameters

type
The runtime type to unregister.

See Also

Theme Members
Theme Class
com.mindfusion.diagramming Namespace

Theme.writeExternal Method

Externalizable.writeExternal implementation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

Theme Members
Theme Class
com.mindfusion.diagramming Namespace

ThemeListener Interface

Defines the events that can be raised by the Theme class.

Syntax

Java

```
public interface ThemeListener extends EventListener
```

See Also

ThemeListener Members
com.mindfusion.diagramming Namespace

ThemeListener Members

Defines the events that can be raised by the Theme class.

The following tables list the members exposed by the ThemeListener type.

Public Methods

	Name	Description
	changed	

See Also

ThemeListener Interface
com.mindfusion.diagramming Namespace

ThemeListener Methods

ThemeListener.changed Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
void changed (
    ThemeChangedEvent e
)
```

Parameters

e

See Also

ThemeListener Members
ThemeListener Interface
com.mindfusion.diagramming Namespace

Thickness Class

Describes the thickness of a rectangular frame.

Syntax

```
Java
public class Thickness implements Externalizable
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Thickness

See Also

Thickness Members
com.mindfusion.diagramming Namespace

Thickness Members

Describes the thickness of a rectangular frame.

The following tables list the members exposed by the Thickness type.

Public Constructors

	Name	Description
	Thickness	Overloaded.

Public Methods

	Name	Description
	getBottom	Gets the width of the bottom side of the frame.
	getLeft	Gets the width of the left side of the frame.
	getRight	Gets the width of the right side of the frame.
	getTop	Gets the width of the top side of the frame.
	readExternal	
	setBottom	Sets the width of the bottom side of the frame.
	setLeft	Ssets the width of the left side of the frame.
	setRight	Sets the width of the right side of the frame.
	setTop	Sets the width of the top side of the frame.
	writeExternal	

See Also

Thickness Class
com.mindfusion.diagramming Namespace

Thickness Constructor

Overload List

Name	Description
Thickness ()	
Thickness (float)	
Thickness (float, float, float, float)	
Thickness (Thickness)	

See Also

Thickness Class
com.mindfusion.diagramming Namespace

Thickness Constructor ()

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Thickness ()`

See Also

Thickness Constructor Overload List
Thickness Class
com.mindfusion.diagramming Namespace

Thickness Constructor (float)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Thickness (
    float uniformLength
)
```

Parameters

uniformLength

See Also

Thickness Constructor Overload List
Thickness Class
com.mindfusion.diagramming Namespace

Thickness Constructor (float, float, float, float)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Thickness (
    float left,
    float top,
    float right,
    float bottom
)
```

Parameters

left

top

right

bottom

See Also

Thickness Constructor Overload List
Thickness Class
com.mindfusion.diagramming Namespace

Thickness Constructor (Thickness)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Thickness (
    Thickness prototype
)
```

Parameters

prototype

See Also

Thickness Constructor Overload List
Thickness Class
com.mindfusion.diagramming Namespace

Thickness Methods

Thickness.getBottom Method

Gets the width of the bottom side of the frame.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getBottom ()
```

Return Value

the bottom

See Also

Thickness Members
Thickness Class
com.mindfusion.diagramming Namespace

Thickness.getLeft Method

Gets the width of the left side of the frame.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getLeft ()
```

Return Value

the left

See Also

Thickness Members
Thickness Class
com.mindfusion.diagramming Namespace

Thickness.getRight Method

Gets the width of the right side of the frame.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getRight ()
```

Return Value

the right

See Also

Thickness Members
Thickness Class
com.mindfusion.diagramming Namespace

Thickness.getTop Method

Gets the width of the top side of the frame.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getTop ()
```

Return Value

the top

See Also

Thickness Members
Thickness Class
com.mindfusion.diagramming Namespace

Thickness.readExternal Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

Thickness Members
Thickness Class
com.mindfusion.diagramming Namespace

Thickness.setBottom Method

Sets the width of the bottom side of the frame.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBottom (
    float bottom
)
```

Parameters

bottom
the bottom to set

See Also

Thickness Members
Thickness Class
com.mindfusion.diagramming Namespace

Thickness.setLeft Method

Ssets the width of the left side of the frame.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLeft (
    float left
)
```

Parameters

left
the left to set

See Also

Thickness Members
Thickness Class
com.mindfusion.diagramming Namespace

Thickness.setRight Method

Sets the width of the right side of the frame.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRight (
    float right
)
```

Parameters

right
the right to set

See Also

Thickness Members
Thickness Class
com.mindfusion.diagramming Namespace

Thickness.setTop Method

Sets the width of the top side of the frame.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTop (
    float top
)
```

Parameters

top
the top to set

See Also

Thickness Members
Thickness Class
com.mindfusion.diagramming Namespace

Thickness.writeExternal Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

Thickness Members
Thickness Class
com.mindfusion.diagramming Namespace

TickPosition Enumeration

The members of this enumeration specify the position of trackbar ticks.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum TickPosition`

Members

	Member name	Description
	Both	Ticks are rendered on both sides of the trackbar.
	Far	Ticks are rendered on the right or bottom side of the trackbar.
	Near	Ticks are rendered on the left or top side of the trackbar.
	None	There are no ticks rendered.

See Also

com.mindfusion.diagramming Namespace

TopologicalLayout Class

Implements a topological ordering.

Syntax

Java
`public class TopologicalLayout extends AbstractLayout`

Remarks

The algorithm arranges nodes in a row or a column (depending on the value of the Orientation property) in such a way that there are as fewer back links as possible. The links connecting nonadjacent nodes are rendered as arcs. The links connecting adjacent nodes are rendered either as arcs or as straight lines, depending on the BendAdjacentLinks property. The amplitude of the link arcs is proportional to the distance between the connected nodes.

All forward links are rendered at one side of the nodes and all back links are rendered at the opposite side. Thus, all bent links follow the same rotation direction.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AbstractLayout
    com.mindfusion.diagramming.TopologicalLayout

See Also

TopologicalLayout Members
com.mindfusion.diagramming Namespace

TopologicalLayout Members

Implements a topological ordering.

The following tables list the members exposed by the TopologicalLayout type.

Public Constructors

	Name	Description
	TopologicalLayout	Initializes a new instance of the CircularLayout class with the default settings.

Public Methods

	Name	Description
	arrange	Overloaded.
	getAnchoring	Gets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	getBendAdjacentLinks	Gets a value indicating whether to bend links connecting adjacent nodes or draw them as straight lines.
	getDirection	Gets the direction of the arranged diagram.
	getGrowToFit	Gets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	getKeepGroupLayout	Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	getLayoutLink	Gets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	getLayoutNode	Gets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	getMultipleGraphsPlacement	Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	getNodeDistance	Gets the distance between adjecent nodes in the diagram.
	getOrientation	Gets the overall orientation of the arranged diagram.
	getProgress	Gets the progress callback delegate. (Inherited from AbstractLayout.)
	init	Returns a TopologicalLayoutBuilder object used to configure this TopologicalLayout instance.
S	removeMidleSegmentPoint	(Inherited from AbstractLayout.)

	setAnchoring	Sets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	setBendAdjacentLinks	Sets a value indicating whether to bend links connecting adjacent nodes or draw them as straight lines.
	setDirection	Sets the direction of the arranged diagram.
	setGrowToFit	Sets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	setKeepGroupLayout	Sets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	setLayoutLink	Sets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	setLayoutNode	Sets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	setMultipleGraphsPlacement	Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	setNodeDistance	Sets the distance between adjecent nodes in the diagram.
	setOrientation	Sets the overall orientation of the arranged diagram.
	setProgress	Sets the progress callback delegate. (Inherited from AbstractLayout.)
S	with	Returns a TopologicalLayoutBuilder object used to configure and create new TopologicalLayout instances.

See Also

TopologicalLayout Class
com.mindfusion.diagramming Namespace

TopologicalLayout Constructor

Initializes a new instance of the CircularLayout class with the default settings.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TopologicalLayout ()
```

See Also

TopologicalLayout Class
com.mindfusion.diagramming Namespace

TopologicalLayout Methods

TopologicalLayout.arrange Method

Overload List

Name	Description
TopologicalLayout.arrange (Diagram)	Applies the layout on the specified Diagram instance.
TopologicalLayout.arrange (Diagram, DiagramItemList)	Applies the layout on the specified subset of items from the specified Diagram instance.

See Also

TopologicalLayout Members
TopologicalLayout Class
com.mindfusion.diagramming Namespace

TopologicalLayout.arrange Method (Diagram)

Applies the layout on the specified Diagram instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram diagram
)
```

Parameters

diagram
The Diagram that should be arranged.

Return Value

See Also

arrange Method Overload List
TopologicalLayout Members
TopologicalLayout Class
com.mindfusion.diagramming Namespace

TopologicalLayout.arrange Method (Diagram, DiagramItemList)

Applies the layout on the specified subset of items from the specified Diagram instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram diagram,
    DiagramItemList items
)
```

Parameters

diagram
The Diagram that should be arranged.

items
A collection of nodes and links from diagram that define the subgraph to arrange.

Return Value

See Also

arrange Method Overload List
TopologicalLayout Members
TopologicalLayout Class
com.mindfusion.diagramming Namespace

TopologicalLayout.getBendAdjacentLinks Method

Gets a value indicating whether to bend links connecting adjacent nodes or draw them as straight lines.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getBendAdjacentLinks ()
```

Return Value

true to bend links connecting adjecent nodes; **false**, to draw them as straight lines. The default is **false**.

See Also

TopologicalLayout Members
TopologicalLayout Class
com.mindfusion.diagramming Namespace

TopologicalLayout.getDirection Method

Gets the direction of the arranged diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Direction getDirection ()
```

Return Value

A member of the Direction enumeration. The default is Straight.

Remarks

If Orientation is set to Horizontal, Direction.Straight stands for "left to right" and Direction.Reversed for "right to left". If Orientation is set to Vertical, Direction.Straight stands for "top to bottom" and Direction.Reversed for "bottom to top".

See Also

TopologicalLayout Members
TopologicalLayout Class
com.mindfusion.diagramming Namespace

TopologicalLayout.getNodeDistance Method

Gets the distance between adjecent nodes in the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getNodeDistance ()
```

Return Value

A float value specifying the distance between adjacent nodes. The default is 20.

See Also

TopologicalLayout Members
TopologicalLayout Class
com.mindfusion.diagramming Namespace

TopologicalLayout.getOrientation Method

Gets the overall orientation of the arranged diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Orientation getOrientation ()
```

Return Value

A member of the Orientation enumeration. The default is Horizontal.

See Also

TopologicalLayout Members
TopologicalLayout Class
com.mindfusion.diagramming Namespace

TopologicalLayout.init Method

Returns a TopologicalLayoutBuilder object used to configure this TopologicalLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public TopologicalLayoutBuilder init ()
```

Return Value

A **TopologicalLayoutBuilder** instance.

See Also

TopologicalLayout Members
TopologicalLayout Class
com.mindfusion.diagramming Namespace

TopologicalLayout.setBendAdjacentLinks Method

Sets a value indicating whether to bend links connecting adjacent nodes or draw them as straight lines.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setBendAdjacentLinks (
    boolean value
)
```

Parameters

value
true to bend links connecting adjacent nodes; false, to draw them as straight lines. The default is false.

Remarks

This property applies only to forward links. Back links connecting adjacent nodes are always rendered as bent.

See Also

TopologicalLayout Members
TopologicalLayout Class
com.mindfusion.diagramming Namespace

TopologicalLayout.setDirection Method

Sets the direction of the arranged diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDirection (
    Direction value
)
```

Parameters

value
A member of the Direction enumeration. The default is Straight.

See Also

TopologicalLayout Members
TopologicalLayout Class
com.mindfusion.diagramming Namespace

TopologicalLayout.setNodeDistance Method

Sets the distance between adjecent nodes in the diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setNodeDistance (
    float value
)
```

Parameters

value
A float value specifying the distance between adjacent nodes. The default is 20.

See Also

TopologicalLayout Members
TopologicalLayout Class
com.mindfusion.diagramming Namespace

TopologicalLayout.setOrientation Method

Sets the overall orientation of the arranged diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value
A member of the Orientation enumeration.

See Also

TopologicalLayout Members
TopologicalLayout Class
com.mindfusion.diagramming Namespace

TopologicalLayout.with Method

Returns a TopologicalLayoutBuilder object used to configure and create new TopologicalLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static TopologicalLayoutBuilder with ()
```

Return Value

A **TopologicalLayoutBuilder** instance.

See Also

TreeItemList Class

Syntax

Java
`public class TreeItemList extends BaseList<E> implements Cloneable`

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.BaseList(E)
        com.mindfusion.diagramming.TreeItemList

See Also

TreeItemList Members
com.mindfusion.diagramming Namespace

TreeItemList Members

The following tables list the members exposed by the TreeItemList type.

Public Constructors

	Name	Description
	TreeItemList	

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)
	listEvent	(Inherited from BaseList.)
	notifyParent	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	Adds a new element to the list. (Inherited from BaseList.)
	clear	Removes all elements from the list. (Inherited from BaseList.)

	clone	
	contains	Determines if this list contains the specified element. (Inherited from BaseList.)
	first	Gets the first element of this list. (Inherited from BaseList.)
	get	Gets the element at the specified position in this list. (Inherited from BaseList.)
	last	Gets the last element of this list. (Inherited from BaseList.)
	readExternal	Loads the list's contents. (Inherited from BaseList.)
	remove	Overloaded. (Inherited from BaseList.)
	removeRange	Removes a range of elements from this list. (Inherited from BaseList.)
	set	Sets the element at the specified position in this list. (Inherited from BaseList.)
	size	Gets the number of elements in this list. (Inherited from BaseList.)
	writeExternal	Saves the list's contents. (Inherited from BaseList.)

Protected Methods

	Name	Description
	raiseAdding	Raises the adding event. (Inherited from BaseList.)
	raiseClearing	Raises the clearing event. (Inherited from BaseList.)
	raiseRemoving	Raises the removing event. (Inherited from BaseList.)

See Also

TreeItemList Class
com.mindfusion.diagramming Namespace

TreeItemList Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeItemList ()
```

See Also

TreeItemList Class
com.mindfusion.diagramming Namespace

TreeItemList Methods

TreeItemList.clone Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Object clone ()
```

Return Value

See Also

TreeItemList Members
TreeItemList Class
com.mindfusion.diagramming Namespace

TreeLayout Class

Implements several algorithms for arranging tree structures.

Syntax

```
Java
public class TreeLayout implements Layout
```

Remarks

Set the Type property of a **TreeLayout** instance to select which tree layout algorithm to run, and call the arrange method to apply the layout on a tree/subtree in the current diagram.

As long as the graph is a tree, the algorithm can find the root node automatically. You can override it by setting the Root property, e.g. in order to arrange only a selected branch of the tree. The distance between the root and the second level and between all subsequent levels can be set through the LevelDistance property. The distance between adjacent nodes in the same level is set through NodeDistance.

In addition to arranging the tree nodes, **TreeLayout** also sets the shape of links as set through its LinkStyle property. Anchoring specifies whether the links should be attached to the anchor points of tree nodes. Note that links that are not part of the tree are ignored, e.g. graph links that go in opposite direction of the general parent-to-child flow or cross-links that connect different tree branches. The tree layout algorithm produces best results if it can place link ends at arbitrary positions over nodes' outlines, that is, when using the Ignore value. If your application logic requires links to be always attached to anchor points, use the other two values. In such cases Reassign would yield better results. You can post-process such links after calling **arrange**, e.g. by setting their ControlPoints coordinates or by calling their route method.

By default, the order of child nodes arranged under a parent corresponds to the order of links in the parent's OutgoingLinks collection. The Balance property can be set to Preserve to keep the original geometric order of child nodes when arranging them under their parent. This can be used to arrange tree branches in a specific order by first placing them in increasing horizontal or vertical positions. Another

possibility is to apply **TreeLayout** from nodeModified handler to let users rearrange the tree branches by dragging and dropping a node.

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.TreeLayout

See Also

TreeLayout Members
com.mindfusion.diagramming Namespace

TreeLayout Members

Implements several algorithms for arranging tree structures.

The following tables list the members exposed by the TreeLayout type.

Public Constructors

	Name	Description
	TreeLayout	Overloaded. Initializes a new **TreeLayout** instance.

Public Methods

	Name	Description
	arrange	Arranges the specified diagram.
	getAnchoring	Gets a value indicating how links will be aligned to the anchor points of tree nodes.
	getBalance	Gets a value indicating the ordering of the child nodes in order to produce layouts with custom balance.
	getCompactAssistants	Gets a value indicating whether the "assistant" nodes on the same side of a single parent are arranged as close enough to each other as possible. Turning this off will force the nodes on one side to be aligned with their counterparts in the other and occasionally leaving space between adjacent branches.
	getDirection	Gets a value indicating in what direction child nodes should be placed relatively to their parent nodes.
	getEnableAssistants	Gets a value indicating whether the "assistant" trait is regarded when performing the layout.
	getIgnoreLinkDirection	Gets a value indicating whether the direction of links should be ignored.
	getKeepGroupLayout	Gets a value indicating whether groups of diagram nodes should be treated as integral nodes in the tree that will be laid out.
	getKeepRootPosition	Gets a value indicating whether the root node should be kept at its original position.

	getLevelDistance	Gets the desired distance between tree levels.
	getLinkStyle	Gets what style is assigned to the links processed by the **TreeLayout**.
	getNodeDistance	Gets the desired distance between nodes on the same level.
	getReversedLinks	Gets a value indicating which direction of links should be considered the parent-to-child one.
	getRoot	Gets the node which will be used as root of the tree.
	getStretchFactor	Gets a value defining the elliptic factor used with radial layouts.
	getType	Gets the layout mode.
	getXGap	Gets a value indicating how much horizontal space to leave between the document boundaries and the tree.
	getYGap	Gets a value indicating how much vertical space to leave between the document boundaries and the tree.
	init	Returns a TreeLayoutBuilder object used to configure this TreeLayout instance.
	setAnchoring	Sets a value indicating how links should be aligned to the anchor points of tree nodes.
	setBalance	Sets a value indicating the ordering of the child nodes in order to produce layouts with custom balance.
	setCompactAssistants	Sets a value indicating whether the "assistant" nodes on the same side of a single parent are arranged as close enough to each other as possible. Turning this off will force the nodes on one side to be aligned with their counterparts in the other and occasionally leaving space between adjacent branches.
	setDirection	Sets a value indicating in what direction child nodes should be placed relatively to their parent nodes.
	setEnableAssistants	Sets a value indicating whether the "assistant" trait is regarded when performing the layout.
	setIgnoreLinkDirection	Sets a value indicating whether the direction of links should be ignored.
	setKeepGroupLayout	Sets a value indicating whether groups of diagram nodes should be treated as integral nodes in the tree that will be laid out.
	setKeepRootPosition	Sets a value indicating whether the root node should be kept at its original position.
	setLevelDistance	Sets the desired distance between tree levels.
	setLinkStyle	Sets what style should be assigned to the links processed by the layout algorithm.
	setNodeDistance	Sets the desired distance between nodes on the same level.

	setReversedLinks	Sets a value indicating which direction of links should be considered the parent-to-child one.
	setRoot	Sets the object which will be used as root of the tree.
	setStretchFactor	Sets a value defining the elliptic factor used with radial layouts.
	setType	Sets the layout mode.
	setXGap	Sets a value indicating how much horizontal space to leave between the document boundaries and the tree.
	setYGap	Sets a value indicating how much vertical space to leave between the document boundaries and the tree.
S	with	Returns a TreeLayoutBuilder object used to configure and create new TreeLayout instances.

See Also

TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout Constructor

Initializes a new TreeLayout instance.

Overload List

Name	Description
TreeLayout ()	Initializes a new instance of the **TreeLayout** class.
TreeLayout (DiagramNode)	Initializes a new instance of the **TreeLayout** class, specifying which node to use as a tree root.
TreeLayout (DiagramNode, TreeLayoutType)	Initializes a new instance of the TreeLayout class, specifying the root node and layout mode.
TreeLayout (DiagramNode, TreeLayoutType, boolean, TreeLayoutLinkType, TreeLayoutDirection, float, float, boolean, float, float)	Initializes a new instance of the TreeLayout class.
TreeLayout (DiagramNode, TreeLayoutType, boolean, TreeLayoutLinkType, TreeLayoutDirection, float, float, boolean, float, float, boolean)	Initializes a new instance of the **TreeLayout** class.
TreeLayout (TreeLayoutType)	Initializes a new instance of the **TreeLayout** class, specifying the layout mode.

See Also

TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout Constructor ()

Initializes a new instance of the TreeLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeLayout ()
```

See Also

TreeLayout Constructor Overload List
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout Constructor (DiagramNode)

Initializes a new instance of the TreeLayout class, specifying which node to use as a tree root.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeLayout (
    DiagramNode root
)
```

Parameters

root
A DiagramNode -derived object representing the tree root node.

See Also

TreeLayout Constructor Overload List
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout Constructor (DiagramNode, TreeLayoutType)

Initializes a new instance of the TreeLayout class, specifying the root node and layout mode.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeLayout (
    DiagramNode root,
    TreeLayoutType type
)
```

Parameters

root
A DiagramNode -derived object representing the tree root node.

type
A member of the TreeLayoutType enumeration.

See Also

TreeLayout Constructor Overload List
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout Constructor (DiagramNode, TreeLayoutType, boolean, TreeLayoutLinkType, TreeLayoutDirection, float, float, boolean, float, float)

Initializes a new instance of the TreeLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeLayout (
    DiagramNode root,
    TreeLayoutType type,
    boolean reversedLinks,
    TreeLayoutLinkType linkStyle,
    TreeLayoutDirection direction,
    float levelDistance,
    float nodeDistance,
    boolean keepRootPosition,
    float xGap,
    float yGap
)
```

Parameters

root
A DiagramNode -derived object representing the tree root node.

type
A member of the TreeLayoutType enumeration.

reversedLinks
true if the parent-to-child directionin the tree is considered to be the one from links destination nodes to links origin nodes, otherwise **false**.

linkStyle
A member of the TreeLayoutLinkType enumeration.

direction
A member of the TreeLayoutDirection enumeration.

levelDistance
A float value specifying the distance between tree levels.

nodeDistance
A float value specifying the distance between sibling nodes.

keepRootPosition
true if the root positionshould be preserved, otherwise false.

xGap
A float value specifying the horizontal offsetfrom the left document border.

yGap
A float value specifying the vertical offsetfrom the top document border.

See Also

TreeLayout Constructor Overload List
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout Constructor (DiagramNode, TreeLayoutType, boolean, TreeLayoutLinkType, TreeLayoutDirection, float, float, boolean, float, float, boolean)

Initializes a new instance of the TreeLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeLayout (
    DiagramNode root,
    TreeLayoutType type,
    boolean reversedLinks,
    TreeLayoutLinkType linkStyle,
    TreeLayoutDirection direction,
    float levelDistance,
    float nodeDistance,
    boolean keepRootPosition,
    float xGap,
    float yGap,
    boolean keepGroupLayout
)
```

Parameters

root
A DiagramNode -derived object representing the tree root node.

type
A member of the TreeLayoutType enumeration.

reversedLinks
true if the parent-to-child directionin the tree is considered to be the one from links destination nodes to links origin nodes, otherwise **false**.

linkStyle
A member of the TreeLayoutLinkType enumeration.

direction

A member of the TreeLayoutDirection enumeration.

levelDistance
A float value specifying the distance between tree levels.

nodeDistance
A float value specifying the distance between sibling nodes.

keepRootPosition
true if the root positionshould be preserved, otherwise false.

xGap
A float value specifying the horizontal offsetfrom the left document border.

yGap
A float value specifying the vertical offsetfrom the top document border.

keepGroupLayout
true if the relative position ofnodes within groups should be preserved, otherwise false.

See Also

TreeLayout Constructor Overload List
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout Constructor (TreeLayoutType)

Initializes a new instance of the TreeLayout class, specifying the layout mode.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeLayout (
    TreeLayoutType type
)
```

Parameters

type
A member of the TreeLayoutType enumeration.

See Also

TreeLayout Constructor Overload List
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout Methods

TreeLayout.arrange Method

Arranges the specified diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean arrange (
    Diagram chart
)
```

Parameters

chart
The Diagram to arrange.

Return Value

true if the tree is arranged successfully, or **false** if JDiagram cannot find the tree root, for example, when the setIgnoreLinkDirection method is called and the tree root is not specified by the application.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.getAnchoring Method

Gets a value indicating how links will be aligned to the anchor points of tree nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Anchoring getAnchoring ()
```

Return Value

A member of the Anchoring enumeration.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.getBalance Method

Gets a value indicating the ordering of the child nodes in order to produce layouts with custom balance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeLayoutBalance getBalance ()
```

Return Value

A member of the TreeLayoutBalance enumeration.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.getCompactAssistants Method

Gets a value indicating whether the "assistant" nodes on the same side of a single parent are arranged as close enough to each other as possible. Turning this off will force the nodes on one side to be aligned with their counterparts in the other and occasionally leaving space between adjacent branches.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getCompactAssistants ()
```

Return Value

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.getDirection Method

Gets a value indicating in what direction child nodes should be placed relatively to their parent nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeLayoutDirection getDirection ()
```

Return Value

A member of the TreeLayoutDirection enumeration.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.getEnableAssistants Method

Gets a value indicating whether the "assistant" trait is regarded when performing the layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getEnableAssistants ()
```

Return Value

true to enable assistant nodes, otherwise **false**; the default value is **false**.

Remarks

Enabling this property lets you create organizational charts as in MS office. To designate some nodes as assistants, assign **true** as a value for the TreeLayoutTraits.Assistant key in the node's LayoutTraits.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.getIgnoreLinkDirection Method

Gets a value indicating whether the direction of links should be ignored.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getIgnoreLinkDirection ()
```

Return Value

true if the direction of links will be ignored when arranging a tree, otherwise **false**.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.getKeepGroupLayout Method

Gets a value indicating whether groups of diagram nodes should be treated as integral nodes in the tree that will be laid out.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getKeepGroupLayout ()
```

Return Value

true if the relative position of nodes within groups should be preserved, otherwise **false**.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.getKeepRootPosition Method

Gets a value indicating whether the root node should be kept at its original position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getKeepRootPosition ()
```

Return Value

true if the root position will be preserved, otherwise **false**.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.getLevelDistance Method

Gets the desired distance between tree levels.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getLevelDistance ()
```

Return Value

A float value specifying the distance between tree levels.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.getLinkStyle Method

Gets what style is assigned to the links processed by the TreeLayout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeLayoutLinkType getLinkStyle ()
```

Return Value

A member of the TreeLayoutLinkType enumeration.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.getNodeDistance Method

Gets the desired distance between nodes on the same level.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getNodeDistance ()
```

Return Value

A float value specifying the distance between sibling nodes.

See Also

TreeLayout Members
TreeLayout Class

TreeLayout.getReversedLinks Method

Gets a value indicating which direction of links should be considered the parent-to-child one.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getReversedLinks ()
```

Return Value

true if the parent-to-child direction in the tree is considered to be the one from links destination nodes to links origin nodes, otherwise **false**.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.getRoot Method

Gets the node which will be used as root of the tree.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramNode getRoot ()
```

Return Value

A DiagramNode -derived object representing the tree root node.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.getStretchFactor Method

Gets a value defining the elliptic factor used with radial layouts.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getStretchFactor ()
```

Return Value

A float multiplier that is applied to the horizontal distance between nodes in a radial layout.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.getType Method

Gets the layout mode.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public TreeLayoutType getType ()
```

Return Value

A member of the TreeLayoutType enumeration.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.getXGap Method

Gets a value indicating how much horizontal space to leave between the document boundaries and the tree.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getXGap ()
```

Return Value

A **float** value specifying the horizontal offset from the left document border.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.getYGap Method

Gets a value indicating how much vertical space to leave between the document boundaries and the tree.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getYGap ()
```

Return Value

A **float** value specifying the vertical offset from the top document border.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.init Method

Returns a TreeLayoutBuilder object used to configure this TreeLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeLayoutBuilder init ()
```

Return Value

A **TreeLayoutBuilder** instance.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.setAnchoring Method

Sets a value indicating how links should be aligned to the anchor points of tree nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setAnchoring (
    Anchoring value
)
```

Parameters

value
A member of the Anchoring enumeration.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.setBalance Method

Sets a value indicating the ordering of the child nodes in order to produce layouts with custom balance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setBalance (
    TreeLayoutBalance value
)
```

Parameters

value
A member of the TreeLayoutBalance enumeration.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.setCompactAssistants Method

Sets a value indicating whether the "assistant" nodes on the same side of a single parent are arranged as close enough to each other as possible. Turning this off will force the nodes on one side to be aligned with their counterparts in the other and occasionally leaving space between adjacent branches.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setCompactAssistants (
    boolean value
)
```

Parameters

value

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.setDirection Method

Sets a value indicating in what direction child nodes should be placed relatively to their parent nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setDirection (
    TreeLayoutDirection value
)
```

Parameters

value
A member of the TreeLayoutDirection enumeration.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.setEnableAssistants Method

Sets a value indicating whether the "assistant" trait is regarded when performing the layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public void setEnableAssistants (
    boolean value
)
```

Parameters

value
true to enable assistant nodes, otherwise **false**; the default value is **false**.

Remarks

Enabling this property lets you create organizational charts as in MS office. To designate some nodes as assistants, assign true as a value for the TreeLayoutTraits.Assistant key in the node's LayoutTraits.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.setIgnoreLinkDirection Method

Sets a value indicating whether the direction of links should be ignored.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIgnoreLinkDirection (
    boolean value
)
```

Parameters

value
true if the direction of links should be ignored when arranging a tree, otherwise **false**.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.setKeepGroupLayout Method

Sets a value indicating whether groups of diagram nodes should be treated as integral nodes in the tree that will be laid out.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setKeepGroupLayout (
    boolean value
)
```

Parameters

value
true if the relative position of nodes within groups should be preserved, otherwise **false**.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.setKeepRootPosition Method

Sets a value indicating whether the root node should be kept at its original position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setKeepRootPosition (
    boolean value
)
```

Parameters

value
true if the root position should be preserved, otherwise **false**.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.setLevelDistance Method

Sets the desired distance between tree levels.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setLevelDistance (
    float value
)
```

Parameters

value
A float value specifying the distance between tree levels.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.setLinkStyle Method

Sets what style should be assigned to the links processed by the layout algorithm.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLinkStyle (
    TreeLayoutLinkType value
)
```

Parameters

value
A member of the TreeLayoutLinkType enumeration.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.setNodeDistance Method

Sets the desired distance between nodes on the same level.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setNodeDistance (
    float value
)
```

Parameters

value
A float value specifying the distance between sibling nodes.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.setReversedLinks Method

Sets a value indicating which direction of links should be considered the parent-to-child one.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setReversedLinks (
    boolean value
)
```

Parameters

value
true if the parent-to-child direction in the tree is considered to be the one from links destination nodes to links origin nodes, otherwise **false**.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.setRoot Method

Sets the object which will be used as root of the tree.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setRoot (
    DiagramNode value
)
```

Parameters

value
A DiagramNode -derived object representing the tree root node.

See Also

TreeLayout Members
TreeLayout Class

TreeLayout.setStretchFactor Method

Sets a value defining the elliptic factor used with radial layouts.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setStretchFactor (
    float value
)
```

Parameters

value
A float multiplier that is applied to the horizontal distance between nodes in a radial layout.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.setType Method

Sets the layout mode.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setType (
    TreeLayoutType value
)
```

Parameters

value
A member of the TreeLayoutType enumeration.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.setXGap Method

Sets a value indicating how much horizontal space to leave between the document boundaries and the tree.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setXGap (
    float value
)
```

Parameters

value
A **float** value specifying the horizontal offset from the left document border.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.setYGap Method

Sets a value indicating how much vertical space to leave between the document boundaries and the tree.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setYGap (
    float value
)
```

Parameters

value
A **float** value specifying the vertical offset from the top document border.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayout.with Method

Returns a TreeLayoutBuilder object used to configure and create new TreeLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static TreeLayoutBuilder with ()`

Return Value

A **TreeLayoutBuilder** instance.

See Also

TreeLayout Members
TreeLayout Class
com.mindfusion.diagramming Namespace

TreeLayoutBalance Enumeration

Specifies how to order child nodes in order to produce tree layouts with custom balance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum TreeLayoutBalance`

Members

	Member name	Description
	LeftHeavy	Indicates that the child nodes with most total children will be processed first, thus producing a left-heavy layout.
	Original	Indicates that the child order should not be changed.
	Preserve	Indicates that the layout will attempt to preserve the initial relative ordering of nodes.
	Reversed	Indicates that the child order should be reversed.
	RightHeavy	Indicates that the child nodes with least total children will be processed first, thus producing a right-heavy layout.

See Also

com.mindfusion.diagramming Namespace

TreeLayoutLinkType Enumeration

The members of this enumeration specify what style to assign to the links processed by TreeLayout. They can be used as parameters of the setLinkStyle method of the **TreeLayout** class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum TreeLayoutLinkType`

Members

	Member name	Description
	Cascading2	Each link should be a cascade of two orthogonal straight line segments.
	Cascading3	Each link should be a cascade of three orthogonal straight line segments.
	Rounded	Each link should consist of one Bezier segment.
	Straight	Each link should consist of on straight line segment.

See Also

com.mindfusion.diagramming Namespace

TreeLayoutType Enumeration

The members of this enumeration specify what the shape of a tree arranged by the TreeLayout class should be. They can be used as parameters of the setType method of the **TreeLayout** class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum TreeLayoutType`

Members

	Member name	Description
	Cascading	Windows Explorer- like tree.
	Centered	Center parent nodes above their children.
	Radial	The root node is at the center and each next level of children is further from the root. Each level is arranged on a circle around the root.

See Also

com.mindfusion.diagramming Namespace

TreeMapLayout Class

Implements a tree map layout algorithm.

Syntax

Java
`public class TreeMapLayout extends AbstractLayout`

Remarks

Tree maps represent hierarchies by nesting child nodes within their parents, where the areas of leaf nodes are proportional to their Weight values. Unlike other layout algorithms, **TreeMapLayout** expects hierarchies to be defined via grouping or containment (see attachTo method and ContainerNode class), and will ignore any links in the diagram.

The diagram area covered by the topmost nodes in a hierarchy is specified via the LayoutArea property. By default, the layout tries to keep the ratio of node sides as close as possible to one. However this could make it hard to distinguish separate levels of the hierarchy. To alleviate that, set Squarify to **false**, and child nodes will be arranged either as a row or a column inside their parent node, alternating directions for each level. The drawback is that when **Weight** ratios differ greatly or nodes contain many children, some nodes could end up with very narrow rectangles.

The padding size between parent nodes and their outermost children is specified via the ContainerPadding property. The padding size between child nodes is specified via Padding.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AbstractLayout
    com.mindfusion.diagramming.TreeMapLayout

See Also

TreeMapLayout Members
com.mindfusion.diagramming Namespace

TreeMapLayout Members

Implements a tree map layout algorithm.

The following tables list the members exposed by the TreeMapLayout type.

Public Constructors

	Name	Description
	TreeMapLayout	Initializes a new instance of the **TreeMapLayout** class with the default settings.

Public Methods

	Name	Description
	arrange	Applies the layout to the specified diagram.
	getAnchoring	Gets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	getContainerPadding	Gets the padding inside containers.
	getGrowToFit	Gets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	getKeepGroupLayout	Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	getLayoutArea	Gets the rectangle in which the layout will try to arrange the nodes, or **null**, to use the diagram bounds.
	getLayoutLink	Gets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	getLayoutNode	Gets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	getMultipleGraphsPlacement	Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	getOrientation	Gets the orientation of the arranged diagram.
	getPadding	Gets the distance between adjacent nodes.
	getProgress	Gets the progress callback delegate. (Inherited from AbstractLayout.)
	getSquarify	Gets a value indicating whether the layout should attempt to keep the dimension ratio of the nodes closer to 1.
	init	Returns a TreeMapLayoutBuilder object used to configure this TreeMapLayout instance.
	removeMidleSegmentPoint	(Inherited from AbstractLayout.)
	setAnchoring	Sets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	setContainerPadding	Sets the padding inside containers.
	setGrowToFit	Sets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	setKeepGroupLayout	Sets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)

	setLayoutArea	Sets the rectangle in which the layout will try to arrange the nodes, or null, to use the diagram bounds.
	setLayoutLink	Sets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	setLayoutNode	Sets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	setMultipleGraphsPlacement	Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	setOrientation	Sets the orientation of the arranged diagram.
	setPadding	Sets the distance between adjacent nodes.
	setProgress	Sets the progress callback delegate. (Inherited from AbstractLayout.)
	setSquarify	Sets a value indicating whether the layout should attempt to keep the dimension ratio of the nodes closer to 1.
S	with	Returns a TreeMapLayoutBuilder object used to configure and create new TreeMapLayout instances.

Protected Methods

	Name	Description
	getDefaultMarginValue	Gets the default value of the **Margins** property.

See Also

TreeMapLayout Class
com.mindfusion.diagramming Namespace

TreeMapLayout Constructor

Initializes a new instance of the TreeMapLayout class with the default settings.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeMapLayout ()
```

See Also

TreeMapLayout Methods

TreeMapLayout.arrange Method

Applies the layout to the specified diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram diagram,
    DiagramItemList items
)
```

Parameters

diagram

items

Return Value

See Also

TreeMapLayout Members
TreeMapLayout Class
com.mindfusion.diagramming Namespace

TreeMapLayout.getContainerPadding Method

Gets the padding inside containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getContainerPadding ()
```

Return Value

A **float** value specifying the padding size between parent nodes and their outermost children. The default value is 0.

See Also

TreeMapLayout Members
TreeMapLayout Class

TreeMapLayout.getDefaultMarginValue Method

Gets the default value of the Margins property.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected XDimension2D.Double getDefaultMarginValue ()
```

Return Value

See Also

TreeMapLayout Members
TreeMapLayout Class
com.mindfusion.diagramming Namespace

TreeMapLayout.getLayoutArea Method

Gets the rectangle in which the layout will try to arrange the nodes, or **null**, to use the diagram bounds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D.Float getLayoutArea ()
```

Return Value

A **Rectangle2D** specifying the area where topmost nodes in the hierarchy are laid out. The default value is **null**.

Remarks

If this property is not set, the algorithm uses the value of diagram's Bounds property as target layout rectangle.

See Also

TreeMapLayout Members
TreeMapLayout Class
com.mindfusion.diagramming Namespace

TreeMapLayout.getOrientation Method

Gets the orientation of the arranged diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Orientation getOrientation ()
```

Return Value

A member of the Orientation enumeration. The default is Vertical.

Remarks

This value is used only when Squarify is set to **false**, and specifies the orientation of the topmost level of the hierarchy. The algorithm alternates the orientation of each subsequent level, arranging its nodes either in rows or columns.

See Also

TreeMapLayout Members
TreeMapLayout Class
com.mindfusion.diagramming Namespace

TreeMapLayout.getPadding Method

Gets the distance between adjacent nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getPadding ()
```

Return Value

A real number specifying the distance between adjacent nodes. The default is 1.

See Also

TreeMapLayout Members
TreeMapLayout Class
com.mindfusion.diagramming Namespace

TreeMapLayout.getSquarify Method

Gets a value indicating whether the layout should attempt to keep the dimension ratio of the nodes closer to 1.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getSquarify ()
```

Return Value

true to keep the ratio of node sides as close as possible to one, or **false** otherwise. The default value is **true**.

Remarks

If set to **false**, each level of the hierarchy is arranged in rows or columns with same height/width, which might create very narrow rectangles when Weight values differ greatly or nodes have many children. The alternating orientation between levels however helps to distinguish between different levels in the hierarchy. The initial direction of nodes (in topmost level) depends on the value of Orientation.

See Also

TreeMapLayout Members
TreeMapLayout Class
com.mindfusion.diagramming Namespace

TreeMapLayout.init Method

Returns a TreeMapLayoutBuilder object used to configure this TreeMapLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public TreeMapLayoutBuilder init ()
```

Return Value

A **TreeMapLayoutBuilder** instance.

See Also

TreeMapLayout Members
TreeMapLayout Class
com.mindfusion.diagramming Namespace

TreeMapLayout.setContainerPadding Method

Sets the padding inside containers.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setContainerPadding (
    float value
)
```

Parameters

value
A **float** value specifying the padding size between parent nodes and their outermost children.

See Also

TreeMapLayout Members
TreeMapLayout Class
com.mindfusion.diagramming Namespace
Padding Property

TreeMapLayout.setLayoutArea Method

Sets the rectangle in which the layout will try to arrange the nodes, or null, to use the diagram bounds.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLayoutArea (
    Rectangle2D.Float value
)
```

Parameters

value
A **Rectangle2D** specifying the area where topmost nodes in the hierarchy are laid out. The default value is **null**.

Remarks

If this property is not set, the algorithm uses the value of diagram's Bounds property as target layout rectangle.

See Also

TreeMapLayout Members
TreeMapLayout Class
com.mindfusion.diagramming Namespace

TreeMapLayout.setOrientation Method

Sets the orientation of the arranged diagram.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setOrientation (
    Orientation value
)
```

Parameters

value
A member of the Orientation enumeration. The default is Vertical.

See Also

TreeMapLayout Members
TreeMapLayout Class
com.mindfusion.diagramming Namespace

TreeMapLayout.setPadding Method

Sets the distance between adjacent nodes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setPadding (
    float value
)
```

Parameters

value
A real number specifying the distance between adjacent nodes.

See Also

TreeMapLayout Members
TreeMapLayout Class
com.mindfusion.diagramming Namespace
ContainerPadding Property

TreeMapLayout.setSquarify Method

Sets a value indicating whether the layout should attempt to keep the dimension ratio of the nodes closer to 1.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setSquarify (
    boolean value
)
```

Parameters

value
true to keep the ratio of node sides as close as possible to one, or **false** otherwise.

Remarks

If set to **false**, each level of the hierarchy is arranged in rows or columns with same height/width, which might create very narrow rectangles when Weight values differ greatly or nodes have many children. The alternating orientation between levels however helps to distinguish between different levels in the hierarchy. The initial direction of nodes (in topmost level) depends on the value of Orientation.

See Also

TreeMapLayout Members
TreeMapLayout Class
com.mindfusion.diagramming Namespace

TreeMapLayout.with Method

Returns a TreeMapLayoutBuilder object used to configure and create new TreeMapLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static TreeMapLayoutBuilder with ()
```

Return Value

A **TreeMapLayoutBuilder** instance.

See Also

TreeMapLayout Members
TreeMapLayout Class
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint Class

Syntax

```
Java
public class TreeViewConnectionPoint extends ConnectionPoint
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.ConnectionPoint
    com.mindfusion.diagramming.TreeViewConnectionPoint

See Also

TreeViewConnectionPoint Members
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint Members

The following tables list the members exposed by the TreeViewConnectionPoint type.

Public Constructors

	Name	Description
	TreeViewConnectionPoint	Overloaded.

Protected Fields

	Name	Description
	node	(Inherited from ConnectionPoint.)

Public Methods

	Name	Description
	addLinkToNode	ConnectionPoint.addLinkToNode override.
	anchorPointFromIndex	Returns the AnchorPoint instance with the specified index. (Inherited from ConnectionPoint.)
	calculateIntersections	Determines whether the end of a link should be aligned to the point where the node contour is intersected by the line connecting the centers of the connected nodes. (Inherited from ConnectionPoint.)
	canMoveLink	Checks whether the specified point, expressed in document coordinates, is a valid location for this connection point. (Inherited from ConnectionPoint.)
	getAnchorPos	Overloaded. (Inherited from ConnectionPoint.)
	getEndPoint	ConnectionPoint.getEndPoint override.
	getInitialPoint	ConnectionPoint.getInitialPoint override.
	getIntersection	ConnectionPoint.getIntersection override.
	getNodeRect	Returns the bounding rectangle of the node associated with this connection point. (Inherited from ConnectionPoint.)
	getRelativePosition	Gets the position of this connection point, relative to the associated node's bounding rectangle, expressed in

		percents. (Inherited from ConnectionPoint.)
	getRow	ConnectionPoint.getRow override.
	linkChanges	ConnectionPoint.linkChanges override.
	nodesIntersect	Checks whether the node associated with the current connection point and the node associated with the specified connection point intersect. (Inherited from ConnectionPoint.)
	readExternal	
	removeLinkFromNode	ConnectionPoint.removeLinkFromNode override.
	sameNode	Checks whether the current connection point and the specified connection point are associated with the same node. (Inherited from ConnectionPoint.)
	saveEndRelative	ConnectionPoint.saveEndRelative override.
	setRelativePosition	Sets the position of this connection point, relative to the associated node's bounding rectangle, expressed in percents. (Inherited from ConnectionPoint.)
	writeExternal	

Protected Methods

	Name	Description
	getIncoming	Gets a flag indicating whether this connection point is at the origin or the destination of the associated link. (Inherited from ConnectionPoint.)
	getLink	Gets the link associated with this connection point. (Inherited from ConnectionPoint.)
	getNearestBorderPoint	ConnectionPoint.getNearestBorderPoint override.
	getNode	Gets the node associated with this connection point. (Inherited from ConnectionPoint.)
	updateFromPoint	Updates the connection stated according to the specified point, without changing the related node.

See Also

TreeViewConnectionPoint Class
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint Constructor

Overload List

Name	Description
TreeViewConnectionPoint ()	Initializes a new instance of the TreeViewConnectionPoint class.

TreeViewConnectionPoint (TreeViewNode, DiagramLink, boolean, TreeViewItem)	Initializes a new instance of the TreeViewConnectionPoint class.

See Also

TreeViewConnectionPoint Class
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint Constructor ()

Initializes a new instance of the TreeViewConnectionPoint class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeViewConnectionPoint ()
```

See Also

TreeViewConnectionPoint Constructor Overload List
TreeViewConnectionPoint Class
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint Constructor (TreeViewNode, DiagramLink, boolean, TreeViewItem)

Initializes a new instance of the TreeViewConnectionPoint class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeViewConnectionPoint (
    TreeViewNode node,
    DiagramLink link,
    boolean incoming,
    TreeViewItem item
)
```

Parameters

node
A TreeViewNode instance.

link
A DiagramLink instance.

incoming
Specifies which end of the link is represented by this TreeViewConnectionPoint.

item
The TreeViewItem to which the link connects.

See Also

TreeViewConnectionPoint Constructor Overload List
TreeViewConnectionPoint Class
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint Methods

TreeViewConnectionPoint.addLinkToNode Method

ConnectionPoint.addLinkToNode override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addLinkToNode ()
```

See Also

TreeViewConnectionPoint Members
TreeViewConnectionPoint Class
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint.getEndPoint Method

ConnectionPoint.getEndPoint override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D getEndPoint ()
```

Return Value

See Also

TreeViewConnectionPoint Members
TreeViewConnectionPoint Class
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint.getInitialPoint Method

ConnectionPoint.getInitialPoint override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D getInitialPoint ()
```

Return Value

See Also

TreeViewConnectionPoint Members
TreeViewConnectionPoint Class
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint.getIntersection Method

ConnectionPoint.getIntersection override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D getIntersection (
    Point2D pt1,
    Point2D pt2
)
```

Parameters

pt1

pt2

Return Value

See Also

TreeViewConnectionPoint Members
TreeViewConnectionPoint Class
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint.getNearestBorderPoint Method

ConnectionPoint.getNearestBorderPoint override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected Point2D getNearestBorderPoint (
    Point2D point
)
```

Parameters

point

Return Value

See Also

TreeViewConnectionPoint Members
TreeViewConnectionPoint Class
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint.getRow Method

ConnectionPoint.getRow override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getRow ()
```

Return Value

See Also

TreeViewConnectionPoint Members
TreeViewConnectionPoint Class
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint.linkChanges Method

ConnectionPoint.linkChanges override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean linkChanges (
    DiagramNode node,
    Point2D point
)
```

Parameters

node

point

Return Value

See Also

TreeViewConnectionPoint Members
TreeViewConnectionPoint Class
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint.readExternal Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

TreeViewConnectionPoint Members
TreeViewConnectionPoint Class
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint.removeLinkFromNode Method

ConnectionPoint.removeLinkFromNode override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeLinkFromNode ()
```

See Also

TreeViewConnectionPoint Members
TreeViewConnectionPoint Class
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint.saveEndRelative Method

ConnectionPoint.saveEndRelative override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void saveEndRelative ()
```

See Also

TreeViewConnectionPoint Members
TreeViewConnectionPoint Class
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint.updateFromPoint Method

Updates the connection stated according to the specified point, without changing the related node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void updateFromPoint (
    Point2D point
)
```

Parameters

point

See Also

TreeViewConnectionPoint Members
TreeViewConnectionPoint Class
com.mindfusion.diagramming Namespace

TreeViewConnectionPoint.writeExternal Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

TreeViewConnectionPoint Members
TreeViewConnectionPoint Class
com.mindfusion.diagramming Namespace

TreeViewConnectionStyle Enumeration

The members of this enumeration specify the possible ways to connect links to TreeViewNodes. They can be assigned to the setConnectionStyle property of TreeViewNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public enum TreeViewConnectionStyle`

Members

	Member name	Description
	Items	Users are allowed to draw relations to individual items of a TreeViewNode.
	Node	Users are allowed to draw relations to the TreeViewNode as an integral entity.

See Also

com.mindfusion.diagramming Namespace

TreeViewItem Class

Represents a constituent item of the hierarchy displayed inside a TreeViewNode.

Syntax

Java
`public class TreeViewItem implements RenderTextCallback, InplaceEditable, Externalizable`

Remarks

The items of a TreeViewNode can be traversed recursively starting from the node's RootItems. Given an item, you can find its parent and child items by calling getParent and getChildren.

If the ConnectionStyle of a node is set to Items, links connect to specific items of the node. Such links can be accessed by means of the IncomingLinks and OutgoingLinks collections.

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.TreeViewItem

See Also

TreeViewItem Members
com.mindfusion.diagramming Namespace

TreeViewItem Members

Represents a constituent item of the hierarchy displayed inside a TreeViewNode.

The following tables list the members exposed by the TreeViewItem type.

Public Constructors

	Name	Description
	TreeViewItem	Overloaded.

Public Methods

	Name	Description
	clone	Creates a copy of this item.
	getBrush	Gets the brush used to paint item's background.
	getChildren	Gets a list of this item's children in the hierarchy.
	getEditRect	Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).
	getExpanded	Gets whether this item is expanded to show its children.
	getHeight	Gets the height of this item.
	getIncomingLinks	Gets a collection of all links that point to this item.
	getLabel	Gets the label of this item.
	getLabelBrush	Gets the brush used to draw this item's label text.
	getLabelFont	Gets the label font of this item.
	getOutgoingLinks	Gets a collection of all links that go out of this item.
	getParent	Gets the parent item of this item.
	getTag	Gets custom data associated with this item.
	getTextToEdit	Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when this item is edited in-place.
	loadFromXml	Loads the item content from an XML element.
	readExternal	Implements Externalizable.
	renderText	

	setBrush	Sets the brush used to paint item's background.
	setEditedText	Implements InplaceEditable.setEditedText. Assigns the edited text to the item after in-place edit operation completes successfully
	setExpanded	Sets whether this item is expanded to show its children.
	setHeight	Sets the height of this item.
	setImage	Sets the image that is displayed in this treeview item.
	setLabel	Sets the label of this item.
	setLabelBrush	Sets the brush used to draw this item's label text.
	setLabelFont	Sets the label font of this item.
	setTag	Sets custom data associated with this item.
	writeExternal	Implements Externalizable.

Protected Methods

	Name	Description
	loadFromJson	
	saveToJson	
	saveToXml	Saves the item content into an XML element.

See Also

TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem Constructor

Overload List

Name	Description
TreeViewItem ()	Initializes a new instance of the TreeViewItem class.
TreeViewItem (String)	Initializes a new instance of the **TreeViewItem** class.
TreeViewItem (TreeViewItem)	Initializes a new instance of the **TreeViewItem** class using the specified item as a prototype.

See Also

TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem Constructor ()

Initializes a new instance of the TreeViewItem class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeViewItem ()
```

See Also

TreeViewItem Constructor Overload List
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem Constructor (String)

Initializes a new instance of the TreeViewItem class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeViewItem (
    String label
)
```

Parameters

label
The text initially displayed by the item.

See Also

TreeViewItem Constructor Overload List
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem Constructor (TreeViewItem)

Initializes a new instance of the TreeViewItem class using the specified item as a prototype.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeViewItem (
    TreeViewItem prototype
```

```
)
```

Parameters

prototype
The treeview item to use as a prototype. The properties of the new treeview are initialized from the property values of prototype.

Remarks

This constructor copies the TreeViewItem property values from the specified prototype item.

See Also

TreeViewItem Constructor Overload List
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem Methods

TreeViewItem.clone Method

Creates a copy of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object clone ()
```

Return Value

An instance of the TreeViewItem class.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.getBrush Method

Gets the brush used to paint item's background.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush getBrush ()
```

Return Value

An instance of Brush -derived class. The default value is **null**.

Remarks

If this property is not set, item's background is painted using the parent node's Brush.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.getChildren Method

Gets a list of this item's children in the hierarchy.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeItemList getChildren ()
```

Return Value

A list of child TreeViewItem objects.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace
TreeViewNode.getRootItems Method

TreeViewItem.getEditRect Method

Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getEditRect (
    DiagramItem item,
    Point2D mousePosition
)
```

Parameters

item
The TreeViewNode whose item's text will be edited.

mousePosition
A **Point2D** instance specifying the current pointer position.

Return Value

A **Rectangle2D** specifying where the edit box should be placed.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.getExpanded Method

Gets whether this item is expanded to show its children.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getExpanded ()
```

Return Value

true to show the children of this item, otherwise **false**; the default value is **true**.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.getHeight Method

Gets the height of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getHeight ()
```

Return Value

A float value specifying the item's height. The default value is 5.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.getIncomingLinks Method

Gets a collection of all links that point to this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramLinkList getIncomingLinks ()
```

Return Value

This method returns a collection of all links that point to this item. Use it to access the links or get their number.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.getLabel Method

Gets the label of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getLabel ()
```

Return Value

A string specifying the item's label.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.getLabelBrush Method

Gets the brush used to draw this item's label text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getLabelBrush ()
```

Return Value

A Brush instance.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.getLabelFont Method

Gets the label font of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Font getLabelFont ()
```

Return Value

An instance of the Font class. The default value is null.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.getOutgoingLinks Method

Gets a collection of all links that go out of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public DiagramLinkList getOutgoingLinks ()
```

Return Value

The property returns a collection of all links that start from this item. Use it to access the links or get their number.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.getParent Method

Gets the parent item of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeViewItem getParent ()
```

Return Value

A TreeViewItem instance.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.getTag Method

Gets custom data associated with this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object getTag ()
```

Return Value

An instance of any class derived from **java.lang.Object**. The default value is null.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.getTextToEdit Method

Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when this item is edited in-place.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getTextToEdit ()
```

Return Value

A **String** specifying the item's text.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.loadFromJson Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the item's data.

context
A JsonPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.loadFromXml Method

Loads the item content from an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An XmlElement containing the link's data.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.renderText Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void renderText (
    String text,
    Rectangle2D dest,
    DrawTextHint hint
)
```

Parameters

text

dest

hint

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.saveToJson Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject where item's data is stored

context
A JsonPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.saveToXml Method

Saves the item content into an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An XmlElement the item's data should be stored into.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.setBrush Method

Sets the brush used to paint item's background.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBrush (
    Brush value
)
```

Parameters

value
An instance of Brush -derived class.

Remarks

If this property is not set, item's background is painted using the parent node's Brush.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.setEditedText Method

Implements InplaceEditable.setEditedText. Assigns the edited text to the item after in-place edit operation completes successfully

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEditedText (
    String newText
)
```

Parameters

newText
The new text of this item.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.setExpanded Method

Sets whether this item is expanded to show its children.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setExpanded (
    boolean value
)
```

Parameters

value
true to show the children of this item, otherwise false; the default value is true.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.setHeight Method

Sets the height of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setHeight (
    float value
)
```

Parameters

value
A float value specifying the item's height. The default value is 5.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.setImage Method

Sets the image that is displayed in this treeview item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setImage (
    Image image
)
```

Parameters

image
An instance of the **java.awt.Image** class.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.setLabel Method

Sets the label of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLabel (
    String text
)
```

Parameters

text
A string specifying the item's label.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.setLabelBrush Method

Sets the brush used to draw this item's label text.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLabelBrush (
    Brush value
)
```

Parameters

value
An instance of the Brush class.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.setLabelFont Method

Sets the label font of this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setLabelFont (
    Font value
)
```

Parameters

value
An instance of the Font class. The default value is null.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.setTag Method

Sets custom data associated with this item.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTag (
    Object object
)
```

Parameters

object
An instance of any class derived from java.lang.Object. The default value is null.

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewItem.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

TreeViewItem Members
TreeViewItem Class
com.mindfusion.diagramming Namespace

TreeViewNode Class

Represents nodes that can draw hierarchical data.

Syntax

Java
`public class TreeViewNode extends DiagramNode implements RenderTextCallback, InplaceEditable, Scrollable`

Remarks

The root items displayed in the node can be accessed through the getRootItems method. New items can be added to and removed from the returned collection. The root items can have child items on their own and so on. For more information, refer to the TreeViewItem class.

The text and image displayed in the node caption can be customized through the setCaption and setCaptionImage methods respectively. The scroll position can be manipulated through setScrollPosition.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.DiagramItem
    com.mindfusion.diagramming.DiagramNode
      com.mindfusion.diagramming.TreeViewNode

See Also

TreeViewNode Members
com.mindfusion.diagramming Namespace

TreeViewNode Members

Represents nodes that can draw hierarchical data.

The following tables list the members exposed by the TreeViewNode type.

Public Constructors

	Name	Description
	TreeViewNode	Overloaded.

Protected Fields

	Name	Description
	allowIncomingLinks	(Inherited from DiagramNode.)
	allowOutgoingLinks	(Inherited from DiagramNode.)

	anchorPattern	(Inherited from DiagramNode.)
	AV_Cancel	(Inherited from DiagramNode.)
	AV_EndModIncoming	(Inherited from DiagramNode.)
	AV_EndModOutgoing	(Inherited from DiagramNode.)
	AV_StartModIncoming	(Inherited from DiagramNode.)
	AV_StartModOutgoing	(Inherited from DiagramNode.)
	AV_UpdateIncoming	(Inherited from DiagramNode.)
	AV_UpdateOutgoing	(Inherited from DiagramNode.)
	AV_UpdIntscIncoming	(Inherited from DiagramNode.)
	AV_UpdIntscOutgoing	(Inherited from DiagramNode.)
	AV_UpdPosIncoming	(Inherited from DiagramNode.)
	AV_UpdPosOutgoing	(Inherited from DiagramNode.)
	bounds	(Inherited from DiagramNode.)
	brush	(Inherited from DiagramItem.)
	cycleDetected	(Inherited from DiagramItem.)
	cycleProtect	(Inherited from DiagramItem.)
	enabledHandles	(Inherited from DiagramNode.)
	handlesStyle	(Inherited from DiagramNode.)
	incomingLinks	(Inherited from DiagramNode.)
	masterGroup	(Inherited from DiagramNode.)
	modifyDX	(Inherited from DiagramItem.)
	modifyDY	(Inherited from DiagramItem.)
	modifyHandle	(Inherited from DiagramItem.)
	modifying	(Inherited from DiagramItem.)
	obstacle	(Inherited from DiagramNode.)
	outgoingLinks	(Inherited from DiagramNode.)
	pen	(Inherited from DiagramItem.)
	ptEnd	(Inherited from DiagramItem.)
	ptMdfLast	(Inherited from DiagramItem.)
	ptOrg	(Inherited from DiagramItem.)
	ptSavedEnd	(Inherited from DiagramItem.)
	ptSavedOrg	(Inherited from DiagramItem.)
	savedBounds	(Inherited from DiagramNode.)

	subordinateGroup	(Inherited from DiagramItem.)

Public Methods

	Name	Description
	addLabel	Overloaded. (Inherited from DiagramNode.)
	as	Down-casts the item to specified type. (Inherited from DiagramItem.)
	attachTo	Overloaded. (Inherited from DiagramNode.)
	clone	Creates a copy of this item. (Inherited from DiagramItem.)
	containsPoint	Overloaded. (Inherited from DiagramNode.)
	createConnectionPoint	DiagramNode.createConnectionPoint override.
	createScrollCommand	Implements the Scrollable interface. Creates a ScrollTreeViewCmd instance that can be used to undo the scroll operation.
	detach	Detaches a node from its master group. (Inherited from DiagramNode.)
	getAllIncomingLinks	Gets a collection of all links entering this node. (Inherited from DiagramNode.)
	getAllLinks	Gets all links connected to this node. (Inherited from DiagramNode.)
	getAllOutgoingLinks	Gets a collection of all links going out of this node. (Inherited from DiagramNode.)
	getAllowIncomingLinks	Gets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	getAllowOutgoingLinks	Gets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	getAnchorPattern	Gets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)
	getBounds	Gets the node location and size. (Inherited from DiagramNode.)
	getBrush	Gets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	getCaption	Gets the text displayed as caption of the node.
	getCaptionHeight	Gets the height of the node's caption bar.
	getCaptionImage	Gets the image that is displayed in the caption.
	getCenter	Returns the center point of this node. (Inherited from DiagramNode.)
	getConnectionStyle	Gets a value indicating whether drawing a link from/to this node should connect an item or the whole node as an integral entity.

	getConstraints	Gets the movement and size constraints applied to a node. (Inherited from DiagramNode.)
	getContainer	Gets the parent ContainerNode containing this node. (Inherited from DiagramNode.)
	getDividerPen	Gets the Pen used to draw the the divider line between node's caption bar and content area.
	getEditRect	Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).
	getEffectiveBrush	Gets the effective brush of the item. (Inherited from DiagramItem.)
	getEffectiveFont	Gets the currently effective font of the item. This property returns getFont if it is not null, or a font with the DiagramItemStyle.getFontFamily, DiagramItemStyle.getFontSize, and DiagramItemStyle.getFontStyle properties of the item's style. (Inherited from DiagramItem.)
	getEffectivePen	Gets the effective pen of the item. (Inherited from DiagramItem.)
	getEffectiveShadowBrush	Creates a Brush object representing the currently effective shadow brush of the item. This method returns a system brush corresponding to the item's getShadowBrush if the item's **getShadowBrush** is not null, or a system brush corresponding to the DiagramItemStyle.getShadowBrush property of the item's style. (Inherited from DiagramItem.)
	getEffectiveTextBrush	Gets the effective text brush of the item. (Inherited from DiagramItem.)
	getEffects	Gets a collection with all effects applied to this node. (Inherited from DiagramNode.)
	getEnabledHandles	Gets a combination of NodeHandleType members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	getEnableStyledText	Gets a value indicating whether styled text rendering is enabled.
	getExpandable	Gets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	getExpanded	Gets a value indicating whether the tree branch that starts from a node is expanded or collapsed. (Inherited from DiagramNode.)
	getFlatItemList	Gets a list of all items of this node.
	getFont	Gets or the font used to render the node's caption.
	getHandlesStyle	Gets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)

	getHyperLink	Gets the hyperlink associated with an item. (Inherited from DiagramItem.)
	getId	Gets user-defined identifier associated with this item. (Inherited from DiagramItem.)
	getIgnoreLayout	Gets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	getIncomingLinks	Gets the links coming into a node. (Inherited from DiagramNode.)
	getItemRect	Gets the location and size of the specified TreeViewItem.
	getLabels	Returns the list of supplementary labels displayed by this node. (Inherited from DiagramNode.)
	getLayerIndex	Gets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	getLayoutTraits	Returns a hashtable containing properties specific to layout algorithms. (Inherited from DiagramItem.)
	getLocalCenter	(Inherited from DiagramNode.)
	getLocked	Gets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	getMasterGroup	Gets the hierarchical group in which this node is a subordinate item. (Inherited from DiagramNode.)
	getMasterItem	Returns the node's **Container** or main item of **MasterGroup**. (Inherited from DiagramNode.)
	getNearestBorderPoint	Returns a point that lies on the outline of this node, at the shortest distance from the specified point. (Inherited from DiagramNode.)
	getObstacle	Gets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	getOpacity	Gets the opacity of this item. (Inherited from DiagramItem.)
	getOutgoingLinks	Gets the links going out from a node. (Inherited from DiagramNode.)
	getParent	Gets the diagram that contains this item. (Inherited from DiagramItem.)
	getPen	Gets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	getPrintable	Gets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	getRepaintRect	getRepaintRect override.
	getRootItems	Gets a list of the root TreeViewItem objects displayed in this node.
S	getRotatedBounds	Gets the bounding rectangle of this node, when it is rotated at the specified angle around the specified pivot.

		(Inherited from DiagramNode.)
	getRotationAngle	Gets the rotation angle of this node. (Inherited from DiagramNode.)
	getRuntimeIndex	For internal use. (Inherited from DiagramItem.)
	getScrollable	Gets a value indicating whether users are allowed to scroll this tree view.
	getScrollbarLargeChange	Implements the Scrollable interface. Gets the amount to scroll by when the user clicks above or below the scrollbar thumb.
	getScrollbarMaximum	Implements the Scrollable interface. Gets the maximum scroll position.
	getScrollPosition	Gets the current scroll position.
	getSelected	Gets a value indicating whether this item is selected. (Inherited from DiagramItem.)
	getShadowBrush	Gets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	getShadowOffsetX	Gets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getShadowOffsetY	Gets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	getShape	Gets the shape of this node.
	getShowLines	Gets whether to display lines connecting child items to parent items.
	getStyle	Gets the style associated with the item. (Inherited from DiagramItem.)
	getSubordinateGroup	Gets the group of subordinated items attached to this one. (Inherited from DiagramItem.)
	getTag	Gets user-defined data assigned to an item. (Inherited from DiagramItem.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	getTextFormat	Gets a TextFormat object specifying how to format and align the text of this node.
	getTextPadding	Gets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	getTextToEdit	Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when the node's caption is edited in-place.
	getToolTip	Gets the tooltip text displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	getVisible	Gets a value indicating whether an item is visible. (Inherited from DiagramItem.)

	getWeight	Gets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	getZIndex	Gets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	hasSubordinates	Checks whether there are any nodes attached to this item. (Inherited from DiagramItem.)
	hitTest	Returns the diagram item that contains the specified point. (Inherited from DiagramItem.)
	hitTestHandle	DiagramItem.hitTestHandle override. (Inherited from DiagramNode.)
	init	Returns a TreeViewNodeBuilder object used to configure this TreeViewNode instance.
	itemFromPoint	Returns the item at the specified location.
	labelFromPoint	Returns the label whose layout rectangle contains the specified point. (Inherited from DiagramNode.)
	moveTo	Moves a node to the specified location. (Inherited from DiagramNode.)
	nodesIntersect	Determines whether two nodes intersect. (Inherited from DiagramNode.)
	onDragOut	Invoked when a diagram item is being dragged out of this node. (Inherited from DiagramNode.)
	onDragOver	Invoked when a diagram item is being dragged over this node. (Inherited from DiagramNode.)
	onDropOver	Invoked when a diagram item is dropped over this node. (Inherited from DiagramNode.)
	query	Returns the items that can be reached from this item by following the path specified in the given query expression. (Inherited from DiagramItem.)
	readExternal	Implements Externalizable.
	removeItem	Removes the specified item from the node.
	removeLabel	Removes the specified label from this node. (Inherited from DiagramNode.)
	renderText	
	resize	Sets the size of a node. (Inherited from DiagramNode.)
	resizeToFitText	Overloaded.
	setAllowIncomingLinks	Sets a value indicating whether users are allowed to draw links to this node. (Inherited from DiagramNode.)
	setAllowOutgoingLinks	Sets a value indicating whether users are allowed to draw links from this node. (Inherited from DiagramNode.)
	setAnchorPattern	Sets the anchor points to which link end points are aligned when links connect to this node. (Inherited from DiagramNode.)

	setBounds	Overloaded. (Inherited from DiagramNode.)
	setBoundsDirect	For internal use. (Inherited from DiagramNode.)
	setBrush	Sets the brush used to fill the item's interior. (Inherited from DiagramItem.)
	setCaption	Sets the text displayed as caption of the node.
	setCaptionHeight	Gets the height of the node's caption bar.
	setCaptionImage	Gets the image that is displayed in the caption.
	setConnectionStyle	Sets a value indicating whether drawing a link from/to this node should connect an item or the whole node as an integral entity.
	setConstraints	Sets constraints to the node size and movement direction. The constraints are applied when a user modifies the node interactively. They are not checked when the position of a node is set programmatically. (Inherited from DiagramNode.)
	setDividerPen	Sets the **Pen** used to draw the the divider line between node's caption bar and content area.
	setEditedText	Implements InplaceEditable.setEditedText. Assigns the edited text to the node's caption after in-place edit operation completes successfully.
	setEnabledHandles	Sets a combination of **NodeHandleType** members identifying which manipulation handles are enabled for a node. This effectively controls what kind of modifications users are allowed to perform on this node. (Inherited from DiagramNode.)
	setEnableStyledText	Sets a value indicating whether styled text rendering is enabled.
	setExpandable	Sets a value indicating whether users are allowed to expand or collapse the tree branch that starts from this node. (Inherited from DiagramNode.)
	setExpanded	Expands or collapses the tree branch that starts from a node. (Inherited from DiagramNode.)
	setExpandedFlag	Changes the "expanded" flag without actually expanding or collapsing the tree branch that starts from a node. (Inherited from DiagramNode.)
	setFont	Sets or the font used to render the node's caption.
	setHandlesStyle	Sets a value indicating how the node adjustment handles behave and what do they look like. (Inherited from DiagramNode.)
	setHyperLink	Sets the hyperlink associated with an item. (Inherited from DiagramItem.)
	setId	Assigns user-defined identifier to this item. (Inherited from DiagramItem.)

	setIgnoreLayout	Sets a value indicating whether an item should be ignored by the automatic layout algorithms. (Inherited from DiagramItem.)
	setLayerIndex	Sets the zero-based index of the layer this item is associated with, or -1, if the item is not associated with any layer. (Inherited from DiagramItem.)
	setLocked	Sets a value indicating whether users are allowed to modify an item. (Inherited from DiagramItem.)
	setObstacle	Sets a value indicating whether the link routing algorithm should consider this node an obstacle. (Inherited from DiagramNode.)
	setOpacity	Sets the opacity of this item. (Inherited from DiagramItem.)
	setPen	Sets the pen used to draw the item frame lines. (Inherited from DiagramItem.)
	setPrintable	Sets a value indicating whether an item will be printed. (Inherited from DiagramItem.)
	setRotationAngle	Sets the rotation angle of a node. (Inherited from DiagramNode.)
	setScrollable	Sets a value indicating whether users are allowed to scroll this tree view.
	setScrollPosition	Sets the current scroll position.
	setSelected	Selects or deselects an item. (Inherited from DiagramItem.)
	setShadowBrush	Sets the brush used to paint the item's shadow. (Inherited from DiagramItem.)
	setShadowOffsetX	Sets the horizontal distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShadowOffsetY	Sets the vertical distance between a shadow and the item that casts it. (Inherited from DiagramItem.)
	setShape	Sets the shape of this node.
	setShowLines	Sets whether to display lines connecting child items to parent items.
	setStyle	Sets the style associated with the item. (Inherited from DiagramItem.)
	setTag	Assigns user-defined data to an item. If the tag object is serializable, it will be automatically saved when serializing the diagram into binary format. When serializing to XML, you can save the tag by handling the DiagramListener.serializeTag event. (Inherited from DiagramItem.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItem.)
	setTextFormat	Sets a TextFormat object specifying how to format and align the text of this node.

	setTextPadding	Sets the spacing between the item boundaries and its text. (Inherited from DiagramItem.)
	setToolTip	Sets the tooltip text that should be displayed when the pointer rests over this item. (Inherited from DiagramItem.)
	setVisible	Sets a value indicating whether an item is visible. (Inherited from DiagramItem.)
	setWeight	Sets a weight value used in layout and path-finding algorithms. (Inherited from DiagramItem.)
	setZIndex	Sets the position of an item within the diagram's Z-order. (Inherited from DiagramItem.)
	updateScrollPosition	Implements the Scrollable interface. Updates the node's scroll position from scrollbar's value.
S	with	Returns a TreeViewNodeBuilder object used to configure and create new TreeViewNode instances.
	writeExternal	Implements Externalizable.
	zBottom	Moves an item to the bottom of the Z order. (Inherited from DiagramItem.)
	zLevelDown	Moves an item down in the Z order. (Inherited from DiagramItem.)
	zLevelUp	Moves an item up in the Z order. (Inherited from DiagramItem.)
	zTop	Moves an item to the top of the Z order. (Inherited from DiagramItem.)

Protected Methods

	Name	Description
	allowCreate	DiagramItem.allowCreate override. (Inherited from DiagramNode.)
	allowModify	(Inherited from DiagramNode.)
	allowModifyImpl	(Inherited from DiagramNode.)
	cancelModify	DiagramItem.cancelModify override. Invoked when the interactive modification of this node has been canceled. (Inherited from DiagramNode.)
	completeCreate	DiagramItem.completeCreate override. (Inherited from DiagramNode.)
	completeModify	(Inherited from DiagramNode.)
	constraintsInfringed	(Inherited from DiagramNode.)
	createProperties	Creates an item property set corresponding to the type of this diagram item. This method is invoked by the undo/redo subsystem when creating a ChangeItemCmd instance.
	createState	DiagramItem.createState override. (Inherited from DiagramNode.)

	draw	DiagramItem.draw override. (Inherited from DiagramNode.)
	drawLocal	Draws the tree node on the specified **Graphics2D** surface.
	drawShadow	DiagramItem.drawShadow override. (Inherited from DiagramNode.)
	drawShadowLocal	Override in a derived class to provide implementation specific drawing for the shadow of the node. (Inherited from DiagramNode.)
	getAllIncomingLinks	getAllIncomingLinks override.
	getAllOutgoingLinks	getAllOutgoingLinks override.
	getLocalBounds	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getLocalBoundsD	Gets this node's bounding rectangle in local coordinates. (Inherited from DiagramNode.)
	getMeasureUnit	(Inherited from DiagramItem.)
	getValue	Gets the effective value of the style property with the specified name. (Inherited from DiagramItem.)
	groupContains	(Inherited from DiagramNode.)
	loadFromJson	Loads the node from a JSON object.
	loadFromXml	Loads the item content from an XML element.
	move	(Inherited from DiagramNode.)
	onAdd	Called when an item is added to a Diagram, either by the user, programmatically or by undo / redo. (Inherited from DiagramItem.)
	onChangeFont	(Inherited from DiagramItem.)
	onChangeTextPadding	DiagramItem.onChangeTextPadding override.
	onChildModified	Called when a group child node has been modified. Override this method if you need to know when a node from the **SubordinateGroup** is modified. (Inherited from DiagramItem.)
	onClick	DiagramItem.onClick override.
	onDoubleClick	Invoked when the user double-clicks this item. (Inherited from DiagramItem.)
	onLoad	DiagramItem.onLoad override.
	onMeasureUnitChanged	Called when the Diagram's MeasureUnit changes.
	onModify	Called when an item is modified (Inherited from DiagramNode.)
	onRemove	Called when an item is removed from a **Diagram**, either by the user, programmatically or by undo / redo. (Inherited from DiagramNode.)
	onRotationAngleChanged	Called when the node's rotation angle changes. (Inherited from DiagramNode.)

	onStyleChanged	Invoked when the associated style or theme have changed. (Inherited from DiagramItem.)
	onStyleFontChanged	DiagramItem.onStyleFontChanged override.
	onUpdateBounds	**DiagramNode.onUpdateBounds**; override.
	onZoomChanged	Called when the Diagram's ZoomFactor changes.
	parentConstraintsInfringed	(Inherited from DiagramNode.)
	putExpandable	(Inherited from DiagramNode.)
	putSelected	(Inherited from DiagramItem.)
	rectFromPoints	(Inherited from DiagramNode.)
	repaint	Overloaded. (Inherited from DiagramItem.)
	resizeToFitImage	(Inherited from DiagramNode.)
	restoreProperties	DiagramNode.restoreProperties override.
	restoreState	DiagramItem.restoreState override. (Inherited from DiagramNode.)
	saveProperties	DiagramNode.saveProperties override.
	saveState	DiagramItem.saveState override. (Inherited from DiagramNode.)
	saveToJson	Saves the item content into a JsonObject.
	saveToXml	Saves the item content into an XML element.
	scaleElements	DiagramNode.scaleElements override.
	setDiagramDirty	Marks the diagram as changed. (Inherited from DiagramItem.)
	setReflexive	Invoked to let a node set the shape of a reflexive link connected to it.
	shouldRender	Determines whether the item is rendered in the current context. (Inherited from DiagramItem.)
	shouldRenderAnchors	Determines whether the node should render its anchor points. (Inherited from DiagramNode.)
	startCreate	DiagramItem.startCreate override. (Inherited from DiagramNode.)
	startModify	DiagramItem.startModify override. Invoked when the user starts modifying this node interactively. (Inherited from DiagramNode.)
	updateCreate	DiagramItem.updateCreate override. (Inherited from DiagramNode.)
	updateLinkPositions	(Inherited from DiagramNode.)
	updateModify	DiagramItem.updateModify override. Invoked during interactive modification of this node. (Inherited from DiagramNode.)

See Also

TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode Constructor

Overload List

Name	Description
TreeViewNode ()	Initializes a new instance of the TreeViewNode class.
TreeViewNode (Diagram)	Initializes a new instance of the TreeViewNode class.
TreeViewNode (TreeViewNode)	Initializes a new instance of the TreeViewNode class using the specified node as a prototype.

See Also

TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode Constructor ()

Initializes a new instance of the TreeViewNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public TreeViewNode ()`

See Also

TreeViewNode Constructor Overload List
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode Constructor (Diagram)

Initializes a new instance of the TreeViewNode class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeViewNode (
    Diagram diagram
)
```

Parameters

diagram
The Diagram from which to obtain default values for the node properties.

Remarks

This constructor initializes the TreeViewNode properties with the values specified in the respective default-value properties of the Diagram object.

See Also

TreeViewNode Constructor Overload List
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode Constructor (TreeViewNode)

Initializes a new instance of the TreeViewNode class using the specified node as a prototype.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeViewNode (
    TreeViewNode prototype
)
```

Parameters

prototype

See Also

TreeViewNode Constructor Overload List
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode Methods

TreeViewNode.createConnectionPoint Method

DiagramNode.createConnectionPoint override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ConnectionPoint createConnectionPoint (
    DiagramLink link,
    Point2D point,
    boolean incoming
)
```

Parameters

link
A DiagramLink that should be connected to this node.

point
The point at which the link should be connected.

incoming
true if link is an incoming link; otherwise, false.

Return Value

A TreeViewConnectionPoint instance representing the connection.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.createProperties Method

Creates an item property set corresponding to the type of this diagram item. This method is invoked by the undo/redo subsystem when creating a ChangeItemCmd instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected DiagramItemProperties createProperties ()
```

Return Value

A DiagramItemProperties-derived object containing a snapshot of the item's properties.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.createScrollCommand Method

Implements the Scrollable interface. Creates a ScrollTreeViewCmd instance that can be used to undo the scroll operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Command createScrollCommand ()
```

Return Value

A ScrollTreeViewCmd instance

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.drawLocal Method

Draws the tree node on the specified **Graphics2D** surface.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
protected void drawLocal (
    Graphics2D g,
    RenderOptions options
)
```

Parameters

g
An **Graphics2D** object where the link should be rendered.

options
A RenderOptions object specifying options for the drawing operation.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getAllIncomingLinks Method

getAllIncomingLinks override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void getAllIncomingLinks (
    DiagramLinkList links
)
```

Parameters

links
A DiagramLinkList the links should be added to.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getAllOutgoingLinks Method

getAllOutgoingLinks override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void getAllOutgoingLinks (
    DiagramLinkList links
)
```

Parameters

links
A DiagramLinkList the links should be added to.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getCaption Method

Gets the text displayed as caption of the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getCaption ()
```

Return Value

A string specifying the caption text.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getCaptionHeight Method

Gets the height of the node's caption bar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public float getCaptionHeight ()`

Return Value

A float value specifying the caption bar height. The default value is 8.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getCaptionImage Method

Gets the image that is displayed in the caption.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Image getCaptionImage ()`

Return Value

An instance of the **java.awt.Image** class.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getConnectionStyle Method

Gets a value indicating whether drawing a link from/to this node should connect an item or the whole node as an integral entity.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeViewConnectionStyle getConnectionStyle ()
```

Return Value

A member of the TreeViewConnectionStyle enumeration.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getDividerPen Method

Gets the Pen used to draw the the divider line between node's caption bar and content area.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Pen getDividerPen ()
```

Return Value

A Pen instance. The default value is **null**.

Remarks

If DividerPen is not set, the divider line is drawn using the pen assigned to Pen property.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace
Pen Property

TreeViewNode.getEditRect Method

Implements InplaceEditable.getEditRect. Returns the rectangle where the in-place edit text box should appear (in document coordinates).

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Rectangle2D getEditRect (
    DiagramItem item,
    Point2D mousePosition
)
```

Parameters

item
A reference to this node.

mousePosition
A **Point2D** instance specifying the current pointer position.

Return Value

A **Rectangle2D** specifying where the edit box should be placed.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getEnableStyledText Method

Gets a value indicating whether styled text rendering is enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getEnableStyledText ()
```

Return Value

true to parse the text of the node's caption and items in order to find formatting tags; otherwise false. Initialized with the value of Diagram.getEnableStyledText.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getFlatItemList Method

Gets a list of all items of this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ArrayList<TreeViewItem> getFlatItemList ()
```

Return Value

A list of TreeViewItem objects.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace
getRootItems Method

TreeViewNode.getFont Method

Gets or the font used to render the node's caption.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Font getFont ()
```

Return Value

A Font instance specifying the font attributes.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getItemRect Method

Gets the location and size of the specified TreeViewItem.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Rectangle2D.Float getItemRect (
    TreeViewItem treeItem
)
```

Parameters

treeItem
A TreeViewItem instance.

Return Value

A **Rectangle2D.Float** specifying the item's position and size.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getRepaintRect Method

getRepaintRect override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D getRepaintRect (
    boolean includeConnected
)
```

Parameters

includeConnected
true is related items should be considered too; otherwise, false.

Return Value

A rectangular region that should be repainted when this node is modified.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getRootItems Method

Gets a list of the root TreeViewItem objects displayed in this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeItemList getRootItems ()
```

Return Value

A TreeItemList instance containing the root items of this node.

Remarks

You can directly manipulate this collection to add or remove root items.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace
TreeViewItem.getChildren Method

TreeViewNode.getScrollable Method

Gets a value indicating whether users are allowed to scroll this tree view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getScrollable ()
```

Return Value

true if users are allowed to scroll the tree view, otherwise **false**.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getScrollbarLargeChange Method

Implements the Scrollable interface. Gets the amount to scroll by when the user clicks above or below the scrollbar thumb.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getScrollbarLargeChange (
    boolean vertical
)
```

Parameters

vertical

true if scrolling using a vertical scrollbar, or **false** if horizontal one.

Return Value

A **float** value specifying the amount to scroll.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getScrollbarMaximum Method

Implements the Scrollable interface. Gets the maximum scroll position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getScrollbarMaximum (
    boolean vertical
)
```

Parameters

vertical
true if scrolling using a vertical scrollbar, or **false** if horizontal one.

Return Value

The maximum scroll position for specified scroll direction.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getScrollPosition Method

Gets the current scroll position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getScrollPosition ()
```

Return Value

A float value specifying the scroll position.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getShape Method

Gets the shape of this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SimpleShape getShape ()
```

Return Value

A member of the SimpleShape enumeration.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getShowLines Method

Gets whether to display lines connecting child items to parent items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getShowLines ()
```

Return Value

true to draw connecting lines, or **false** otherwise. The default value is **true**.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace
setShowLines Method

TreeViewNode.getTextFormat Method

Gets a TextFormat object specifying how to format and align the text of this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TextFormat getTextFormat ()
```

Return Value

A TextFormat object specifying the text format and alignment.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.getTextToEdit Method

Implements InplaceEditable.getTextToEdit. Returns the text that should be displayed initially when the node's caption is edited in-place.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String getTextToEdit ()
```

Return Value

A **String** that represents the initial contents of the in-place edit box.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.init Method

Returns a TreeViewNodeBuilder object used to configure this TreeViewNode instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeViewNodeBuilder init ()
```

Return Value

A **TreeViewNodeBuilder** instance.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.itemFromPoint Method

Returns the item at the specified location.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TreeViewItem itemFromPoint (
    Point2D point
)
```

Parameters

point
The point to check.

Return Value

The TreeViewItem instance that contains the specified point.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.loadFromJson Method

Loads the node from a JSON object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject containing the node's data.

context
A JsonPersistContext object providing contextual information about the serialization process and helper serialization methods.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.loadFromXml Method

Loads the item content from an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An XmlElement containing the item's data.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.onChangeTextPadding Method

DiagramItem.onChangeTextPadding override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onChangeTextPadding ()
```

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.onClick Method

DiagramItem.onClick override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onClick (
    int mouseButton,
    Point2D pointerPosition
)
```

Parameters

mouseButton

mousePosition

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.onLoad Method

DiagramItem.onLoad override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onLoad (
    Diagram diagram
)
```

Parameters

diagram

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.onMeasureUnitChanged Method

Called when the Diagram's MeasureUnit changes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onMeasureUnitChanged ()
```

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.onStyleFontChanged Method

DiagramItem.onStyleFontChanged override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onStyleFontChanged ()
```

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.onUpdateBounds Method

DiagramNode.onUpdateBounds; override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```

```

```
protected void onUpdateBounds (
    Rectangle2D oldBounds
)
```

Parameters

oldBounds

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.onZoomChanged Method

Called when the Diagram's ZoomFactor changes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void onZoomChanged ()
```

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.removeItem Method

Removes the specified item from the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeItem (
    TreeViewItem item
)
```

Parameters

item
The TreeViewItem to remove.

Remarks

This method recursively searches for the specified item and removes its from the Children collection of its parent item, or from the RootItems collection if it is a root item.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.renderText Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void renderText (
    String text,
    Rectangle2D dest,
    DrawTextHint hint
)
```

Parameters

text

dest

hint

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.resizeToFitText Method

Overload List

Name	Description
TreeViewNode.resizeToFitText ()	Resizes the tree view so that it is large enough to fit the text of its items.
TreeViewNode.resizeToFitText (boolean)	Resizes the tree view so that it is large enough to fit the text of its items.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.resizeToFitText Method ()

Resizes the tree view so that it is large enough to fit the text of its items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public void resizeToFitText ()`

See Also

resizeToFitText Method Overload List
TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.resizeToFitText Method (boolean)

Resizes the tree view so that it is large enough to fit the text of its items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void resizeToFitText (
    boolean ignoreCaption
)
```

Parameters

ignoreCaption

See Also

resizeToFitText Method Overload List
TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.restoreProperties Method

DiagramNode.restoreProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void restoreProperties (
    DiagramItemProperties props
)
```

Parameters

props
A DiagramItemProperties-derived object containing a snapshot of the item's properties.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.saveProperties Method

DiagramNode.saveProperties override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveProperties (
    DiagramItemProperties props
)
```

Parameters

props
A DiagramItemProperties-derived object where the item's properties should be saved.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.saveToJson Method

Saves the item content into a JsonObject.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject where item's data is stored

context
A JsonPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.saveToXml Method

Saves the item content into an XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An XmlElement the item's data should be stored into.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.scaleElements Method

DiagramNode.scaleElements override.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void scaleElements (
    float scale
)
```

Parameters

scale
The value by which to multiply node elements' sizes.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.setCaption Method

Sets the text displayed as caption of the node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCaption (
    String caption
)
```

Parameters

caption
A string specifying the caption text.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.setCaptionHeight Method

Gets the height of the node's caption bar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCaptionHeight (
    float value
)
```

Parameters

value
A float value specifying the caption bar height. The default value is 8.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.setCaptionImage Method

Gets the image that is displayed in the caption.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCaptionImage (
    Image image
)
```

Parameters

image
An instance of the **java.awt.Image** class.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.setConnectionStyle Method

Sets a value indicating whether drawing a link from/to this node should connect an item or the whole node as an integral entity.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setConnectionStyle (
    TreeViewConnectionStyle value
)
```

Parameters

value
A member of the TreeViewConnectionStyle enumeration.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.setDividerPen Method

Sets the Pen used to draw the the divider line between node's caption bar and content area.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setDividerPen (
    Pen value
)
```

Parameters

value
A Pen instance.

Remarks

If **DividerPen** is not set, the divider line is drawn using the pen assigned to Pen property.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace
Pen Property

TreeViewNode.setEditedText Method

Implements InplaceEditable.setEditedText. Assigns the edited text to the node's caption after in-place edit operation completes successfully.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEditedText (
    String newText
)
```

Parameters

newText
The new text of the node's caption.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.setEnableStyledText Method

Sets a value indicating whether styled text rendering is enabled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setEnableStyledText (
    boolean value
)
```

Parameters

value
true to parse the text of the node's caption and items in order to find formatting tags; otherwise false.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.setFont Method

Sets or the font used to render the node's caption.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFont (
    Font value
)
```

Parameters

value
A Font instance specifying the font attributes.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.setReflexive Method

Invoked to let a node set the shape of a reflexive link connected to it.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void setReflexive (
    DiagramLink link
)
```

Parameters

link
Reference to the link.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.setScrollable Method

Sets a value indicating whether users are allowed to scroll this tree view.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setScrollable (
    boolean value
)
```

Parameters

value
true if users are allowed to scroll the tree view, otherwise **false**.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.setScrollPosition Method

Sets the current scroll position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setScrollPosition (
    float value
)
```

Parameters

value
A float value specifying the scroll position.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.setShape Method

Sets the shape of this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
```

```
public void setShape (
    SimpleShape value
)
```

Parameters

value
A member of the SimpleShape enumeration.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.setShowLines Method

Sets whether to display lines connecting child items to parent items.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShowLines (
    boolean value
)
```

Parameters

value
true to draw connecting lines, or **false** otherwise.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace
getShowLines Method

TreeViewNode.setTextFormat Method

Sets a TextFormat object specifying how to format and align the text of this node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTextFormat (
    TextFormat value
)
```

Parameters

value
A TextFormat object specifying the text format and alignment.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.updateScrollPosition Method

Implements the Scrollable interface. Updates the node's scroll position from scrollbar's value.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void updateScrollPosition (
    float newValue,
    boolean vertical
)
```

Parameters

newValue
A **float** value specifying scroll offset.

vertical
true if scrolling using a vertical scrollbar, or **false** if horizontal one.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.with Method

Returns a TreeViewNodeBuilder object used to configure and create new TreeViewNode instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static TreeViewNodeBuilder with ()
```

Return Value

A **TreeViewNodeBuilder** instance.

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNode.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

TreeViewNode Members
TreeViewNode Class
com.mindfusion.diagramming Namespace

TreeViewNodeStyle Class

Represents a reusable set of properties that define the appearance of tree view nodes.

Syntax

Java

```
public class TreeViewNodeStyle extends DiagramNodeStyle
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.Style
    com.mindfusion.diagramming.DiagramItemStyle
      com.mindfusion.diagramming.DiagramNodeStyle
        com.mindfusion.diagramming.TreeViewNodeStyle

See Also

TreeViewNodeStyle Members
com.mindfusion.diagramming Namespace

TreeViewNodeStyle Members

Represents a reusable set of properties that define the appearance of tree view nodes.

The following tables list the members exposed by the TreeViewNodeStyle type.

Public Constructors

	Name	Description
	TreeViewNodeStyle	Initializes a new instance of the **TreeViewNodeStyle** class.

Public Methods

	Name	Description
	addPropertyChangeListener	(Inherited from Style.)
	getBrush	Gets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)
	getEffects	Gets a list of the effects applied to the node. (Inherited from DiagramNodeStyle.)
	getFontFamily	Gets the font family of the item text. (Inherited from DiagramItemStyle.)
	getFontSize	Gets the font size of the item text. (Inherited from DiagramItemStyle.)
	getFontStyle	Gets the font style of the item text. (Inherited from DiagramItemStyle.)
	getFontUnit	Gets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	getShadowBrush	Gets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	getStroke	Gets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	getStrokeThickness	Gets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	getTextBrush	Gets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
	init	Returns a TreeViewNodeStyleBuilder object used to configure this TreeViewNodeStyle instance.
	readExternal	**Externalizable.readExternal** implementation. (Inherited from Style.)
S	registerType	Associates a type with an alias. The alias is used when saving and loading objects of the specified type during style serialization and deserialization. (Inherited from Style.)
	removePropertyChangeListener	(Inherited from Style.)
	setBrush	Sets the brush used to fill the interior of the item. (Inherited from DiagramItemStyle.)

	setFontFamily	Sets the font family of the item text. (Inherited from DiagramItemStyle.)
	setFontSize	Sets the font size of the item text. (Inherited from DiagramItemStyle.)
	setFontStyle	Sets the font style of the item text. (Inherited from DiagramItemStyle.)
	setFontUnit	Sets the measure unit used to specify font size. (Inherited from DiagramItemStyle.)
	setShadowBrush	Sets the brush used to paint the shadow of the item. (Inherited from DiagramItemStyle.)
	setStroke	Sets the brush used to paint the outline of the item. (Inherited from DiagramItemStyle.)
	setStrokeThickness	Sets the thickness of the item's outline, expressed in the current units of measure. (Inherited from DiagramItemStyle.)
	setTextBrush	Sets the brush used to paint texts inside the item. (Inherited from DiagramItemStyle.)
S	with	Returns a TreeViewNodeStyleBuilder object used to configure and create new TreeViewNodeStyle instances.
	writeExternal	**Externalizable.writeExternal** implementation. (Inherited from Style.)

Protected Methods

	Name	Description
	getValue	Gets the value of the specified property. (Inherited from Style.)
	isPropertySet	Checks whether the specified property has a value. (Inherited from Style.)
	loadFromJson	Loads the style content from a JsonObject. (Inherited from DiagramNodeStyle.)
	loadFromXml	Loads the style content from an XML element. (Inherited from Style.)
	registerProperty	Registers a new property with the specified name and type. (Inherited from Style.)
	saveToJson	Saves the style content into a JsonObject. (Inherited from DiagramNodeStyle.)
	saveToXml	Saves the style content into an XML element. (Inherited from Style.)
	setValue	Sets the value of the specified property. (Inherited from Style.)
	unsetValue	Clears the value of the specified property. (Inherited from Style.)

See Also

TreeViewNodeStyle Class
com.mindfusion.diagramming Namespace

TreeViewNodeStyle Constructor

Initializes a new instance of the TreeViewNodeStyle class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public TreeViewNodeStyle ()`

See Also

TreeViewNodeStyle Class
com.mindfusion.diagramming Namespace

TreeViewNodeStyle Methods

TreeViewNodeStyle.init Method

Returns a TreeViewNodeStyleBuilder object used to configure this TreeViewNodeStyle instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public TreeViewNodeStyleBuilder init ()`

Return Value

A **TreeViewNodeStyleBuilder** instance.

See Also

TreeViewNodeStyle Members
TreeViewNodeStyle Class
com.mindfusion.diagramming Namespace

TreeViewNodeStyle.with Method

Returns a TreeViewNodeStyleBuilder object used to configure and create new TreeViewNodeStyle instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static TreeViewNodeStyleBuilder with ()`

Return Value

A **TreeViewNodeStyleBuilder** instance.

See Also

TreeViewNodeStyle Members
TreeViewNodeStyle Class
com.mindfusion.diagramming Namespace

TriangularLayout Class

Performs triangular layout on simple, connected graphs.

Syntax

Java
`public class TriangularLayout extends AbstractLayout`

Remarks

TriangularLayout places nodes on a virtual grid, such that if the source graph is planar, all links are guaranteed to have a single segment and not intersect. If the graph is not planar, its intersecting links can be optionally segmented and bended in order to improve readability. The layout method places the nodes from the external face on a triangle and recursively adds the rest of the nodes as vertices of internal triangles. As a result, it is very effective for near maximal-planar (a.k.a. triangular) graphs.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.AbstractLayout
    com.mindfusion.diagramming.TriangularLayout

See Also

TriangularLayout Members
com.mindfusion.diagramming Namespace

TriangularLayout Members

Performs triangular layout on simple, connected graphs.

The following tables list the members exposed by the TriangularLayout type.

Public Constructors

	Name	Description

	TriangularLayout	Initializes a new instance of the TriangularLayout class.

Public Methods

	Name	Description
	arrange	Applies the layout on the specified subset of items from the specified Diagram instance.
	getAnchoring	Gets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	getBendNonplanarLinks	Gets a value indicating whether the intersecting links in a non-planar graphs will be segmented and bended to improve presentation.
	getGridSize	Gets the size of the virtual grid the layout will place vertices on.
	getGrowToFit	Gets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	getKeepGroupLayout	Gets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	getLayoutLink	Gets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	getLayoutNode	Gets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	getMultipleGraphsPlacement	Gets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	getOrientation	Gets a the orientation of the arranged graph.
	getProgress	Gets the progress callback delegate. (Inherited from AbstractLayout.)
	init	Returns a TriangularLayoutBuilder object used to configure this TriangularLayout instance.
S	removeMidleSegmentPoint	(Inherited from AbstractLayout.)
	setAnchoring	Sets how to align links to the anchor points of nodes. (Inherited from AbstractLayout.)
	setBendNonplanarLinks	Sets a value indicating whether the intersecting links in a non-planar graphs will be segmented and bended to improve presentation.
	setGridSize	Sets the size of the virtual grid the layout will place vertices on.

	setGrowToFit	Sets a value indicating whether the diagram boundaries should grow to fit the arranged content. (Inherited from AbstractLayout.)
	setKeepGroupLayout	Sets a value indicating whether to treat each Group of nodes as a single vertex in the arranged graph. (Inherited from AbstractLayout.)
	setLayoutLink	Sets an object, which is notified when the position of a link is changed by the layout. (Inherited from AbstractLayout.)
	setLayoutNode	Sets an object, which is notified when the position of a node is changed by the layout. (Inherited from AbstractLayout.)
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds. (Inherited from AbstractLayout.)
	setMultipleGraphsPlacement	Sets a value indicating how multiple independent graphs in the diagram should be positioned relatively to each other. (Inherited from AbstractLayout.)
	setOrientation	Sets a the orientation of the arranged graph.
	setProgress	Sets the progress callback delegate. (Inherited from AbstractLayout.)
S	with	Returns a TriangularLayoutBuilder object used to configure and create new TriangularLayout instances.

See Also

TriangularLayout Class
com.mindfusion.diagramming Namespace

TriangularLayout Constructor

Initializes a new instance of the TriangularLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TriangularLayout ()
```

See Also

TriangularLayout Class
com.mindfusion.diagramming Namespace

TriangularLayout Methods

TriangularLayout.arrange Method

Applies the layout on the specified subset of items from the specified Diagram instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean arrange (
    Diagram diagram,
    DiagramItemList items
)
```

Parameters

diagram
The Diagram that should be arranged.

items
A collection of nodes and links from diagram that define the subgraph to arrange.

Return Value

This method always returns true.

See Also

TriangularLayout Members
TriangularLayout Class
com.mindfusion.diagramming Namespace

TriangularLayout.getBendNonplanarLinks Method

Gets a value indicating whether the intersecting links in a non-planar graphs will be segmented and bended to improve presentation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getBendNonplanarLinks ()
```

Return Value

See Also

TriangularLayout Members
TriangularLayout Class
com.mindfusion.diagramming Namespace

TriangularLayout.getGridSize Method

Gets the size of the virtual grid the layout will place vertices on.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getGridSize ()
```

Return Value

See Also

TriangularLayout Members
TriangularLayout Class
com.mindfusion.diagramming Namespace

TriangularLayout.getOrientation Method

Gets a the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Orientation getOrientation ()
```

Return Value

A member of the Orientation enumeration.

See Also

TriangularLayout Members
TriangularLayout Class
com.mindfusion.diagramming Namespace

TriangularLayout.init Method

Returns a TriangularLayoutBuilder object used to configure this TriangularLayout instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TriangularLayoutBuilder init ()
```

Return Value

A **TriangularLayoutBuilder** instance.

See Also

TriangularLayout Members
TriangularLayout Class
com.mindfusion.diagramming Namespace

TriangularLayout.setBendNonplanarLinks Method

Sets a value indicating whether the intersecting links in a non-planar graphs will be segmented and bended to improve presentation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBendNonplanarLinks (
    boolean value
)
```

Parameters

value

See Also

TriangularLayout Members
TriangularLayout Class
com.mindfusion.diagramming Namespace

TriangularLayout.setGridSize Method

Sets the size of the virtual grid the layout will place vertices on.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setGridSize (
    float value
)
```

Parameters

value

See Also

TriangularLayout Members
TriangularLayout Class
com.mindfusion.diagramming Namespace

TriangularLayout.setOrientation Method

Sets a the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value
A member of the Orientation enumeration.

See Also

TriangularLayout Members
TriangularLayout Class
com.mindfusion.diagramming Namespace

TriangularLayout.with Method

Returns a TriangularLayoutBuilder object used to configure and create new TriangularLayout instances.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static TriangularLayoutBuilder with ()
```

Return Value

A **TriangularLayoutBuilder** instance.

See Also

TriangularLayout Members
TriangularLayout Class
com.mindfusion.diagramming Namespace

UndoEvent Class

Contains the arguments passed to the ActionRecorded, ActionUndone and ActionRedone event handlers.

Syntax

Java
`public class UndoEvent extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.UndoEvent
      com.mindfusion.diagramming.UndoValidationEvent

See Also

UndoEvent Members
com.mindfusion.diagramming Namespace

UndoEvent Members

Contains the arguments passed to the ActionRecorded, ActionUndone and ActionRedone event handlers.

The following tables list the members exposed by the UndoEvent type.

Public Constructors

	Name	Description
	UndoEvent	Initializes a new instance of the **UndoEvent** class.

Public Methods

	Name	Description
	getCommand	Gets a reference to the Command instance related to the event being handled.

See Also

UndoEvent Class
com.mindfusion.diagramming Namespace

UndoEvent Constructor

Initializes a new instance of the UndoEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public UndoEvent (
    Object source,
    Command command
)
```

Parameters

source
The source of the event.

command
The UndoEvent.getCommand command related to the event.

See Also

UndoEvent Class
com.mindfusion.diagramming Namespace

UndoEvent Methods

UndoEvent.getCommand Method

Gets a reference to the Command instance related to the event being handled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Command getCommand ()
```

Return Value

An instance of the Command class.

See Also

UndoEvent Members
UndoEvent Class
com.mindfusion.diagramming Namespace

UndoManager Class

Implements undo/redo functionality. The undo manager can be accessed by calling the getUndoManager method of the Diagram class.

Syntax

Java

```
public class UndoManager
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.UndoManager

See Also

UndoManager Members
com.mindfusion.diagramming Namespace

UndoManager Members

Implements undo/redo functionality. The undo manager can be accessed by calling the getUndoManager method of the Diagram class.

The following tables list the members exposed by the UndoManager type.

Public Methods

	Name	Description
	getHistory	Gets a reference to the list of commands stored for later undo/redo.
	getUndoEnabled	Gets a value indicating whether actions performed on the diagram can be undone or redone.
	redo	Redoes the next action in the undo/redo queue.
	setUndoEnabled	Enables or disabled undo/redo.
	startComposite	Overloaded.
	undo	Undoes the previous action in the undo/redo queue.

See Also

UndoManager Class
com.mindfusion.diagramming Namespace

UndoManager Methods

UndoManager.getHistory Method

Gets a reference to the list of commands stored for later undo/redo.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CommandHistory getHistory ()
```

Return Value

A CommandHistory object representing the undo/redo queue.

See Also

UndoManager Members
UndoManager Class
com.mindfusion.diagramming Namespace

UndoManager.getUndoEnabled Method

Gets a value indicating whether actions performed on the diagram can be undone or redone.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getUndoEnabled ()
```

Return Value

true if undo/redo is enabled, otherwise **false**.

See Also

UndoManager Members
UndoManager Class
com.mindfusion.diagramming Namespace

UndoManager.redo Method

Redoes the next action in the undo/redo queue.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void redo ()
```

See Also

UndoManager Members
UndoManager Class
com.mindfusion.diagramming Namespace

UndoManager.setUndoEnabled Method

Enables or disabled undo/redo.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setUndoEnabled (
    boolean value
)
```

Parameters

value
true if modifications done on the diagram should be tracked so that they can be undone or redone later, otherwise **false**.

See Also

UndoManager Members
UndoManager Class
com.mindfusion.diagramming Namespace

UndoManager.startComposite Method

Overload List

Name	Description
UndoManager.startComposite (String)	Starts recording a composite undo/redo command.
UndoManager.startComposite (String, boolean)	Starts recording a composite undo/redo command.

See Also

UndoManager Members
UndoManager Class
com.mindfusion.diagramming Namespace

UndoManager.startComposite Method (String)

Starts recording a composite undo/redo command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public CompositeCmd startComposite (
    String title
)
```

Parameters

title

A String containing the title of the composite command.

Return Value

A CompositeCmd object representing the composite command.

See Also

startComposite Method Overload List
UndoManager Members
UndoManager Class
com.mindfusion.diagramming Namespace

UndoManager.startComposite Method (String, boolean)

Starts recording a composite undo/redo command.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public CompositeCmd startComposite (
    String title,
    boolean saveZOrder
)
```

Parameters

title
A String containing the title of the composite command.

saveZOrder

Return Value

A CompositeCmd object representing the composite command.

See Also

startComposite Method Overload List
UndoManager Members
UndoManager Class
com.mindfusion.diagramming Namespace

UndoManager.undo Method

Undoes the previous action in the undo/redo queue.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void undo ()
```

See Also

UndoManager Members
UndoManager Class
com.mindfusion.diagramming Namespace

UndoValidationEvent Class

Contains the arguments passed to the ActionRecording event handlers.

Syntax

Java
`public class UndoValidationEvent extends UndoEvent`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.UndoEvent
      com.mindfusion.diagramming.UndoValidationEvent

See Also

UndoValidationEvent Members
com.mindfusion.diagramming Namespace

UndoValidationEvent Members

Contains the arguments passed to the ActionRecording event handlers.

The following tables list the members exposed by the UndoValidationEvent type.

Public Constructors

	Name	Description
	UndoValidationEvent	Initializes a new instance of the UndoValidationEvent class.

Public Methods

	Name	Description
	getCancel	Gets a value indicating whether the operation should be canceled.
	getCommand	Gets a reference to the Command instance related to the event being handled. (Inherited from UndoEvent.)
	setCancel	Sets a value indicating whether the operation should be canceled.

See Also

UndoValidationEvent Class
com.mindfusion.diagramming Namespace

UndoValidationEvent Constructor

Initializes a new instance of the UndoValidationEvent class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public UndoValidationEvent (
    Object source,
    Command command
)
```

Parameters

source
The source of the event.

command
The Command related to the event.

See Also

UndoValidationEvent Class
com.mindfusion.diagramming Namespace

UndoValidationEvent Methods

UndoValidationEvent.getCancel Method

Gets a value indicating whether the operation should be canceled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getCancel ()
```

Return Value

true if the operation is canceled; **false** if approved.

See Also

UndoValidationEvent Members
UndoValidationEvent Class

UndoValidationEvent.setCancel Method

Sets a value indicating whether the operation should be canceled.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCancel (
    boolean cancel
)
```

Parameters

cancel
true to cancel the operation; **false** to approve it.

See Also

UndoValidationEvent Members
UndoValidationEvent Class
com.mindfusion.diagramming Namespace

UnitType Enumeration

Defines values that indicate whether point positions are specified as percentage, or in absolute units relative to the node's top-left corner.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public enum UnitType
```

Members

	Member name	Description
	Fixed	Point coordinates designate fixed offset from the node's top-left corner.
	Percentage	Point coordinates are specified as percentage of the node's size.

See Also

Utilities Class

Syntax

Java
`public class Utilities`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.Utilities

See Also

Utilities Members
com.mindfusion.diagramming Namespace

Utilities Members

The following tables list the members exposed by the Utilities type.

Public Constructors

	Name	Description
	Utilities	

Public Methods

	Name	Description
	add	Overloaded.
	areClose	
	cartesianToPolar	
	checkIntersect	Checks if the specified rectangle and circle intersect.
	clone	Overloaded.
	concat	Joins array elements using the specified delimiter.
	convertRect	
	deviceToDoc	
	distance	
	distToLineSegment	Calculates distance from the specified point to the specified line segment.
	distToRectPoint	Returns the nearest to pt point that lies on the outline of rectangle.

	docToDevice	
	drawImage	Overloaded.
	filter	Overloaded.
	findValidateRoot	Returns the ancestor component that acts as validate root
	FromLTRB	
	getArcParams	Calculates the bounding rectangle, start and sweep angle of an arc from the specified arc end points, direction flags and radius sizes.
	getLocation	
	getSize	
	inflate	
	lineIntersect	Calculates the intersection point of endless lines (pA, pB) and (pC, pD)
	lineIntersectHorizontal	Finds the x coordinate of the intersection point of the horizontal line at y and the line defined by points pA and pB. If the lines do not intersect, result is undefined.
	lineIntersectVertical	Finds the y coordinate of the intersection point of the vertical line at x and the line defined by points pA and pB. If the lines do not intersect, result is undefined.
	minDistToRect	Calculates the minimum distance between a given point and a given rectangle.
	newPoint2D	Overloaded.
	newPointDouble	Overloaded.
	newPointFloat	Overloaded.
	newRectangle2D	
	newRectangleDouble	Overloaded.
	newRectangleFloat	Overloaded.
	normalizeRect	
	parse	Parses space separated numbers into Point2D
	pointAlongLength	
	pointsInRect	
	polarToCartesian	
	readFileAsString	Returns the content of a file as a string.
	resize	
	revalidateSynced	Performs synchronized revalidation to ensure that layout is up to date after this method returns.
	set	Overloaded.

	setHeight	
	setLocation	
	setWidth	
	setX	Overloaded.
	setY	Overloaded.
	subtract	Subtract the coordinates of one point from the coordinates of another
	translate	
	translateX	Overloaded.
	translateY	Overloaded.
	unionNonEmptyRects	
	unzip	
	writeStringToFile	Writes the specified string to a file.

See Also

Utilities Class
com.mindfusion.diagramming Namespace

Utilities Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Utilities ()`

See Also

Utilities Class
com.mindfusion.diagramming Namespace

Utilities Methods

Utilities.add Method

Overload List

Name	Description

Utilities.add (T, double, double)	
Utilities.add (T, Point2D)	Add (translate) the coordinates of one point with the coordinates of another

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.add<T> Method (T, double, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T add (
    T changed,
    double addX,
    double addY
)
```

Parameters

changed

addX

addY

Return Value

See Also

add Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.add<T> Method (T, Point2D)

Add (translate) the coordinates of one point with the coordinates of another

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T add (
    T changed,
    Point2D changeVector
)
```

Parameters

changed

changeVector

Return Value

the first parameter which holds the result

See Also

add Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.areClose Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static boolean areClose (
    float a,
    float b
)
```

Parameters

a

b

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.cartesianToPolar Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void cartesianToPolar (
    Point2D coordCenter,
    Point2D point,
    Point2D result
)
```

Parameters

coordCenter

point

result

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.checkIntersect Method

Checks if the specified rectangle and circle intersect.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static boolean checkIntersect (
    Point2D pt,
    Rectangle2D rc,
    float rad
)
```

Parameters

pt

rc

rad

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.clone Method

Overload List

Name	Description
Utilities.clone (T)	
Utilities.clone (T)	

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.clone<T> Method (T)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T clone (
    T rect
)
```

Parameters

rect

Return Value

See Also

clone Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.clone<T> Method (T)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T clone (
    T point
)
```

Parameters

point

Return Value

See Also

clone Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.concat Method

Joins array elements using the specified delimiter.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static String concat (
    String delimiter,
    Object[] objs
)
```

Parameters

delimiter
A character inserted between the array elements.

objs
The objects to be joined.

Return Value

A string containing the concatenated string representations of the objects.

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.convertRect<T> Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T convertRect (
    Rectangle2D rc,
    T dest
)
```

Parameters

rc

dest

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.deviceToDoc Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static Rectangle2D deviceToDoc (
    Graphics2D g,
    Rectangle r
)
```

Parameters

g

r

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.distance Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static double distance (
    Point2D pt1,
    Point2D pt2
)
```

Parameters

pt1

pt2

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.distToLineSegment Method

Calculates distance from the specified point to the specified line segment.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static float distToLineSegment (
    Point2D pt,
    Point2D p1,
    Point2D p2
)
```

Parameters

pt

p1

p2

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.distToRectPoint Method

Returns the nearest to pt point that lies on the outline of rectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Point2D distToRectPoint (
    Point2D pt,
    Rectangle2D r
)
```

Parameters

pt

r

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.docToDevice Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Rectangle docToDevice (
    Graphics2D g,
    Rectangle2D r
)
```

Parameters

g

r

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.drawImage Method

Overload List

Name	Description
Utilities.drawImage (Graphics2D, Image, Rectangle2D, ImageAlign, Diagram)	
Utilities.drawImage (Graphics2D, Image, Rectangle2D, ImageAlign, Diagram, double, Point2D)	

See Also

Utilities.drawImage Method (Graphics2D, Image, Rectangle2D, ImageAlign, Diagram)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void drawImage (
    Graphics2D g,
    Image image,
    Rectangle2D rect,
    ImageAlign imageAlign,
    Diagram diagram
)
```

Parameters

g

image

rect

imageAlign

diagram

See Also

drawImage Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.drawImage Method (Graphics2D, Image, Rectangle2D, ImageAlign, Diagram, double, Point2D)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void drawImage (
    Graphics2D g,
    Image image,
    Rectangle2D rect,
    ImageAlign imageAlign,
    Diagram diagram,
    double rotationAngle,
```

```
    Point2D pivot
)
```

Parameters

g

image

rect

imageAlign

diagram

rotationAngle

pivot

See Also

drawImage Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.filter Method

Overload List

Name	Description
Utilities.filter (Iterable, Class)	Creates Iterable that iterates only over the subset of the given Iterable that consist of elements of desired type Example: for (TableNode t: filter(diagram .getItems(), TableNode.class)) t.getRowCount();
Utilities.filter (Iterator, Class)	Creates Iterator that iterates only over the subset of the given Iterator that consist of elements of desired type

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.filter<T, D> Method (Iterable<T>, Class<D>)

Creates Iterable that iterates only over the subset of the given Iterable that consist of elements of desired type Example: for (TableNode t: filter(diagram .getItems(), TableNode.class)) t.getRowCount();

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T, D> Iterable<D> filter (
    Iterable<T> unfiltered,
    Class<D> desiredType
)
```

Parameters

unfiltered
the collection of items that can be of different type.

desiredType
the class of the items in the collection to be returned.

Return Value

An iterator over the collection items of the desired type.

See Also

filter Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.filter<T, D> Method (Iterator<T>, Class<D>)

Creates Iterator that iterates only over the subset of the given Iterator that consist of elements of desired type

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T, D> Iterator<D> filter (
    Iterator<T> unfiltered,
    Class<D> desiredType
)
```

Parameters

unfiltered
the collection of items that can be of different type.

desiredType
the class of the items in the collection to be returned.

Return Value

An iterator over the collection items of the desired type.

See Also

filter Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.findValidateRoot Method

Returns the ancestor component that acts as validate root

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Component findValidateRoot (
    JComponent c
)
```

Parameters

c
A JComponent whose validation root should be returned.

Return Value

A Component that is the validation root of c.

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.FromLTRB Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Rectangle2D FromLTRB (
    double l,
    double t,
    double r,
    double b
)
```

Parameters

l

t

r

b

Return Value

See Also

Utilities.getArcParams Method

Calculates the bounding rectangle, start and sweep angle of an arc from the specified arc end points, direction flags and radius sizes.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void getArcParams (
    Point2D.Float pt1,
    Point2D.Float pt2,
    boolean isLargeArc,
    boolean isCounterclockwise,
    float radiusX,
    float radiusY,
    float angleRotation,
    Point2D.Float centerPt,
    ByRef<Float> startAngle,
    ByRef<Float> sweepAngle
)
```

Parameters

pt1
The arc's start point.

pt2
The arc's end point.

isLargeArc
A flag specifying whether to choose the shorter ot longer arc.

isCounterclockwise
A flag specifying whether to choose the clockwise arc.

radiusX
Specifies the X radius of the ellipse.

radiusY
Specifies the Y radius of the ellipse.

angleRotation
Specifies the rotation of the ellipse.

centerPt
Returns the center of the bounding rectangle.

startAngle
Returns the start angle of the arc.

sweepAngle
Returns the sweep angle of the arc.

See Also

Utilities Members
Utilities Class

Utilities.getLocation Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Point2D getLocation (
    Rectangle2D rect
)
```

Parameters

rect

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.getSize Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Dimension2D getSize (
    Rectangle2D rect
)
```

Parameters

rect

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.inflate Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void inflate (
    Rectangle2D rc,
    double size
)
```

Parameters

rc

size

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.lineIntersect<T> Method

Calculates the intersection point of endless lines (pA, pB) and (pC, pD)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> boolean lineIntersect (
    Point2D pA,
    Point2D pB,
    Point2D pC,
    Point2D pD,
    Point2D result
)
```

Parameters

pA

pB

pC

pD

result
the point that will receive the result if the lines intersect

Return Value

true if the lines intersect

See Also

Utilities.lineIntersectHorizontal Method

Finds the x coordinate of the intersection point of the horizontal line at y and the line defined by points pA and pB. If the lines do not intersect, result is undefined.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static double lineIntersectHorizontal (
    double y,
    Point2D pA,
    Point2D pB
)
```

Parameters

y

pA

pB

Return Value

The intersection point x coordinate.

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.lineIntersectVertical Method

Finds the y coordinate of the intersection point of the vertical line at x and the line defined by points pA and pB. If the lines do not intersect, result is undefined.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static double lineIntersectVertical (
    double x,
    Point2D pA,
    Point2D pB
)
```

Parameters

x

pA

pB

Return Value

The intersection point y coordinate.

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.minDistToRect Method

Calculates the minimum distance between a given point and a given rectangle.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static double minDistToRect (
    Point2D pt,
    Rectangle2D rc
)
```

Parameters

pt

rc

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.newPoint2D Method

Overload List

Name	Description
Utilities.newPoint2D (double, double)	
Utilities.newPoint2D (Point2D)	

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.newPoint2D Method (double, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Point2D newPoint2D (
    double x,
    double y
)
```

Parameters

x

y

Return Value

See Also

newPoint2D Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.newPoint2D Method (Point2D)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Point2D newPoint2D (
    Point2D point
)
```

Parameters

point

Return Value

See Also

newPoint2D Method Overload List
Utilities Members

Utilities.newPointDouble Method

Overload List

Name	Description
Utilities.newPointDouble (double, double)	
Utilities.newPointDouble (Point2D)	

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.newPointDouble Method (double, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Point2D.Double newPointDouble (
    double x,
    double y
)
```

Parameters

x

y

Return Value

See Also

newPointDouble Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.newPointDouble Method (Point2D)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public static Point2D.Double newPointDouble (`
`  Point2D point`
`)`

Parameters

point

Return Value

See Also

newPointDouble Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.newPointFloat Method

Overload List

Name	Description
Utilities.newPointFloat ()	
Utilities.newPointFloat (double, double)	
Utilities.newPointFloat (Point2D)	

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.newPointFloat Method ()

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static Point2D.Float newPointFloat ()`

Return Value

See Also

newPointFloat Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.newPointFloat Method (double, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Point2D.Float newPointFloat (
    double x,
    double y
)
```

Parameters

x

y

Return Value

See Also

newPointFloat Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.newPointFloat Method (Point2D)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Point2D.Float newPointFloat (
    Point2D point
)
```

Parameters

point

Return Value

See Also

Utilities.newRectangle2D Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Rectangle2D newRectangle2D (
    double x,
    double y,
    double width,
    double height
)
```

Parameters

x

y

width

height

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.newRectangleDouble Method

Overload List

Name	Description
Utilities.newRectangleDouble (double, double, double, double)	
Utilities.newRectangleDouble (Rectangle2D)	

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.newRectangleDouble Method (double, double, double, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Rectangle2D.Double newRectangleDouble (
    double x,
    double y,
    double width,
    double height
)
```

Parameters

x

y

width

height

Return Value

See Also

newRectangleDouble Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.newRectangleDouble Method (Rectangle2D)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Rectangle2D.Double newRectangleDouble (
    Rectangle2D rc
)
```

Parameters

rc

Return Value

See Also

newRectangleDouble Method Overload List
Utilities Members

Utilities.newRectangleFloat Method

Overload List

Name	Description
Utilities.newRectangleFloat (double, double, double, double)	
Utilities.newRectangleFloat (Rectangle2D)	

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.newRectangleFloat Method (double, double, double, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Rectangle2D.Float newRectangleFloat (
    double x,
    double y,
    double width,
    double height
)
```

Parameters

x

y

width

height

Return Value

See Also

newRectangleFloat Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.newRectangleFloat Method (Rectangle2D)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Rectangle2D.Float newRectangleFloat (
    Rectangle2D rc
)
```

Parameters

rc

Return Value

See Also

newRectangleFloat Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.normalizeRect Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Rectangle2D normalizeRect (
    Rectangle2D rc
)
```

Parameters

rc

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.parse Method

Parses space separated numbers into Point2D

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static boolean parse (
    String pair,
    Point2D dest
)
```

Parameters

pair
A string representation of the point coordinates.

dest
A Point2D object to which the parsed values are assigned.

Return Value

true if the string has been parsed successfully, otherwise false.

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.pointAlongLength Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static Point2D pointAlongLength (
    float distance,
    List<Point2D.Float> segments
)
```

Parameters

distance

segments

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.pointsInRect Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static boolean pointsInRect (
    List<Point2D> points,
    Rectangle2D rect
)
```

Parameters

points

rect

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.polarToCartesian Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void polarToCartesian (
    Point2D coordCenter,
    double a,
    double r,
    Point2D point
)
```

Parameters

coordCenter

a

r

point

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.readFileAsString Method

Returns the content of a file as a string.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static String readFileAsString (
    String filePath
)
```

Parameters

filePath
A String containing the file name or full path.

Return Value

A String containing the file content.

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.resize<T> Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T resize (
    T changed,
    double width,
    double height
)
```

Parameters

changed

width

height

Return Value

See Also

Utilities Members
Utilities Class

Utilities.revalidateSynced Method

Performs synchronized revalidation to ensure that layout is up to date after this method returns.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static void revalidateSynced (
    JComponent comp
)
```

Parameters

comp

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.set Method

Overload List

Name	Description
Utilities.set (T, double, double)	
Utilities.set (T, double, double)	
Utilities.set (T, double, double, double, double)	
Utilities.set (T, Rectangle2D)	

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.set<T> Method (T, double, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T set (
    T changed,
    double x,
    double y
)
```

Parameters

changed

x

y

Return Value

See Also

set Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.set<T> Method (T, double, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T set (
    T changed,
    double x,
    double y
)
```

Parameters

changed

x

y

Return Value

See Also

set Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.set<T> Method (T, double, double, double, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static <T> T set (
    T changed,
    double x,
    double y,
    double width,
    double height
)
```

Parameters

changed

x

y

width

height

Return Value

See Also

set Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.set<T> Method (T, Rectangle2D)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public static <T> T set (
    T changed,
    Rectangle2D src
)
```

Parameters

changed

src

Return Value

See Also

set Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.setHeight<T> Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T setHeight (
    T changed,
    double height
)
```

Parameters

changed

height

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.setLocation<T> Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T setLocation (
    T changed,
    Rectangle2D src
)
```

Parameters

changed

src

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.setWidth<T> Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T setWidth (
    T changed,
    double width
)
```

Parameters

changed

width

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.setX Method

Overload List

Name	Description
Utilities.setX (T, double)	
Utilities.setX (T, double)	

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.setX<T> Method (T, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T setX (
    T changed,
    double x
)
```

Parameters

changed

x

Return Value

See Also

setX Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.setX<T> Method (T, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T setX (
    T changed,
    double x
)
```

Parameters

changed

x

Return Value

See Also

setX Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.setY Method

Overload List

Name	Description
Utilities.setY (T, double) Utilities.setY (T, double)	

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.setY<T> Method (T, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T setY (
    T changed,
    double y
)
```

Parameters

changed

y

Return Value

See Also

setY Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.setY<T> Method (T, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T setY (
    T changed,
    double y
)
```

Parameters

changed

y

Return Value

See Also

setY Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.subtract Method

Subtract the coordinates of one point from the coordinates of another

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Point subtract (
    Point changed,
    Point changeVector
)
```

Parameters

changed

changeVector

Return Value

the first parameter which holds the result

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.translate<T> Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T translate (
    T changed,
    double addX,
    double addY
)
```

Parameters

changed

addX

addY

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.translateX Method

Overload List

Name	Description
Utilities.translateX (T, double)	
Utilities.translateX (T, double)	

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.translateX<T> Method (T, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T translateX (
    T changed,
    double addX
)
```

Parameters

changed

addX

Return Value

See Also

translateX Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.translateX<T> Method (T, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T translateX (
    T changed,
    double addX
)
```

Parameters

changed

addX

Return Value

See Also

translateX Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.translateY Method

Overload List

Name	Description
Utilities.translateY (T, double)	
Utilities.translateY (T, double)	

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.translateY<T> Method (T, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T translateY (
    T changed,
    double addY
)
```

Parameters

changed

addY

Return Value

See Also

translateY Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.translateY<T> Method (T, double)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static <T> T translateY (
    T changed,
    double addY
)
```

Parameters

changed

addY

Return Value

See Also

translateY Method Overload List
Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.unionNonEmptyRects Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static Rectangle2D unionNonEmptyRects (
    Rectangle2D rc1,
    Rectangle2D rc2
)
```

Parameters

rc1

rc2

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.unzip Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static byte[] unzip (
    byte[] bytes
)
```

Parameters

bytes

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

Utilities.writeStringToFile Method

Writes the specified string to a file.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java

public static String writeStringToFile (
    String str,
    String filePath
)
```

Parameters

str
A text string.

filePath
File name or full path.

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.diagramming Namespace

ValidationEvent Class

Contains information passed to the validation events defined in DiagramListener.

Syntax

```
Java

public class ValidationEvent extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.ValidationEvent

See Also

ValidationEvent Members
com.mindfusion.diagramming Namespace

ValidationEvent Members

Contains information passed to the validation events defined in DiagramListener.

The following tables list the members exposed by the ValidationEvent type.

Public Constructors

	Name	Description
	ValidationEvent	Initializes a new ValidationEvent instance.

Public Methods

	Name	Description
	cancelDrag	Immediately cancels the item's creation or modification. This differs from calling setCancel(false), which would only change the cursor to indicate to users that they cannot complete the modification at the current pointer position.
	getCancel	Gets a value indicating whether to prevent the user from completing the operation.
	setCancel	Sets a value indicating whether to prevent the user from completing the operation

See Also

ValidationEvent Class
com.mindfusion.diagramming Namespace

ValidationEvent Constructor

Initializes a new ValidationEvent instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public ValidationEvent (
    Object source
)
```

Parameters

source

See Also

ValidationEvent Class
com.mindfusion.diagramming Namespace

ValidationEvent Methods

ValidationEvent.cancelDrag Method

Immediately cancels the item's creation or modification. This differs from calling setCancel(false), which would only change the cursor to indicate to users that they cannot complete the modification at the current pointer position.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void cancelDrag ()
```

See Also

ValidationEvent Members
ValidationEvent Class
com.mindfusion.diagramming Namespace

ValidationEvent.getCancel Method

Gets a value indicating whether to prevent the user from completing the operation.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getCancel ()
```

Return Value

true to cancel the operation; **false** to approve it.

See Also

ValidationEvent Members
ValidationEvent Class
com.mindfusion.diagramming Namespace

ValidationEvent.setCancel Method

Sets a value indicating whether to prevent the user from completing the operation

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCancel (
    boolean cancel
)
```

Parameters

cancel
true to cancel the operation; **false** to approve it.

See Also

ValidationEvent Members
ValidationEvent Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout Class

A version of **FlowLayout** which arranges its components vertically.

Syntax

Java
`public class VerticalFlowLayout implements LayoutManager2, Serializable`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.VerticalFlowLayout

See Also

VerticalFlowLayout Members
com.mindfusion.diagramming Namespace

VerticalFlowLayout Members

A version of **FlowLayout** which arranges its components vertically.

The following tables list the members exposed by the VerticalFlowLayout type.

Public Constructors

	Name	Description
	VerticalFlowLayout	Overloaded.

Public Fields

	Name	Description
	BOTTOM	This value indicates that each row of components should be bottom-justified.
	CENTER	This value indicates that each row of components should be centered.
	LEFT	This value indicates that the components should be left-aligned.
	MIDDLE	This value indicates that the components should be centered horizontally.

	RIGHT	This value indicates that the components should be right-aligned.
	STRETCH	This value indicates that the components should be stretched horizontally.
	TOP	This value indicates that each row of components should be top-justified.

Public Methods

	Name	Description
	addLayoutComponent	Overloaded.
	getAlignment	Gets the alignment for this layout.
	getHAlignment	Gets the horizontal alignment of layout components.
	getHgap	Gets the horizontal gap between components and between the components and the borders of the Container.
	getLayoutAlignmentX	
	getLayoutAlignmentY	
	getVgap	Gets the vertical gap between components and between the components and the borders of the Container.
	invalidateLayout	
	layoutContainer	Lays out the container. This method lets each *visible* component take its preferred size by reshaping the components in the target container in order to satisfy the alignment of this VerticalFlowLayout object.
	maximumLayoutSize	
	minimumLayoutSize	Returns the minimum dimensions needed to layout the *visible* components contained in the specified target container.
	preferredLayoutSize	Returns the preferred dimensions for this layout given the *visible* components in the specified target container.
	removeLayoutComponent	
	setAlignment	Sets the alignment for this layout.
	setHAlignment	Sets the horizontal alignment of layout components.
	setHgap	Sets the horizontal gap between components and between the components and the borders of the Container.
	setVgap	Sets the vertical gap between components and between the components and the borders of the Container.
	toString	Returns a string representation of this VerticalFlowLayout object and its values.

See Also

VerticalFlowLayout Fields

VerticalFlowLayout.BOTTOM Field

This value indicates that each row of components should be bottom-justified.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static final int BOTTOM
```

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.CENTER Field

This value indicates that each row of components should be centered.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static final int CENTER
```

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.LEFT Field

This value indicates that the components should be left-aligned.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static final int LEFT
```

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.MIDDLE Field

This value indicates that the components should be centered horizontally.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static final int MIDDLE
```

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.RIGHT Field

This value indicates that the components should be right-aligned.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static final int RIGHT
```

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.STRETCH Field

This value indicates that the components should be stretched horizontally.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static final int STRETCH`

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.TOP Field

This value indicates that each row of components should be top-justified.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static final int TOP`

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout Constructor

Overload List

Name	Description
VerticalFlowLayout ()	Initializes a new instance of the VerticalFlowLayout class with a centered alignment and a default 5-unit horizontal and vertical gap.
VerticalFlowLayout (int)	Initializes a new instance of the **VerticalFlowLayout** class with the specified alignment and a default 5-unit horizontal and vertical gap.
VerticalFlowLayout (int, int, int)	Initializes a new instance of the **VerticalFlowLayout** class with the indicated alignment and the indicated horizontal and vertical gaps.
VerticalFlowLayout (int, int, int, int)	Initializes a new instance of the **VerticalFlowLayout** class.

See Also

VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout Constructor ()

Initializes a new instance of the VerticalFlowLayout class with a centered alignment and a default 5-unit horizontal and vertical gap.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public VerticalFlowLayout ()
```

See Also

VerticalFlowLayout Constructor Overload List
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout Constructor (int)

Initializes a new instance of the VerticalFlowLayout class with the specified alignment and a default 5-unit horizontal and vertical gap.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public VerticalFlowLayout (
    int align
)
```

Parameters

align

See Also

VerticalFlowLayout Constructor Overload List
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout Constructor (int, int, int)

Initializes a new instance of the VerticalFlowLayout class with the indicated alignment and the indicated horizontal and vertical gaps.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public VerticalFlowLayout (
    int align,
    int hgap,
    int vgap
)
```

Parameters

align

hgap

vgap

See Also

VerticalFlowLayout Constructor Overload List
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout Constructor (int, int, int, int)

Initializes a new instance of the VerticalFlowLayout class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public VerticalFlowLayout (
    int halign,
    int align,
    int hgap,
    int vgap
)
```

Parameters

halign

align

hgap

vgap

See Also

VerticalFlowLayout Constructor Overload List
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout Methods

VerticalFlowLayout.addLayoutComponent Method

Overload List

Name	Description
VerticalFlowLayout.addLayoutComponent (Component, Object)	
VerticalFlowLayout.addLayoutComponent (String, Component)	

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.addLayoutComponent Method (Component, Object)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addLayoutComponent (
    Component comp,
    Object constraints
)
```

Parameters

comp

constraints

See Also

addLayoutComponent Method Overload List
VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.addLayoutComponent Method (String, Component)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void addLayoutComponent (
    String name,
    Component comp
)
```

Parameters

name

comp

See Also

addLayoutComponent Method Overload List
VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.getAlignment Method

Gets the alignment for this layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getAlignment ()
```

Return Value

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.getHAlignment Method

Gets the horizontal alignment of layout components.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getHAlignment ()
```

Return Value

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.getHgap Method

Gets the horizontal gap between components and between the components and the borders of the Container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getHgap ()
```

Return Value

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.getLayoutAlignmentX Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getLayoutAlignmentX (
    Container target
)
```

Parameters

target

Return Value

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.getLayoutAlignmentY Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getLayoutAlignmentY (
    Container target
)
```

Parameters

target

Return Value

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.getVgap Method

Gets the vertical gap between components and between the components and the borders of the Container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getVgap ()
```

Return Value

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.invalidateLayout Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void invalidateLayout (
    Container target
)
```

Parameters

target

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.layoutContainer Method

Lays out the container. This method lets each *visible* component take its preferred size by reshaping the components in the target container in order to satisfy the alignment of this VerticalFlowLayout object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void layoutContainer (
    Container target
)
```

Parameters

target

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.maximumLayoutSize Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension maximumLayoutSize (
    Container target
)
```

Parameters

target

Return Value

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.minimumLayoutSize Method

Returns the minimum dimensions needed to layout the *visible* components contained in the specified target container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension minimumLayoutSize (
    Container target
)
```

Parameters

target

Return Value

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.preferredLayoutSize Method

Returns the preferred dimensions for this layout given the *visible* components in the specified target container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension preferredLayoutSize (
    Container target
)
```

Parameters

target

Return Value

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.removeLayoutComponent Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void removeLayoutComponent (
    Component comp
)
```

Parameters

comp

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.setAlignment Method

Sets the alignment for this layout.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setAlignment (
    int value
)
```

Parameters

value

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.setHAlignment Method

Sets the horizontal alignment of layout components.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHAlignment (
    int value
)
```

Parameters

value

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.setHgap Method

Sets the horizontal gap between components and between the components and the borders of the Container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setHgap (
    int hgap
)
```

Parameters

hgap

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.setVgap Method

Sets the vertical gap between components and between the components and the borders of the Container.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setVgap (
    int vgap
)
```

Parameters

vgap

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

VerticalFlowLayout.toString Method

Returns a string representation of this VerticalFlowLayout object and its values.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public String toString ()`

Return Value

See Also

VerticalFlowLayout Members
VerticalFlowLayout Class
com.mindfusion.diagramming Namespace

XDimension2D Class

Syntax

Java
`public class XDimension2D`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.XDimension2D

See Also

XDimension2D Members
com.mindfusion.diagramming Namespace

XDimension2D Members

The following tables list the members exposed by the XDimension2D type.

Public Constructors

	Name	Description
	XDimension2D	

Public Methods

	Name	Description
	fromRect	

See Also

XDimension2D Class
com.mindfusion.diagramming Namespace

XDimension2D Constructor

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public XDimension2D ()
```

See Also

XDimension2D Class
com.mindfusion.diagramming Namespace

XDimension2D Methods

XDimension2D.fromRect Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public static XDimension2D.Double fromRect (
    Rectangle2D rect
)
```

Parameters

rect

Return Value

See Also

XDimension2D Members
XDimension2D Class
com.mindfusion.diagramming Namespace

XmlElementNameAnnotation Interface

Specifies a string to be used as a XML element name of a type during XML serialization.

Syntax

Java

```
public interface XmlElementNameAnnotation extends Annotation
```

See Also

XmlElementNameAnnotation Members
com.mindfusion.diagramming Namespace

XmlElementNameAnnotation Members

Specifies a string to be used as a XML element name of a type during XML serialization.

The following tables list the members exposed by the XmlElementNameAnnotation type.

See Also

XmlElementNameAnnotation Interface
com.mindfusion.diagramming Namespace

XmlPersistContext Class

Contains methods that can help you serialize and deserialize diagram items to and from XML documents.

Syntax

Java

```
public class XmlPersistContext
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.XmlPersistContext

See Also

XmlPersistContext Members
com.mindfusion.diagramming Namespace

XmlPersistContext Members

Contains methods that can help you serialize and deserialize diagram items to and from XML documents.

The following tables list the members exposed by the XmlPersistContext type.

Public Constructors

	Name	Description
	XmlPersistContext	Overloaded.

Public Fields

	Name	Description
	LatestFormat	

Public Methods

	Name	Description
	addChildElement	Overloaded.
	getChildElement	
	getClassVersion	
	getDiagram	
	getIncludeUnalteredProperties	Gets whether properties should be saved to XML when they have the default values.
	getXmlDocument	
	loadHeaderFromXml	Reads a lane header from the specified XML element.
	readAnchorPattern	
	readBool	Overloaded.
	readBrush	
	readByte	
	readChar	
	readColor	Overloaded.
	readColorArray	
	readDouble	
	readEffect	Overloaded.
	readEnum	Overloaded.
	readFloat	Overloaded.
	readFloatArray	
	readFont	

	readGroup	
	readHashtable	Reads a hash or traits table object with the specified name.
	readImage	Overloaded.
	readInt	Overloaded.
	readItemReference	Overloaded.
	readLong	
	readNodeConstraints	
	readObject	
	readPen	Overloaded.
	readPointCollection	
	readPointCoordinates	
	readPointF	
	readRectangleF	
	readShape	Overloaded.
	readShort	Overloaded.
	readSizeF	
	readSizeF	
	readString	Overloaded.
	readStringFormat	Overloaded.
	readStyle	Reads a Style object with the specified name.
	readSvg	Reads a SVG object with the specified name.
	readTag	
	readTheme	Reads a Theme object with the specified name.
	readThickness	
	saveHeaderToXml	Saves the specified lane header to the underlying document under the specified name.
	setIncludeUnalteredProperties	Sets whether properties should be saved to XML when they have the default values.
	writeAnchorPattern	Writes the specified anchor pattern.
	writeBool	Writes a boolean value with the specified name.
	writeBrush	
	writeByte	Write a byte value with the specified name.
	writeChar	Write a char value with the specified name.
	writeColor	

	writeColorArray	
	writeDouble	Writes a double value with the specified name.
	writeEffect	Writes a reference to the specified effect. The effect is registered within the internal hashtable for subsequent serialization.
	writeEnum	
	writeFloat	Writes a float value with the specified name.
	writeFloatArray	
	writeFont	Overloaded.
	writeGroup	
	writeImage	
	writeInt	Writes an integer value with the specified name.
	writeItemReference	Writes a reference to the specified item with the specified name.
	writeLong	Writes a long value with the specified name.
	writePen	
	writePointCollection	
	writePointCoordinates	
	writePointF	Writes a Point2D with the specified name.
	writeRectangleF	Writes a Rectangle2D with the specified name.
	writeShape	Writes the specified shape with the specified name.
	writeShort	Writes a short value with the specified name.
	writeSizeF	Writes a **Dimension2D** object with the specified name.
	writeString	Writes a string value with the specified name.
	writeStringFormat	
	writeStyle	Writes a reference to the specified style. The style is registered within the internal hashtable for subsequent serialization.
	writeSvg	Writes a reference to the specified SVG. The SVG is registered within the internal hashtable for subsequent serialization.
	writeTag	Writes the specified tag of the specified object.
	writeTheme	Writes the specified Theme object.
	writeThickness	
	writeTraits	

See Also

XmlPersistContext Fields

XmlPersistContext.LatestFormat Field

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public static int LatestFormat`

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext Constructor

Overload List

Name	Description
XmlPersistContext (Diagram, Document)	Initializes a new instance of the XmlPersistContext class.
XmlPersistContext (Diagram, Document, int)	Initializes a new instance of the XmlPersistContext class.

See Also

XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext Constructor (Diagram, Document)

Initializes a new instance of the XmlPersistContext class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public XmlPersistContext (
    Diagram diagram,
```

```
    Document document
)
```

Parameters

diagram
The Diagram this class will operate on.

document
The Xml Document to serializeto / deserialize from.

See Also

XmlPersistContext Constructor Overload List
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext Constructor (Diagram, Document, int)

Initializes a new instance of the XmlPersistContext class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public XmlPersistContext (
    Diagram diagram,
    Document document,
    int fileVersion
)
```

Parameters

diagram
The Diagram this class will operate on.

document
The Xml Document to serialize to / deserialize from.

fileVersion

See Also

XmlPersistContext Constructor Overload List
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext Methods

XmlPersistContext.addChildElement Method

Overload List

Name	Description
XmlPersistContext.addChildElement (String, Element)	Adds a new child node with the specified name to the specified parent node.
XmlPersistContext.addChildElement (String, Element, String)	Adds a new child node with the specified name and value to the specified parent node.

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.addChildElement Method (String, Element)

Adds a new child node with the specified name to the specified parent node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element addChildElement (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

addChildElement Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.addChildElement Method (String, Element, String)

Adds a new child node with the specified name and value to the specified parent node.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element addChildElement (
    String elementName,
```

```
    Element parentElement,
    String innerText
)
```

Parameters

elementName

parentElement

innerText

Return Value

See Also

addChildElement Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.getChildElement Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element getChildElement (
    Element element,
    String name
)
```

Parameters

element

name

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.getClassVersion Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int getClassVersion ()
```

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.getDiagram Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Diagram getDiagram ()
```

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.getIncludeUnalteredProperties Method

Gets whether properties should be saved to XML when they have the default values.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean getIncludeUnalteredProperties ()
```

Return Value

true if all properties should be saved; false if only the altered ones should be saved

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.getXmlDocument Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Document getXmlDocument ()
```

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.loadHeaderFromXml Method

Reads a lane header from the specified XML element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Header loadHeaderFromXml (
    Element element
)
```

Parameters

element

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readAnchorPattern Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public AnchorPattern readAnchorPattern (
    String elementName,
```

```
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readBool Method

Overload List

Name	Description
XmlPersistContext.readBool (String, Element)	
XmlPersistContext.readBool (String, Element, boolean)	

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readBool Method (String, Element)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean readBool (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

readBool Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readBool Method (String, Element, boolean)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean readBool (
    String elementName,
    Element parentElement,
    boolean defaultValue
)
```

Parameters

elementName

parentElement

defaultValue

Return Value

See Also

readBool Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readBrush Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Brush readBrush (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readByte Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public byte readByte (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readChar Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Character readChar (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readColor Method

Overload List

Name	Description
XmlPersistContext.readColor (String, Element)	
XmlPersistContext.readColor (String, Element, Color)	

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readColor Method (String, Element)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color readColor (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

readColor Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readColor Method (String, Element, Color)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color readColor (
    String elementName,
    Element parentElement,
    Color defaultValue
)
```

Parameters

elementName

parentElement

defaultValue

Return Value

See Also

readColor Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readColorArray Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Color[] readColorArray (
    String elementName,
    String subElementName,
    Element parentElement
)
```

Parameters

elementName

subElementName

parentElement

Return Value

See Also

XmlPersistContext.readDouble Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public double readDouble (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readEffect Method

Overload List

Name	Description
XmlPersistContext.readEffect (Element)	Reads a NodeEffect object from the specified element.
XmlPersistContext.readEffect (String, Element)	Reads a **NodeEffect** object with the specified name.

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readEffect Method (Element)

Reads a NodeEffect object from the specified element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeEffect readEffect (
    Element element
)
```

Parameters

element

Return Value

See Also

readEffect Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readEffect Method (String, Element)

Reads a NodeEffect object with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeEffect readEffect (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

readEffect Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readEnum Method

Overload List

Name	Description
XmlPersistContext.readEnum (String, Element)	
XmlPersistContext.readEnum (String, Element, int)	

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readEnum Method (String, Element)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int readEnum (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

readEnum Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readEnum Method (String, Element, int)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int readEnum (
    String elementName,
    Element parentElement,
    int defaultValue
)
```

Parameters

elementName

parentElement

defaultValue

Return Value

See Also

readEnum Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readFloat Method

Overload List

Name	Description
XmlPersistContext.readFloat (String, Element)	
XmlPersistContext.readFloat (String, Element, float)	

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readFloat Method (String, Element)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public float readFloat ( String elementName, Element parentElement )`

Parameters

elementName

parentElement

Return Value

See Also

readFloat Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readFloat Method (String, Element, float)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float readFloat (
    String elementName,
    Element parentElement,
    float defaultValue
)
```

Parameters

elementName

parentElement

defaultValue

Return Value

See Also

readFloat Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readFloatArray Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float[] readFloatArray (
    String elementName,
    String subElementName,
```

```
    Element parentElement
)
```

Parameters

elementName

subElementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readFont Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Font readFont (
    String elementName,
    Element parentElement,
    boolean convertToPoint
)
```

Parameters

elementName

parentElement

convertToPoint

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readGroup Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public Group readGroup (`
`  String elementName,`
`  Element parentElement`
`)`

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readHashtable Method

Reads a hash or traits table object with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public Hashtable<Object, Object> readHashtable (`
`  String elementName,`
`  Element parentElement`
`)`

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readImage Method

Overload List

Name	Description

XmlPersistContext.readImage (Element)	
XmlPersistContext.readImage (String, Element)	

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readImage Method (Element)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Image readImage (
    Element element
)
```

Parameters

element

Return Value

See Also

readImage Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readImage Method (String, Element)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Image readImage (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

readImage Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readInt Method

Overload List

Name	Description
XmlPersistContext.readInt (String, Element)	
XmlPersistContext.readInt (String, Element, int)	

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readInt Method (String, Element)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int readInt (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

readInt Method Overload List
XmlPersistContext Members

XmlPersistContext.readInt Method (String, Element, int)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public int readInt (
    String elementName,
    Element parentElement,
    int defaultValue
)
```

Parameters

elementName

parentElement

defaultValue

Return Value

See Also

readInt Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readItemReference Method

Overload List

Name	Description
XmlPersistContext.readItemReference (Element)	Reads an item reference from the specified element.
XmlPersistContext.readItemReference (String, Element)	

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readItemReference Method (Element)

Reads an item reference from the specified element.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem readItemReference (
    Element itemElement
)
```

Parameters

itemElement

Return Value

See Also

readItemReference Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readItemReference Method (String, Element)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramItem readItemReference (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

readItemReference Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readLong Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public long readLong (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readNodeConstraints Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public NodeConstraints readNodeConstraints (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readObject Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object readObject (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readPen Method

Overload List

Name	Description
XmlPersistContext.readPen (String, Element)	
XmlPersistContext.readPen (String, Element, Pen)	

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readPen Method (String, Element)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Pen readPen (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

readPen Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readPen Method (String, Element, Pen)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Pen readPen (
    String elementName,
    Element parentElement,
    Pen defaultPen
)
```

Parameters

elementName

parentElement

defaultPen

Return Value

See Also

readPen Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readPointCollection Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public PointList readPointCollection (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readPointCoordinates Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public ArrayList<Point2D.Float> readPointCoordinates (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readPointF Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Point2D.Float readPointF (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readRectangleF Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Rectangle2D.Float readRectangleF (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readShape Method

Overload List

Name	Description

XmlPersistContext.readShape (String, Element)	
XmlPersistContext.readShape (String, Element, Shape)	

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readShape Method (String, Element)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Shape readShape (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

readShape Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readShape Method (String, Element, Shape)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Shape readShape (
    String elementName,
    Element parentElement,
    Shape defaultValue
)
```

Parameters

elementName

parentElement

defaultValue

Return Value

See Also

readShape Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readShort Method

Overload List

Name	Description
XmlPersistContext.readShort (String, Element)	
XmlPersistContext.readShort (String, Element, short)	

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readShort Method (String, Element)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public short readShort (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

readShort Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readShort Method (String, Element, short)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public short readShort (
    String elementName,
    Element parentElement,
    short defaultValue
)
```

Parameters

elementName

parentElement

defaultValue

Return Value

See Also

readShort Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readSizeF Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension2D readSizeF (
    String elementName,
    Element parentElement,
    Dimension2D defaultValue
)
```

Parameters

elementName

parentElement

defaultValue

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readSizeF Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Dimension2D readSizeF (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readString Method

Overload List

Name	Description
XmlPersistContext.readString (String, Element)	
XmlPersistContext.readString (String, Element, String)	

See Also

XmlPersistContext Members
XmlPersistContext Class

XmlPersistContext.readString Method (String, Element)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String readString (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

readString Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readString Method (String, Element, String)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public String readString (
    String elementName,
    Element parentElement,
    String defaultValue
)
```

Parameters

elementName

parentElement

defaultValue

Return Value

See Also

readString Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readStringFormat Method

Overload List

Name	Description
XmlPersistContext.readStringFormat (String, Element)	
XmlPersistContext.readStringFormat (String, Element, TextFormat)	

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readStringFormat Method (String, Element)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TextFormat readStringFormat (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

readStringFormat Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readStringFormat Method (String, Element, TextFormat)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TextFormat readStringFormat (
    String elementName,
    Element parentElement,
    TextFormat defaultValue
)
```

Parameters

elementName

parentElement

defaultValue

Return Value

See Also

readStringFormat Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readStyle Method

Reads a Style object with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Style readStyle (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readSvg Method

Reads a SVG object with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public SvgContent readSvg (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readTag Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Object readTag (
    Object item,
    String elementName,
    Element parentElement
)
```

Parameters

item

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readTheme Method

Reads a Theme object with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Theme readTheme (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.readThickness Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Thickness readThickness (
    String elementName,
    Element parentElement
)
```

Parameters

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.saveHeaderToXml Method

Saves the specified lane header to the underlying document under the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void saveHeaderToXml (
    Header header,
    Element collectionElement,
    String elementName
)
```

Parameters

header

collectionElement

elementName

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.setIncludeUnalteredProperties Method

Sets whether properties should be saved to XML when they have the default values.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setIncludeUnalteredProperties (
    boolean value
)
```

Parameters

value
true to save all properties; false to save only altered properties

See Also

XmlPersistContext Members
XmlPersistContext Class

XmlPersistContext.writeAnchorPattern Method

Writes the specified anchor pattern.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeAnchorPattern (
    AnchorPattern anchorPattern,
    String elementName,
    Element parentElement
)
```

Parameters

anchorPattern

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeBool Method

Writes a boolean value with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeBool (
    boolean boolValue,
    String elementName,
    Element parentElement
)
```

Parameters

boolValue

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeBrush Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeBrush (
    Brush brush,
    String elementName,
    Element parentElement
)
```

Parameters

brush

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeByte Method

Write a byte value with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeByte (
    byte byteValue,
    String elementName,
    Element parentElement
)
```

Parameters

byteValue

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeChar Method

Write a char value with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeChar (
    Character charValue,
    String elementName,
    Element parentElement
)
```

Parameters

charValue

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeColor Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeColor (
    Color color,
    String elementName,
    Element parentElement
)
```

Parameters

color

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeColorArray Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeColorArray (
    Color[] array,
    String elementName,
    String subElementName,
    Element parentElement
)
```

Parameters

array

elementName

subElementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeDouble Method

Writes a double value with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeDouble (
    double doubleValue,
    String elementName,
    Element parentElement
)
```

Parameters

doubleValue

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeEffect Method

Writes a reference to the specified effect. The effect is registered within the internal hashtable for subsequent serialization.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeEffect (
    NodeEffect effect,
    String elementName,
    Element parentElement
)
```

Parameters

effect

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeEnum Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeEnum (
    int enumValue,
    String elementName,
    Element parentElement
)
```

Parameters

enumValue

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeFloat Method

Writes a float value with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeFloat (
    float floatValue,
    String elementName,
    Element parentElement
)
```

Parameters

floatValue

elementName

parentElement

Return Value

See Also

XmlPersistContext.writeFloatArray Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeFloatArray (
    float[] array,
    String elementName,
    String subElementName,
    Element parentElement
)
```

Parameters

array

elementName

subElementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeFont Method

Overload List

Name	Description
XmlPersistContext.writeFont (Font, String, Element)	
XmlPersistContext.writeFont (Font, String, Element, GraphicsUnit)	

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeFont Method (Font, String, Element)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeFont (
    Font font,
    String elementName,
    Element parentElement
)
```

Parameters

font

elementName

parentElement

Return Value

See Also

writeFont Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeFont Method (Font, String, Element, GraphicsUnit)

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeFont (
    Font font,
    String elementName,
    Element parentElement,
    GraphicsUnit unit
)
```

Parameters

font

elementName

parentElement

unit

Return Value

See Also

writeFont Method Overload List
XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeGroup Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeGroup (
    Group group,
    String elementName,
    Element parentElement
)
```

Parameters

group

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeImage Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeImage (
    Image image,
    String elementName,
    Element parentElement
)
```

Parameters

image

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeInt Method

Writes an integer value with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeInt (
    int intValue,
    String elementName,
    Element parentElement
)
```

Parameters

intValue

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeItemReference Method

Writes a reference to the specified item with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeItemReference (
    DiagramItem item,
    String elementName,
    Element parentElement
)
```

Parameters

item

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeLong Method

Writes a long value with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeLong (
    long longValue,
    String elementName,
    Element parentElement
)
```

Parameters

longValue

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writePen Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writePen (
    Pen pen,
    String elementName,
    Element parentElement
)
```

Parameters

pen

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writePointCollection Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writePointCollection (
    PointList points,
    String elementName,
    Element parentElement
)
```

Parameters

points

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writePointCoordinates Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Element writePointCoordinates (
    List<Point2D.Float> points,
    String elementName,
    Element parentElement
)
```

Parameters

points

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writePointF Method

Writes a Point2D with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Element writePointF (
    Point2D point,
    String elementName,
    Element parentElement
)
```

Parameters

point

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeRectangleF Method

Writes a Rectangle2D with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeRectangleF (
    Rectangle2D rectangle,
    String elementName,
    Element parentElement
)
```

Parameters

rectangle

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeShape Method

Writes the specified shape with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeShape (
    Shape shape,
    String elementName,
    Element parentElement
)
```

Parameters

shape

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeShort Method

Writes a short value with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeShort (
    short shortValue,
    String elementName,
    Element parentElement
)
```

Parameters

shortValue

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeSizeF Method

Writes a **Dimension2D** object with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeSizeF (
    Dimension2D size,
    String elementName,
    Element parentElement
)
```

Parameters

size

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeString Method

Writes a string value with the specified name.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeString (
    String stringValue,
    String elementName,
    Element parentElement
)
```

Parameters

stringValue

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeStringFormat Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeStringFormat (
    TextFormat stringFormat,
    String elementName,
    Element parentElement
)
```

Parameters

stringFormat

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeStyle Method

Writes a reference to the specified style. The style is registered within the internal hashtable for subsequent serialization.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeStyle (
    Style style,
    String elementName,
    Element parentElement
)
```

Parameters

style

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeSvg Method

Writes a reference to the specified SVG. The SVG is registered within the internal hashtable for subsequent serialization.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeSvg (
    SvgContent svg,
    String elementName,
    Element parentElement
)
```

Parameters

svg

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeTag Method

Writes the specified tag of the specified object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeTag (
    Object item,
    Object tagValue,
    String elementName,
    Element parentElement
)
```

Parameters

item

tagValue

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeTheme Method

Writes the specified Theme object.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeTheme (
    Theme theme,
    String elementName,
    Element parentElement
)
```

Parameters

theme

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeThickness Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeThickness (
    Thickness thickness,
    String elementName,
    Element parentElement
)
```

Parameters

thickness

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlPersistContext.writeTraits Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public Element writeTraits (
    Hashtable<Object, Object> traits,
    String elementName,
    Element parentElement
)
```

Parameters

traits

elementName

parentElement

Return Value

See Also

XmlPersistContext Members
XmlPersistContext Class
com.mindfusion.diagramming Namespace

XmlReaderException Class

An exception thrown by XmlReader if it cannot parse an input file.

Syntax

Java

```
public class XmlReaderException extends Exception
```

Inheritance Hierarchy

java.lang.Object
  java.lang.Throwable
    java.lang.Exception
      com.mindfusion.diagramming.XmlReaderException

See Also

XmlReaderException Members
com.mindfusion.diagramming Namespace

XmlReaderException Members

An exception thrown by XmlReader if it cannot parse an input file.

The following tables list the members exposed by the XmlReaderException type.

Public Constructors

	Name	Description
	XmlReaderException	Initializes a new XmlReaderException instance.

See Also

XmlReaderException Class
com.mindfusion.diagramming Namespace

XmlReaderException Constructor

Initializes a new XmlReaderException instance.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public XmlReaderException (
    Throwable cause
)
```

Parameters

cause
Specifies the cause of the exception.

See Also

XmlReaderException Class
com.mindfusion.diagramming Namespace

XmlReaderListener Interface

Defines events that let you load custom tag data from XML files.

Syntax

Java

```
public interface XmlReaderListener extends EventListener
```

See Also

XmlReaderListener Members
com.mindfusion.diagramming Namespace

XmlReaderListener Members

Defines events that let you load custom tag data from XML files.

The following tables list the members exposed by the XmlReaderListener type.

Public Methods

	Name	Description
	readTag	Called when a tag object must be read.

See Also

XmlReaderListener Interface
com.mindfusion.diagramming Namespace

XmlReaderListener Methods

XmlReaderListener.readTag Method

Called when a tag object must be read.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
void readTag (
    SerializeTagEvent e
)
```

Parameters

e
A SerializeTagEvent object providing information about the event.

See Also

XmlReaderListener Members
XmlReaderListener Interface
com.mindfusion.diagramming Namespace

ZoomControl Class

ZoomControl lets users zoom and pan a target DiagramView interactively.

Syntax

Java

```
public class ZoomControl extends JComponent implements MouseListener, MouseMotionListener,
PropertyChangeListener
```

Remarks

The **ZoomControl** class lets user change interactively the current zoom level and scroll position of a DiagramView. To set it up, add a **ZoomControl** to the frame, place it anywhere over a **DiagramView**, and set the control's View property to that view. Set the ZoomStep and ScrollStep properties to specify the amount added to view's zoom level or scroll position by **ZoomControl**'s buttons. You can customize the control's appearance by setting properties such as Fill, BorderColor, CornerRadius and TickPosition.

Inheritance Hierarchy

java.lang.Object
  java.awt.Component
    java.awt.Container
      javax.swing.JComponent
        com.mindfusion.diagramming.ZoomControl

See Also

ZoomControl Members
com.mindfusion.diagramming Namespace

ZoomControl Members

ZoomControl lets users zoom and pan a target DiagramView interactively.

The following tables list the members exposed by the **ZoomControl** type.

Public Constructors

	Name	Description
	ZoomControl	Initializes a new instance of the ZoomControl class.

Public Methods

	Name	Description
	getActiveColor	Gets the color used to render depressed buttons.
	getBorderColor	Gets the color of ZoomControl elements' borders.
	getCornerRadius	Gets the corner radius of rounded child elements.
	getFill	Gets the brush used to fill the ZoomControl elements.
	getInnerColor	Gets the color of plus, minus and arrow icons.
	getMaxZoomFactor	Gets the maximum zoom level allowed to set through this control.
	getMinZoomFactor	Gets the minimum zoom level allowed to set through this control.
	getScrollStep	Gets the scroll offset added when users click the pan arrows.
	getShadowColor	Gets the shadow color.
	getShowLabel	Gets a value indicating whether the label that shows the current zoom level should be visible.

	getSnapToZoomStep	Gets whether the trackbar should snap to ZoomStep values when dragged.
	getTickPosition	Gets the current tick position of the trackbar.
	getView	Gets the DiagramView object controlled by this ZoomControl.
	getZoomFactor	Gets current zoom level.
	getZoomStep	Gets the amount by which to change zoom level when + and - buttons are clicked.
	isDoubleBuffered	Overrides JComponent.isDoubleBuffered method.
	isOpaque	Overrides JComponent.isOpaque method.
	mouseClicked	
	mouseDragged	Implements MouseListener.mouseDragged
	mouseEntered	
	mouseExited	
	mouseMoved	Implements MouseListener.mouseMoved
	mousePressed	Implements MouseListener.mousePressed
	mouseReleased	Implements MouseListener.mouseReleased
	propertyChange	
	setActiveColor	Sets the color used to render depressed buttons.
	setBorderColor	Sets the color of ZoomControl elements' borders.
	setCornerRadius	Sets the corner radius of rounded child elements.
	setFill	Sets the brush used to fill the ZoomControl elements.
	setInnerColor	Sets the color of plus, minus and arrow icons.
	setMaxZoomFactor	Sets the maximum zoom level allowed to set through this control.
	setMinZoomFactor	Sets the minimum zoom level allowed to set through this control.
	setScrollStep	Sets the scroll offset added when users click the pan arrows.
	setShadowColor	Sets the shadow color.
	setShowLabel	Sets a value indicating whether the label that shows the current zoom level should be visible.
	setSnapToZoomStep	Sets whether the trackbar should snap to ZoomStep values when dragged.
	setTickPosition	Sets the current tick position of the trackbar.
	setView	Sets the DiagramView object controlled by this ZoomControl.
	setZoomFactor	Overloaded. Sets current zoom level.

	setZoomStep	Sets the amount by which to change zoom level when + and - buttons are clicked.

Protected Methods

	Name	Description
	paintComponent	

See Also

ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl Constructor

Initializes a new instance of the ZoomControl class.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public ZoomControl ()`

See Also

ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl Methods

ZoomControl.getActiveColor Method

Gets the color used to render depressed buttons.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java
`public Color getActiveColor ()`

Return Value

A java.awt.Color instance. The default value is RGB(135, 206, 235)

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.getBorderColor Method

Gets the color of ZoomControl elements' borders.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Color getBorderColor ()
```

Return Value

A java.awt.Color instance. The default value is RGB(77, 83, 94).

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.getCornerRadius Method

Gets the corner radius of rounded child elements.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public int getCornerRadius ()
```

Return Value

An integer value specifying the radius of corner arcs. The default value is 6.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.getFill Method

Gets the brush used to fill the ZoomControl elements.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Brush getFill ()
```

Return Value

A Brush instance.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.getInnerColor Method

Gets the color of plus, minus and arrow icons.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Color getInnerColor ()
```

Return Value

A java.awt.Color instance. The default value is RGB(91, 91, 91).

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.getMaxZoomFactor Method

Gets the maximum zoom level allowed to set through this control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public float getMaxZoomFactor ()
```

Return Value

A float value specifying the maximum zoom level. The default value is 200.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.getMinZoomFactor Method

Gets the minimum zoom level allowed to set through this control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getMinZoomFactor ()
```

Return Value

A float value specifying the minimum zoom level. The default value is 0.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.getScrollStep Method

Gets the scroll offset added when users click the pan arrows.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getScrollStep ()
```

Return Value

A float value specifying the scroll offset. The default value is 0.5.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.getShadowColor Method

Gets the shadow color.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public Color getShadowColor ()
```

Return Value

A java.awt.Color instance. The default value is ARGB(150, 0, 0, 0).

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.getShowLabel Method

Gets a value indicating whether the label that shows the current zoom level should be visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getShowLabel ()
```

Return Value

true to show the zoom level label, or false otherwise. The default value is true.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.getSnapToZoomStep Method

Gets whether the trackbar should snap to ZoomStep values when dragged.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public boolean getSnapToZoomStep ()
```

Return Value

true to snap to multiples of ZoomStep, or false otherwise. The default value is true.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.getTickPosition Method

Gets the current tick position of the trackbar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public TickPosition getTickPosition ()
```

Return Value

A member of the TickPosition enumeration.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.getView Method

Gets the DiagramView object controlled by this ZoomControl.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public DiagramView getView ()
```

Return Value

The DiagramView object controlled by this ZoomControl.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.getZoomFactor Method

Gets current zoom level.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getZoomFactor ()
```

Return Value

A float value specifying the current zoom level.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.getZoomStep Method

Gets the amount by which to change zoom level when + and - buttons are clicked.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public float getZoomStep ()
```

Return Value

A float value specifying the zoom level change. The default value is 10.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.isDoubleBuffered Method

Overrides JComponent.isDoubleBuffered method.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean isDoubleBuffered ()
```

Return Value

true

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.isOpaque Method

Overrides JComponent.isOpaque method.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public boolean isOpaque ()
```

Return Value

false

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.mouseClicked Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void mouseClicked (
    MouseEvent e
)
```

Parameters

e

See Also

ZoomControl Members
ZoomControl Class

com.mindfusion.diagramming Namespace

ZoomControl.mouseDragged Method

Implements MouseListener.mouseDragged

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void mouseDragged (
    MouseEvent e
)
```

Parameters

e
A MouseEvent instance providing more information about the event.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.mouseEntered Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void mouseEntered (
    MouseEvent e
)
```

Parameters

e

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.mouseExited Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void mouseExited (
    MouseEvent e
)
```

Parameters

e

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.mouseMoved Method

Implements MouseListener.mouseMoved

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void mouseMoved (
    MouseEvent e
)
```

Parameters

e
A MouseEvent instance providing more information about the event.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.mousePressed Method

Implements MouseListener.mousePressed

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void mousePressed (
    MouseEvent e
)
```

Parameters

e
A MouseEvent instance providing more information about the event.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.mouseReleased Method

Implements MouseListener.mouseReleased

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void mouseReleased (
    MouseEvent e
)
```

Parameters

e
A MouseEvent instance providing more information about the event.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.paintComponent Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
protected void paintComponent (
    Graphics g
)
```

Parameters

g

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.propertyChange Method

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void propertyChange (
    PropertyChangeEvent args
)
```

Parameters

args

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setActiveColor Method

Sets the color used to render depressed buttons.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setActiveColor (
    Color value
)
```

Parameters

value
A java.awt.Color instance.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setBorderColor Method

Sets the color of ZoomControl elements' borders.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setBorderColor (
    Color value
)
```

Parameters

value
A java.awt.Color instance.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setCornerRadius Method

Sets the corner radius of rounded child elements.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setCornerRadius (
    int value
)
```

Parameters

value
An integer value specifying the radius of corner arcs.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setFill Method

Sets the brush used to fill the ZoomControl elements.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setFill (
    Brush value
)
```

Parameters

value
A Brush instance.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setInnerColor Method

Sets the color of plus, minus and arrow icons.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setInnerColor (
    Color value
)
```

Parameters

value
A java.awt.Color instance.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setMaxZoomFactor Method

Sets the maximum zoom level allowed to set through this control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMaxZoomFactor (
    float value
)
```

Parameters

value
A float value specifying the maximum zoom level.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setMinZoomFactor Method

Sets the minimum zoom level allowed to set through this control.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setMinZoomFactor (
    float value
)
```

Parameters

value
A float value specifying the minimum zoom level.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setScrollStep Method

Sets the scroll offset added when users click the pan arrows.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setScrollStep (
    float value
)
```

Parameters

value
A float value specifying the scroll offset.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setShadowColor Method

Sets the shadow color.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShadowColor (
    Color value
)
```

Parameters

value
A java.awt.Color instance.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setShowLabel Method

Sets a value indicating whether the label that shows the current zoom level should be visible.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setShowLabel (
    boolean value
)
```

Parameters

value
true to show the zoom level label, or false otherwise.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setSnapToZoomStep Method

Sets whether the trackbar should snap to ZoomStep values when dragged.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setSnapToZoomStep (
    boolean value
)
```

Parameters

value
true to snap to multiples of ZoomStep, or false otherwise. The default value is true.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setTickPosition Method

Sets the current tick position of the trackbar.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setTickPosition (
    TickPosition position
)
```

Parameters

position
A member of the TickPosition enumeration.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setView Method

Sets the DiagramView object controlled by this ZoomControl.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

```
public void setView (
    DiagramView value
)
```

Parameters

value
The DiagramView object controlled by this ZoomControl.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setZoomFactor Method

Sets current zoom level.

Overload List

Name	Description
ZoomControl.setZoomFactor (float)	Sets current zoom level.
ZoomControl.setZoomFactor (float, boolean)	Sets current zoom level.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setZoomFactor Method (float)

Sets current zoom level.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setZoomFactor (
    float value
)
```

Parameters

value
A float value specifying the new zoom level.

See Also

setZoomFactor Method Overload List
ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setZoomFactor Method (float, boolean)

Sets current zoom level.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

```
Java
public void setZoomFactor (
    float value,
    boolean applyConstraints
)
```

Parameters

value

applyConstraints

See Also

setZoomFactor Method Overload List
ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

ZoomControl.setZoomStep Method

Sets the amount by which to change zoom level when + and - buttons are clicked.

Namespace: com.mindfusion.diagramming
Package: com.mindfusion.diagramming

Syntax

Java

`public void setZoomStep (`
`    float value`
`)`

Parameters

value
A float value specifying the zoom level change.

See Also

ZoomControl Members
ZoomControl Class
com.mindfusion.diagramming Namespace

com.mindfusion.diagramming.components Namespace

AddChild Interface

Defines a method for adding child objects to a parent objects.

Syntax

Java
`public interface AddChild`

Inheritors

com.mindfusion.diagramming.components.ContainerComponent
com.mindfusion.diagramming.components.ContentComponent

See Also

AddChild Members
com.mindfusion.diagramming.components Namespace

AddChild Members

Defines a method for adding child objects to a parent objects.

The following tables list the members exposed by the AddChild type.

Public Methods

	Name	Description
	addChild	Adds the specified object as a child to the current object.

See Also

AddChild Interface
com.mindfusion.diagramming.components Namespace

AddChild Methods

AddChild.addChild Method

Adds the specified object as a child to the current object.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void addChild (
    Object child
)
```

Parameters

child
The child object to add.

See Also

AddChild Members
AddChild Interface
com.mindfusion.diagramming.components Namespace

BorderComponent Class

Represents a component that draws a border around another component.

Syntax

Java

```
public class BorderComponent extends ContentComponent
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentBase
    com.mindfusion.diagramming.components.ContentComponent
      com.mindfusion.diagramming.components.BorderComponent

See Also

BorderComponent Members

Represents a component that draws a border around another component.

The following tables list the members exposed by the BorderComponent type.

Public Constructors

	Name	Description
	BorderComponent	Initializes a new instance of the BorderComponent class.

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description
	accept	ComponentBase.accept override. (Inherited from ContentComponent.)
	addChild	Implements AddChild.addChild (Inherited from ContentComponent.)
	addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	arrangeComponents	ComponentBase.arrangeComponents override. (Inherited from ContentComponent.)
	confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)
	contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
	createOutlinePath	ComponentBase.createOutlinePath override
	draw	ContentComponent.draw override

find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
getBackground	Gets the brush used to fill the border background.
getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
getChildCount	ComponentBase.getChildCount override. (Inherited from ContentComponent.)
getContent	Gets the content of this component. (Inherited from ContentComponent.)
getCursor	Gets the cursor to display when the mouse is at the specified position. (Inherited from ComponentBase.)
getDesiredSize	ComponentBase.getDesiredSize override. (Inherited from ContentComponent.)
getDocumentBounds	For internal use. (Inherited from ComponentBase.)
getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
getIsOutline	Gets a value indicating whether this component defines the outline of its host.
getName	Gets the name of the component. (Inherited from ComponentBase.)

	getPadding	Gets the padding around this component's content. (Inherited from ContentComponent.)
	getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
	getParentHost	For internal use. (Inherited from ComponentBase.)
	getPen	Gets the pen used to stroke the border sides.
	getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
	invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
	invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)
	onContextChanged	(Inherited from ComponentBase.)
	onKeyDown	(Inherited from ComponentBase.)
	onKeyPress	Called when a character key is pressed when this component has the input focus. (Inherited from ComponentBase.)
	onKeyUp	(Inherited from ComponentBase.)
	onMouseMove	Overloaded. (Inherited from ComponentBase.)
	onMouseUp	Overloaded. (Inherited from ComponentBase.)
	onUnitChanged	Invoked when the measure unit of the document containing the component has changed. (Inherited from ComponentBase.)
	raiseValidated	(Inherited from ComponentBase.)
	readExternal	Implements Externalizable
	removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	setBackground	Sets the brush used to fill the border background.
	setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from

		ComponentBase.)
	setContent	Sets the content of this component. (Inherited from ContentComponent.)
	setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
	setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	setIsOutline	Sets a value indicating whether this component defines the outline of its host.
	setName	Sets the name of the component. (Inherited from ComponentBase.)
	setPadding	Sets the padding around this component's content. (Inherited from ContentComponent.)
	setParent	For internal use. (Inherited from ComponentBase.)
	setPen	Sets the pen used to stroke the border sides.
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)

	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	Implements Externalizable

Protected Methods

	Name	Description
	getThickness	ContentComponent.getThickness override
	loadFromJson	ContentComponent.LoadFromJson override.
	loadFromXml	ContentComponent.loadFromXml override
	onAddedToParent	Invoked when the component is added to a parent component. (Inherited from ComponentBase.)
	onGotFocus	Overloaded. (Inherited from ComponentBase.)
	onLostFocus	Overloaded. (Inherited from ComponentBase.)
	onMouseDown	Overloaded. (Inherited from ComponentBase.)
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidating	Raises the Validating event. (Inherited from ComponentBase.)
	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed. (Inherited from ComponentBase.)
	saveToJson	ContentComponent.SaveToJson override.
	saveToXml	ContentComponent.saveToXml override
	serializeSubcomponents	Invoked to query whether the underlying component structure should be automatically serialized or serialized by the user. (Inherited from ComponentBase.)

See Also

BorderComponent Class
com.mindfusion.diagramming.components Namespace

BorderComponent Constructor

Initializes a new instance of the BorderComponent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public BorderComponent ()
```

See Also

BorderComponent Class
com.mindfusion.diagramming.components Namespace

BorderComponent Methods

BorderComponent.createOutlinePath Method

ComponentBase.createOutlinePath override

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public GeneralPath createOutlinePath (
    Rectangle2D.Float bounds,
    float rotationAngle
)
```

Parameters

bounds

rotationAngle

Return Value

See Also

BorderComponent Members
BorderComponent Class
com.mindfusion.diagramming.components Namespace

BorderComponent.draw Method

ContentComponent.draw override

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void draw (
    Graphics2D g2d,
```

```
    RenderOptions options
)
```

Parameters

g2d

options

See Also

BorderComponent Members
BorderComponent Class
com.mindfusion.diagramming.components Namespace

BorderComponent.getBackground Method

Gets the brush used to fill the border background.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getBackground ()
```

Return Value

The brush used to fill the border background.

See Also

BorderComponent Members
BorderComponent Class
com.mindfusion.diagramming.components Namespace

BorderComponent.getIsOutline Method

Gets a value indicating whether this component defines the outline of its host.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean getIsOutline ()
```

Return Value

true to mark this component as the node's outline, otherwise false.

See Also

BorderComponent Members
BorderComponent Class
com.mindfusion.diagramming.components Namespace

BorderComponent.getPen Method

Gets the pen used to stroke the border sides.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public Pen getPen ()
```

Return Value

The pen used to stroke the border sides.

See Also

BorderComponent Members
BorderComponent Class
com.mindfusion.diagramming.components Namespace

BorderComponent.getThickness Method

ContentComponent.getThickness override

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
protected Thickness getThickness ()
```

Return Value

See Also

BorderComponent Members
BorderComponent Class
com.mindfusion.diagramming.components Namespace

BorderComponent.loadFromJson Method

ContentComponent.LoadFromJson override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj

context

See Also

BorderComponent Members
BorderComponent Class
com.mindfusion.diagramming.components Namespace

BorderComponent.loadFromXml Method

ContentComponent.loadFromXml override

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

BorderComponent Members
BorderComponent Class
com.mindfusion.diagramming.components Namespace

BorderComponent.readExternal Method

Implements Externalizable

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

BorderComponent Members
BorderComponent Class
com.mindfusion.diagramming.components Namespace

BorderComponent.saveToJson Method

ContentComponent.SaveToJson override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj

context

See Also

BorderComponent Members
BorderComponent Class
com.mindfusion.diagramming.components Namespace

BorderComponent.saveToXml Method

ContentComponent.saveToXml override

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

BorderComponent Members
BorderComponent Class
com.mindfusion.diagramming.components Namespace

BorderComponent.setBackground Method

Sets the brush used to fill the border background.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setBackground (
    Brush value
)
```

Parameters

value
The brush used to fill the border background.

See Also

BorderComponent Members
BorderComponent Class
com.mindfusion.diagramming.components Namespace

BorderComponent.setIsOutline Method

Sets a value indicating whether this component defines the outline of its host.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setIsOutline (
    boolean value
)
```

Parameters

value
true to mark this component as the node's outline, otherwise false. The default value is false.

See Also

BorderComponent Members
BorderComponent Class
com.mindfusion.diagramming.components Namespace

BorderComponent.setPen Method

Sets the pen used to stroke the border sides.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setPen (
    Pen value
)
```

Parameters

value
The pen used to stroke the border sides.

See Also

BorderComponent Members
BorderComponent Class
com.mindfusion.diagramming.components Namespace

BorderComponent.writeExternal Method

Implements Externalizable

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

BorderComponent Members
BorderComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent Class

Represents a button-like component, which can respond to user clicks.

Syntax

Java

```
public class ButtonComponent
    extends ContentComponent
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentBase
    com.mindfusion.diagramming.components.ContentComponent
      com.mindfusion.diagramming.components.ButtonComponent
        com.mindfusion.diagramming.components.CheckBoxComponent

See Also

ButtonComponent Members
com.mindfusion.diagramming.components Namespace

ButtonComponent Members

Represents a button-like component, which can respond to user clicks.

The following tables list the members exposed by the ButtonComponent type.

Public Constructors

	Name	Description
	ButtonComponent	Initializes a new instance of the ButtonComponent class.

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description
	accept	ComponentBase.accept override. (Inherited from ContentComponent.)
	addButtonComponentListener	Registers an event listener.
	addChild	Implements AddChild.addChild (Inherited from ContentComponent.)
	addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from

		ComponentBase.)
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	arrangeComponents	ComponentBase.arrangeComponents override. (Inherited from ContentComponent.)
	confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)
	contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
	createOutlinePath	For internal use. (Inherited from ComponentBase.)
	draw	ComponentBase.draw override.
	find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
	getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	getBrush	Gets the background brush of the button when it is in normal state.
	getBrushHovered	Gets the background brush of the button when it is in hovered state.
	getBrushPressed	Gets the background brush of the button when it is in pressed state.
	getChildCount	ComponentBase.getChildCount override. (Inherited from ContentComponent.)
	getContent	Gets the content of this component. (Inherited from ContentComponent.)
	getCursor	ComponentBase.getCursor override.
	getDesiredSize	ComponentBase.getDesiredSize override.
	getDocumentBounds	For internal use. (Inherited from ComponentBase.)
	getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)

getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
getImageList	Gets a list with images. Each image in the list represents the appearance of the button in one of its states: 0 - normal, 1 - pressed, 2 - disabled, 3 - hovered.
getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
getName	Gets the name of the component. (Inherited from ComponentBase.)
getPadding	Gets the padding around this component's content. (Inherited from ContentComponent.)
getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
getParentHost	For internal use. (Inherited from ComponentBase.)
getPen	Gets the border pen of the button when it is in normal state.
getPenHovered	Gets the border pen of the button when it is in hovered state.
getPenPressed	Gets the border pen of the button when it is in pressed state.
getType	Gets the type of the button.
getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)

onContextChanged	(Inherited from ComponentBase.)
onKeyDown	ComponentBase.onKeyDown override.
onKeyPress	Called when a character key is pressed when this component has the input focus. (Inherited from ComponentBase.)
onKeyUp	(Inherited from ComponentBase.)
onMouseDown	ComponentBase.onMouseDown override.
onMouseMove	ComponentBase.onMouseMove override.
onMouseUp	ComponentBase.onMouseUp override.
onUnitChanged	Invoked when the measure unit of the document containing the component has changed. (Inherited from ComponentBase.)
raiseValidated	(Inherited from ComponentBase.)
readExternal	ComponentBase.readExternal override.
removeButtonComponentListener	Unregisters an event listener.
removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
setBrush	Sets the background brush of the button when it is in normal state.
setBrushHovered	Sets the background brush of the button when it is in hovered state.
setBrushPressed	Sets the background brush of the button when it is in pressed state.
setContent	Sets the content of this component. (Inherited from ContentComponent.)
setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)

	setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
	setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setImageList	Sets a list with images. Each image in the list represents the appearance of the button in one of its states: 0 - normal, 1 - pressed, 2 - disabled, 3 - hovered.
	setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	setName	Sets the name of the component. (Inherited from ComponentBase.)
	setPadding	Sets the padding around this component's content. (Inherited from ContentComponent.)
	setParent	For internal use. (Inherited from ComponentBase.)
	setPen	Sets the border pen of the button when it is in normal state.
	setPenHovered	Sets the border pen of the button when it is in hovered state.
	setPenPressed	Sets the border pen of the button when it is in pressed state.
	setType	Sets the type of the button.
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)

	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	ComponentBase.writeExternal override.

Protected Methods

	Name	Description
	fireCustomDraw	Raises the customDraw event.
	fireOnClicked	Raises the mouseClicked event.
	fireRepeatEnded	Raises the repeatEnded event.
	getImage	Gets the image from the button's image list corresponding to the current state of the button.
	getState	Gets the current state of the button
	getThickness	Gets the space around the component's content. This space includes padding by default but can be subsequently adjusted as necessary by the deriving classes. (Inherited from ContentComponent.)
	loadFromJson	
	loadFromXml	ComponentBase.loadFromXml override.
	onAddedToParent	Invoked when the component is added to a parent component. (Inherited from ComponentBase.)
	onGotFocus	Overloaded. (Inherited from ComponentBase.)
	onLostFocus	Overloaded. (Inherited from ComponentBase.)
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidating	Raises the Validating event. (Inherited from ComponentBase.)
	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed. (Inherited from ComponentBase.)
	saveToJson	
	saveToXml	ComponentBase.saveToXml override.
	serializeSubcomponents	Invoked to query whether the underlying component structure should be automatically serialized or serialized by the user. (Inherited from ComponentBase.)

See Also

ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent Constructor

Initializes a new instance of the ButtonComponent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ButtonComponent ()
```

See Also

ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent Methods

ButtonComponent.addButtonComponentListener Method

Registers an event listener.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addButtonComponentListener (
    ButtonComponentListener listener
)
```

Parameters

listener
An object implementing ButtonComponentListener interface.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.draw Method

ComponentBase.draw override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void draw (
    Graphics2D g2d,
    RenderOptions options
)
```

Parameters

g2d

options

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.fireCustomDraw Method

Raises the customDraw event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void fireCustomDraw (
    ButtonDrawEvent e
)
```

Parameters

e
An object containing the event data.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.fireOnClicked Method

Raises the mouseClicked event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void fireOnClicked (
    ComponentMouseEvent e
)
```

Parameters

e
An object containing the event data.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.fireRepeatEnded Method

Raises the repeatEnded event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void fireRepeatEnded (
    ComponentEvent e
)
```

Parameters

e
An object containing the event data.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.getBrush Method

Gets the background brush of the button when it is in normal state.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getBrush ()
```

Return Value

An instance of the Brush class.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.getBrushHovered Method

Gets the background brush of the button when it is in hovered state.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public Brush getBrushHovered ()
```

Return Value

An instance of the Brush class.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.getBrushPressed Method

Gets the background brush of the button when it is in pressed state.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public Brush getBrushPressed ()
```

Return Value

An instance of the Brush class.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.getCursor Method

ComponentBase.getCursor override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public CursorHint getCursor (
    Point2D.Float point
)
```

Parameters

point

Return Value

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.getDesiredSize Method

ComponentBase.getDesiredSize override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public XDimension2D.Double getDesiredSize (
    XDimension2D.Double availableSize,
    Graphics2D g2d
)
```

Parameters

availableSize

g2d

Return Value

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.getImage Method

Gets the image from the button's image list corresponding to the current state of the button.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected Image getImage ()
```

Return Value

An instance of the Image class.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.getImageList Method

Gets a list with images. Each image in the list represents the appearance of the button in one of its states: 0 - normal, 1 - pressed, 2 - disabled, 3 - hovered.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ArrayList<Image> getImageList ()
```

Return Value

A list of java.awt.Image objects.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.getPen Method

Gets the border pen of the button when it is in normal state.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Pen getPen ()
```

Return Value

An instance of the Pen class.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.getPenHovered Method

Gets the border pen of the button when it is in hovered state.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public Pen getPenHovered ()
```

Return Value

An instance of the Pen class.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.getPenPressed Method

Gets the border pen of the button when it is in pressed state.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public Pen getPenPressed ()
```

Return Value

An instance of the Pen class.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.getState Method

Gets the current state of the button

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
protected ButtonComponent.ButtonState getState ()
```

Return Value

A member of the ButtonState enumerator.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.getType Method

Gets the type of the button.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public ButtonComponent.ButtonType getType ()
```

Return Value

A member of the ButtonType enumerator.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.loadFromJson Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj

An JsonObject containing the ButtonComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.loadFromXml Method

ComponentBase.loadFromXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.onKeyDown Method

ComponentBase.onKeyDown override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean onKeyDown (
    int keyCode,
    int modifiers
)
```

Parameters

keyCode

modifiers

Return Value

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.onMouseDown Method

ComponentBase.onMouseDown override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseDown (
    Point2D.Float point
)
```

Parameters

point

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.onMouseMove Method

ComponentBase.onMouseMove override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseMove (
    Point2D.Float point
)
```

Parameters

point

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.onMouseUp Method

ComponentBase.onMouseUp override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseUp (
    Point2D.Float point
)
```

Parameters

point

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.readExternal Method

ComponentBase.readExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.removeButtonComponentListener Method

Unregisters an event listener.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void removeButtonComponentListener (
    ButtonComponentListener listener
)
```

Parameters

listener
An object implementing ButtonComponentListener interface.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.saveToJson Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the ButtonComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.saveToXml Method

ComponentBase.saveToXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.setBrush Method

Sets the background brush of the button when it is in normal state.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setBrush (
    Brush value
)
```

Parameters

value
An instance of the Brush class.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.setBrushHovered Method

Sets the background brush of the button when it is in hovered state.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void setBrushHovered (
    Brush value
)
```

Parameters

value
An instance of the Brush class.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.setBrushPressed Method

Sets the background brush of the button when it is in pressed state.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void setBrushPressed (
    Brush value
)
```

Parameters

value
An instance of the Brush class.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.setImageList Method

Sets a list with images. Each image in the list represents the appearance of the button in one of its states: 0 - normal, 1 - pressed, 2 - disabled, 3 - hovered.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setImageList (
    ArrayList<Image> value
)
```

Parameters

value
A list of java.awt.Image objects.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.setPen Method

Sets the border pen of the button when it is in normal state.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setPen (
    Pen value
)
```

Parameters

value
An instance of the Pen class.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.setPenHovered Method

Sets the border pen of the button when it is in hovered state.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setPenHovered (
    Pen value
)
```

Parameters

value
An instance of the Pen class.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.setPenPressed Method

Sets the border pen of the button when it is in pressed state.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setPenPressed (
    Pen value
)
```

Parameters

value
An instance of the Pen class.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.setType Method

Sets the type of the button.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setType (
    ButtonComponent.ButtonType value
)
```

Parameters

value
A member of the ButtonType enumerator.

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponent.writeExternal Method

ComponentBase.writeExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

ButtonComponent Members
ButtonComponent Class
com.mindfusion.diagramming.components Namespace

ButtonComponentAdapter Class

Provides empty implementations for the methods defined in the ButtonComponentListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of ButtonComponentListener.

Syntax

Java

```
public class ButtonComponentAdapter implements ButtonComponentListener
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ButtonComponentAdapter

See Also

ButtonComponentAdapter Members
com.mindfusion.diagramming.components Namespace

ButtonComponentAdapter Members

Provides empty implementations for the methods defined in the ButtonComponentListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of ButtonComponentListener.

The following tables list the members exposed by the ButtonComponentAdapter type.

Public Constructors

	Name	Description
	ButtonComponentAdapter	

Public Methods

	Name	Description
	customDraw	Raised when the button is drawn to allow for custom drawing.
	repeatEnded	Raised when a repeat button has been released.

See Also

ButtonComponentAdapter Class
com.mindfusion.diagramming.components Namespace

ButtonComponentAdapter Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public ButtonComponentAdapter ()`

See Also

ButtonComponentAdapter Class
com.mindfusion.diagramming.components Namespace

ButtonComponentAdapter Methods

ButtonComponentAdapter.customDraw Method

Raised when the button is drawn to allow for custom drawing.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void customDraw (
    Object sender,
    ButtonDrawEvent e
)
```

Parameters

sender

e

See Also

ButtonComponentAdapter Members
ButtonComponentAdapter Class
com.mindfusion.diagramming.components Namespace

ButtonComponentAdapter.repeatEnded Method

Raised when a repeat button has been released.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void repeatEnded (
    Object sender,
    ComponentEvent e
)
```

Parameters

sender

e

See Also

ButtonComponentAdapter Members
ButtonComponentAdapter Class
com.mindfusion.diagramming.components Namespace

ButtonComponentListener Interface

Defines the events that can be raised by ButtonComponent.

Syntax

Java

```
public interface ButtonComponentListener extends EventListener
```

Inheritors

com.mindfusion.diagramming.components.ButtonComponentAdapter

See Also

ButtonComponentListener Members
com.mindfusion.diagramming.components Namespace

ButtonComponentListener Members

Defines the events that can be raised by ButtonComponent.

The following tables list the members exposed by the ButtonComponentListener type.

Public Methods

	Name	Description
	customDraw	Raised when the button is drawn to allow for custom drawing.
	repeatEnded	Raised when a repeat button has been released.

See Also

ButtonComponentListener Interface
com.mindfusion.diagramming.components Namespace

ButtonComponentListener Methods

ButtonComponentListener.customDraw Method

Raised when the button is drawn to allow for custom drawing.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void customDraw (
    Object sender,
    ButtonDrawEvent e
)
```

Parameters

sender
The button that raises the event.

e
An object providing information about the event.

See Also

ButtonComponentListener Members
ButtonComponentListener Interface
com.mindfusion.diagramming.components Namespace

ButtonComponentListener.repeatEnded Method

Raised when a repeat button has been released.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void repeatEnded (
    Object sender,
    ComponentEvent e
)
```

Parameters

sender
The button that raises the event.

e
An object providing information about the event.

See Also

ButtonComponentListener Members
ButtonComponentListener Interface
com.mindfusion.diagramming.components Namespace

ButtonDrawEvent Class

Contains arguments passed to the customDraw event of buttons.

Syntax

Java

```
public class ButtonDrawEvent extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.components.ButtonDrawEvent

See Also

ButtonDrawEvent Members
com.mindfusion.diagramming.components Namespace

ButtonDrawEvent Members

Contains arguments passed to the customDraw event of buttons.

The following tables list the members exposed by the ButtonDrawEvent type.

Public Methods

	Name	Description
	getClipBounds	Gets the current clip rectangle.
	getGraphics	Gets the Graphics surface where the event handler should draw.

See Also

ButtonDrawEvent Class
com.mindfusion.diagramming.components Namespace

ButtonDrawEvent Methods

ButtonDrawEvent.getClipBounds Method

Gets the current clip rectangle.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public Rectangle2D getClipBounds ()`

Return Value

See Also

ButtonDrawEvent Members
ButtonDrawEvent Class
com.mindfusion.diagramming.components Namespace

ButtonDrawEvent.getGraphics Method

Gets the Graphics surface where the event handler should draw.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public Graphics getGraphics ()`

Return Value

See Also

ButtonDrawEvent Members
ButtonDrawEvent Class
com.mindfusion.diagramming.components Namespace

ButtonState Enumeration

Indicates the state of a button.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public enum ButtonState`

Members

	Member name	Description
	Hovered	Specifies that the button is hovered with the mouse.
	Normal	Specifies a normal state.
	Pressed	Specifies that the button is pressed.

See Also

com.mindfusion.diagramming.components Namespace

ButtonType Enumeration

Indicates the behavior of the button.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public enum ButtonType`

Members

	Member name	Description
	Normal	Specifies a normal, clickable button.

	Repeat	Specifies a repeat button.

See Also

com.mindfusion.diagramming.components Namespace

CheckBoxComponent Class

Displays a check-box that lets users select true / false values.

Syntax

Java
`public class CheckBoxComponent` `    extends ButtonComponent`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentBase
    com.mindfusion.diagramming.components.ContentComponent
      com.mindfusion.diagramming.components.ButtonComponent
        com.mindfusion.diagramming.components.CheckBoxComponent

See Also

CheckBoxComponent Members
com.mindfusion.diagramming.components Namespace

CheckBoxComponent Members

Displays a check-box that lets users select true / false values.

The following tables list the members exposed by the CheckBoxComponent type.

Public Constructors

	Name	Description
	CheckBoxComponent	Initializes a new instance of the CheckBoxComponent class.

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description

accept	ComponentBase.accept override. (Inherited from ContentComponent.)
addButtonComponentListener	Registers an event listener. (Inherited from ButtonComponent.)
addChild	Implements AddChild.addChild (Inherited from ContentComponent.)
addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
arrangeComponents	ComponentBase.arrangeComponents override. (Inherited from ContentComponent.)
confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)
contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
createOutlinePath	For internal use. (Inherited from ComponentBase.)
draw	ButtonComponent.draw override.
find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
getBrush	Gets the background brush of the button when it is in normal state. (Inherited from ButtonComponent.)
getBrushHovered	Gets the background brush of the button when it is in hovered state. (Inherited from ButtonComponent.)
getBrushPressed	Gets the background brush of the button when it is in pressed state. (Inherited from ButtonComponent.)
getCheckedImageList	Gets a list with images. Each image in the list represents the appearance of the check box in its checked state: 0 - normal, 1 - pressed, 2 - disabled, 3 - hovered.
getChildCount	ComponentBase.getChildCount override. (Inherited from ContentComponent.)
getContent	Gets the content of this component. (Inherited from ContentComponent.)

getCursor	ComponentBase.getCursor override. (Inherited from ButtonComponent.)
getDesiredSize	ComponentBase.getDesiredSize override. (Inherited from ButtonComponent.)
getDocumentBounds	For internal use. (Inherited from ComponentBase.)
getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
getImageList	Gets a list with images. Each image in the list represents the appearance of the button in one of its states: 0 - normal, 1 - pressed, 2 - disabled, 3 - hovered. (Inherited from ButtonComponent.)
getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
getName	Gets the name of the component. (Inherited from ComponentBase.)
getPadding	Gets the padding around this component's content. (Inherited from ContentComponent.)
getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
getParentHost	For internal use. (Inherited from ComponentBase.)
getPen	Gets the border pen of the button when it is in normal state. (Inherited from ButtonComponent.)
getPenHovered	Gets the border pen of the button when it is in hovered state. (Inherited from ButtonComponent.)

	getPenPressed	Gets the border pen of the button when it is in pressed state. (Inherited from ButtonComponent.)
	getType	Gets the type of the button. (Inherited from ButtonComponent.)
	getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
	invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
	invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)
	isChecked	Gets a value indicating whether the check box is checked.
	onContextChanged	(Inherited from ComponentBase.)
	onKeyDown	ComponentBase.onKeyDown override. (Inherited from ButtonComponent.)
	onKeyPress	Called when a character key is pressed when this component has the input focus. (Inherited from ComponentBase.)
	onKeyUp	(Inherited from ComponentBase.)
	onMouseDown	ComponentBase.onMouseDown override. (Inherited from ButtonComponent.)
	onMouseMove	ComponentBase.onMouseMove override. (Inherited from ButtonComponent.)
	onMouseUp	ComponentBase.onMouseUp override. (Inherited from ButtonComponent.)
	onUnitChanged	Invoked when the measure unit of the document containing the component has changed. (Inherited from ComponentBase.)
	raiseValidated	(Inherited from ComponentBase.)
	readExternal	ComponentBase.readExternal override.
	removeButtonComponentListener	Unregisters an event listener. (Inherited from ButtonComponent.)
	removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)

	removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	setBrush	Sets the background brush of the button when it is in normal state. (Inherited from ButtonComponent.)
	setBrushHovered	Sets the background brush of the button when it is in hovered state. (Inherited from ButtonComponent.)
	setBrushPressed	Sets the background brush of the button when it is in pressed state. (Inherited from ButtonComponent.)
	setCheckedImageList	Sets a list with images. Each image in the list represents the appearance of the check box in its checked state: 0 - normal, 1 - pressed, 2 - disabled, 3 - hovered.
	setContent	Sets the content of this component. (Inherited from ContentComponent.)
	setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
	setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setImageList	Sets a list with images. Each image in the list represents the appearance of the button in one of its states: 0 - normal, 1 - pressed, 2 - disabled, 3 - hovered. (Inherited from ButtonComponent.)
	setIsChecked	Sets a value indicating whether the check box is checked.
	setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)

	setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	setName	Sets the name of the component. (Inherited from ComponentBase.)
	setPadding	Sets the padding around this component's content. (Inherited from ContentComponent.)
	setParent	For internal use. (Inherited from ComponentBase.)
	setPen	Sets the border pen of the button when it is in normal state. (Inherited from ButtonComponent.)
	setPenHovered	Sets the border pen of the button when it is in hovered state. (Inherited from ButtonComponent.)
	setPenPressed	Sets the border pen of the button when it is in pressed state. (Inherited from ButtonComponent.)
	setType	Sets the type of the button. (Inherited from ButtonComponent.)
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	ComponentBase.writeExternal override.

Protected Methods

	Name	Description
	fireCustomDraw	Raises the customDraw event. (Inherited from ButtonComponent.)
	fireOnClicked	Raises the mouseClicked event. (Inherited from ButtonComponent.)
	fireRepeatEnded	Raises the repeatEnded event. (Inherited from ButtonComponent.)
	getImage	ButtonComponent.getImage override.
	getState	Gets the current state of the button (Inherited from ButtonComponent.)

	getThickness	Gets the space around the component's content. This space includes padding by default but can be subsequently adjusted as necessary by the deriving classes. (Inherited from ContentComponent.)
	loadFromJson	
	loadFromXml	ComponentBase.loadFromXml override.
	onAddedToParent	Invoked when the component is added to a parent component. (Inherited from ComponentBase.)
	onGotFocus	Overloaded. (Inherited from ComponentBase.)
	onLostFocus	Overloaded. (Inherited from ComponentBase.)
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidating	Raises the Validating event. (Inherited from ComponentBase.)
	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed. (Inherited from ComponentBase.)
	saveToJson	
	saveToXml	ComponentBase.saveToXml override.
	serializeSubcomponents	Invoked to query whether the underlying component structure should be automatically serialized or serialized by the user. (Inherited from ComponentBase.)

See Also

CheckBoxComponent Class
com.mindfusion.diagramming.components Namespace

CheckBoxComponent Constructor

Initializes a new instance of the CheckBoxComponent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public CheckBoxComponent ()
```

See Also

CheckBoxComponent Class
com.mindfusion.diagramming.components Namespace

CheckBoxComponent Methods

CheckBoxComponent.draw Method

ButtonComponent.draw override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java

public void draw (
    Graphics2D g2d,
    RenderOptions options
)
```

Parameters

g2d

options

See Also

CheckBoxComponent Members
CheckBoxComponent Class
com.mindfusion.diagramming.components Namespace

CheckBoxComponent.getCheckedImageList Method

Gets a list with images. Each image in the list represents the appearance of the check box in its checked state: 0 - normal, 1 - pressed, 2 - disabled, 3 - hovered.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java

public ArrayList<Image> getCheckedImageList ()
```

Return Value

A list of java.awt.Image objects.

See Also

CheckBoxComponent Members
CheckBoxComponent Class
com.mindfusion.diagramming.components Namespace

CheckBoxComponent.getImage Method

ButtonComponent.getImage override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected Image getImage ()
```

Return Value

See Also

CheckBoxComponent Members
CheckBoxComponent Class
com.mindfusion.diagramming.components Namespace

CheckBoxComponent.isChecked Method

Gets a value indicating whether the check box is checked.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean isChecked ()
```

Return Value

true if the box is checked, or false otherwise.

See Also

CheckBoxComponent Members
CheckBoxComponent Class
com.mindfusion.diagramming.components Namespace

CheckBoxComponent.loadFromJson Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the CheckBoxComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

CheckBoxComponent Members
CheckBoxComponent Class
com.mindfusion.diagramming.components Namespace

CheckBoxComponent.loadFromXml Method

ComponentBase.loadFromXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

CheckBoxComponent Members
CheckBoxComponent Class
com.mindfusion.diagramming.components Namespace

CheckBoxComponent.readExternal Method

ComponentBase.readExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

CheckBoxComponent Members
CheckBoxComponent Class
com.mindfusion.diagramming.components Namespace

CheckBoxComponent.saveToJson Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the CheckBoxComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

CheckBoxComponent Members
CheckBoxComponent Class
com.mindfusion.diagramming.components Namespace

CheckBoxComponent.saveToXml Method

ComponentBase.saveToXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

CheckBoxComponent Members
CheckBoxComponent Class
com.mindfusion.diagramming.components Namespace

CheckBoxComponent.setCheckedImageList Method

Sets a list with images. Each image in the list represents the appearance of the check box in its checked state: 0 - normal, 1 - pressed, 2 - disabled, 3 - hovered.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setCheckedImageList (
    ArrayList<Image> value
)
```

Parameters

value
A list of java.awt.Image objects.

See Also

CheckBoxComponent Members
CheckBoxComponent Class
com.mindfusion.diagramming.components Namespace

CheckBoxComponent.setIsChecked Method

Sets a value indicating whether the check box is checked.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setIsChecked (
    boolean value
)
```

Parameters

value
true if the box is checked, or false otherwise.

See Also

CheckBoxComponent Members
CheckBoxComponent Class

CheckBoxComponent.writeExternal Method

ComponentBase.writeExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

CheckBoxComponent Members
CheckBoxComponent Class
com.mindfusion.diagramming.components Namespace

ComponentBase Class

Represents the abstract base of all components.

Syntax

Java

```
public abstract class ComponentBase implements Externalizable
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentBase
    com.mindfusion.diagramming.components.ContainerComponent
    com.mindfusion.diagramming.components.ContentComponent
    com.mindfusion.diagramming.components.EditComponent
    com.mindfusion.diagramming.components.ImageComponent
    com.mindfusion.diagramming.components.ShapeComponent
    com.mindfusion.diagramming.components.TextComponent

See Also

ComponentBase Members
com.mindfusion.diagramming.components Namespace

ComponentBase Members

Represents the abstract base of all components.

The following tables list the members exposed by the ComponentBase type.

Protected Constructors

	Name	Description
	ComponentBase	Initializes a new instance of the ComponentBase class.

Protected Fields

	Name	Description
	eventListenerList	

Public Methods

	Name	Description
	addComponentEventListener	Adds the specified component listener to receive events from this component.
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component.
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component.
	arrangeComponents	Recursively arranges the child components, within the specified space and using the specified graphics for measurement purposes.
	confirmValidating	Confirms validation by raising the Validating event.
	contains	Checks if the specified component is contained in the hierarchy defined by the current component.
	createOutlinePath	For internal use.
	draw	Renders the component in the specified Graphics2D.
	find	Returns the component with the specified name within the hierarchy defined by the current component.
	getBounds	Gets the calculated bounds of this component relative to its parent.
	getChildCount	Gets the number of child components of this component.
	getCursor	Gets the cursor to display when the mouse is at the specified position.
	getDesiredSize	Gets the desired size of this component in case the width and/or height have not been explicitly specified.

getDocumentBounds	For internal use.
getFocusable	Gets a value indicating whether the component can receive the input focus.
getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel.
getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel.
getHeight	Gets the explicit height of this component.
getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent.
getIsEnabled	Gets a value indicating whether the component is enabled.
getIsFocused	Gets a value indicating whether this component currently holds the input focus.
getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations.
getIsInteractive	Gets a value indicating whether this component can be interacted with.
getName	Gets the name of the component.
getParent	Gets the parent component, if the current component is hosted.
getParentHost	For internal use.
getVerticalAlignment	Gets the vertical alignment of this component relative to its parent.
getVisible	Gets a value indicating whether the component is visible.
getWidth	Gets the explicit width of this component.
invalidate	Invalidates the visual appearance of the component.
invalidateLayout	Invalidates the layout of this component and all its children.
onContextChanged	
onKeyDown	
onKeyPress	Called when a character key is pressed when this component has the input focus.
onKeyUp	
onMouseMove	Overloaded.
onMouseUp	Overloaded.
onUnitChanged	Invoked when the measure unit of the document containing the component has changed.
raiseValidated	

	readExternal	Implements Externalizable
	removeComponentEventListener	Removes the specified component listener to not receive events from this component.
	removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component.
	removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component.
	setBounds	Sets the calculated bounds of this component relative to its parent.
	setFocusable	Sets a value indicating whether the component can receive the input focus.
	setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel.
	setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel.
	setHeight	Sets the explicit height of this component.
	setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent.
	setIsEnabled	Sets a value indicating whether the component is enabled.
	setIsFocused	Sets a value indicating whether this component currently holds the input focus.
	setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations.
	setIsInteractive	Sets a value indicating whether this component can be interacted with.
	setName	Sets the name of the component.
	setParent	For internal use.
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent.
	setVisible	Sets a value indicating whether the component is visible.
	setWidth	Sets the explicit width of this component.
	toDocument	Converts a point from local to document coordinates.
	toLocal	Converts a point from document to local coordinates.
	toParent	Converts a point from local coordinates to the specified parent's coordinates.
	writeExternal	Implements Externalizable

Protected Methods

	Name	Description
	loadFromJson	Deserializes the component from a JsonObject.
	loadFromXml	Deserializes the component from an XML element.
	onAddedToParent	Invoked when the component is added to a parent component.
	onGotFocus	Overloaded.
	onLostFocus	Overloaded.
	onMouseDown	Overloaded.
	onRemovedFromParent	Invoked when the component is removed from a parent component.
	onValidated	Raises the Validated event.
	onValidating	Raises the Validating event.
	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed.
	saveToJson	Serializes the component into a JsonObject.
	saveToXml	Serializes the component into an XML element.
	serializeSubcomponents	Invoked to query whether the underlying component structure should be automatically serialized or serialized by the user.

See Also

ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase Fields

ComponentBase.eventListenerList Field

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`protected EventListenerList eventListenerList`

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase Constructor

Initializes a new instance of the ComponentBase class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected ComponentBase ()
```

See Also

ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase Methods

ComponentBase.addComponentEventListener Method

Adds the specified component listener to receive events from this component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addComponentEventListener (
    ComponentEventListener listener
)
```

Parameters

listener
A ComponentEventListener object.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.addComponentMouseEventListener Method

Adds the specified component listener to receive events from this component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addComponentMouseEventListener (
    ComponentMouseEventListener listener
)
```

Parameters

listener
A ComponentMouseEventListener object.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.addComponentValidationEventListener Method

Adds the specified component listener to receive events from this component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addComponentValidationEventListener (
    ComponentValidationEventListener listener
)
```

Parameters

listener
A ComponentValidationEventListener object.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.arrangeComponents Method

Recursively arranges the child components, within the specified space and using the specified graphics for measurement purposes.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void arrangeComponents (
    Rectangle2D.Float bounds,
    Graphics2D g2d
)
```

Parameters

bounds
The space available for arrangement.

g2d
A relevant Graphics2D object.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.confirmValidating Method

Confirms validation by raising the Validating event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean confirmValidating ()
```

Return Value

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.contains Method

Checks if the specified component is contained in the hierarchy defined by the current component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean contains (
    ComponentBase component
)
```

Parameters

component
The component to search for.

Return Value

true if the component is a direct or indirect child of the current component; otherwise, false.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.createOutlinePath Method

For internal use.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public GeneralPath createOutlinePath (
    Rectangle2D.Float bounds,
    float rotationAngle
)
```

Parameters

bounds

rotationAngle

Return Value

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.draw Method

Renders the component in the specified Graphics2D.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void draw (
    Graphics2D g2d,
    RenderOptions options
)
```

Parameters

g2d
The drawing target.

options
A RenderOptions object specifying the drawing context.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.find Method

Returns the component with the specified name within the hierarchy defined by the current component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentBase find (
    String name
)
```

Parameters

name
The name of the component to search for.

Return Value

The found component, or null, if no component matches. The search is case-sensitive.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getBounds Method

Gets the calculated bounds of this component relative to its parent.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Rectangle2D.Float getBounds ()
```

Return Value

An instance of the Rectangle2D.Float class.

See Also

ComponentBase Members
ComponentBase Class

ComponentBase.getChildCount Method

Gets the number of child components of this component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public int getChildCount ()
```

Return Value

An integer value specifying the number of direct children of this component.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getCursor Method

Gets the cursor to display when the mouse is at the specified position.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public CursorHint getCursor (
    Point2D.Float point
)
```

Parameters

point
A Point2D.Float instance that specifies the current mouse position, in document coordinates.

Return Value

A member of the CursorHint enumeration.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getDesiredSize Method

Gets the desired size of this component in case the width and/or height have not been explicitly specified.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public XDimension2D.Double getDesiredSize (
    XDimension2D.Double availableSize,
    Graphics2D g2d
)
```

Parameters

availableSize
The available size.

g2d
A relevant Graphics2D object.

Return Value

A XDimension2D.Double object representing the desired size.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getDocumentBounds Method

For internal use.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Rectangle2D.Float getDocumentBounds ()
```

Return Value

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getFocusable Method

Gets a value indicating whether the component can receive the input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public boolean getFocusable ()
```

Return Value

true if the component can receive the input focus; otherwise false.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getGridColumn Method

Gets the index of the grid column this component will be associated with when added to a GridPanel.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public int getGridColumn ()
```

Return Value

An integer value specifying the 0-based index of the grid column in which this component is placed.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getGridRow Method

Gets the index of the grid row this component will be associated with when added to a GridPanel.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public int getGridRow ()
```

Return Value

An integer value specifying the 0-based index of the grid row in which this component is placed.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getHeight Method

Gets the explicit height of this component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getHeight ()
```

Return Value

The height of this component or float.NaN to auto-size the component.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getHorizontalAlignment Method

Gets the horizontal alignment of this component relative to its parent.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public int getHorizontalAlignment ()
```

Return Value

An integer value specifying the horizontal alignment of this component relative to its parent.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getIsEnabled Method

Gets a value indicating whether the component is enabled.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean getIsEnabled ()
```

Return Value

true if the component is enabled and can be interacted with; otherwise, false.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getIsFocused Method

Gets a value indicating whether this component currently holds the input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean getIsFocused ()
```

Return Value

true if the component currently holds the input focus; otherwise, false.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getIsHitTestVisible Method

Gets a value indicating whether this component and all its children are subject to hit-testing operations.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean getIsHitTestVisible ()
```

Return Value

true if the component can be hit-tested; otherwise, false.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getIsInteractive Method

Gets a value indicating whether this component can be interacted with.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean getIsInteractive ()
```

Return Value

true if the component accepts user input, or false otherwise.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getName Method

Gets the name of the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public String getName ()
```

Return Value

A String value specifying the name of the component.

See Also

ComponentBase Members
ComponentBase Class

ComponentBase.getParent Method

Gets the parent component, if the current component is hosted.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public Object getParent ()
```

Return Value

The parent component, if the current component is hosted.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getParentHost Method

For internal use.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public ComponentHost getParentHost ()
```

Return Value

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getVerticalAlignment Method

Gets the vertical alignment of this component relative to its parent.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
```

Java

```
public int getVerticalAlignment ()
```

Return Value

An integer value specifying the vertical alignment of this component relative to its parent.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getVisible Method

Gets a value indicating whether the component is visible.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean getVisible ()
```

Return Value

true if the component is visible; otherwise, false.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.getWidth Method

Gets the explicit width of this component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getWidth ()
```

Return Value

The width of this component or float.NaN to auto-size the component.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.invalidate Method

Invalidates the visual appearance of the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void invalidate ()
```

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.invalidateLayout Method

Invalidates the layout of this component and all its children.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void invalidateLayout ()
```

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.loadFromJson Method

Deserializes the component from a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
```

```
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the component's data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.loadFromXml Method

Deserializes the component from an XML element.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An Element containing the component's data.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onAddedToParent Method

Invoked when the component is added to a parent component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`protected void onAddedToParent ()`

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onContextChanged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public void onContextChanged ()`

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onGotFocus Method

Overload List

Name	Description
ComponentBase.onGotFocus ()	Invokes when the component gains the input focus.
ComponentBase.onGotFocus (ComponentEvent)	Raises the GotFocus event.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onGotFocus Method ()

Invokes when the component gains the input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onGotFocus ()
```

See Also

onGotFocus Method Overload List
ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onGotFocus Method (ComponentEvent)

Raises the GotFocus event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onGotFocus (
    ComponentEvent e
)
```

Parameters

e
An object providing the event data.

See Also

onGotFocus Method Overload List
ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onKeyDown Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean onKeyDown (
    int keyCode,
    int modifiers
)
```

Parameters

keyCode

modifiers

Return Value

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onKeyPress Method

Called when a character key is pressed when this component has the input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onKeyPress (
    Character keyChar
)
```

Parameters

keyChar
The character representing the pressed key.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onKeyUp Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onKeyUp (
    int keyCode,
    int modifiers
)
```

Parameters

keyCode

modifiers

See Also

ComponentBase.onLostFocus Method

Overload List

Name	Description
ComponentBase.onLostFocus ()	Invokes when the component loses the input focus.
ComponentBase.onLostFocus (ComponentEvent)	Raises the LostFocus event.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onLostFocus Method ()

Invokes when the component loses the input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onLostFocus ()
```

See Also

onLostFocus Method Overload List
ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onLostFocus Method (ComponentEvent)

Raises the LostFocus event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onLostFocus (
    ComponentEvent e
)
```

Parameters

e
An object providing the event data.

See Also

onLostFocus Method Overload List
ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onMouseDown Method

Overload List

Name	Description
ComponentBase.onMouseDown (ComponentMouseEvent)	
ComponentBase.onMouseDown (Point2D.Float)	Called when the left mouse button is pressed while the pointer is over this component.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onMouseDown Method (ComponentMouseEvent)

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

`protected void onMouseDown (`
`  ComponentMouseEvent e`
`)`

Parameters

e

See Also

onMouseDown Method Overload List
ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onMouseDown Method (Point2D.Float)

Called when the left mouse button is pressed while the pointer is over this component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseDown (
    Point2D.Float point
)
```

Parameters

point
A Point2D.Float instance that specifies the current mouse position.

See Also

onMouseDown Method Overload List
ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onMouseMove Method

Overload List

Name	Description
ComponentBase.onMouseMove (ComponentMouseEvent)	Raises the MouseMove event.
ComponentBase.onMouseMove (Point2D.Float)	Called when the mouse is moved while this component tracks the mouse events.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onMouseMove Method (ComponentMouseEvent)

Raises the MouseMove event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onMouseMove (
    ComponentMouseEvent e
)
```

Parameters

e
An object providing the event data.

See Also

onMouseMove Method Overload List
ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onMouseMove Method (Point2D.Float)

Called when the mouse is moved while this component tracks the mouse events.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseMove (
    Point2D.Float point
)
```

Parameters

point
A Point2D.Float instance that specifies the current mouse position.

See Also

onMouseMove Method Overload List
ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onMouseUp Method

Overload List

Name	Description

ComponentBase.onMouseUp (ComponentMouseEvent)	
ComponentBase.onMouseUp (Point2D.Float)	Called when the left mouse button is released while this component tracks the mouse events.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onMouseUp Method (ComponentMouseEvent)

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onMouseUp (
    ComponentMouseEvent e
)
```

Parameters

e

See Also

onMouseUp Method Overload List
ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onMouseUp Method (Point2D.Float)

Called when the left mouse button is released while this component tracks the mouse events.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseUp (
    Point2D.Float point
)
```

Parameters

point
A Point2D.Float instance that specifies the current mouse position.

See Also

onMouseUp Method Overload List
ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onRemovedFromParent Method

Invoked when the component is removed from a parent component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onRemovedFromParent ()
```

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onUnitChanged Method

Invoked when the measure unit of the document containing the component has changed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onUnitChanged ()
```

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onValidated Method

Raises the Validated event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onValidated (
    ComponentEvent e
)
```

Parameters

e
An object providing the event data.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onValidating Method

Raises the Validating event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onValidating (
    ComponentValidationEvent e
)
```

Parameters

e
An object providing the event data.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.onZoomChanged Method

Invoked when the zoom factor of the document containing the component has changed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onZoomChanged ()
```

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.raiseValidated Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void raiseValidated ()
```

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.readExternal Method

Implements Externalizable

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.removeComponentEventListener Method

Removes the specified component listener to not receive events from this component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void removeComponentEventListener (
    ComponentEventListener listener
)
```

Parameters

listener

ComponentEventListener object to remove.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.removeComponentMouseEventListener Method

Removes the specified component listener to not receive events from this component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void removeComponentMouseEventListener (
    ComponentMouseEventListener listener
)
```

Parameters

listener

ComponentMouseEventListener object to remove.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.removeComponentValidationEventListener Method

Removes the specified component listener to not receive events from this component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void removeComponentValidationEventListener (
    ComponentValidationEventListener listener
)
```

Parameters

listener
ComponentValidationEventListener object to remove.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.saveToJson Method

Serializes the component into a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the component's data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.saveToXml Method

Serializes the component into an XML element.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement
An Element the component's data should be stored into.

context
An XmlPersistContext object providing contextual information about the serialization process and some helper serialization methods.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.serializeSubcomponents Method

Invoked to query whether the underlying component structure should be automatically serialized or serialized by the user.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected boolean serializeSubcomponents ()
```

Return Value

true to inform the caller to automatically serialize the subcomponent tree; false to skip the automatic component serialization.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.setBounds Method

Sets the calculated bounds of this component relative to its parent.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setBounds (
    Rectangle2D.Float value
)
```

Parameters

value

The bounds of this component relative to its parent.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.setFocusable Method

Sets a value indicating whether the component can receive the input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setFocusable (
    boolean value
)
```

Parameters

value
A boolean value specifying if the component can receive the input focus. The default is false.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.setGridColumn Method

Sets the index of the grid row this component will be associated with when added to a GridPanel.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setGridColumn (
    int value
)
```

Parameters

value
An integer value specifying the 0-based index of the grid column in which to place this component. The default is 0.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.setGridRow Method

Sets the index of the grid row this component will be associated with when added to a GridPanel.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setGridRow (
    int value
)
```

Parameters

value
An integer value specifying the 0-based index of the grid row in which to place this component. The default is 0.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.setHeight Method

Sets the explicit height of this component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setHeight (
    float value
)
```

Parameters

value
A floating point value specifying the component's height. The default is NaN.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.setHorizontalAlignment Method

Sets the horizontal alignment of this component relative to its parent.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setHorizontalAlignment (
    int value
)
```

Parameters

value
A member of the HorizontalAlignment enumeration. The default is Stretch.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.setIsEnabled Method

Sets a value indicating whether the component is enabled.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setIsEnabled (
    boolean value
)
```

Parameters

value
A boolean value specifying if the component is enabled and can be interacted with. The default is true.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.setIsFocused Method

Sets a value indicating whether this component currently holds the input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setIsFocused (
    boolean value
)
```

Parameters

value
A boolean value specifying if the component currently holds the input focus.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.setIsHitTestVisible Method

Sets a value indicating whether this component and all its children are subject to hit-testing operations.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setIsHitTestVisible (
    boolean value
)
```

Parameters

value
true if the component can be hit-tested; otherwise, false. The default is true.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.setIsInteractive Method

Sets a value indicating whether this component can be interacted with.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setIsInteractive (
    boolean value
)
```

Parameters

value
true if the component accepts user input, or false otherwise.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.setName Method

Sets the name of the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setName (
    String value
)
```

Parameters

value
A String identifying this component within its component tree.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.setParent Method

For internal use.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setParent (
    Object value
)
```

Parameters

value

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.setVerticalAlignment Method

Sets the vertical alignment of this component relative to its parent.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setVerticalAlignment (
    int value
)
```

Parameters

value
A member of the VerticalAlignment enumeration. The default is Stretch.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.setVisible Method

Sets a value indicating whether the component is visible.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setVisible (
    boolean value
)
```

Parameters

value
true if the component is visible; otherwise, false. The default is true.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.setWidth Method

Sets the explicit width of this component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setWidth (
    float value
)
```

Parameters

value
A floating point value specifying the component's width. The default is NaN.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.toDocument Method

Converts a point from local to document coordinates.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Point2D.Float toDocument (
    Point2D.Float point
)
```

Parameters

point
The local Point2D.Float to convert.

Return Value

A Point2D.Float instance containing coordinates of the specified point relative to the diagram.

See Also

ComponentBase Members
ComponentBase Class

ComponentBase.toLocal Method

Converts a point from document to local coordinates.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Point2D.Float toLocal (
    Point2D.Float point
)
```

Parameters

point
The document Point2D.Float to convert.

Return Value

A Point2D.Float instance containing coordinates of the specified point relative to the component.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.toParent Method

Converts a point from local coordinates to the specified parent's coordinates.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Point2D.Float toParent (
    ComponentBase parent,
    Point2D.Float point
)
```

Parameters

parent
A ComponentBase representing a direct or indirect parent.

point
The local Point2D.Float to convert.

Return Value

A Point2D.Float representing the specified point in the specified parent's coordinate space.

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentBase.writeExternal Method

Implements Externalizable

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

ComponentBase Members
ComponentBase Class
com.mindfusion.diagramming.components Namespace

ComponentEvent Class

The base class for arguments supplied to various component-related events.

Syntax

Java

```
public class ComponentEvent extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.components.ComponentEvent
      com.mindfusion.diagramming.components.ComponentKeyEvent
      com.mindfusion.diagramming.components.ComponentMouseEvent
      com.mindfusion.diagramming.components.ComponentTextEvent
      com.mindfusion.diagramming.components.ComponentValidationEvent

See Also

ComponentEvent Members

The base class for arguments supplied to various component-related events.

The following tables list the members exposed by the ComponentEvent type.

Public Constructors

	Name	Description
	ComponentEvent	

Public Methods

	Name	Description
	getComponent	
	getParentHost	

See Also

ComponentEvent Class
com.mindfusion.diagramming.components Namespace

ComponentEvent Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentEvent (
    ComponentBase component
)
```

Parameters

component

See Also

ComponentEvent Class
com.mindfusion.diagramming.components Namespace

ComponentEvent Methods

ComponentEvent.getComponent Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentBase getComponent ()
```

Return Value

See Also

ComponentEvent Members
ComponentEvent Class
com.mindfusion.diagramming.components Namespace

ComponentEvent.getParentHost Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentHost getParentHost ()
```

Return Value

See Also

ComponentEvent Members
ComponentEvent Class
com.mindfusion.diagramming.components Namespace

ComponentEventListener Interface

Defines events raised by components.

Syntax

Java

```
public interface ComponentEventListener extends EventListener
```

See Also

ComponentEventListener Members
com.mindfusion.diagramming.components Namespace

ComponentEventListener Members

Defines events raised by components.

The following tables list the members exposed by the ComponentEventListener type.

Public Methods

	Name	Description
	gotFocus	Raised when the component receives the input focus.
	lostFocus	Raised when the component loses the input focus.
	validated	Raised after validating event confirms the change.

See Also

ComponentEventListener Interface
com.mindfusion.diagramming.components Namespace

ComponentEventListener Methods

ComponentEventListener.gotFocus Method

Raised when the component receives the input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void gotFocus (
    Object sender,
    ComponentEvent e
)
```

Parameters

sender
The component that raises the event.

e
An object providing information about the event.

See Also

ComponentEventListener Members
ComponentEventListener Interface
com.mindfusion.diagramming.components Namespace

ComponentEventListener.lostFocus Method

Raised when the component loses the input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void lostFocus (
    Object sender,
    ComponentEvent e
)
```

Parameters

sender
The component that raises the event.

e
An object providing information about the event.

See Also

ComponentEventListener Members
ComponentEventListener Interface
com.mindfusion.diagramming.components Namespace

ComponentEventListener.validated Method

Raised after validating event confirms the change.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void validated (
    Object sender,
    ComponentEvent e
)
```

Parameters

sender
The component that raises the event.

e
An object providing information about the event.

See Also

ComponentEventListener Members
ComponentEventListener Interface
com.mindfusion.diagramming.components Namespace

ComponentFinder Class

For internal use.

Syntax

Java
`public class ComponentFinder implements ComponentVisitor`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentFinder

See Also

ComponentFinder Members
com.mindfusion.diagramming.components Namespace

ComponentFinder Members

For internal use.

The following tables list the members exposed by the ComponentFinder type.

Public Constructors

	Name	Description
	ComponentFinder	Overloaded.

Public Methods

	Name	Description
	enterVisit	
	getFoundComponent	
	leaveVisit	
	setFoundComponent	

See Also

ComponentFinder Class
com.mindfusion.diagramming.components Namespace

ComponentFinder Constructor

Overload List

Name	Description
ComponentFinder (ComponentBase)	
ComponentFinder (ComponentFinder.Predicate, Object)	
ComponentFinder (String)	

See Also

ComponentFinder Class
com.mindfusion.diagramming.components Namespace

ComponentFinder Constructor (ComponentBase)

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentFinder (
    ComponentBase component
)
```

Parameters

component

See Also

ComponentFinder Constructor Overload List
ComponentFinder Class
com.mindfusion.diagramming.components Namespace

ComponentFinder Constructor (ComponentFinder.Predicate, Object)

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentFinder (
    ComponentFinder.Predicate predicate,
    Object param
)
```

Parameters

predicate

param

See Also

ComponentFinder Constructor Overload List
ComponentFinder Class
com.mindfusion.diagramming.components Namespace

ComponentFinder Constructor (String)

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentFinder (
    String name
)
```

Parameters

name

See Also

ComponentFinder Constructor Overload List
ComponentFinder Class
com.mindfusion.diagramming.components Namespace

ComponentFinder Methods

ComponentFinder.enterVisit Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean enterVisit (
    ComponentBase component
)
```

Parameters

component

Return Value

See Also

ComponentFinder Members
ComponentFinder Class

ComponentFinder.getFoundComponent Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentBase getFoundComponent ()
```

Return Value

See Also

ComponentFinder Members
ComponentFinder Class
com.mindfusion.diagramming.components Namespace

ComponentFinder.leaveVisit Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void leaveVisit (
    ComponentBase component
)
```

Parameters

component

See Also

ComponentFinder Members
ComponentFinder Class
com.mindfusion.diagramming.components Namespace

ComponentFinder.setFoundComponent Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setFoundComponent (
    ComponentBase value
)
```

Parameters

value

See Also

ComponentFinder Members
ComponentFinder Class
com.mindfusion.diagramming.components Namespace

ComponentHitTester Class

For internal use.

Syntax

Java
`public class ComponentHitTester implements ComponentVisitor`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentHitTester

See Also

ComponentHitTester Members
com.mindfusion.diagramming.components Namespace

ComponentHitTester Members

For internal use.

The following tables list the members exposed by the ComponentHitTester type.

Public Constructors

	Name	Description
	ComponentHitTester	

Public Methods

	Name	Description
	enterVisit	
	getHitComponent	

	leaveVisit	

See Also

ComponentHitTester Class
com.mindfusion.diagramming.components Namespace

ComponentHitTester Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentHitTester (
    Point2D.Float point
)
```

Parameters

point

See Also

ComponentHitTester Class
com.mindfusion.diagramming.components Namespace

ComponentHitTester Methods

ComponentHitTester.enterVisit Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean enterVisit (
    ComponentBase component
)
```

Parameters

component

Return Value

See Also

ComponentHitTester Members
ComponentHitTester Class

ComponentHitTester.getHitComponent Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentBase getHitComponent ()
```

Return Value

See Also

ComponentHitTester Members
ComponentHitTester Class
com.mindfusion.diagramming.components Namespace

ComponentHitTester.leaveVisit Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void leaveVisit (
    ComponentBase component
)
```

Parameters

component

See Also

ComponentHitTester Members
ComponentHitTester Class
com.mindfusion.diagramming.components Namespace

ComponentHost Interface

For internal use.

Syntax

Java

```
public interface ComponentHost
```

Inheritors

com.mindfusion.diagramming.CompositeNode

See Also

ComponentHost Members
com.mindfusion.diagramming.components Namespace

ComponentHost Members

For internal use.

The following tables list the members exposed by the ComponentHost type.

Public Methods

	Name	Description
	applyEffects	
	getBounds	
	getClipboard	
	getFocusedComponent	
	invalidate	Overloaded.
	invalidateLayout	Overloaded.
	setClipboard	
	setFocusedComponent	

See Also

ComponentHost Interface
com.mindfusion.diagramming.components Namespace

ComponentHost Methods

ComponentHost.applyEffects Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void applyEffects (
    ComponentBase component,
    Object parameters,
```

```
    EffectPhase phase
)
```

Parameters

component

parameters

phase

See Also

ComponentHost Members
ComponentHost Interface
com.mindfusion.diagramming.components Namespace

ComponentHost.getBounds Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
Rectangle2D.Float getBounds ()
```

Return Value

See Also

ComponentHost Members
ComponentHost Interface
com.mindfusion.diagramming.components Namespace

ComponentHost.getClipboard Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
Object getClipboard (
    ComponentBase source,
    Class<?> data
)
```

Parameters

source

data

Return Value

See Also

ComponentHost Members
ComponentHost Interface
com.mindfusion.diagramming.components Namespace

ComponentHost.getFocusedComponent Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`ComponentBase getFocusedComponent ()`

Return Value

See Also

ComponentHost Members
ComponentHost Interface
com.mindfusion.diagramming.components Namespace

ComponentHost.invalidate Method

Overload List

Name	Description
ComponentHost.invalidate ()	
ComponentHost.invalidate (Rectangle2D.Float)	

See Also

ComponentHost Members
ComponentHost Interface
com.mindfusion.diagramming.components Namespace

ComponentHost.invalidate Method ()

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void invalidate ()
```

See Also

invalidate Method Overload List
ComponentHost Members
ComponentHost Interface
com.mindfusion.diagramming.components Namespace

ComponentHost.invalidate Method (Rectangle2D.Float)

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void invalidate (
    Rectangle2D.Float bounds
)
```

Parameters

bounds

See Also

invalidate Method Overload List
ComponentHost Members
ComponentHost Interface
com.mindfusion.diagramming.components Namespace

ComponentHost.invalidateLayout Method

Overload List

Name	Description
ComponentHost.invalidateLayout ()	
ComponentHost.invalidateLayout (ComponentBase)	

See Also

ComponentHost Members
ComponentHost Interface
com.mindfusion.diagramming.components Namespace

ComponentHost.invalidateLayout Method ()

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void invalidateLayout ()
```

See Also

invalidateLayout Method Overload List
ComponentHost Members
ComponentHost Interface
com.mindfusion.diagramming.components Namespace

ComponentHost.invalidateLayout Method (ComponentBase)

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void invalidateLayout (
    ComponentBase component
)
```

Parameters

component

See Also

invalidateLayout Method Overload List
ComponentHost Members
ComponentHost Interface
com.mindfusion.diagramming.components Namespace

ComponentHost.setClipboard Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void setClipboard (
    ComponentBase source,
    Object data
)
```

Parameters

source

data

See Also

ComponentHost Members
ComponentHost Interface
com.mindfusion.diagramming.components Namespace

ComponentHost.setFocusedComponent Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void setFocusedComponent (
    ComponentBase value
)
```

Parameters

value

See Also

ComponentHost Members
ComponentHost Interface
com.mindfusion.diagramming.components Namespace

ComponentKeyEvent Class

Provides data to keyboard-related events.

Syntax

Java

```
public class ComponentKeyEvent extends ComponentEvent
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.components.ComponentEvent
      com.mindfusion.diagramming.components.ComponentKeyEvent

See Also

ComponentKeyEvent Members
com.mindfusion.diagramming.components Namespace

ComponentKeyEvent Members

Provides data to keyboard-related events.

The following tables list the members exposed by the ComponentKeyEvent type.

Public Constructors

	Name	Description
	ComponentKeyEvent	Overloaded.

Public Methods

	Name	Description
	getComponent	(Inherited from ComponentEvent.)
	getKeyChar	
	getKeyCode	
	getModifiers	
	getParentHost	(Inherited from ComponentEvent.)
	setKeyChar	
	setKeyCode	Overloaded.
	setModifiers	

See Also

ComponentKeyEvent Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEvent Constructor

Overload List

Name	Description
ComponentKeyEvent (ComponentBase, Character)	
ComponentKeyEvent (ComponentBase, Character, int)	
ComponentKeyEvent (ComponentBase, int)	
ComponentKeyEvent (ComponentBase, int, int)	

See Also

ComponentKeyEvent Constructor (ComponentBase, Character)

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentKeyEvent (
    ComponentBase component,
    Character keyChar
)
```

Parameters

component

keyChar

See Also

ComponentKeyEvent Constructor Overload List
ComponentKeyEvent Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEvent Constructor (ComponentBase, Character, int)

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentKeyEvent (
    ComponentBase component,
    Character keyChar,
    int modifiers
)
```

Parameters

component

keyChar

modifiers

See Also

ComponentKeyEvent Constructor Overload List
ComponentKeyEvent Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEvent Constructor (ComponentBase, int)

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentKeyEvent (
    ComponentBase component,
    int keyCode
)
```

Parameters

component

keyCode

See Also

ComponentKeyEvent Constructor Overload List
ComponentKeyEvent Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEvent Constructor (ComponentBase, int, int)

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentKeyEvent (
    ComponentBase component,
    int keyCode,
    int modifiers
)
```

Parameters

component

keyCode

modifiers

See Also

ComponentKeyEvent Constructor Overload List
ComponentKeyEvent Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEvent Methods

ComponentKeyEvent.getKeyChar Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Character getKeyChar ()
```

Return Value

See Also

ComponentKeyEvent Members
ComponentKeyEvent Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEvent.getKeyCode Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public int getKeyCode ()
```

Return Value

See Also

ComponentKeyEvent Members
ComponentKeyEvent Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEvent.getModifiers Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public int getModifiers ()
```

Return Value

See Also

ComponentKeyEvent Members
ComponentKeyEvent Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEvent.setKeyChar Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setKeyChar (
    Character value
)
```

Parameters

value

See Also

ComponentKeyEvent Members
ComponentKeyEvent Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEvent.setKeyCode Method

Overload List

Name	Description
ComponentKeyEvent.setKeyCode (Character)	
ComponentKeyEvent.setKeyCode (int)	

See Also

ComponentKeyEvent Members
ComponentKeyEvent Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEvent.setKeyCode Method (Character)

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setKeyCode (
    Character value
)
```

Parameters

value

See Also

setKeyCode Method Overload List
ComponentKeyEvent Members
ComponentKeyEvent Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEvent.setKeyCode Method (int)

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setKeyCode (
    int value
)
```

Parameters

value

See Also

setKeyCode Method Overload List
ComponentKeyEvent Members
ComponentKeyEvent Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEvent.setModifiers Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setModifiers (
    int value
)
```

Parameters

value

See Also

ComponentKeyEvent Members
ComponentKeyEvent Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEventAdapter Class

Provides empty implementations for the methods defined in the ComponentKeyEventListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of ComponentKeyEventListener.

Syntax

Java

```
public class ComponentKeyEventAdapter implements ComponentKeyEventListener
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentKeyEventAdapter

See Also

ComponentKeyEventAdapter Members
com.mindfusion.diagramming.components Namespace

ComponentKeyEventAdapter Members

Provides empty implementations for the methods defined in the ComponentKeyEventListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of ComponentKeyEventListener.

The following tables list the members exposed by the ComponentKeyEventAdapter type.

Public Constructors

	Name	Description
	ComponentKeyEventAdapter	

Public Methods

	Name	Description
	keyDown	Raised when a key is pressed while the component has input focus.
	keyPressed	Raised when a key is pressed while the component has input focus.
	keyUp	Raised when a key is released while the component has input focus.

See Also

ComponentKeyEventAdapter Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEventAdapter Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentKeyEventAdapter ()
```

See Also

ComponentKeyEventAdapter Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEventAdapter Methods

ComponentKeyEventAdapter.keyDown Method

Raised when a key is pressed while the component has input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void keyDown (
    Object sender,
    ComponentKeyEvent e
)
```

Parameters

sender

e

See Also

ComponentKeyEventAdapter Members
ComponentKeyEventAdapter Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEventAdapter.keyPressed Method

Raised when a key is pressed while the component has input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void keyPressed (
    Object sender,
    ComponentKeyEvent e
)
```

Parameters

sender

e

See Also

ComponentKeyEventAdapter Members
ComponentKeyEventAdapter Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEventAdapter.keyUp Method

Raised when a key is released while the component has input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void keyUp (
    Object sender,
    ComponentKeyEvent e
)
```

Parameters

sender

e

See Also

ComponentKeyEventAdapter Members
ComponentKeyEventAdapter Class
com.mindfusion.diagramming.components Namespace

ComponentKeyEventListener Interface

Defines keyboard events that can be raised by components.

Syntax

Java

```
public interface ComponentKeyEventListener extends EventListener
```

Inheritors

com.mindfusion.diagramming.components.ComponentKeyEventAdapter

See Also

ComponentKeyEventListener Members
com.mindfusion.diagramming.components Namespace

ComponentKeyEventListener Members

Defines keyboard events that can be raised by components.

The following tables list the members exposed by the ComponentKeyEventListener type.

Public Methods

	Name	Description
	keyDown	Raised when a key is pressed while the component has input focus.
	keyPressed	Raised when a key is pressed while the component has input focus.
	keyUp	Raised when a key is released while the component has input focus.

See Also

ComponentKeyEventListener Interface
com.mindfusion.diagramming.components Namespace

ComponentKeyEventListener Methods

ComponentKeyEventListener.keyDown Method

Raised when a key is pressed while the component has input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void keyDown (
    Object sender,
    ComponentKeyEvent e
)
```

Parameters

sender
The component that raises the event.

e
An object providing information about the event.

See Also

ComponentKeyEventListener Members
ComponentKeyEventListener Interface
com.mindfusion.diagramming.components Namespace

ComponentKeyEventListener.keyPressed Method

Raised when a key is pressed while the component has input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void keyPressed (
    Object sender,
    ComponentKeyEvent e
)
```

Parameters

sender
The component that raises the event.

e
An object providing information about the event.

See Also

ComponentKeyEventListener Members
ComponentKeyEventListener Interface
com.mindfusion.diagramming.components Namespace

ComponentKeyEventListener.keyUp Method

Raised when a key is released while the component has input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void keyUp (
    Object sender,
    ComponentKeyEvent e
)
```

Parameters

sender
The component that raises the event.

e
An object providing information about the event.

See Also

ComponentKeyEventListener Members
ComponentKeyEventListener Interface
com.mindfusion.diagramming.components Namespace

ComponentMouseEvent Class

Provides data to mouse-related component events.

Syntax

Java
`public class ComponentMouseEvent extends ComponentEvent`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.components.ComponentEvent
      com.mindfusion.diagramming.components.ComponentMouseEvent

See Also

ComponentMouseEvent Members
com.mindfusion.diagramming.components Namespace

ComponentMouseEvent Members

Provides data to mouse-related component events.

The following tables list the members exposed by the ComponentMouseEvent type.

Public Constructors

	Name	Description
	ComponentMouseEvent	

Public Methods

	Name	Description
	getComponent	(Inherited from ComponentEvent.)
	getMousePosition	
	getParentHost	(Inherited from ComponentEvent.)

See Also

ComponentMouseEvent Class
com.mindfusion.diagramming.components Namespace

ComponentMouseEvent Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentMouseEvent (
    ComponentBase component,
    Point2D.Float mousePosition
)
```

Parameters

component

mousePosition

See Also

ComponentMouseEvent Class
com.mindfusion.diagramming.components Namespace

ComponentMouseEvent Methods

ComponentMouseEvent.getMousePosition Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Point2D.Float getMousePosition ()
```

Return Value

See Also

ComponentMouseEvent Members
ComponentMouseEvent Class
com.mindfusion.diagramming.components Namespace

ComponentMouseEventAdapter Class

Provides empty implementations for the methods defined in the ComponentMouseEventListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of ComponentMouseEventListener.

Syntax

Java
`public class ComponentMouseEventAdapter implements ComponentMouseEventListener`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentMouseEventAdapter

See Also

ComponentMouseEventAdapter Members
com.mindfusion.diagramming.components Namespace

ComponentMouseEventAdapter Members

Provides empty implementations for the methods defined in the ComponentMouseEventListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of ComponentMouseEventListener.

The following tables list the members exposed by the ComponentMouseEventAdapter type.

Public Constructors

	Name	Description
	ComponentMouseEventAdapter	

Public Methods

	Name	Description
	mouseClicked	Raised when mouse button is clicked over the component.
	mouseMove	Raised when the mouse moves over the component.

See Also

ComponentMouseEventAdapter Class
com.mindfusion.diagramming.components Namespace

ComponentMouseEventAdapter Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public ComponentMouseEventAdapter ()
```

See Also

ComponentMouseEventAdapter Class
com.mindfusion.diagramming.components Namespace

ComponentMouseEventAdapter Methods

ComponentMouseEventAdapter.mouseClicked Method

Raised when mouse button is clicked over the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void mouseClicked (
    Object sender,
    ComponentMouseEvent e
)
```

Parameters

sender

e

See Also

ComponentMouseEventAdapter Members
ComponentMouseEventAdapter Class
com.mindfusion.diagramming.components Namespace

ComponentMouseEventAdapter.mouseMove Method

Raised when the mouse moves over the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void mouseMove (
    Object sender,
    ComponentMouseEvent e
)
```

Parameters

sender

e

See Also

ComponentMouseEventAdapter Members
ComponentMouseEventAdapter Class
com.mindfusion.diagramming.components Namespace

ComponentMouseEventListener Interface

Defines keyboard events that can be raised by components.

Syntax

Java
`public interface ComponentMouseEventListener extends EventListener`

Inheritors

com.mindfusion.diagramming.components.ComponentMouseEventAdapter

See Also

ComponentMouseEventListener Members
com.mindfusion.diagramming.components Namespace

ComponentMouseEventListener Members

Defines keyboard events that can be raised by components.

The following tables list the members exposed by the ComponentMouseEventListener type.

Public Methods

	Name	Description
	mouseClicked	Raised when mouse button is clicked over the component.
	mouseMove	Raised when the mouse moves over the component.

See Also

ComponentMouseEventListener Interface
com.mindfusion.diagramming.components Namespace

ComponentMouseEventListener Methods

ComponentMouseEventListener.mouseClicked Method

Raised when mouse button is clicked over the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void mouseClicked (
    Object sender,
    ComponentMouseEvent e
)
```

Parameters

sender
The component that raises the event.

e
An object providing information about the event.

See Also

ComponentMouseEventListener Members
ComponentMouseEventListener Interface
com.mindfusion.diagramming.components Namespace

ComponentMouseEventListener.mouseMove Method

Raised when the mouse moves over the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void mouseMove (
    Object sender,
    ComponentMouseEvent e
)
```

Parameters

sender
The component that raises the event.

e
An object providing information about the event.

See Also

ComponentMouseEventListener Members
ComponentMouseEventListener Interface
com.mindfusion.diagramming.components Namespace

ComponentPostLoader Class

For internal use.

Syntax

Java
`public class ComponentPostLoader implements ComponentVisitor`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentPostLoader

See Also

ComponentPostLoader Members
com.mindfusion.diagramming.components Namespace

ComponentPostLoader Members

For internal use.

The following tables list the members exposed by the ComponentPostLoader type.

Public Constructors

	Name	Description
	ComponentPostLoader	

Public Methods

	Name	Description
	enterVisit	
	leaveVisit	

See Also

ComponentPostLoader Class
com.mindfusion.diagramming.components Namespace

ComponentPostLoader Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentPostLoader ()
```

See Also

ComponentPostLoader Class
com.mindfusion.diagramming.components Namespace

ComponentPostLoader Methods

ComponentPostLoader.enterVisit Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean enterVisit (
    ComponentBase component
)
```

Parameters

component

Return Value

See Also

ComponentPostLoader Members
ComponentPostLoader Class
com.mindfusion.diagramming.components Namespace

ComponentPostLoader.leaveVisit Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void leaveVisit (
    ComponentBase component
)
```

Parameters

component

See Also

ComponentPostLoader Members
ComponentPostLoader Class
com.mindfusion.diagramming.components Namespace

ComponentTextEvent Class

Provides arguments for text-related events.

Syntax

Java
`public class ComponentTextEvent extends ComponentEvent`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.components.ComponentEvent
      com.mindfusion.diagramming.components.ComponentTextEvent
        com.mindfusion.diagramming.components.ComponentTextValidationEvent

See Also

ComponentTextEvent Members
com.mindfusion.diagramming.components Namespace

ComponentTextEvent Members

Provides arguments for text-related events.

The following tables list the members exposed by the ComponentTextEvent type.

Public Constructors

	Name	Description
	ComponentTextEvent	

Public Methods

	Name	Description
	getComponent	(Inherited from ComponentEvent.)
	getNewText	
	getOldText	
	getParentHost	(Inherited from ComponentEvent.)
	setNewText	
	setOldText	

See Also

ComponentTextEvent Class
com.mindfusion.diagramming.components Namespace

ComponentTextEvent Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentTextEvent (
    EditComponent component,
    String oldText,
    String newText
)
```

Parameters

component

oldText

newText

See Also

ComponentTextEvent Class
com.mindfusion.diagramming.components Namespace

ComponentTextEvent Methods

ComponentTextEvent.getNewText Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public String getNewText ()
```

Return Value

See Also

ComponentTextEvent Members
ComponentTextEvent Class
com.mindfusion.diagramming.components Namespace

ComponentTextEvent.getOldText Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public String getOldText ()
```

Return Value

See Also

ComponentTextEvent Members
ComponentTextEvent Class
com.mindfusion.diagramming.components Namespace

ComponentTextEvent.setNewText Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setNewText (
    String value
)
```

Parameters

value

See Also

ComponentTextEvent Members
ComponentTextEvent Class
com.mindfusion.diagramming.components Namespace

ComponentTextEvent.setOldText Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setOldText (
    String value
)
```

Parameters

value

See Also

ComponentTextEvent Members
ComponentTextEvent Class
com.mindfusion.diagramming.components Namespace

ComponentTextValidationEvent Class

Provides argument for text validation events.

Syntax

Java
`public class ComponentTextValidationEvent extends ComponentTextEvent`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.components.ComponentEvent
      com.mindfusion.diagramming.components.ComponentTextEvent
        com.mindfusion.diagramming.components.ComponentTextValidationEvent

See Also

ComponentTextValidationEvent Members
com.mindfusion.diagramming.components Namespace

ComponentTextValidationEvent Members

Provides argument for text validation events.

The following tables list the members exposed by the ComponentTextValidationEvent type.

Public Constructors

	Name	Description
	ComponentTextValidationEvent	

Public Methods

	Name	Description
	getCancel	
	getComponent	(Inherited from ComponentEvent.)
	getNewText	(Inherited from ComponentTextEvent.)

	getOldText	(Inherited from ComponentTextEvent.)
	getParentHost	(Inherited from ComponentEvent.)
	setCancel	
	setNewText	(Inherited from ComponentTextEvent.)
	setOldText	(Inherited from ComponentTextEvent.)

See Also

ComponentTextValidationEvent Class
com.mindfusion.diagramming.components Namespace

ComponentTextValidationEvent Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentTextValidationEvent (
    EditComponent component,
    String oldText,
    String newText
)
```

Parameters

component

oldText

newText

See Also

ComponentTextValidationEvent Class
com.mindfusion.diagramming.components Namespace

ComponentTextValidationEvent Methods

ComponentTextValidationEvent.getCancel Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean getCancel ()
```

Return Value

See Also

ComponentTextValidationEvent Members
ComponentTextValidationEvent Class
com.mindfusion.diagramming.components Namespace

ComponentTextValidationEvent.setCancel Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setCancel (
    boolean value
)
```

Parameters

value

See Also

ComponentTextValidationEvent Members
ComponentTextValidationEvent Class
com.mindfusion.diagramming.components Namespace

ComponentValidationEvent Class

Provides arguments for validation events.

Syntax

Java

```
public class ComponentValidationEvent extends ComponentEvent
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.components.ComponentEvent
      com.mindfusion.diagramming.components.ComponentValidationEvent

See Also

ComponentValidationEvent Members
com.mindfusion.diagramming.components Namespace

ComponentValidationEvent Members

Provides arguments for validation events.

The following tables list the members exposed by the ComponentValidationEvent type.

Public Constructors

	Name	Description
	ComponentValidationEvent	

Public Methods

	Name	Description
	getCancel	
	getComponent	(Inherited from ComponentEvent.)
	getParentHost	(Inherited from ComponentEvent.)
	setCancel	

See Also

ComponentValidationEvent Class
com.mindfusion.diagramming.components Namespace

ComponentValidationEvent Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ComponentValidationEvent (
    ComponentBase component
)
```

Parameters

component

See Also

ComponentValidationEvent Class
com.mindfusion.diagramming.components Namespace

ComponentValidationEvent Methods

ComponentValidationEvent.getCancel Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public boolean getCancel ()
```

Return Value

See Also

ComponentValidationEvent Members
ComponentValidationEvent Class
com.mindfusion.diagramming.components Namespace

ComponentValidationEvent.setCancel Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void setCancel (
    boolean value
)
```

Parameters

value

See Also

ComponentValidationEvent Members
ComponentValidationEvent Class
com.mindfusion.diagramming.components Namespace

ComponentValidationEventListener Interface

Defines validation events that can be raised by components.

Syntax

```
Java
public interface ComponentValidationEventListener extends EventListener
```

See Also

ComponentValidationEventListener Members

Defines validation events that can be raised by components.

The following tables list the members exposed by the ComponentValidationEventListener type.

Public Methods

	Name	Description
	validating	Raised when the component is about to lose input focus in order to validate it.

See Also

ComponentValidationEventListener Interface
com.mindfusion.diagramming.components Namespace

ComponentValidationEventListener Methods

ComponentValidationEventListener.validating Method

Raised when the component is about to lose input focus in order to validate it.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void validating (
    Object sender,
    ComponentValidationEvent e
)
```

Parameters

sender
The component that raises the event.

e
An object providing information about the event.

See Also

ComponentValidationEventListener Members
ComponentValidationEventListener Interface
com.mindfusion.diagramming.components Namespace

ComponentVisitor Interface

For internal use.

Syntax

Java
`public interface ComponentVisitor`

Inheritors

com.mindfusion.diagramming.components.ComponentFinder
com.mindfusion.diagramming.components.ComponentHitTester
com.mindfusion.diagramming.components.ComponentPostLoader

See Also

ComponentVisitor Members
com.mindfusion.diagramming.components Namespace

ComponentVisitor Members

For internal use.

The following tables list the members exposed by the ComponentVisitor type.

Public Methods

	Name	Description
	enterVisit	
	leaveVisit	

See Also

ComponentVisitor Interface
com.mindfusion.diagramming.components Namespace

ComponentVisitor Methods

ComponentVisitor.enterVisit Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

`boolean enterVisit (`
`  ComponentBase component`
`)`

Parameters

component

Return Value

See Also

ComponentVisitor Members
ComponentVisitor Interface
com.mindfusion.diagramming.components Namespace

ComponentVisitor.leaveVisit Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void leaveVisit (
    ComponentBase component
)
```

Parameters

component

See Also

ComponentVisitor Members
ComponentVisitor Interface
com.mindfusion.diagramming.components Namespace

ContainerComponent Class

Represents a component which can host other components.

Syntax

Java

```
public abstract class ContainerComponent extends ComponentBase implements AddChild
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentBase
    com.mindfusion.diagramming.components.ContainerComponent
      com.mindfusion.diagramming.components.GridPanel
      com.mindfusion.diagramming.components.RangeSliderRailComponent
      com.mindfusion.diagramming.components.SimplePanel
      com.mindfusion.diagramming.components.SliderRailComponent
      com.mindfusion.diagramming.components.StackPanel

See Also

ContainerComponent Members
com.mindfusion.diagramming.components Namespace

ContainerComponent Members

Represents a component which can host other components.

The following tables list the members exposed by the ContainerComponent type.

Protected Constructors

	Name	Description
	ContainerComponent	Initializes a new instance of the ContainerComponent class.

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description
	accept	ComponentBase.accept override.
	addChild	Implements AddChild.addChild.
	addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	arrangeComponents	ComponentBase.arrangeComponents override.
	confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)
	contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
	createOutlinePath	For internal use. (Inherited from ComponentBase.)
	draw	ComponentBase.draw override.
	find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)

	getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	getChildCount	Gets the number of child components of this component.
	getComponents	Gets the child components of this container.
	getCursor	Gets the cursor to display when the mouse is at the specified position. (Inherited from ComponentBase.)
	getDesiredSize	Gets the desired size of this component in case the width and/or height have not been explicitly specified. (Inherited from ComponentBase.)
	getDocumentBounds	For internal use. (Inherited from ComponentBase.)
	getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
	getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	getName	Gets the name of the component. (Inherited from ComponentBase.)
	getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
	getParentHost	For internal use. (Inherited from ComponentBase.)
	getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)

	getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
	invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
	invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)
	loadComponents	Overloaded.
	onContextChanged	(Inherited from ComponentBase.)
	onKeyDown	(Inherited from ComponentBase.)
	onKeyPress	Called when a character key is pressed when this component has the input focus. (Inherited from ComponentBase.)
	onKeyUp	(Inherited from ComponentBase.)
	onMouseMove	Overloaded. (Inherited from ComponentBase.)
	onMouseUp	Overloaded. (Inherited from ComponentBase.)
	onUnitChanged	Invoked when the measure unit of the document containing the component has changed. (Inherited from ComponentBase.)
	raiseValidated	(Inherited from ComponentBase.)
	readExternal	ComponentBase.readExternal override.
	removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	saveComponents	Overloaded.
	setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)

	setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
	setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	setName	Sets the name of the component. (Inherited from ComponentBase.)
	setParent	For internal use. (Inherited from ComponentBase.)
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	ComponentBase.writeExternal override.

Protected Methods

	Name	Description
	loadFromJson	Deserializes the component from a JsonObject.
	loadFromXml	ComponentBase.loadFromXml override.
	onAddedToParent	Invoked when the component is added to a parent component. (Inherited from ComponentBase.)

	onGotFocus	Overloaded. (Inherited from ComponentBase.)
	onLostFocus	Overloaded. (Inherited from ComponentBase.)
	onMouseDown	Overloaded. (Inherited from ComponentBase.)
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidating	Raises the Validating event. (Inherited from ComponentBase.)
	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed. (Inherited from ComponentBase.)
	saveToJson	Serializes the component into a JsonObject.
	saveToXml	ComponentBase.saveToXml override.
	serializeSubcomponents	Invoked to query whether the underlying component structure should be automatically serialized or serialized by the user. (Inherited from ComponentBase.)

See Also

ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent Constructor

Initializes a new instance of the ContainerComponent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected ContainerComponent ()
```

See Also

ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent Methods

ContainerComponent.accept Method

ComponentBase.accept override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void accept (
    ComponentVisitor visitor
)
```

Parameters

visitor

See Also

ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent.addChild Method

Implements AddChild.addChild.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addChild (
    Object child
)
```

Parameters

child

See Also

ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent.arrangeComponents Method

ComponentBase.arrangeComponents override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void arrangeComponents (
    Rectangle2D.Float availableSpace,
    Graphics2D g2d
)
```

Parameters

availableSpace

g2d

See Also

ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent.draw Method

ComponentBase.draw override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void draw (
    Graphics2D g,
    RenderOptions ro
)
```

Parameters

g

ro

See Also

ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent.getChildCount Method

Gets the number of child components of this component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public int getChildCount ()
```

Return Value

An integer value specifying the number of direct children of this component.

See Also

ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent.getComponents Method

Gets the child components of this container.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public List<ComponentBase> getComponents ()`

Return Value

A List of ComponentBase objects that are child components of this container.

See Also

ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent.loadComponents Method

Overload List

Name	Description
ContainerComponent.loadComponents (Element, XmlPersistContext)	For internal use.
ContainerComponent.loadComponents (JsonObject, JsonPersistContext)	Loads the child components from Json. For internal use.

See Also

ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent.loadComponents Method (Element, XmlPersistContext)

For internal use.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void loadComponents (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

loadComponents Method Overload List
ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent.loadComponents Method (JsonObject, JsonPersistContext)

Loads the child components from Json. For internal use.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void loadComponents (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the ContainerComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

loadComponents Method Overload List
ContainerComponent Members

ContainerComponent.loadFromJson Method

Deserializes the component from a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the ContainerComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent.loadFromXml Method

ComponentBase.loadFromXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent.readExternal Method

ComponentBase.readExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent.saveComponents Method

Overload List

Name	Description
ContainerComponent.saveComponents (Element, XmlPersistContext)	For internal use.
ContainerComponent.saveComponents (JsonObject, JsonPersistContext)	Saves the child components to Json. For internal use.

See Also

ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent.saveComponents Method (Element, XmlPersistContext)

For internal use.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void saveComponents (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

saveComponents Method Overload List
ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent.saveComponents Method (JsonObject, JsonPersistContext)

Saves the child components to Json. For internal use.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void saveComponents (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the ContainerComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

saveComponents Method Overload List
ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent.saveToJson Method

Serializes the component into a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the ContainerComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent.saveToXml Method

ComponentBase.saveToXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContainerComponent.writeExternal Method

ComponentBase.writeExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

ContainerComponent Members
ContainerComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent Class

Represents a component which can host a single component as its child.

Syntax

```
Java
public class ContentComponent extends ComponentBase implements AddChild
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentBase
    com.mindfusion.diagramming.components.ContentComponent
      com.mindfusion.diagramming.components.BorderComponent
      com.mindfusion.diagramming.components.ButtonComponent
      com.mindfusion.diagramming.components.SliderComponent
      com.mindfusion.diagramming.components.SpinnerComponent

See Also

ContentComponent Members
com.mindfusion.diagramming.components Namespace

ContentComponent Members

Represents a component which can host a single component as its child.

The following tables list the members exposed by the ContentComponent type.

Public Constructors

	Name	Description

	ContentComponent	Initializes a new instance of the ContentComponent class.

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description
	accept	ComponentBase.accept override.
	addChild	Implements AddChild.addChild
	addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	arrangeComponents	ComponentBase.arrangeComponents override.
	confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)
	contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
	createOutlinePath	For internal use. (Inherited from ComponentBase.)
	draw	ComponentBase.draw override.
	find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
	getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	getChildCount	ComponentBase.getChildCount override.
	getContent	Gets the content of this component.
	getCursor	Gets the cursor to display when the mouse is at the specified position. (Inherited from ComponentBase.)
	getDesiredSize	ComponentBase.getDesiredSize override.
	getDocumentBounds	For internal use. (Inherited from ComponentBase.)
	getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from

		ComponentBase.)
	getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
	getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	getName	Gets the name of the component. (Inherited from ComponentBase.)
	getPadding	Gets the padding around this component's content.
	getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
	getParentHost	For internal use. (Inherited from ComponentBase.)
	getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
	invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
	invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)
	onContextChanged	(Inherited from ComponentBase.)
	onKeyDown	(Inherited from ComponentBase.)
	onKeyPress	Called when a character key is pressed when this component has the input focus. (Inherited from ComponentBase.)

	onKeyUp	(Inherited from ComponentBase.)
	onMouseMove	Overloaded. (Inherited from ComponentBase.)
	onMouseUp	Overloaded. (Inherited from ComponentBase.)
	onUnitChanged	Invoked when the measure unit of the document containing the component has changed. (Inherited from ComponentBase.)
	raiseValidated	(Inherited from ComponentBase.)
	readExternal	ComponentBase.readExternal override.
	removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	setContent	Sets the content of this component.
	setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
	setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)

	setName	Sets the name of the component. (Inherited from ComponentBase.)
	setPadding	Sets the padding around this component's content.
	setParent	For internal use. (Inherited from ComponentBase.)
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	ComponentBase.writeExternal override.

Protected Methods

	Name	Description
	getThickness	Gets the space around the component's content. This space includes padding by default but can be subsequently adjusted as necessary by the deriving classes.
	loadFromJson	Deserializes the component from a JsonObject.
	loadFromXml	ComponentBase.loadFromXml override.
	onAddedToParent	Invoked when the component is added to a parent component. (Inherited from ComponentBase.)
	onGotFocus	Overloaded. (Inherited from ComponentBase.)
	onLostFocus	Overloaded. (Inherited from ComponentBase.)
	onMouseDown	Overloaded. (Inherited from ComponentBase.)
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidating	Raises the Validating event. (Inherited from ComponentBase.)
	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed. (Inherited from ComponentBase.)
	saveToJson	Serializes the component into a JsonObject.

	saveToXml	ComponentBase.saveToXml override.
	serializeSubcomponents	Invoked to query whether the underlying component structure should be automatically serialized or serialized by the user. (Inherited from ComponentBase.)

See Also

ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent Constructor

Initializes a new instance of the ContentComponent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ContentComponent ()
```

See Also

ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent Methods

ContentComponent.accept Method

ComponentBase.accept override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void accept (
    ComponentVisitor visitor
)
```

Parameters

visitor

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent.addChild Method

Implements AddChild.addChild

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addChild (
    Object child
)
```

Parameters

child

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent.arrangeComponents Method

ComponentBase.arrangeComponents override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void arrangeComponents (
    Rectangle2D.Float availableSpace,
    Graphics2D g2d
)
```

Parameters

availableSpace

g2d

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent.draw Method

ComponentBase.draw override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void draw (
    Graphics2D g2d,
    RenderOptions options
)
```

Parameters

g2d

options

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent.getChildCount Method

ComponentBase.getChildCount override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public int getChildCount ()
```

Return Value

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent.getContent Method

Gets the content of this component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public ComponentBase getContent ()
```

Return Value

An instance of the ComponentBase class representing the sole child of the component.

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent.getDesiredSize Method

ComponentBase.getDesiredSize override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public XDimension2D.Double getDesiredSize (
    XDimension2D.Double availableSize,
    Graphics2D g2d
)
```

Parameters

availableSize

g2d

Return Value

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent.getPadding Method

Gets the padding around this component's content.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Thickness getPadding ()
```

Return Value

A Thickness object specifying the spacing between this component and its child.

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent.getThickness Method

Gets the space around the component's content. This space includes padding by default but can be subsequently adjusted as necessary by the deriving classes.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected Thickness getThickness ()
```

Return Value

An instance of the Thickness class.

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent.loadFromJson Method

Deserializes the component from a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the ContentComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent.loadFromXml Method

ComponentBase.loadFromXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent.readExternal Method

ComponentBase.readExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent.saveToJson Method

Serializes the component into a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the ContentComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent.saveToXml Method

ComponentBase.saveToXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent.setContent Method

Sets the content of this component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setContent (
    ComponentBase value
)
```

Parameters

value
An instance of the ComponentBase class representing the sole child of the component.

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent.setPadding Method

Sets the padding around this component's content.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setPadding (
    Thickness value
)
```

Parameters

value
A Thickness object specifying the spacing between this component and its child. The default is 0.

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

ContentComponent.writeExternal Method

ComponentBase.writeExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

ContentComponent Members
ContentComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent Class

Represents an editable text area.

Syntax

```
Java
public class EditComponent
    extends ComponentBase
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentBase
    com.mindfusion.diagramming.components.EditComponent
      com.mindfusion.diagramming.components.NumericEditComponent

See Also

EditComponent Members
com.mindfusion.diagramming.components Namespace

EditComponent Members

Represents an editable text area.

The following tables list the members exposed by the EditComponent type.

Public Constructors

	Name	Description
	EditComponent	Initializes a new instance of the EditComponent class.

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description
	acceptsReturn	Gets a value indicating whether the edit component will insert new line when the user presses the ENTER key.
	addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentKeyEventListener	Registers an event listener.
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addEditComponentListener	Registers an event listener.
	arrangeComponents	Recursively arranges the child components, within the specified space and using the specified graphics for measurement purposes. (Inherited from ComponentBase.)
	confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)
	contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
	createOutlinePath	For internal use. (Inherited from ComponentBase.)
	draw	ComponentBase.draw override.
	find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
	getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	getBrush	Gets the background brush of the edit component.
	getChildCount	Gets the number of child components of this component. (Inherited from ComponentBase.)
	getCursor	ComponentBase.getCursor override.
	getDesiredSize	ComponentBase.getDesiredSize override.
	getDocumentBounds	For internal use. (Inherited from ComponentBase.)

	getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	getFont	Gets the font of the text.
	getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
	getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getInactiveSelectionColor	Gets the color of the selection when the edit component does not have input focus.
	getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	getName	Gets the name of the component. (Inherited from ComponentBase.)
	getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
	getParentHost	For internal use. (Inherited from ComponentBase.)
	getPen	Gets the border pen of the edit component.
	getScrollFirstLine	Gets the index of the first visible line in the edit component.
	getSelectionColor	Gets the color of the selection.
	getSelectionLength	Gets the length of the selection in the edit component.
	getSelectionStart	Gets the start of the selection in the edit component.
	getText	Gets the text of the edit component.
	getTextAlignment	Gets the horizontal alignment of the text in the edit component.

	getTextColor	Gets the color of the text.
	getTextPadding	Gets the padding of the edit component.
	getTextWrapping	Gets the wrapping of of the text in the edit component.
	getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
	invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
	invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)
	isHideSelection	Gets a value indicating whether to hide the selection when the edit component does not have input focus.
	onContextChanged	ComponentBase.onContextChanged override.
	onGotFocus	ComponentBase.onGotFocus override.
	onKeyPress	ComponentBase.onKeyPress override.
	onKeyUp	Overloaded.
	onLostFocus	ComponentBase.onLostFocus override.
	onMouseDown	ComponentBase.onMouseDown override.
	onMouseMove	ComponentBase.onMouseMove override.
	onMouseUp	ComponentBase.onMouseUp override.
	onUnitChanged	ComponentBase.onUnitChanged override.
	raiseValidated	(Inherited from ComponentBase.)
	readExternal	ComponentBase.readExternal override.
	removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentKeyEventListener	Unregisters an event listener.
	removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeEditComponentListener	Unregisters an event listener.

setAcceptsReturn	Sets a value indicating whether the edit component will insert new line when the user presses the ENTER key.
setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
setBrush	Sets the background brush of the edit component.
setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
setFont	Sets the font of the text.
setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
setHideSelection	Sets a value indicating whether to hide the selection when the edit component does not have input focus.
setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
setInactiveSelectionColor	Sets the color of the selection when the edit component does not have input focus.
setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
setName	Sets the name of the component. (Inherited from ComponentBase.)
setParent	For internal use. (Inherited from ComponentBase.)
setPen	Sets the border pen of the edit component.
setScrollFirstLine	Sets the index of the first visible line in the edit component.
setSelectionColor	Sets the color of the selection.

	setSelectionLength	Sets the length of the selection in the edit component.
	setSelectionStart	Sets the start of the selection in the edit component. Setting this property will reset SelectionLength to 0.
	setText	Sets the text of the edit component.
	setTextAlignment	Sets the horizontal alignment of the text in the edit component.
	setTextColor	Sets the color of the text.
	setTextPadding	Sets the padding of the edit component.
	setTextWrapping	Sets the wrapping of of the text in the edit component.
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	ComponentBase.writeExternal override.

Protected Methods

	Name	Description
	loadFromJson	Deserializes the component from a JsonObject.
	loadFromXml	ComponentBase.loadFromXml override.
	onAddedToParent	ComponentBase.onAddedToParent override.
	onClicked	Raises the mouseClicked event.
	onKeyDown	Overloaded.
	onKeyPressed	Raises the keyPressed event.
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onTextChanged	Raises the textChanged event.
	onTextChanging	Raises the textChanging event.

	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidating	Raises the Validating event. (Inherited from ComponentBase.)
	onZoomChanged	ComponentBase.onZoomChanged override.
	saveToJson	Serializes the component into a JsonObject.
	saveToXml	ComponentBase.saveToXml override.
	serializeSubcomponents	Invoked to query whether the underlying component structure should be automatically serialized or serialized by the user. (Inherited from ComponentBase.)

See Also

EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent Constructor

Initializes a new instance of the EditComponent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public EditComponent ()
```

See Also

EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent Methods

EditComponent.acceptsReturn Method

Gets a value indicating whether the edit component will insert new line when the user presses the ENTER key.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean acceptsReturn ()
```

Return Value

true to insert new line when the user presses ENTER, or false to ignore the key.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.addComponentKeyEventListener Method

Registers an event listener.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addComponentKeyEventListener (
    ComponentKeyEventListener listener
)
```

Parameters

listener
An object implementing ComponentKeyEventListener interface.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.addEditComponentListener Method

Registers an event listener.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addEditComponentListener (
    EditComponentListener listener
)
```

Parameters

listener
An object implementing EditComponentListener interface.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.draw Method

ComponentBase.draw override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void draw (
    Graphics2D g2d,
    RenderOptions options
)
```

Parameters

g2d

options

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.getBrush Method

Gets the background brush of the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getBrush ()
```

Return Value

A Brush instance.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.getCursor Method

ComponentBase.getCursor override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public CursorHint getCursor (
    Point2D.Float point
)
```

Parameters

point

Return Value

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.getDesiredSize Method

ComponentBase.getDesiredSize override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public XDimension2D.Double getDesiredSize (
    XDimension2D.Double availableSize,
    Graphics2D g2d
)
```

Parameters

availableSize

g2d

Return Value

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.getFont Method

Gets the font of the text.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Font getFont ()
```

Return Value

A jawa.awt.Font instance.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.getInactiveSelectionColor Method

Gets the color of the selection when the edit component does not have input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Color getInactiveSelectionColor ()
```

Return Value

A jawa.awt.Color instance.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.getPen Method

Gets the border pen of the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Pen getPen ()
```

Return Value

A Pen instance.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.getScrollFirstLine Method

Gets the index of the first visible line in the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public int getScrollFirstLine ()
```

Return Value

An integer value specifying the scroll position.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.getSelectionColor Method

Gets the color of the selection.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Color getSelectionColor ()
```

Return Value

A jawa.awt.Color instance.

See Also

EditComponent Members
EditComponent Class

com.mindfusion.diagramming.components Namespace

EditComponent.getSelectionLength Method

Gets the length of the selection in the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public int getSelectionLength ()
```

Return Value

An integer specifying the length of the current selection.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.getSelectionStart Method

Gets the start of the selection in the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public int getSelectionStart ()
```

Return Value

An integer specifying the start of the current selection.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.getText Method

Gets the text of the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public String getText ()
```

Return Value

A String containing the component's text.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.getTextAlignment Method

Gets the horizontal alignment of the text in the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Align getTextAlignment ()
```

Return Value

A member of the Align enumeration.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.getTextColor Method

Gets the color of the text.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Color getTextColor ()
```

Return Value

A jawa.awt.Color instance.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.getTextPadding Method

Gets the padding of the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public float getTextPadding ()
```

Return Value

A floating point value specifying the spacing between the component border and displayed text.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.getTextWrapping Method

Gets the wrapping of of the text in the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public TextWrapping getTextWrapping ()
```

Return Value

A member of the TextWrapping enumeration.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.isHideSelection Method

Gets a value indicating whether to hide the selection when the edit component does not have input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public boolean isHideSelection ()
```

Return Value

true, to hide selection when the edit component does not have input focus, or false otherwise.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.loadFromJson Method

Deserializes the component from a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the EditComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.loadFromXml Method

ComponentBase.loadFromXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
```

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onAddedToParent Method

ComponentBase.onAddedToParent override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onAddedToParent ()
```

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onClicked Method

Raises the mouseClicked event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onClicked (
    ComponentMouseEvent e
)
```

Parameters

e
An object containing the event data.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onContextChanged Method

ComponentBase.onContextChanged override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onContextChanged ()
```

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onGotFocus Method

ComponentBase.onGotFocus override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onGotFocus (
    ComponentEvent e
)
```

Parameters

e

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onKeyDown Method

Overload List

Name	Description

EditComponent.onKeyDown (ComponentKeyEvent)	Raises the keyDown event.
EditComponent.onKeyDown (int, int)	ComponentBase.onKeyDown override.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onKeyDown Method (ComponentKeyEvent)

Raises the keyDown event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onKeyDown (
    ComponentKeyEvent e
)
```

Parameters

e
An object containing the event data.

See Also

onKeyDown Method Overload List
EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onKeyDown Method (int, int)

ComponentBase.onKeyDown override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean onKeyDown (
    int keyCode,
    int modifiers
)
```

Parameters

keyCode

modifiers

Return Value

See Also

onKeyDown Method Overload List
EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onKeyPress Method

ComponentBase.onKeyPress override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onKeyPress (
    Character keyChar
)
```

Parameters

keyChar

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onKeyPressed Method

Raises the keyPressed event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onKeyPressed (
    ComponentKeyEvent e
)
```

Parameters

e
An object containing the event data.

See Also

EditComponent.onKeyUp Method

Overload List

Name	Description
EditComponent.onKeyUp (ComponentKeyEvent)	Raises the keyUp event.
EditComponent.onKeyUp (int, int)	ComponentBase.onKeyUp override.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onKeyUp Method (ComponentKeyEvent)

Raises the keyUp event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onKeyUp (
    ComponentKeyEvent e
)
```

Parameters

e
An object containing the event data.

See Also

onKeyUp Method Overload List
EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onKeyUp Method (int, int)

ComponentBase.onKeyUp override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void onKeyUp (
    int keyCode,
    int modifiers
)
```

Parameters

keyCode

modifiers

See Also

onKeyUp Method Overload List
EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onLostFocus Method

ComponentBase.onLostFocus override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void onLostFocus ()
```

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onMouseDown Method

ComponentBase.onMouseDown override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void onMouseDown (
    Point2D.Float point
)
```

Parameters

point

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onMouseMove Method

ComponentBase.onMouseMove override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseMove (
    Point2D.Float point
)
```

Parameters

point

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onMouseUp Method

ComponentBase.onMouseUp override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseUp (
    Point2D.Float point
)
```

Parameters

point

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onTextChanged Method

Raises the textChanged event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onTextChanged (
    ComponentTextEvent e
)
```

Parameters

e
An object containing the event data.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onTextChanging Method

Raises the textChanging event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onTextChanging (
    ComponentTextValidationEvent e
)
```

Parameters

e
An object containing the event data.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onUnitChanged Method

ComponentBase.onUnitChanged override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onUnitChanged ()
```

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.onZoomChanged Method

ComponentBase.onZoomChanged override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onZoomChanged ()
```

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.readExternal Method

ComponentBase.readExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.removeComponentKeyEventListener Method

Unregisters an event listener.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void removeComponentKeyEventListener (
    ComponentKeyEventListener listener
)
```

Parameters

listener
An object implementing ComponentKeyEventListener interface.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.removeEditComponentListener Method

Unregisters an event listener.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void removeEditComponentListener (
    EditComponentListener listener
)
```

Parameters

listener
An object implementing EditComponentListener interface.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.saveToJson Method

Serializes the component into a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the EditComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.saveToXml Method

ComponentBase.saveToXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.setAcceptsReturn Method

Sets a value indicating whether the edit component will insert new line when the user presses the ENTER key.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setAcceptsReturn (
    boolean value
)
```

Parameters

value
true to insert new line when the user presses ENTER, or false to ignore the key.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.setBrush Method

Sets the background brush of the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setBrush (
    Brush value
)
```

Parameters

value
A Brush instance.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.setFont Method

Sets the font of the text.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setFont (
    Font value
)
```

Parameters

value
A jawa.awt.Font instance.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.setHideSelection Method

Sets a value indicating whether to hide the selection when the edit component does not have input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setHideSelection (
    boolean value
)
```

Parameters

value
true, to hide selection when the edit component does not have input focus, or false otherwise.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.setInactiveSelectionColor Method

Sets the color of the selection when the edit component does not have input focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void setInactiveSelectionColor (
    Color value
)
```

Parameters

value
A jawa.awt.Color instance.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.setPen Method

Sets the border pen of the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void setPen (
    Pen value
)
```

Parameters

value
A Pen instance.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.setScrollFirstLine Method

Sets the index of the first visible line in the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
```

```
public void setScrollFirstLine (
    int value
)
```

Parameters

value
An integer value specifying the scroll position.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.setSelectionColor Method

Sets the color of the selection.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setSelectionColor (
    Color value
)
```

Parameters

value
A jawa.awt.Color instance.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.setSelectionLength Method

Sets the length of the selection in the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setSelectionLength (
    int value
)
```

Parameters

value
An integer specifying the length of the current selection.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.setSelectionStart Method

Sets the start of the selection in the edit component. Setting this property will reset SelectionLength to 0.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setSelectionStart (
    int value
)
```

Parameters

value
An integer specifying the start of the current selection.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.setText Method

Sets the text of the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setText (
    String value
)
```

Parameters

value
A String containing the component's text.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.setTextAlignment Method

Sets the horizontal alignment of the text in the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setTextAlignment (
    Align value
)
```

Parameters

value
A member of the Align enumeration.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.setTextColor Method

Sets the color of the text.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setTextColor (
    Color value
)
```

Parameters

value
A jawa.awt.Color instance.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.setTextPadding Method

Sets the padding of the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setTextPadding (
    float value
)
```

Parameters

value
A floating point value specifying the spacing between the component border and displayed text.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.setTextWrapping Method

Sets the wrapping of of the text in the edit component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setTextWrapping (
    TextWrapping value
)
```

Parameters

value
A member of the TextWrapping enumeration.

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponent.writeExternal Method

ComponentBase.writeExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

EditComponent Members
EditComponent Class
com.mindfusion.diagramming.components Namespace

EditComponentAdapter Class

Provides empty implementations for the methods defined in the EditComponentListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of EditComponentListener.

Syntax

```
Java
public class EditComponentAdapter implements EditComponentListener
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.EditComponentAdapter

See Also

EditComponentAdapter Members
com.mindfusion.diagramming.components Namespace

EditComponentAdapter Members

Provides empty implementations for the methods defined in the EditComponentListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of EditComponentListener.

The following tables list the members exposed by the EditComponentAdapter type.

Public Constructors

	Name	Description
	EditComponentAdapter	

Public Methods

	Name	Description
	textChanged	Raised when the text is changed.
	textChanging	Raised when the text is about to be changed.

See Also

EditComponentAdapter Class
com.mindfusion.diagramming.components Namespace

EditComponentAdapter Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public EditComponentAdapter ()
```

See Also

EditComponentAdapter Class
com.mindfusion.diagramming.components Namespace

EditComponentAdapter Methods

EditComponentAdapter.textChanged Method

Raised when the text is changed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void textChanged (
    Object sender,
    ComponentTextEvent e
)
```

Parameters

sender

e

See Also

EditComponentAdapter Members
EditComponentAdapter Class
com.mindfusion.diagramming.components Namespace

EditComponentAdapter.textChanging Method

Raised when the text is about to be changed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void textChanging (
    Object sender,
    ComponentTextValidationEvent e
)
```

Parameters

sender

e

See Also

EditComponentAdapter Members
EditComponentAdapter Class
com.mindfusion.diagramming.components Namespace

EditComponentListener Interface

Defines the events that can be raised by EditComponent.

Syntax

Java

```
public interface EditComponentListener extends EventListener
```

Inheritors

com.mindfusion.diagramming.components.EditComponentAdapter

See Also

EditComponentListener Members
com.mindfusion.diagramming.components Namespace

EditComponentListener Members

Defines the events that can be raised by EditComponent.

The following tables list the members exposed by the EditComponentListener type.

Public Methods

	Name	Description
	textChanged	Raised when the text is changed.
	textChanging	Raised when the text is about to be changed.

See Also

EditComponentListener Interface
com.mindfusion.diagramming.components Namespace

EditComponentListener Methods

EditComponentListener.textChanged Method

Raised when the text is changed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void textChanged (
    Object sender,
    ComponentTextEvent e
)
```

Parameters

sender
The component that raises the event.

e
An object providing information about the event.

See Also

EditComponentListener Members
EditComponentListener Interface
com.mindfusion.diagramming.components Namespace

EditComponentListener.textChanging Method

Raised when the text is about to be changed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void textChanging (
    Object sender,
    ComponentTextValidationEvent e
)
```

Parameters

sender
The component that raises the event.

e
An object providing information about the event.

See Also

EditComponentListener Members
EditComponentListener Interface
com.mindfusion.diagramming.components Namespace

GridPanel Class

Represents a container which arranges it's children in a two-dimensional grid.

Syntax

Java
`public class GridPanel extends ContainerComponent`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentBase
    com.mindfusion.diagramming.components.ContainerComponent
      com.mindfusion.diagramming.components.GridPanel

See Also

GridPanel Members
com.mindfusion.diagramming.components Namespace

GridPanel Members

Represents a container which arranges it's children in a two-dimensional grid.

The following tables list the members exposed by the GridPanel type.

Public Constructors

	Name	Description
	GridPanel	Initializes a new instance of the GridPanel class.

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description
	accept	ComponentBase.accept override. (Inherited from ContainerComponent.)
	addChild	Implements AddChild.addChild. (Inherited from ContainerComponent.)
	addColumns	
	addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addRows	
	arrangeComponents	ContainerComponent.arrangeComponents override.
	confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)
	contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
	createOutlinePath	For internal use. (Inherited from ComponentBase.)
	draw	ComponentBase.draw override. (Inherited from ContainerComponent.)
	find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
	getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	getChildCount	Gets the number of child components of this component. (Inherited from ContainerComponent.)
	getColumns	Gets a list with the definitions of all columns in the grid.
	getComponents	Gets the child components of this container. (Inherited from ContainerComponent.)
	getCursor	Gets the cursor to display when the mouse is at the specified position. (Inherited from ComponentBase.)

	getDesiredSize	ContainerComponent.getDesiredSize override.
	getDocumentBounds	For internal use. (Inherited from ComponentBase.)
	getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
	getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	getName	Gets the name of the component. (Inherited from ComponentBase.)
	getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
	getParentHost	For internal use. (Inherited from ComponentBase.)
	getRows	Gets a list with the definitions of all rows in the grid.
	getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
	invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
	invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)

loadComponents	Overloaded. (Inherited from ContainerComponent.)
onContextChanged	(Inherited from ComponentBase.)
onKeyDown	(Inherited from ComponentBase.)
onKeyPress	Called when a character key is pressed when this component has the input focus. (Inherited from ComponentBase.)
onKeyUp	(Inherited from ComponentBase.)
onMouseMove	Overloaded. (Inherited from ComponentBase.)
onMouseUp	Overloaded. (Inherited from ComponentBase.)
onUnitChanged	Invoked when the measure unit of the document containing the component has changed. (Inherited from ComponentBase.)
raiseValidated	(Inherited from ComponentBase.)
readExternal	ContainterComponent.readExternal override.
removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
saveComponents	Overloaded. (Inherited from ContainerComponent.)
setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)

	setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	setName	Sets the name of the component. (Inherited from ComponentBase.)
	setParent	For internal use. (Inherited from ComponentBase.)
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	ContainerComponent.writeExternal override.

Protected Methods

	Name	Description
	loadFromJson	Deserializes the component from a JsonObject.
	loadFromXml	ContainerComponent.loadFromXml override.
	onAddedToParent	Invoked when the component is added to a parent component. (Inherited from ComponentBase.)
	onGotFocus	Overloaded. (Inherited from ComponentBase.)
	onLostFocus	Overloaded. (Inherited from ComponentBase.)
	onMouseDown	Overloaded. (Inherited from ComponentBase.)
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidating	Raises the Validating event. (Inherited from ComponentBase.)

	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed. (Inherited from ComponentBase.)
	saveToJson	Serializes the component into a JsonObject.
	saveToXml	ContainerComponent.saveToXml override.
	serializeSubcomponents	Invoked to query whether the underlying component structure should be automatically serialized or serialized by the user. (Inherited from ComponentBase.)

See Also

GridPanel Class
com.mindfusion.diagramming.components Namespace

GridPanel Constructor

Initializes a new instance of the GridPanel class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public GridPanel ()
```

See Also

GridPanel Class
com.mindfusion.diagramming.components Namespace

GridPanel Methods

GridPanel.addColumns Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addColumns (
    int count
)
```

Parameters

count

See Also

GridPanel Members
GridPanel Class
com.mindfusion.diagramming.components Namespace

GridPanel.addRows Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addRows (
    int count
)
```

Parameters

count

See Also

GridPanel Members
GridPanel Class
com.mindfusion.diagramming.components Namespace

GridPanel.arrangeComponents Method

ContainerComponent.arrangeComponents override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void arrangeComponents (
    Rectangle2D.Float availableSpace,
    Graphics2D g2d
)
```

Parameters

availableSpace

g2d

See Also

GridPanel Members
GridPanel Class
com.mindfusion.diagramming.components Namespace

GridPanel.getColumns Method

Gets a list with the definitions of all columns in the grid.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ArrayList<GridColumn> getColumns ()
```

Return Value

A list with GridColumn objects.

See Also

GridPanel Members
GridPanel Class
com.mindfusion.diagramming.components Namespace

GridPanel.getDesiredSize Method

ContainerComponent.getDesiredSize override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public XDimension2D.Double getDesiredSize (
    XDimension2D.Double availableSize,
    Graphics2D g2d
)
```

Parameters

availableSize

g2d

Return Value

See Also

GridPanel Members
GridPanel Class
com.mindfusion.diagramming.components Namespace

GridPanel.getRows Method

Gets a list with the definitions of all rows in the grid.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public ArrayList<GridRow> getRows ()
```

Return Value

A list with GridRow objects.

See Also

GridPanel Members
GridPanel Class
com.mindfusion.diagramming.components Namespace

GridPanel.loadFromJson Method

Deserializes the component from a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the GridPanel data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

GridPanel Members
GridPanel Class
com.mindfusion.diagramming.components Namespace

GridPanel.loadFromXml Method

ContainerComponent.loadFromXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
```

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

GridPanel Members
GridPanel Class
com.mindfusion.diagramming.components Namespace

GridPanel.readExternal Method

ContainterComponent.readExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

GridPanel Members
GridPanel Class
com.mindfusion.diagramming.components Namespace

GridPanel.saveToJson Method

Serializes the component into a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the GridPanel data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

GridPanel Members
GridPanel Class
com.mindfusion.diagramming.components Namespace

GridPanel.saveToXml Method

ContainerComponent.saveToXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

GridPanel Members
GridPanel Class
com.mindfusion.diagramming.components Namespace

GridPanel.writeExternal Method

ContainerComponent.writeExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

GridPanel Members
GridPanel Class
com.mindfusion.diagramming.components Namespace

HorizontalAlignment Class

Contains static constants that specify the horizontal alignment of a component relative to its allocated space. Center - Indicates that the component should be centered. Left - Indicates that the component should be left-aligned. Right - Indicates that the component should be right-aligned. Stretch - Indicates that the component should be stretched horizontally. @author Anton

Syntax

Java
`public class HorizontalAlignment`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.components.HorizontalAlignment

See Also

HorizontalAlignment Members
com.mindfusion.diagramming.components Namespace

HorizontalAlignment Members

Contains static constants that specify the horizontal alignment of a component relative to its allocated space. Center - Indicates that the component should be centered. Left - Indicates that the component should be left-aligned. Right - Indicates that the component should be right-aligned. Stretch - Indicates that the component should be stretched horizontally. @author Anton

The following tables list the members exposed by the HorizontalAlignment type.

Public Constructors

	Name	Description
	HorizontalAlignment	

Public Fields

	Name	Description
	Center	
	Left	
	Right	

	Stretch	

See Also

HorizontalAlignment Class
com.mindfusion.diagramming.components Namespace

HorizontalAlignment Fields

HorizontalAlignment.Center Field

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public static final int Center
```

See Also

HorizontalAlignment Members
HorizontalAlignment Class
com.mindfusion.diagramming.components Namespace

HorizontalAlignment.Left Field

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public static final int Left
```

See Also

HorizontalAlignment Members
HorizontalAlignment Class
com.mindfusion.diagramming.components Namespace

HorizontalAlignment.Right Field

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public static final int Right
```

See Also

HorizontalAlignment Members
HorizontalAlignment Class
com.mindfusion.diagramming.components Namespace

HorizontalAlignment.Stretch Field

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public static final int Stretch
```

See Also

HorizontalAlignment Members
HorizontalAlignment Class
com.mindfusion.diagramming.components Namespace

HorizontalAlignment Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public HorizontalAlignment ()
```

See Also

HorizontalAlignment Class
com.mindfusion.diagramming.components Namespace

ImageComponent Class

Represents a component which can display an image.

Syntax

Java

```
public class ImageComponent extends ComponentBase
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentBase
    com.mindfusion.diagramming.components.ImageComponent

See Also

ImageComponent Members
com.mindfusion.diagramming.components Namespace

ImageComponent Members

Represents a component which can display an image.

The following tables list the members exposed by the ImageComponent type.

Public Constructors

	Name	Description
	ImageComponent	Initializes a new instance of the ImageComponent class.

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description
	addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	arrangeComponents	Recursively arranges the child components, within the specified space and using the specified graphics for measurement purposes. (Inherited from ComponentBase.)
	confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)
	contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
	createOutlinePath	For internal use. (Inherited from ComponentBase.)

draw	ComponentBase.draw override.
find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
getChildCount	Gets the number of child components of this component. (Inherited from ComponentBase.)
getCursor	Gets the cursor to display when the mouse is at the specified position. (Inherited from ComponentBase.)
getDesiredSize	ComponentBase.getDesiredSize override.
getDocumentBounds	For internal use. (Inherited from ComponentBase.)
getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
getImage	Gets the displayed image.
getImageAlign	Gets the alignment of the displayed image relative to the bounds of the component.
getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
getName	Gets the name of the component. (Inherited from ComponentBase.)
getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)

	getParentHost	For internal use. (Inherited from ComponentBase.)
	getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
	invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
	invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)
	onContextChanged	(Inherited from ComponentBase.)
	onKeyDown	(Inherited from ComponentBase.)
	onKeyPress	Called when a character key is pressed when this component has the input focus. (Inherited from ComponentBase.)
	onKeyUp	(Inherited from ComponentBase.)
	onMouseMove	Overloaded. (Inherited from ComponentBase.)
	onMouseUp	Overloaded. (Inherited from ComponentBase.)
	onUnitChanged	Invoked when the measure unit of the document containing the component has changed. (Inherited from ComponentBase.)
	raiseValidated	(Inherited from ComponentBase.)
	readExternal	ComponentBase.readExternal override.
	removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)

	setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
	setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setImage	Sets the displayed image.
	setImageAlign	Sets the alignment of the displayed image relative to the bounds of the component.
	setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	setName	Sets the name of the component. (Inherited from ComponentBase.)
	setParent	For internal use. (Inherited from ComponentBase.)
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	ComponentBase.writeExternal override.

Protected Methods

	Name	Description
	loadFromJson	Deserializes the component from a JsonObject.

	loadFromXml	ComponentBase.loadFromXml override.
	onAddedToParent	Invoked when the component is added to a parent component. (Inherited from ComponentBase.)
	onClicked	Invokes when the image component is clicked.
	onGotFocus	Overloaded. (Inherited from ComponentBase.)
	onLostFocus	Overloaded. (Inherited from ComponentBase.)
	onMouseDown	ComponentBase.onMouseDown override.
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidating	Raises the Validating event. (Inherited from ComponentBase.)
	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed. (Inherited from ComponentBase.)
	saveToJson	Serializes the component into a JsonObject.
	saveToXml	ComponentBase.saveToXml override.
	serializeSubcomponents	Invoked to query whether the underlying component structure should be automatically serialized or serialized by the user. (Inherited from ComponentBase.)

See Also

ImageComponent Class
com.mindfusion.diagramming.components Namespace

ImageComponent Constructor

Initializes a new instance of the ImageComponent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ImageComponent ()
```

See Also

ImageComponent Class
com.mindfusion.diagramming.components Namespace

ImageComponent Methods

ImageComponent.draw Method

ComponentBase.draw override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void draw (
    Graphics2D g2d,
    RenderOptions options
)
```

Parameters

g2d

options

See Also

ImageComponent Members
ImageComponent Class
com.mindfusion.diagramming.components Namespace

ImageComponent.getDesiredSize Method

ComponentBase.getDesiredSize override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public XDimension2D.Double getDesiredSize (
    XDimension2D.Double availableSize,
    Graphics2D g2d
)
```

Parameters

availableSize

g2d

Return Value

See Also

ImageComponent Members
ImageComponent Class
com.mindfusion.diagramming.components Namespace

ImageComponent.getImage Method

Gets the displayed image.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Image getImage ()
```

Return Value

An instance of the Image class.

See Also

ImageComponent Members
ImageComponent Class
com.mindfusion.diagramming.components Namespace

ImageComponent.getImageAlign Method

Gets the alignment of the displayed image relative to the bounds of the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ImageAlign getImageAlign ()
```

Return Value

A member of the ImageAlign enumeration.

See Also

ImageComponent Members
ImageComponent Class
com.mindfusion.diagramming.components Namespace

ImageComponent.loadFromJson Method

Deserializes the component from a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the ImageComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

ImageComponent Members
ImageComponent Class
com.mindfusion.diagramming.components Namespace

ImageComponent.loadFromXml Method

ComponentBase.loadFromXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

ImageComponent Members
ImageComponent Class
com.mindfusion.diagramming.components Namespace

ImageComponent.onClicked Method

Invokes when the image component is clicked.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onClicked (
    ComponentMouseEvent e
)
```

Parameters

e

See Also

ImageComponent Members
ImageComponent Class
com.mindfusion.diagramming.components Namespace

ImageComponent.onMouseDown Method

ComponentBase.onMouseDown override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onMouseDown (
    ComponentMouseEvent e
)
```

Parameters

e

See Also

ImageComponent Members
ImageComponent Class
com.mindfusion.diagramming.components Namespace

ImageComponent.readExternal Method

ComponentBase.readExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

ImageComponent Members
ImageComponent Class
com.mindfusion.diagramming.components Namespace

ImageComponent.saveToJson Method

Serializes the component into a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the ImageComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

ImageComponent Members
ImageComponent Class
com.mindfusion.diagramming.components Namespace

ImageComponent.saveToXml Method

ComponentBase.saveToXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

ImageComponent Members
ImageComponent Class
com.mindfusion.diagramming.components Namespace

ImageComponent.setImage Method

Sets the displayed image.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setImage (
    Image value
)
```

Parameters

value
An instance of the java.awt.Image class. The default is null.

See Also

ImageComponent Members
ImageComponent Class
com.mindfusion.diagramming.components Namespace

ImageComponent.setImageAlign Method

Sets the alignment of the displayed image relative to the bounds of the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setImageAlign (
    ImageAlign value
)
```

Parameters

value
A member of the ImageAlign enumeration. The default is Center.

See Also

ImageComponent Members
ImageComponent Class
com.mindfusion.diagramming.components Namespace

ImageComponent.writeExternal Method

ComponentBase.writeExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

ImageComponent Members
ImageComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent Class

Represents a numeric-only edit component.

Syntax

Java

```
public class NumericEditComponent
    extends EditComponent
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentBase
    com.mindfusion.diagramming.components.EditComponent
      com.mindfusion.diagramming.components.NumericEditComponent

See Also

NumericEditComponent Members
com.mindfusion.diagramming.components Namespace

NumericEditComponent Members

Represents a numeric-only edit component.

The following tables list the members exposed by the NumericEditComponent type.

Public Constructors

	Name	Description
	NumericEditComponent	Initializes a new instance of the NumericEditComponent class.

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description
	acceptsReturn	Gets a value indicating whether the edit component will insert new line when the user presses the ENTER key. (Inherited from EditComponent.)
	addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentKeyEventListener	Registers an event listener. (Inherited from EditComponent.)
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addEditComponentListener	Registers an event listener. (Inherited from EditComponent.)
	addNumericEditComponentListener	Registers an event listener.
	arrangeComponents	Recursively arranges the child components, within the specified space and using the specified graphics for measurement purposes. (Inherited from ComponentBase.)
	confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)
	contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
	createOutlinePath	For internal use. (Inherited from ComponentBase.)
	draw	ComponentBase.draw override. (Inherited from EditComponent.)

	find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
	getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	getBrush	Gets the background brush of the edit component. (Inherited from EditComponent.)
	getChildCount	Gets the number of child components of this component. (Inherited from ComponentBase.)
	getCursor	ComponentBase.getCursor override. (Inherited from EditComponent.)
	getDesiredSize	ComponentBase.getDesiredSize override. (Inherited from EditComponent.)
	getDocumentBounds	For internal use. (Inherited from ComponentBase.)
	getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	getFont	Gets the font of the text. (Inherited from EditComponent.)
	getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
	getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getInactiveSelectionColor	Gets the color of the selection when the edit component does not have input focus. (Inherited from EditComponent.)
	getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	getName	Gets the name of the component. (Inherited from ComponentBase.)

	getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
	getParentHost	For internal use. (Inherited from ComponentBase.)
	getPen	Gets the border pen of the edit component. (Inherited from EditComponent.)
	getScrollFirstLine	Gets the index of the first visible line in the edit component. (Inherited from EditComponent.)
	getSelectionColor	Gets the color of the selection. (Inherited from EditComponent.)
	getSelectionLength	Gets the length of the selection in the edit component. (Inherited from EditComponent.)
	getSelectionStart	Gets the start of the selection in the edit component. (Inherited from EditComponent.)
	getText	Gets the text of the edit component. (Inherited from EditComponent.)
	getTextAlignment	Gets the horizontal alignment of the text in the edit component. (Inherited from EditComponent.)
	getTextColor	Gets the color of the text. (Inherited from EditComponent.)
	getTextPadding	Gets the padding of the edit component. (Inherited from EditComponent.)
	getTextWrapping	Gets the wrapping of of the text in the edit component. (Inherited from EditComponent.)
	getValue	Gets the value displayed in the edit box.
	getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
	invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
	invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)
	isHideSelection	Gets a value indicating whether to hide the selection when the edit component does not have input focus. (Inherited from EditComponent.)
	onContextChanged	ComponentBase.onContextChanged override. (Inherited from EditComponent.)
	onGotFocus	ComponentBase.onGotFocus override. (Inherited from EditComponent.)

	onKeyDown	EditComponent.onKeyDown override.
	onKeyPress	EditComponent.onKeyPress override.
	onKeyUp	Overloaded. (Inherited from EditComponent.)
	onLostFocus	EditComponent.onLostFocus override.
	onMouseDown	ComponentBase.onMouseDown override. (Inherited from EditComponent.)
	onMouseMove	ComponentBase.onMouseMove override. (Inherited from EditComponent.)
	onMouseUp	ComponentBase.onMouseUp override. (Inherited from EditComponent.)
	onUnitChanged	ComponentBase.onUnitChanged override. (Inherited from EditComponent.)
	raiseValidated	(Inherited from ComponentBase.)
	readExternal	EditComponent.readExternal override.
	removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentKeyEventListener	Unregisters an event listener. (Inherited from EditComponent.)
	removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeEditComponentListener	Unregisters an event listener. (Inherited from EditComponent.)
	removeNumericEditComponentListener	Unregisters an event listener.
	selectAll	Selects the entire text inside this edit box.
	setAcceptsReturn	Sets a value indicating whether the edit component will insert new line when the user presses the ENTER key. (Inherited from EditComponent.)
	setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	setBrush	Sets the background brush of the edit component. (Inherited from EditComponent.)
	setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	setFont	Sets the font of the text. (Inherited from EditComponent.)

	setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
	setHideSelection	Sets a value indicating whether to hide the selection when the edit component does not have input focus. (Inherited from EditComponent.)
	setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setInactiveSelectionColor	Sets the color of the selection when the edit component does not have input focus. (Inherited from EditComponent.)
	setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	setName	Sets the name of the component. (Inherited from ComponentBase.)
	setParent	For internal use. (Inherited from ComponentBase.)
	setPen	Sets the border pen of the edit component. (Inherited from EditComponent.)
	setScrollFirstLine	Sets the index of the first visible line in the edit component. (Inherited from EditComponent.)
	setSelectionColor	Sets the color of the selection. (Inherited from EditComponent.)
	setSelectionLength	Sets the length of the selection in the edit component. (Inherited from EditComponent.)
	setSelectionStart	Sets the start of the selection in the edit component. Setting this property will reset SelectionLength to 0. (Inherited from EditComponent.)
	setText	Sets the text of the edit component. (Inherited from EditComponent.)
	setTextAlignment	Sets the horizontal alignment of the text in the edit component. (Inherited from EditComponent.)

	setTextColor	Sets the color of the text. (Inherited from EditComponent.)
	setTextPadding	Sets the padding of the edit component. (Inherited from EditComponent.)
	setTextWrapping	Sets the wrapping of of the text in the edit component. (Inherited from EditComponent.)
	setValue	Sets the value displayed in the edit box.
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	EditComponent.writeExternal override.

Protected Methods

	Name	Description
	loadFromJson	Deserializes the component from a JsonObject.
	loadFromXml	EditComponent.loadFromXml override.
	onAddedToParent	ComponentBase.onAddedToParent override. (Inherited from EditComponent.)
	onClicked	Raises the mouseClicked event. (Inherited from EditComponent.)
	onKeyPressed	Raises the keyPressed event. (Inherited from EditComponent.)
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onTextChanged	EditComponent.onTextChanged override.
	onTextChanging	Raises the textChanging event. (Inherited from EditComponent.)
	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidateValue	Raises the validateValue event.

	onValidating	Raises the Validating event. (Inherited from ComponentBase.)
	onValueChanged	Raises the valueChanged event.
	onZoomChanged	ComponentBase.onZoomChanged override. (Inherited from EditComponent.)
	saveToJson	Serializes the component into a JsonObject.
	saveToXml	EditComponent.saveToXml override.
	serializeSubcomponents	Invoked to query whether the underlying component structure should be automatically serialized or serialized by the user. (Inherited from ComponentBase.)

See Also

NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent Constructor

Initializes a new instance of the NumericEditComponent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public NumericEditComponent ()
```

See Also

NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent Methods

NumericEditComponent.addNumericEditComponentListener Method

Registers an event listener.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addNumericEditComponentListener (
    NumericEditComponentListener listener
)
```

Parameters

listener
An object implementing NumericEditComponentListener interface.

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent.getValue Method

Gets the value displayed in the edit box.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getValue ()
```

Return Value

The numerical value displayed in the component.

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent.loadFromJson Method

Deserializes the component from a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the NumericEditComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent.loadFromXml Method

EditComponent.loadFromXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent.onKeyDown Method

EditComponent.onKeyDown override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean onKeyDown (
    int keyCode,
    int modifiers
)
```

Parameters

keyCode

modifiers

Return Value

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent.onKeyPress Method

EditComponent.onKeyPress override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onKeyPress (
    Character keyChar
)
```

Parameters

keyChar

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent.onLostFocus Method

EditComponent.onLostFocus override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onLostFocus ()
```

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent.onTextChanged Method

EditComponent.onTextChanged override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onTextChanged (
    ComponentTextEvent e
)
```

Parameters

e

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent.onValidateValue Method

Raises the validateValue event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onValidateValue (
    ValueChangingEvent<Float> e
)
```

Parameters

e
An object containing the event data.

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent.onValueChanged Method

Raises the valueChanged event.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void onValueChanged (
    ValueChangedEvent<Float> e
)
```

Parameters

e
An object containing the event data.

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent.readExternal Method

EditComponent.readExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent.removeNumericEditComponentListener Method

Unregisters an event listener.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void removeNumericEditComponentListener (
    NumericEditComponentListener listener
)
```

Parameters

listener
An object implementing NumericEditComponentListener interface.

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent.saveToJson Method

Serializes the component into a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the NumericEditComponent data

context
An JsonPersistContext object providing information a bout the serialization process and some helper methods.

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent.saveToXml Method

EditComponent.saveToXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent.selectAll Method

Selects the entire text inside this edit box.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void selectAll ()
```

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent.setValue Method

Sets the value displayed in the edit box.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setValue (
    float value
)
```

Parameters

value
The numerical value to display in the component.

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponent.writeExternal Method

EditComponent.writeExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

NumericEditComponent Members
NumericEditComponent Class
com.mindfusion.diagramming.components Namespace

NumericEditComponentListener Interface

Defines the events that can be raised by NumericEditComponent.

Syntax

```
Java
public interface NumericEditComponentListener extends EventListener
```

See Also

NumericEditComponentListener Members
com.mindfusion.diagramming.components Namespace

NumericEditComponentListener Members

Defines the events that can be raised by NumericEditComponent.

The following tables list the members exposed by the NumericEditComponentListener type.

Public Methods

	Name	Description
	validateValue	Raised when the value inside the component needs to be validated.
	valueChanged	Raised when the component's value has changed.

See Also

NumericEditComponentListener Interface
com.mindfusion.diagramming.components Namespace

NumericEditComponentListener Methods

NumericEditComponentListener.validateValue Method

Raised when the value inside the component needs to be validated.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void validateValue (
    Object sender,
    ValueChangingEvent<Float> e
)
```

Parameters

sender

The component that raises the event.

e

An object providing information about the event.

See Also

NumericEditComponentListener Members
NumericEditComponentListener Interface
com.mindfusion.diagramming.components Namespace

NumericEditComponentListener.valueChanged Method

Raised when the component's value has changed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void valueChanged (
    Object sender,
    ValueChangedEvent<Float> e
)
```

Parameters

sender

The component that raises the event.

e

An object providing information about the event.

See Also

Predicate Interface

Syntax

Java
`public interface Predicate`

See Also

Predicate Members
com.mindfusion.diagramming.components Namespace

Predicate Members

The following tables list the members exposed by the Predicate type.

Public Methods

	Name	Description
	match	

See Also

Predicate Interface
com.mindfusion.diagramming.components Namespace

Predicate Methods

Predicate.match Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

`boolean match (`
`  ComponentBase component,`
`  Object param`
`)`

Parameters

component

param

Return Value

See Also

Predicate Members
Predicate Interface
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent Class

Represents a slider rail component.

Syntax

Java
`public class RangeSliderRailComponent extends ContainerComponent`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentBase
    com.mindfusion.diagramming.components.ContainerComponent
      com.mindfusion.diagramming.components.RangeSliderRailComponent

See Also

RangeSliderRailComponent Members
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent Members

Represents a slider rail component.

The following tables list the members exposed by the RangeSliderRailComponent type.

Public Constructors

	Name	Description
	RangeSliderRailComponent	

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description

	accept	ComponentBase.accept override. (Inherited from ContainerComponent.)
	addChild	Implements AddChild.addChild. (Inherited from ContainerComponent.)
	addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addSliderListener	
	arrangeComponents	ContentComponent.arrangeComponents override.
	confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)
	contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
	createOutlinePath	For internal use. (Inherited from ComponentBase.)
	draw	ComponentBase.draw override.
	find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
	getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	getChildCount	Gets the number of child components of this component. (Inherited from ContainerComponent.)
	getComponents	Gets the child components of this container. (Inherited from ContainerComponent.)
	getCursor	ComponentBase.getCursor override.
	getDesiredSize	ContentComponent.GetDesiredSize override.
	getDocumentBounds	For internal use. (Inherited from ComponentBase.)
	getEndValue	Gets the currently selected end value.
	getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel.

		(Inherited from ComponentBase.)
	getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
	getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	getMaximum	Gets the maximum value of the rail.
	getMinimum	Gets the minimum value of the rail.
	getName	Gets the name of the component. (Inherited from ComponentBase.)
	getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
	getParentHost	For internal use. (Inherited from ComponentBase.)
	getRailBrush	Gets the brush used to fill the rail.
	getRailPen	Gets the pen used to draw the rail outline.
	getRailThickness	Gets the rail thickness.
	getStartValue	Gets the currently selected start value.
	getThumbBrush	Gets the brush of the rail's thumbs.
	getThumbPen	Gets the border pen of the rail's thumbs.
	getTickSize	Gets the size of the tick in the middle of the rail.
	getValueBrush	Gets the brush used to fill the portion of the rail between StartValue and EndValue.
	getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
	invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)

	invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)
	loadComponents	Overloaded. (Inherited from ContainerComponent.)
	onContextChanged	(Inherited from ComponentBase.)
	onKeyDown	(Inherited from ComponentBase.)
	onKeyPress	Called when a character key is pressed when this component has the input focus. (Inherited from ComponentBase.)
	onKeyUp	(Inherited from ComponentBase.)
	onMouseDown	ComponentBase.onMouseDown override.
	onMouseMove	ComponentBase.onMouseMove override.
	onMouseUp	ComponentBase.onMouseUp override.
	onUnitChanged	Invoked when the measure unit of the document containing the component has changed. (Inherited from ComponentBase.)
	raiseValidated	(Inherited from ComponentBase.)
	readExternal	ComponentBase.readExternal override. (Inherited from ContainerComponent.)
	removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeSliderListener	
	saveComponents	Overloaded. (Inherited from ContainerComponent.)
	setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	setEndValue	Sets the currently selected end value.
	setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)

setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
setMaximum	Sets the maximum value of the rail.
setMinimum	Sets the minimum value of the rail.
setName	Sets the name of the component. (Inherited from ComponentBase.)
setParent	For internal use. (Inherited from ComponentBase.)
setRailBrush	Sets the brush used to fill the rail.
setRailPen	Sets the pen used to draw the rail outline.
setRailThickness	Sets the rail thickness.
setStartValue	Sets the currently selected start value.
setThumbBrush	Sets the brush of the rail's thumbs.
setThumbPen	Sets the border pen of the rail's thumbs.
setTickSize	Sets the size of the tick in the middle of the rail.
setValueBrush	Sets the brush used to fill the portion of the rail between StartValue and EndValue.
setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from

		ComponentBase.)
	writeExternal	ComponentBase.writeExternal override. (Inherited from ContainerComponent.)

Protected Methods

	Name	Description
	fireOnBatchValueChanged	
	fireOnEndValueChanged	
	fireOnStartValueChanged	
	loadFromJson	Deserializes the component from a JsonObject. (Inherited from ContainerComponent.)
	loadFromXml	ComponentBase.loadFromXml override. (Inherited from ContainerComponent.)
	onAddedToParent	Invoked when the component is added to a parent component. (Inherited from ComponentBase.)
	onGotFocus	Overloaded. (Inherited from ComponentBase.)
	onLostFocus	Overloaded. (Inherited from ComponentBase.)
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidating	Raises the Validating event. (Inherited from ComponentBase.)
	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed. (Inherited from ComponentBase.)
	saveToJson	Serializes the component into a JsonObject. (Inherited from ContainerComponent.)
	saveToXml	ComponentBase.saveToXml override. (Inherited from ContainerComponent.)
	serializeSubcomponents	ComponentBase.serializeSubcomponents override.

See Also

RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public RangeSliderRailComponent ()
```

See Also

RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent Methods

RangeSliderRailComponent.addSliderListener Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addSliderListener (
    SliderListener listener
)
```

Parameters

listener

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.arrangeComponents Method

ContentComponent.arrangeComponents override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void arrangeComponents (
    Rectangle2D.Float availableSpace,
    Graphics2D g2d
)
```

Parameters

availableSpace

g2d

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.draw Method

ComponentBase.draw override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void draw (
    Graphics2D g2d,
    RenderOptions options
)
```

Parameters

g2d

options

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.fireOnBatchValueChanged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void fireOnBatchValueChanged (
    ValueChangedEvent<Float> e
)
```

Parameters

e

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.fireOnEndValueChanged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void fireOnEndValueChanged (
    ValueChangedEvent<Float> e
)
```

Parameters

e

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.fireOnStartValueChanged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void fireOnStartValueChanged (
    ValueChangedEvent<Float> e
)
```

Parameters

e

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.getCursor Method

ComponentBase.getCursor override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public CursorHint getCursor (
    Point2D.Float point
)
```

Parameters

point

Return Value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.getDesiredSize Method

ContentComponent.GetDesiredSize override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public XDimension2D.Double getDesiredSize (
    XDimension2D.Double availableSize,
    Graphics2D g2d
)
```

Parameters

availableSize

g2d

Return Value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.getEndValue Method

Gets the currently selected end value.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getEndValue ()
```

Return Value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.getMaximum Method

Gets the maximum value of the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getMaximum ()
```

Return Value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.getMinimum Method

Gets the minimum value of the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getMinimum ()
```

Return Value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.getRailBrush Method

Gets the brush used to fill the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getRailBrush ()
```

Return Value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.getRailPen Method

Gets the pen used to draw the rail outline.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Pen getRailPen ()
```

Return Value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.getRailThickness Method

Gets the rail thickness.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getRailThickness ()
```

Return Value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.getStartValue Method

Gets the currently selected start value.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getStartValue ()
```

Return Value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.getThumbBrush Method

Gets the brush of the rail's thumbs.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getThumbBrush ()
```

Return Value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.getThumbPen Method

Gets the border pen of the rail's thumbs.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public Pen getThumbPen ()
```

Return Value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.getTickSize Method

Gets the size of the tick in the middle of the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public float getTickSize ()
```

Return Value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.getValueBrush Method

Gets the brush used to fill the portion of the rail between StartValue and EndValue.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public Brush getValueBrush ()
```

Return Value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.onMouseDown Method

ComponentBase.onMouseDown override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseDown (
    Point2D.Float point
)
```

Parameters

point

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.onMouseMove Method

ComponentBase.onMouseMove override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseMove (
    Point2D.Float point
)
```

Parameters

point

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.onMouseUp Method

ComponentBase.onMouseUp override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseUp (
    Point2D.Float point
)
```

Parameters

point

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.removeSliderListener Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void removeSliderListener (
    SliderListener listener
)
```

Parameters

listener

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.serializeSubcomponents Method

ComponentBase.serializeSubcomponents override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected boolean serializeSubcomponents ()
```

Return Value

Always returns false.

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.setEndValue Method

Sets the currently selected end value.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setEndValue (
    float value
)
```

Parameters

value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.setMaximum Method

Sets the maximum value of the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setMaximum (
    float value
)
```

Parameters

value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.setMinimum Method

Sets the minimum value of the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setMinimum (
    float value
)
```

Parameters

value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.setRailBrush Method

Sets the brush used to fill the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setRailBrush (
    Brush value
)
```

Parameters

value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.setRailPen Method

Sets the pen used to draw the rail outline.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setRailPen (
    Pen value
)
```

Parameters

value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.setRailThickness Method

Sets the rail thickness.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setRailThickness (
    float value
)
```

Parameters

value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.setStartValue Method

Sets the currently selected start value.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setStartValue (
    float value
)
```

Parameters

value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.setThumbBrush Method

Sets the brush of the rail's thumbs.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setThumbBrush (
    Brush value
)
```

Parameters

value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.setThumbPen Method

Sets the border pen of the rail's thumbs.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setThumbPen (
    Pen value
)
```

Parameters

value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.setTickSize Method

Sets the size of the tick in the middle of the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setTickSize (
    float value
)
```

Parameters

value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

RangeSliderRailComponent.setValueBrush Method

Sets the brush used to fill the portion of the rail between StartValue and EndValue.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setValueBrush (
    Brush value
)
```

Parameters

value

See Also

RangeSliderRailComponent Members
RangeSliderRailComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent Class

Represents components which can display geometric shapes.

Syntax

Java
`public class ShapeComponent extends ComponentBase`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentBase
    com.mindfusion.diagramming.components.ShapeComponent
      com.mindfusion.diagramming.components.ThumbComponent

See Also

ShapeComponent Members
com.mindfusion.diagramming.components Namespace

ShapeComponent Members

Represents components which can display geometric shapes.

The following tables list the members exposed by the ShapeComponent type.

Public Constructors

	Name	Description
	ShapeComponent	Initializes a new instance of the ShapeComponent class.

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description
	addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)

	arrangeComponents	Recursively arranges the child components, within the specified space and using the specified graphics for measurement purposes. (Inherited from ComponentBase.)
	confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)
	contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
	createOutlinePath	ComponentBase.createOutlinePath override.
	draw	ComponentBase.draw override.
	find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
	getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	getBrush	Gets the brush used to fill the component.
	getChildCount	Gets the number of child components of this component. (Inherited from ComponentBase.)
	getCursor	Gets the cursor to display when the mouse is at the specified position. (Inherited from ComponentBase.)
	getDesiredSize	Gets the desired size of this component in case the width and/or height have not been explicitly specified. (Inherited from ComponentBase.)
	getDocumentBounds	For internal use. (Inherited from ComponentBase.)
	getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
	getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)

getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
getIsOutline	Gets a value indicating whether this component defines the outline of its host.
getName	Gets the name of the component. (Inherited from ComponentBase.)
getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
getParentHost	For internal use. (Inherited from ComponentBase.)
getPen	Gets the pen used to stroke the outline of the component.
getShape	Gets the Shape object defining the outline of the component.
getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)
onContextChanged	(Inherited from ComponentBase.)
onKeyDown	(Inherited from ComponentBase.)
onKeyPress	Called when a character key is pressed when this component has the input focus. (Inherited from ComponentBase.)
onKeyUp	(Inherited from ComponentBase.)
onMouseMove	Overloaded. (Inherited from ComponentBase.)
onMouseUp	Overloaded. (Inherited from ComponentBase.)
onUnitChanged	Invoked when the measure unit of the document containing the component has changed. (Inherited from ComponentBase.)
raiseValidated	(Inherited from ComponentBase.)
readExternal	ComponentBase.readExternal override.
removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from

		ComponentBase.)
	removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	setBrush	Sets the brush used to fill the component.
	setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
	setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	setIsOutline	Sets a value indicating whether this component defines the outline of its host.
	setName	Sets the name of the component. (Inherited from ComponentBase.)
	setParent	For internal use. (Inherited from ComponentBase.)
	setPen	Sets the pen used to stroke the outline of the component.
	setShape	Sets the Shape object defining the outline of the component.
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from

		ComponentBase.)
	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	ComponentBase.writeExternal override.

Protected Methods

	Name	Description
	createGeneralPath	Creates a GeneralPath object representing the shape.
	loadFromJson	Deserializes the component from a JsonObject.
	loadFromXml	ComponentBase.loadFromXml override.
	onAddedToParent	Invoked when the component is added to a parent component. (Inherited from ComponentBase.)
	onGotFocus	Overloaded. (Inherited from ComponentBase.)
	onLostFocus	Overloaded. (Inherited from ComponentBase.)
	onMouseDown	Overloaded. (Inherited from ComponentBase.)
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidating	Raises the Validating event. (Inherited from ComponentBase.)
	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed. (Inherited from ComponentBase.)
	saveToJson	Serializes the component into a JsonObject.
	saveToXml	ComponentBase.saveToXml override.
	serializeSubcomponents	Invoked to query whether the underlying component structure should be automatically serialized or serialized by the user. (Inherited from ComponentBase.)

See Also

ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent Constructor

Initializes a new instance of the ShapeComponent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public ShapeComponent ()
```

See Also

ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent Methods

ShapeComponent.createGeneralPath Method

Creates a GeneralPath object representing the shape.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
protected GeneralPath createGeneralPath ()
```

Return Value

A GeneralPath object representing the shape.

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent.createOutlinePath Method

ComponentBase.createOutlinePath override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public GeneralPath createOutlinePath (
    Rectangle2D.Float bounds,
    float rotationAngle
)
```

Parameters

bounds

rotationAngle

Return Value

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent.draw Method

ComponentBase.draw override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void draw (
    Graphics2D g,
    RenderOptions options
)
```

Parameters

g

options

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent.getBrush Method

Gets the brush used to fill the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getBrush ()
```

Return Value

An instance of a Brush-derived class.

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent.getIsOutline Method

Gets a value indicating whether this component defines the outline of its host.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public boolean getIsOutline ()
```

Return Value

true to mark this component as the node's outline, otherwise false.

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent.getPen Method

Gets the pen used to stroke the outline of the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Pen getPen ()
```

Return Value

An instance of the Pen class.

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent.getShape Method

Gets the Shape object defining the outline of the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Shape getShape ()
```

Return Value

An instance of the Shape class.

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent.loadFromJson Method

Deserializes the component from a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the ShapeComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent.loadFromXml Method

ComponentBase.loadFromXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent.readExternal Method

ComponentBase.readExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent.saveToJson Method

Serializes the component into a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the ShapeComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent.saveToXml Method

ComponentBase.saveToXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent.setBrush Method

Sets the brush used to fill the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setBrush (
    Brush value
)
```

Parameters

value
An instance of a Brush-derived class. The default is null.

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent.setIsOutline Method

Sets a value indicating whether this component defines the outline of its host.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setIsOutline (
    boolean value
)
```

Parameters

value
true to mark this component as the node's outline, otherwise false. The default value is false.

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent.setPen Method

Sets the pen used to stroke the outline of the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setPen (
    Pen value
)
```

Parameters

value
An instance of the Pen class. The default is null.

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent.setShape Method

Sets the Shape object defining the outline of the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setShape (
    Shape value
)
```

Parameters

value
An instance of the Shape class.

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

ShapeComponent.writeExternal Method

ComponentBase.writeExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

ShapeComponent Members
ShapeComponent Class
com.mindfusion.diagramming.components Namespace

SimplePanel Class

A container which arranges its items so that they fill all available space.

Syntax

Java
`public class SimplePanel extends ContainerComponent`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentBase
    com.mindfusion.diagramming.components.ContainerComponent
      com.mindfusion.diagramming.components.SimplePanel

See Also

SimplePanel Members
com.mindfusion.diagramming.components Namespace

SimplePanel Members

A container which arranges its items so that they fill all available space.

The following tables list the members exposed by the SimplePanel type.

Public Constructors

	Name	Description
	SimplePanel	Initializes a new instance of the SimplePanel class.

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description
	accept	ComponentBase.accept override. (Inherited from ContainerComponent.)

	addChild	Implements AddChild.addChild. (Inherited from ContainerComponent.)
	addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	arrangeComponents	ContainerComponent.arrangeComponents override.
	confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)
	contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
	createOutlinePath	For internal use. (Inherited from ComponentBase.)
	draw	ComponentBase.draw override. (Inherited from ContainerComponent.)
	find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
	getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	getChildCount	Gets the number of child components of this component. (Inherited from ContainerComponent.)
	getComponents	Gets the child components of this container. (Inherited from ContainerComponent.)
	getCursor	Gets the cursor to display when the mouse is at the specified position. (Inherited from ComponentBase.)
	getDesiredSize	ContainerComponent.getDesiredSize override.
	getDocumentBounds	For internal use. (Inherited from ComponentBase.)
	getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)

	getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	getName	Gets the name of the component. (Inherited from ComponentBase.)
	getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
	getParentHost	For internal use. (Inherited from ComponentBase.)
	getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
	invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
	invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)
	loadComponents	Overloaded. (Inherited from ContainerComponent.)
	onContextChanged	(Inherited from ComponentBase.)
	onKeyDown	(Inherited from ComponentBase.)
	onKeyPress	Called when a character key is pressed when this component has the input focus. (Inherited from ComponentBase.)
	onKeyUp	(Inherited from ComponentBase.)
	onMouseMove	Overloaded. (Inherited from ComponentBase.)
	onMouseUp	Overloaded. (Inherited from ComponentBase.)
	onUnitChanged	Invoked when the measure unit of the document containing the component has changed. (Inherited from ComponentBase.)
	raiseValidated	(Inherited from ComponentBase.)

	readExternal	ComponentBase.readExternal override. (Inherited from ContainerComponent.)
	removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	saveComponents	Overloaded. (Inherited from ContainerComponent.)
	setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
	setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	setName	Sets the name of the component. (Inherited from ComponentBase.)
	setParent	For internal use. (Inherited from ComponentBase.)
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)

	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	ComponentBase.writeExternal override. (Inherited from ContainerComponent.)

Protected Methods

	Name	Description
	loadFromJson	Deserializes the component from a JsonObject. (Inherited from ContainerComponent.)
	loadFromXml	ComponentBase.loadFromXml override. (Inherited from ContainerComponent.)
	onAddedToParent	Invoked when the component is added to a parent component. (Inherited from ComponentBase.)
	onGotFocus	Overloaded. (Inherited from ComponentBase.)
	onLostFocus	Overloaded. (Inherited from ComponentBase.)
	onMouseDown	Overloaded. (Inherited from ComponentBase.)
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidating	Raises the Validating event. (Inherited from ComponentBase.)
	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed. (Inherited from ComponentBase.)
	saveToJson	Serializes the component into a JsonObject. (Inherited from ContainerComponent.)
	saveToXml	ComponentBase.saveToXml override. (Inherited from ContainerComponent.)
	serializeSubcomponents	Invoked to query whether the underlying component structure should be automatically serialized or serialized by the user. (Inherited from ComponentBase.)

See Also

SimplePanel Class
com.mindfusion.diagramming.components Namespace

SimplePanel Constructor

Initializes a new instance of the SimplePanel class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public SimplePanel ()
```

See Also

SimplePanel Class
com.mindfusion.diagramming.components Namespace

SimplePanel Methods

SimplePanel.arrangeComponents Method

ContainerComponent.arrangeComponents override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void arrangeComponents (
    Rectangle2D.Float availableSpace,
    Graphics2D g2d
)
```

Parameters

availableSpace

g2d

See Also

SimplePanel Members
SimplePanel Class
com.mindfusion.diagramming.components Namespace

SimplePanel.getDesiredSize Method

ContainerComponent.getDesiredSize override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public XDimension2D.Double getDesiredSize (
    XDimension2D.Double availableSize,
    Graphics2D g2d
)
```

Parameters

availableSize

g2d

Return Value

See Also

SimplePanel Members
SimplePanel Class
com.mindfusion.diagramming.components Namespace

SliderAdapter Class

Provides empty implementations for the methods defined in the SliderListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of SliderListener.

Syntax

```
Java
public class SliderAdapter implements SliderListener
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.components.SliderAdapter

See Also

SliderAdapter Members
com.mindfusion.diagramming.components Namespace

SliderAdapter Members

Provides empty implementations for the methods defined in the SliderListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of SliderListener.

The following tables list the members exposed by the SliderAdapter type.

Public Constructors

	Name	Description
	SliderAdapter	

Public Methods

	Name	Description
	batchValueChanged	
	endValueChanged	
	startValueChanged	

See Also

SliderAdapter Class
com.mindfusion.diagramming.components Namespace

SliderAdapter Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public SliderAdapter ()
```

See Also

SliderAdapter Class
com.mindfusion.diagramming.components Namespace

SliderAdapter Methods

SliderAdapter.batchValueChanged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void batchValueChanged (
    Object sender,
    ValueChangedEvent e
)
```

Parameters

sender

e

See Also

SliderAdapter Members
SliderAdapter Class
com.mindfusion.diagramming.components Namespace

SliderAdapter.endValueChanged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void endValueChanged (
    Object sender,
    ValueChangedEvent e
)
```

Parameters

sender

e

See Also

SliderAdapter Members
SliderAdapter Class
com.mindfusion.diagramming.components Namespace

SliderAdapter.startValueChanged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void startValueChanged (
    Object sender,
    ValueChangedEvent e
)
```

Parameters

sender

e

See Also

SliderAdapter Members
SliderAdapter Class
com.mindfusion.diagramming.components Namespace

SliderComponent Class

Represents a slider component, which allows users to select a single value or a range of values.

Syntax

Java
`public class SliderComponent` `    extends ContentComponent`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentBase
    com.mindfusion.diagramming.components.ContentComponent
      com.mindfusion.diagramming.components.SliderComponent

See Also

SliderComponent Members
com.mindfusion.diagramming.components Namespace

SliderComponent Members

Represents a slider component, which allows users to select a single value or a range of values.

The following tables list the members exposed by the SliderComponent type.

Public Constructors

	Name	Description
	SliderComponent	Initializes a new instance of the SliderComponent class.

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description
	accept	ComponentBase.accept override. (Inherited from ContentComponent.)

addChild	Implements AddChild.addChild (Inherited from ContentComponent.)
addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
addSliderListener	Registers an event listener.
addSliderRailListener	Registers an event listener.
arrangeComponents	ComponentBase.arrangeComponents override. (Inherited from ContentComponent.)
confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)
contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
createOutlinePath	For internal use. (Inherited from ComponentBase.)
draw	ComponentBase.draw override. (Inherited from ContentComponent.)
find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
getActiveBrush	Gets the brush used to fill the portion of the rail between StartValue and EndValue. This property is relevant only when the slider Type is set to Range.
getBackground	Gets the brush used to fill the background of the slider.
getBorder	Gets the pen used to draw the border of the slider.
getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
getButtonBrush	Gets the brush of the slider's buttons and thumbs.
getButtonBrushHovered	Gets the background brush of the slider's buttons when they are pointed with the mouse.
getButtonBrushPressed	Gets the background brush of the slider's buttons when they are pressed.
getButtonContentColor	Gets the color of the content of the slider's buttons.
getButtonPen	Gets the border pen of the slider's buttons and thumbs.

getButtonPenHovered	Gets the border pen of the slider's buttons when they are pointed with the mouse.
getButtonPenPressed	Gets the border pen of the slider's buttons when they are pressed.
getChildCount	ComponentBase.getChildCount override. (Inherited from ContentComponent.)
getContent	Gets the content of this component. (Inherited from ContentComponent.)
getCursor	ComponentBase.getCursor override.
getDesiredSize	ComponentBase.getDesiredSize override. (Inherited from ContentComponent.)
getDocumentBounds	For internal use. (Inherited from ComponentBase.)
getEndValue	Gets the end value of the slider. This property is relevant only when the slider Type is set to Range.
getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
getMaximum	Gets the maximum value of the rail.
getMinimum	Gets the minimum value of the rail.
getName	Gets the name of the component. (Inherited from ComponentBase.)
getPadding	Gets the padding around this component's content. (Inherited from ContentComponent.)

	getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
	getParentHost	For internal use. (Inherited from ComponentBase.)
	getRailBrush	Gets the background of the slider rail.
	getRailPen	Gets the border pen of the slider rail.
	getStartValue	Gets the start value of the slider. This property is relevant only when the slider Type is set to Range.
	getType	Gets the type of this slider component.
	getValue	Gets the value of the slider. This property is relevant only when the slider Type is set to SingleValue.
	getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
	invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
	invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)
	onContextChanged	(Inherited from ComponentBase.)
	onKeyDown	(Inherited from ComponentBase.)
	onKeyPress	Called when a character key is pressed when this component has the input focus. (Inherited from ComponentBase.)
	onKeyUp	(Inherited from ComponentBase.)
	onMouseMove	Overloaded. (Inherited from ComponentBase.)
	onMouseUp	Overloaded. (Inherited from ComponentBase.)
	onUnitChanged	Invoked when the measure unit of the document containing the component has changed. (Inherited from ComponentBase.)
	raiseValidated	(Inherited from ComponentBase.)
	readExternal	ContentComponent.readExternal override.
	removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)

	removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeSliderListener	Unregisters an event listener.
	removeSliderRailListener	Unregisters an event listener.
	setActiveBrush	Sets the brush used to fill the portion of the rail between StartValue and EndValue. This property is relevant only when the slider Type is set to Range.
	setBackground	Sets the brush used to fill the background of the slider.
	setBorder	Sets the pen used to draw the border of the slider.
	setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	setButtonBrush	Sets the brush of the slider's buttons and thumbs.
	setButtonBrushHovered	Sets the background brush of the slider's buttons when they are pointed with the mouse.
	setButtonBrushPressed	Sets the background brush of the slider's buttons when they are pressed.
	setButtonContentColor	Sets the color of the content of the slider's buttons.
	setButtonPen	Sets the border pen of the slider's buttons and thumbs.
	setButtonPenHovered	Sets the border pen of the slider's buttons when they are pointed with the mouse.
	setButtonPenPressed	Sets the border pen of the slider's buttons when they are pressed.
	setContent	Sets the content of this component. (Inherited from ContentComponent.)
	setEndValue	Sets the end value of the slider. This property is relevant only when the slider Type is set to Range.
	setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
	setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)

	setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	setMaximum	Sets the maximum value of the rail.
	setMinimum	Sets the minimum value of the rail.
	setName	Sets the name of the component. (Inherited from ComponentBase.)
	setPadding	Sets the padding around this component's content. (Inherited from ContentComponent.)
	setParent	For internal use. (Inherited from ComponentBase.)
	setRailBrush	Sets the background of the slider rail.
	setRailPen	Sets the border pen of the slider rail.
	setStartValue	Sets the start value of the slider. This property is relevant only when the slider Type is set to Range.
	setType	Sets the type of this slider component.
	setValue	Sets the value of the slider. This property is relevant only when the slider Type is set to SingleValue.
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	ContentComponent.writeExternal override.

Protected Methods

	Name	Description

	getThickness	Gets the space around the component's content. This space includes padding by default but can be subsequently adjusted as necessary by the deriving classes. (Inherited from ContentComponent.)
	loadFromJson	Deserializes the component from a JsonObject.
	loadFromXml	ContentComponent.loadFromXml override.
	onAddedToParent	Invoked when the component is added to a parent component. (Inherited from ComponentBase.)
	onGotFocus	Overloaded. (Inherited from ComponentBase.)
	onLostFocus	Overloaded. (Inherited from ComponentBase.)
	onMouseDown	Overloaded. (Inherited from ComponentBase.)
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidating	Raises the Validating event. (Inherited from ComponentBase.)
	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed. (Inherited from ComponentBase.)
	saveToJson	Serializes the component into a JsonObject.
	saveToXml	ContentComponent.saveToXml override.
	serializeSubcomponents	ComponentBase.serializeSubcomponents override.

See Also

SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent Constructor

Initializes a new instance of the SliderComponent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public SliderComponent ()
```

See Also

SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent Methods

SliderComponent.addSliderListener Method

Registers an event listener.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addSliderListener (
    SliderListener listener
)
```

Parameters

listener
An object implementing SliderListener interface.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.addSliderRailListener Method

Registers an event listener.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addSliderRailListener (
    SliderRailListener listener
)
```

Parameters

listener
An object implementing SliderRailListener interface.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getActiveBrush Method

Gets the brush used to fill the portion of the rail between StartValue and EndValue. This property is relevant only when the slider Type is set to Range.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getActiveBrush ()
```

Return Value

An instance of the Brush class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getBackground Method

Gets the brush used to fill the background of the slider.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getBackground ()
```

Return Value

An instance of the Brush class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getBorder Method

Gets the pen used to draw the border of the slider.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Pen getBorder ()
```

Return Value

An instance of the Pen class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getButtonBrush Method

Gets the brush of the slider's buttons and thumbs.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getButtonBrush ()
```

Return Value

An instance of the Brush class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getButtonBrushHovered Method

Gets the background brush of the slider's buttons when they are pointed with the mouse.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getButtonBrushHovered ()
```

Return Value

An instance of the Brush class.

See Also

SliderComponent Members
SliderComponent Class

com.mindfusion.diagramming.components Namespace

SliderComponent.getButtonBrushPressed Method

Gets the background brush of the slider's buttons when they are pressed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public Brush getButtonBrushPressed ()
```

Return Value

An instance of the Brush class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getButtonContentColor Method

Gets the color of the content of the slider's buttons.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public Color getButtonContentColor ()
```

Return Value

An instance of the java.awt.Color class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getButtonPen Method

Gets the border pen of the slider's buttons and thumbs.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Pen getButtonPen ()
```

Return Value

An instance of the Pen class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getButtonPenHovered Method

Gets the border pen of the slider's buttons when they are pointed with the mouse.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Pen getButtonPenHovered ()
```

Return Value

An instance of the Pen class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getButtonPenPressed Method

Gets the border pen of the slider's buttons when they are pressed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Pen getButtonPenPressed ()
```

Return Value

An instance of the Pen class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getCursor Method

ComponentBase.getCursor override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public CursorHint getCursor (
    Point2D.Float point
)
```

Parameters

point

Return Value

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getEndValue Method

Gets the end value of the slider. This property is relevant only when the slider Type is set to Range.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getEndValue ()
```

Return Value

The end value of slider's current range.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getMaximum Method

Gets the maximum value of the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getMaximum ()
```

Return Value

The maximum value of slider's range.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getMinimum Method

Gets the minimum value of the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getMinimum ()
```

Return Value

The minimum value of slider's range.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getRailBrush Method

Gets the background of the slider rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getRailBrush ()
```

Return Value

An instance of the Brush class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getRailPen Method

Gets the border pen of the slider rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Pen getRailPen ()
```

Return Value

An instance of the Pen class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getStartValue Method

Gets the start value of the slider. This property is relevant only when the slider Type is set to Range.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getStartValue ()
```

Return Value

The start value of slider's current range.

See Also

SliderComponent Members
SliderComponent Class

SliderComponent.getType Method

Gets the type of this slider component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public SliderComponent.SliderType getType ()
```

Return Value

A member of the SliderType enumeration.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.getValue Method

Gets the value of the slider. This property is relevant only when the slider Type is set to SingleValue.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public float getValue ()
```

Return Value

The current value displayed by slider.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.loadFromJson Method

Deserializes the component from a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the SliderComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.loadFromXml Method

ContentComponent.loadFromXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.readExternal Method

ContentComponent.readExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.removeSliderListener Method

Unregisters an event listener.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void removeSliderListener (
    SliderListener listener
)
```

Parameters

listener
An object implementing SliderListener interface.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.removeSliderRailListener Method

Unregisters an event listener.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void removeSliderRailListener (
    SliderRailListener listener
)
```

Parameters

listener
An object implementing SliderRailListener interface.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.saveToJson Method

Serializes the component into a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the SliderComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.saveToXml Method

ContentComponent.saveToXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.serializeSubcomponents Method

ComponentBase.serializeSubcomponents override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected boolean serializeSubcomponents ()
```

Return Value

Always returns false.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setActiveBrush Method

Sets the brush used to fill the portion of the rail between StartValue and EndValue. This property is relevant only when the slider Type is set to Range.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setActiveBrush (
    Brush value
)
```

Parameters

value
An instance of the Brush class.

See Also

SliderComponent Members
SliderComponent Class

SliderComponent.setBackground Method

Sets the brush used to fill the background of the slider.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setBackground (
    Brush value
)
```

Parameters

value
An instance of the Brush class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setBorder Method

Sets the pen used to draw the border of the slider.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setBorder (
    Pen value
)
```

Parameters

value
An instance of the Pen class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setButtonBrush Method

Sets the brush of the slider's buttons and thumbs.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setButtonBrush (
    Brush value
)
```

Parameters

value
An instance of the Brush class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setButtonBrushHovered Method

Sets the background brush of the slider's buttons when they are pointed with the mouse.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setButtonBrushHovered (
    Brush value
)
```

Parameters

value
An instance of the Brush class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setButtonBrushPressed Method

Sets the background brush of the slider's buttons when they are pressed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void setButtonBrushPressed (
    Brush value
)
```

Parameters

value
An instance of the Brush class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setButtonContentColor Method

Sets the color of the content of the slider's buttons.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void setButtonContentColor (
    Color value
)
```

Parameters

value
An instance of the java.awt.Color class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setButtonPen Method

Sets the border pen of the slider's buttons and thumbs.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
```

```
public void setButtonPen (
    Pen value
)
```

Parameters

value
An instance of the Pen class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setButtonPenHovered Method

Sets the border pen of the slider's buttons when they are pointed with the mouse.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setButtonPenHovered (
    Pen value
)
```

Parameters

value
An instance of the Pen class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setButtonPenPressed Method

Sets the border pen of the slider's buttons when they are pressed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setButtonPenPressed (
    Pen value
)
```

Parameters

value
An instance of the Pen class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setEndValue Method

Sets the end value of the slider. This property is relevant only when the slider Type is set to Range.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setEndValue (
    float value
)
```

Parameters

value
The end value of slider's current range.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setMaximum Method

Sets the maximum value of the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setMaximum (
    float value
)
```

Parameters

value
The maximum value of slider's range.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setMinimum Method

Sets the minimum value of the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setMinimum (
    float value
)
```

Parameters

value
The minimum value of slider's range.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setRailBrush Method

Sets the background of the slider rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setRailBrush (
    Brush value
)
```

Parameters

value
An instance of the Brush class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setRailPen Method

Sets the border pen of the slider rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setRailPen (
    Pen value
)
```

Parameters

value
An instance of the Pen class.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setStartValue Method

Sets the start value of the slider. This property is relevant only when the slider Type is set to Range.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setStartValue (
    float value
)
```

Parameters

value
The start value of slider's current range.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setType Method

Sets the type of this slider component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void setType (
    SliderComponent.SliderType value
)
```

Parameters

value
A member of the SliderType enumeration.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.setValue Method

Sets the value of the slider. This property is relevant only when the slider Type is set to SingleValue.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void setValue (
    float value
)
```

Parameters

value
The current value displayed by slider.

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderComponent.writeExternal Method

ContentComponent.writeExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
```

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

SliderComponent Members
SliderComponent Class
com.mindfusion.diagramming.components Namespace

SliderListener Interface

Defines the events that can be raised by SliderComponent.

Syntax

Java
`public interface SliderListener extends EventListener`

Inheritors

com.mindfusion.diagramming.components.SliderAdapter

See Also

SliderListener Members
com.mindfusion.diagramming.components Namespace

SliderListener Members

Defines the events that can be raised by SliderComponent.

The following tables list the members exposed by the SliderListener type.

Public Methods

	Name	Description
	batchValueChanged	Raised when the slider value has been changed after a sequence of similar changes.
	endValueChanged	Raised when the selected end value has been changed interactively.
	startValueChanged	Raised when the selected start value has been changed interactively.

See Also

SliderListener Methods

SliderListener.batchValueChanged Method

Raised when the slider value has been changed after a sequence of similar changes.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void batchValueChanged (
    Object sender,
    ValueChangedEvent<Float> e
)
```

Parameters

sender
The component that raises the event.

e
An object providing information about the event.

See Also

SliderListener Members
SliderListener Interface
com.mindfusion.diagramming.components Namespace

SliderListener.endValueChanged Method

Raised when the selected end value has been changed interactively.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void endValueChanged (
    Object sender,
    ValueChangedEvent<Float> e
)
```

Parameters

sender
The component that raises the event.

e
An object providing information about the event.

See Also

SliderListener Members
SliderListener Interface
com.mindfusion.diagramming.components Namespace

SliderListener.startValueChanged Method

Raised when the selected start value has been changed interactively.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void startValueChanged (
    Object sender,
    ValueChangedEvent<Float> e
)
```

Parameters

sender
The component that raises the event.

e
An object providing information about the event.

See Also

SliderListener Members
SliderListener Interface
com.mindfusion.diagramming.components Namespace

SliderRailAdapter Class

Provides empty implementations for the methods defined in the SliderRailListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of SliderRailListener.

Syntax

Java

```
public class SliderRailAdapter implements SliderRailListener
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.SliderRailAdapter

See Also

SliderRailAdapter Members

Provides empty implementations for the methods defined in the SliderRailListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of SliderRailListener.

The following tables list the members exposed by the SliderRailAdapter type.

Public Constructors

	Name	Description
	SliderRailAdapter	

Public Methods

	Name	Description
	batchValueChanged	
	valueChanged	

See Also

SliderRailAdapter Class
com.mindfusion.diagramming.components Namespace

SliderRailAdapter Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public SliderRailAdapter ()`

See Also

SliderRailAdapter Class
com.mindfusion.diagramming.components Namespace

SliderRailAdapter Methods

SliderRailAdapter.batchValueChanged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void batchValueChanged (
    Object sender,
    ValueChangedEvent e
)
```

Parameters

sender

e

See Also

SliderRailAdapter Members
SliderRailAdapter Class
com.mindfusion.diagramming.components Namespace

SliderRailAdapter.valueChanged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void valueChanged (
    Object sender,
    ValueChangedEvent e
)
```

Parameters

sender

e

See Also

SliderRailAdapter Members
SliderRailAdapter Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent Class

Represents a slider rail component.

Syntax

```
Java
public class SliderRailComponent extends ContainerComponent
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.components.ComponentBase
com.mindfusion.diagramming.components.ContainerComponent
com.mindfusion.diagramming.components.SliderRailComponent

See Also

SliderRailComponent Members
com.mindfusion.diagramming.components Namespace

SliderRailComponent Members

Represents a slider rail component.

The following tables list the members exposed by the SliderRailComponent type.

Public Constructors

	Name	Description
	SliderRailComponent	Initializes a new instance of the SliderRailComponent class.

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description
	accept	ComponentBase.accept override. (Inherited from ContainerComponent.)
	addChild	Implements AddChild.addChild. (Inherited from ContainerComponent.)
	addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addSliderRailListener	
	arrangeComponents	ContentComponent.ArrangeComponents override.
	confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)

contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
createOutlinePath	For internal use. (Inherited from ComponentBase.)
draw	ComponentBase.Draw override.
find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
getChildCount	Gets the number of child components of this component. (Inherited from ContainerComponent.)
getComponents	Gets the child components of this container. (Inherited from ContainerComponent.)
getCursor	ComponentBase.getCursor override.
getDesiredSize	ContentComponent.GetDesiredSize override.
getDocumentBounds	For internal use. (Inherited from ComponentBase.)
getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
getMaximum	Gets the maximum value of the rail.
getMinimum	Gets the minimum value of the rail.

	getName	Gets the name of the component. (Inherited from ComponentBase.)
	getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
	getParentHost	For internal use. (Inherited from ComponentBase.)
	getRailBrush	Gets the brush used to fill the rail.
	getRailPen	Gets the pen used to draw the rail outline.
	getRailThickness	Gets the rail thickness.
	getThumbBrush	Gets the brush of the rail's thumb.
	getThumbPen	Gets the border pen of the rail's thumb.
	getValue	Gets the currently selected value.
	getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
	invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
	invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)
	loadComponents	Overloaded. (Inherited from ContainerComponent.)
	onContextChanged	(Inherited from ComponentBase.)
	onKeyDown	(Inherited from ComponentBase.)
	onKeyPress	Called when a character key is pressed when this component has the input focus. (Inherited from ComponentBase.)
	onKeyUp	(Inherited from ComponentBase.)
	onMouseDown	ComponentBase.onMouseDown override.
	onMouseMove	ComponentBase.onMouseMove override.
	onMouseUp	ComponentBase.onMouseUp override.
	onUnitChanged	Invoked when the measure unit of the document containing the component has changed. (Inherited from ComponentBase.)
	raiseValidated	(Inherited from ComponentBase.)
	readExternal	ComponentBase.readExternal override. (Inherited from ContainerComponent.)

	removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeSliderRailListener	
	saveComponents	Overloaded. (Inherited from ContainerComponent.)
	setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
	setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	setMaximum	Sets the maximum value of the rail.
	setMinimum	Sets the minimum value of the rail.
	setName	Sets the name of the component. (Inherited from ComponentBase.)
	setParent	For internal use. (Inherited from ComponentBase.)
	setRailBrush	Sets the brush used to fill the rail.

	setRailPen	Sets the pen used to draw the rail outline.
	setRailThickness	Sets the rail thickness.
	setThumbBrush	Sets the brush of the rail's thumb.
	setThumbPen	Sets the border pen of the rail's thumb.
	setValue	Sets the currently selected value.
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	ComponentBase.writeExternal override. (Inherited from ContainerComponent.)

Protected Methods

	Name	Description
	fireOnBatchValueChanged	
	fireOnValueChanged	
	loadFromJson	Deserializes the component from a JsonObject. (Inherited from ContainerComponent.)
	loadFromXml	ComponentBase.loadFromXml override. (Inherited from ContainerComponent.)
	onAddedToParent	Invoked when the component is added to a parent component. (Inherited from ComponentBase.)
	onGotFocus	Overloaded. (Inherited from ComponentBase.)
	onLostFocus	Overloaded. (Inherited from ComponentBase.)
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidating	Raises the Validating event. (Inherited from ComponentBase.)
	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed. (Inherited from

		ComponentBase.)
	saveToJson	Serializes the component into a JsonObject. (Inherited from ContainerComponent.)
	saveToXml	ComponentBase.saveToXml override. (Inherited from ContainerComponent.)
	serializeSubcomponents	ComponentBase.serializeSubcomponents override.

See Also

SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent Constructor

Initializes a new instance of the SliderRailComponent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public SliderRailComponent ()
```

See Also

SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent Methods

SliderRailComponent.addSliderRailListener Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addSliderRailListener (
    SliderRailListener listener
)
```

Parameters

listener

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.arrangeComponents Method

ContentComponent.ArrangeComponents override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void arrangeComponents (
    Rectangle2D.Float availableSpace,
    Graphics2D g2d
)
```

Parameters

availableSpace

g2d

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.draw Method

ComponentBase.Draw override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void draw (
    Graphics2D g2d,
    RenderOptions options
)
```

Parameters

g2d

options

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.fireOnBatchValueChanged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void fireOnBatchValueChanged (
    ValueChangedEvent<Float> e
)
```

Parameters

e

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.fireOnValueChanged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void fireOnValueChanged (
    ValueChangedEvent<Float> e
)
```

Parameters

e

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.getCursor Method

ComponentBase.getCursor override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public CursorHint getCursor (
    Point2D.Float point
)
```

Parameters

point

Return Value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.getDesiredSize Method

ContentComponent.GetDesiredSize override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public XDimension2D.Double getDesiredSize (
    XDimension2D.Double availableSize,
    Graphics2D g2d
)
```

Parameters

availableSize

g2d

Return Value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.getMaximum Method

Gets the maximum value of the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public float getMaximum ()`

Return Value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.getMinimum Method

Gets the minimum value of the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public float getMinimum ()`

Return Value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.getRailBrush Method

Gets the brush used to fill the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public Brush getRailBrush ()`

Return Value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.getRailPen Method

Gets the pen used to draw the rail outline.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Pen getRailPen ()
```

Return Value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.getRailThickness Method

Gets the rail thickness.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getRailThickness ()
```

Return Value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.getThumbBrush Method

Gets the brush of the rail's thumb.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getThumbBrush ()
```

Return Value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.getThumbPen Method

Gets the border pen of the rail's thumb.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Pen getThumbPen ()
```

Return Value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.getValue Method

Gets the currently selected value.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getValue ()
```

Return Value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.onMouseDown Method

ComponentBase.onMouseDown override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseDown (
    Point2D.Float point
)
```

Parameters

point

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.onMouseMove Method

ComponentBase.onMouseMove override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseMove (
    Point2D.Float point
)
```

Parameters

point

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.onMouseUp Method

ComponentBase.onMouseUp override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseUp (
    Point2D.Float point
)
```

Parameters

point

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.removeSliderRailListener Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void removeSliderRailListener (
    SliderRailListener listener
)
```

Parameters

listener

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.serializeSubcomponents Method

ComponentBase.serializeSubcomponents override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected boolean serializeSubcomponents ()
```

Return Value

Always returns false.

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.setMaximum Method

Sets the maximum value of the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setMaximum (
    float value
)
```

Parameters

value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.setMinimum Method

Sets the minimum value of the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setMinimum (
    float value
)
```

Parameters

value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.setRailBrush Method

Sets the brush used to fill the rail.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setRailBrush (
    Brush value
)
```

Parameters

value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.setRailPen Method

Sets the pen used to draw the rail outline.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setRailPen (
    Pen value
)
```

Parameters

value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.setRailThickness Method

Sets the rail thickness.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setRailThickness (
    float value
)
```

Parameters

value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.setThumbBrush Method

Sets the brush of the rail's thumb.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setThumbBrush (
    Brush value
)
```

Parameters

value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.setThumbPen Method

Sets the border pen of the rail's thumb.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setThumbPen (
    Pen value
)
```

Parameters

value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailComponent.setValue Method

Sets the currently selected value.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setValue (
    float value
)
```

Parameters

value

See Also

SliderRailComponent Members
SliderRailComponent Class
com.mindfusion.diagramming.components Namespace

SliderRailListener Interface

Defines the events that can be raised by SliderRailComponent.

Syntax

Java

```
public interface SliderRailListener extends EventListener
```

Inheritors

com.mindfusion.diagramming.components.SliderRailAdapter

See Also

SliderRailListener Members
com.mindfusion.diagramming.components Namespace

SliderRailListener Members

Defines the events that can be raised by SliderRailComponent.

The following tables list the members exposed by the SliderRailListener type.

Public Methods

	Name	Description
	batchValueChanged	
	valueChanged	

See Also

SliderRailListener Interface
com.mindfusion.diagramming.components Namespace

SliderRailListener Methods

SliderRailListener.batchValueChanged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void batchValueChanged (
    Object sender,
    ValueChangedEvent<Float> e
)
```

Parameters

sender

e

See Also

SliderRailListener Members
SliderRailListener Interface
com.mindfusion.diagramming.components Namespace

SliderRailListener.valueChanged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void valueChanged (
    Object sender,
    ValueChangedEvent<Float> e
)
```

Parameters

sender

e

See Also

SliderRailListener Members
SliderRailListener Interface
com.mindfusion.diagramming.components Namespace

SliderType Enumeration

Specifies the type of a slider component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public enum SliderType`

Members

	Member name	Description
	Range	Indicates that the slider can be used to select range of values.
	SingleValue	Indicates that the slider can be used to select a single value.

See Also

com.mindfusion.diagramming.components Namespace

SpinnerComponent Class

Represents a spin edit component.

Syntax

Java
`public class SpinnerComponent` `    extends ContentComponent`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.components.ComponentBase
com.mindfusion.diagramming.components.ContentComponent
com.mindfusion.diagramming.components.SpinnerComponent

See Also

SpinnerComponent Members
com.mindfusion.diagramming.components Namespace

SpinnerComponent Members

Represents a spin edit component.

The following tables list the members exposed by the SpinnerComponent type.

Public Constructors

	Name	Description
	SpinnerComponent	Initializes a new instance of the SpinnerComponent class.

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description
	accept	ComponentBase.accept override. (Inherited from ContentComponent.)
	addChild	Implements AddChild.addChild (Inherited from ContentComponent.)
	addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addSpinnerComponentListener	Registers an event listener.
	arrangeComponents	ComponentBase.arrangeComponents override. (Inherited from ContentComponent.)
	confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)

	contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
	createOutlinePath	For internal use. (Inherited from ComponentBase.)
	draw	ComponentBase.draw override. (Inherited from ContentComponent.)
	find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
	getBackground	Gets the brush used to fill the background of the spinner.
	getBorder	Gets the pen used to draw the border of the spinner.
	getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	getButtonBrush	Gets the brush of the spinner's buttons.
	getButtonBrushHovered	Gets the background brush of the spinner's buttons when they are pointed with the mouse.
	getButtonBrushPressed	Gets the background brush of the spinner's buttons when they are pressed.
	getButtonContentColor	Gets the color of the content of the spinner's buttons.
	getButtonPen	Gets the border pen of the spinner's buttons.
	getButtonPenHovered	Gets the border pen of the spinner's buttons when they are pointed with the mouse.
	getButtonPenPressed	Gets the border pen of the spinner's buttons when they are pressed.
	getChildCount	ComponentBase.getChildCount override. (Inherited from ContentComponent.)
	getContent	Gets the content of this component. (Inherited from ContentComponent.)
	getCursor	Gets the cursor to display when the mouse is at the specified position. (Inherited from ComponentBase.)
	getDesiredSize	ComponentBase.getDesiredSize override. (Inherited from ContentComponent.)
	getDocumentBounds	For internal use. (Inherited from ComponentBase.)
	getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	getFont	Gets the font of the spinner's text.
	getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)

	getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
	getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	getLargeStep	Gets the amount to add or subtract from the spinner value when the page up or page down keys are pressed while the spinner has focus.
	getMaximum	Gets the maximum value of the spinner.
	getMinimum	Gets the minimum value of the spinner.
	getName	Gets the name of the component. (Inherited from ComponentBase.)
	getPadding	Gets the padding around this component's content. (Inherited from ContentComponent.)
	getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
	getParentHost	For internal use. (Inherited from ComponentBase.)
	getSmallStep	Gets the amount to add or subtract from the spinner value when the adjustment buttons are clicked or when the up or down arrow keys are pressed while the spinner has focus.
	getTextColor	Gets the color of the spinner's text.
	getValue	Gets the value displayed in the spinner.
	getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)

	invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
	invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)
	isSpinning	Gets a value indicating whether the spinner should revolve when the value passes beyond the Minimum or Maximum value.
	onContextChanged	(Inherited from ComponentBase.)
	onKeyDown	(Inherited from ComponentBase.)
	onKeyPress	Called when a character key is pressed when this component has the input focus. (Inherited from ComponentBase.)
	onKeyUp	(Inherited from ComponentBase.)
	onMouseMove	Overloaded. (Inherited from ComponentBase.)
	onMouseUp	Overloaded. (Inherited from ComponentBase.)
	onUnitChanged	Invoked when the measure unit of the document containing the component has changed. (Inherited from ComponentBase.)
	raiseValidated	(Inherited from ComponentBase.)
	readExternal	ContentComponent.readExternal override.
	removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeSpinnerComponentListener	Unregisters an event listener.
	setBackground	Sets the brush used to fill the background of the spinner.
	setBorder	Sets the pen used to draw the border of the spinner.
	setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	setButtonBrush	Sets the brush of the spinner's buttons.
	setButtonBrushHovered	Sets the background brush of the spinner's buttons when they are pointed with the mouse.
	setButtonBrushPressed	Sets the background brush of the spinner's buttons when they are pressed.

setButtonContentColor	Sets the color of the content of the spinner's buttons.
setButtonPen	Sets the border pen of the spinner's buttons.
setButtonPenHovered	Sets the border pen of the spinner's buttons when they are pointed with the mouse.
setButtonPenPressed	Sets the border pen of the spinner's buttons when they are pressed.
setContent	Sets the content of this component. (Inherited from ContentComponent.)
setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
setFont	Sets the font of the spinner's text.
setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
setIsSpinning	Sets a value indicating whether the spinner should revolve when the value passes beyond the Minimum or Maximum value.
setLargeStep	Sets the amount to add or subtract from the spinner value when the page up or page down keys are pressed while the spinner has focus.
setMaximum	Sets the maximum value of the spinner.
setMinimum	Sets the minimum value of the spinner.
setName	Sets the name of the component. (Inherited from ComponentBase.)

	setPadding	Sets the padding around this component's content. (Inherited from ContentComponent.)
	setParent	For internal use. (Inherited from ComponentBase.)
	setSmallStep	Sets the amount to add or subtract from the spinner value when the adjustment buttons are clicked or when the up or down arrow keys are pressed while the spinner has focus.
	setTextColor	Sets the color of the spinner's text.
	setValue	Sets the value displayed in the spinner.
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	ContentComponent.writeExternal override.

Protected Methods

	Name	Description
	getThickness	Gets the space around the component's content. This space includes padding by default but can be subsequently adjusted as necessary by the deriving classes. (Inherited from ContentComponent.)
	loadFromJson	Deserializes the component from a JsonObject.
	loadFromXml	ContentComponent.loadFromXml override.
	onAddedToParent	Invoked when the component is added to a parent component. (Inherited from ComponentBase.)
	onGotFocus	Overloaded. (Inherited from ComponentBase.)
	onLostFocus	Overloaded. (Inherited from ComponentBase.)
	onMouseDown	Overloaded. (Inherited from ComponentBase.)
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onValidated	Raises the Validated event. (Inherited from ComponentBase.)

	onValidating	Raises the Validating event. (Inherited from ComponentBase.)
	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed. (Inherited from ComponentBase.)
	saveToJson	Serializes the component into a JsonObject
	saveToXml	ContentComponent.saveToXml override.
	serializeSubcomponents	ComponentBase.serializeSubcomponents override.

See Also

SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent Constructor

Initializes a new instance of the SpinnerComponent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public SpinnerComponent ()
```

See Also

SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent Methods

SpinnerComponent.addSpinnerComponentListener Method

Registers an event listener.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addSpinnerComponentListener (
    SpinnerComponentListener listener
)
```

Parameters

listener

An object implementing SpinnerComponentListener interface.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.getBackground Method

Gets the brush used to fill the background of the spinner.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getBackground ()
```

Return Value

An instance of the Brush class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.getBorder Method

Gets the pen used to draw the border of the spinner.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Pen getBorder ()
```

Return Value

An instance of the Pen class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.getButtonBrush Method

Gets the brush of the spinner's buttons.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getButtonBrush ()
```

Return Value

An instance of the Brush class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.getButtonBrushHovered Method

Gets the background brush of the spinner's buttons when they are pointed with the mouse.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getButtonBrushHovered ()
```

Return Value

An instance of the Brush class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.getButtonBrushPressed Method

Gets the background brush of the spinner's buttons when they are pressed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getButtonBrushPressed ()
```

Return Value

An instance of the Brush class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.getButtonContentColor Method

Gets the color of the content of the spinner's buttons.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Color getButtonContentColor ()
```

Return Value

An instance of the java.awt.Color class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.getButtonPen Method

Gets the border pen of the spinner's buttons.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Pen getButtonPen ()
```

Return Value

An instance of the Pen class.

See Also

SpinnerComponent Members
SpinnerComponent Class

SpinnerComponent.getButtonPenHovered Method

Gets the border pen of the spinner's buttons when they are pointed with the mouse.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public Pen getButtonPenHovered ()
```

Return Value

An instance of the Pen class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.getButtonPenPressed Method

Gets the border pen of the spinner's buttons when they are pressed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public Pen getButtonPenPressed ()
```

Return Value

An instance of the Pen class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.getFont Method

Gets the font of the spinner's text.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Font getFont ()
```

Return Value

An instance of the java.awt.Font class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.getLargeStep Method

Gets the amount to add or subtract from the spinner value when the page up or page down keys are pressed while the spinner has focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getLargeStep ()
```

Return Value

A float value representing the large step.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.getMaximum Method

Gets the maximum value of the spinner.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getMaximum ()
```

Return Value

The maximum spinner value.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.getMinimum Method

Gets the minimum value of the spinner.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getMinimum ()
```

Return Value

The minimum spinner value.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.getSmallStep Method

Gets the amount to add or subtract from the spinner value when the adjustment buttons are clicked or when the up or down arrow keys are pressed while the spinner has focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getSmallStep ()
```

Return Value

A float value representing the small step.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.getTextColor Method

Gets the color of the spinner's text.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public Color getTextColor ()
```

Return Value

An instance of the java.awt.Color class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.getValue Method

Gets the value displayed in the spinner.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public float getValue ()
```

Return Value

The current spinner value.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.isSpinning Method

Gets a value indicating whether the spinner should revolve when the value passes beyond the Minimum or Maximum value.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public boolean isSpinning ()
```

Return Value

true to let the value revolve to the other end of the range, or false otherwise.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.loadFromJson Method

Deserializes the component from a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the SpinnerComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.loadFromXml Method

ContentComponent.loadFromXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.readExternal Method

ContentComponent.readExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.removeSpinnerComponentListener Method

Unregisters an event listener.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void removeSpinnerComponentListener (
    SpinnerComponentListener listener
)
```

Parameters

listener
An object implementing SpinnerComponentListener interface.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.saveToJson Method

Serializes the component into a JsonObject

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the SpinnerComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.saveToXml Method

ContentComponent.saveToXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.serializeSubcomponents Method

ComponentBase.serializeSubcomponents override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected boolean serializeSubcomponents ()
```

Return Value

Always returns false.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setBackground Method

Sets the brush used to fill the background of the spinner.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setBackground (
    Brush value
)
```

Parameters

value
An instance of the Brush class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setBorder Method

Sets the pen used to draw the border of the spinner.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void setBorder (
    Pen value
)
```

Parameters

value
An instance of the Pen class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setButtonBrush Method

Sets the brush of the spinner's buttons.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void setButtonBrush (
    Brush value
)
```

Parameters

value
An instance of the Brush class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setButtonBrushHovered Method

Sets the background brush of the spinner's buttons when they are pointed with the mouse.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setButtonBrushHovered (
    Brush value
)
```

Parameters

value
An instance of the Brush class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setButtonBrushPressed Method

Sets the background brush of the spinner's buttons when they are pressed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setButtonBrushPressed (
    Brush value
)
```

Parameters

value
An instance of the Brush class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setButtonContentColor Method

Sets the color of the content of the spinner's buttons.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setButtonContentColor (
    Color value
)
```

Parameters

value
An instance of the java.awt.Color class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setButtonPen Method

Sets the border pen of the spinner's buttons.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setButtonPen (
    Pen value
)
```

Parameters

value
An instance of the Pen class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setButtonPenHovered Method

Sets the border pen of the spinner's buttons when they are pointed with the mouse.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setButtonPenHovered (
    Pen value
)
```

Parameters

value
An instance of the Pen class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setButtonPenPressed Method

Sets the border pen of the spinner's buttons when they are pressed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setButtonPenPressed (
    Pen value
)
```

Parameters

value
An instance of the Pen class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setFont Method

Sets the font of the spinner's text.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setFont (
    Font value
)
```

Parameters

value
An instance of the java.awt.Font class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setIsSpinning Method

Sets a value indicating whether the spinner should revolve when the value passes beyond the Minimum or Maximum value.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setIsSpinning (
    boolean value
)
```

Parameters

value
true to let the value revolve to the other end of the range, or false otherwise.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setLargeStep Method

Sets the amount to add or subtract from the spinner value when the page up or page down keys are pressed while the spinner has focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setLargeStep (
    float value
)
```

Parameters

value
A float value representing the large step.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setMaximum Method

Sets the maximum value of the spinner.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setMaximum (
    float value
)
```

Parameters

value
The maximum spinner value.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setMinimum Method

Sets the minimum value of the spinner.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setMinimum (
    float value
)
```

Parameters

value
The minimum spinner value.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setSmallStep Method

Sets the amount to add or subtract from the spinner value when the adjustment buttons are clicked or when the up or down arrow keys are pressed while the spinner has focus.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void setSmallStep (
    float value
)
```

Parameters

value
A float value representing the small step.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setTextColor Method

Sets the color of the spinner's text.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void setTextColor (
    Color value
)
```

Parameters

value
An instance of the java.awt.Color class.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.setValue Method

Sets the value displayed in the spinner.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setValue (
    float value
)
```

Parameters

value

The current spinner value.

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponent.writeExternal Method

ContentComponent.writeExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

SpinnerComponent Members
SpinnerComponent Class
com.mindfusion.diagramming.components Namespace

SpinnerComponentListener Interface

Defines the events that can be raised by SpinnerComponent.

Syntax

Java

```
public interface SpinnerComponentListener extends EventListener
```

See Also

SpinnerComponentListener Members

Defines the events that can be raised by SpinnerComponent.

The following tables list the members exposed by the SpinnerComponentListener type.

Public Methods

	Name	Description
	batchValueChanged	
	valueChanged	

See Also

SpinnerComponentListener Interface
com.mindfusion.diagramming.components Namespace

SpinnerComponentListener Methods

SpinnerComponentListener.batchValueChanged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void batchValueChanged (
    Object sender,
    ValueChangedEvent<Float> e
)
```

Parameters

sender

e

See Also

SpinnerComponentListener Members
SpinnerComponentListener Interface
com.mindfusion.diagramming.components Namespace

SpinnerComponentListener.valueChanged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
void valueChanged (
    Object sender,
    ValueChangedEvent<Float> e
)
```

Parameters

sender

e

See Also

SpinnerComponentListener Members
SpinnerComponentListener Interface
com.mindfusion.diagramming.components Namespace

StackPanel Class

Represents a container which arranges its children either vertically or horizontally.

Syntax

```
Java
public class StackPanel extends ContainerComponent
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentBase
    com.mindfusion.diagramming.components.ContainerComponent
      com.mindfusion.diagramming.components.StackPanel

See Also

StackPanel Members
com.mindfusion.diagramming.components Namespace

StackPanel Members

Represents a container which arranges its children either vertically or horizontally.

The following tables list the members exposed by the StackPanel type.

Public Constructors

	Name	Description
	StackPanel	Initializes a new instance of the StackPanel class.

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description
	accept	ComponentBase.accept override. (Inherited from ContainerComponent.)
	addChild	Implements AddChild.addChild. (Inherited from ContainerComponent.)
	addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	arrangeComponents	ContainerComponent.arrangeComponents override.
	confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)
	contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
	createOutlinePath	For internal use. (Inherited from ComponentBase.)
	draw	ComponentBase.draw override. (Inherited from ContainerComponent.)
	find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
	getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	getChildCount	Gets the number of child components of this component. (Inherited from ContainerComponent.)
	getComponents	Gets the child components of this container. (Inherited from ContainerComponent.)
	getCursor	Gets the cursor to display when the mouse is at the specified position. (Inherited from ComponentBase.)
	getDesiredSize	ContainerComponent.getDesiredSize override.
	getDocumentBounds	For internal use. (Inherited from ComponentBase.)

	getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
	getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	getName	Gets the name of the component. (Inherited from ComponentBase.)
	getOrientation	Gets the orientation of the panel.
	getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
	getParentHost	For internal use. (Inherited from ComponentBase.)
	getSpacing	Gets the distance between adjacent items in the panel.
	getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
	invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
	invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)
	loadComponents	Overloaded. (Inherited from ContainerComponent.)

	onContextChanged	(Inherited from ComponentBase.)
	onKeyDown	(Inherited from ComponentBase.)
	onKeyPress	Called when a character key is pressed when this component has the input focus. (Inherited from ComponentBase.)
	onKeyUp	(Inherited from ComponentBase.)
	onMouseMove	Overloaded. (Inherited from ComponentBase.)
	onMouseUp	Overloaded. (Inherited from ComponentBase.)
	onUnitChanged	Invoked when the measure unit of the document containing the component has changed. (Inherited from ComponentBase.)
	raiseValidated	(Inherited from ComponentBase.)
	readExternal	ContainerComponent.readExternal override.
	removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	saveComponents	Overloaded. (Inherited from ContainerComponent.)
	setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
	setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)

	setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	setName	Sets the name of the component. (Inherited from ComponentBase.)
	setOrientation	Sets the orientation of the panel.
	setParent	For internal use. (Inherited from ComponentBase.)
	setSpacing	Sets the distance between adjacent items in the panel.
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	ContainerComponent.writeExternal override.

Protected Methods

	Name	Description
	loadFromJson	Deserializes the component from a JsonObject.
	loadFromXml	ContainerComponent.loadFromXml override.
	onAddedToParent	Invoked when the component is added to a parent component. (Inherited from ComponentBase.)
	onGotFocus	Overloaded. (Inherited from ComponentBase.)
	onLostFocus	Overloaded. (Inherited from ComponentBase.)
	onMouseDown	Overloaded. (Inherited from ComponentBase.)
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)

	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidating	Raises the Validating event. (Inherited from ComponentBase.)
	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed. (Inherited from ComponentBase.)
	saveToJson	Serializes the component into a JsonObject
	saveToXml	ContainerComponent.saveToXml override.
	serializeSubcomponents	Invoked to query whether the underlying component structure should be automatically serialized or serialized by the user. (Inherited from ComponentBase.)

See Also

StackPanel Class
com.mindfusion.diagramming.components Namespace

StackPanel Constructor

Initializes a new instance of the StackPanel class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public StackPanel ()
```

See Also

StackPanel Class
com.mindfusion.diagramming.components Namespace

StackPanel Methods

StackPanel.arrangeComponents Method

ContainerComponent.arrangeComponents override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void arrangeComponents (
    Rectangle2D.Float availableSpace,
    Graphics2D g2d
)
```

Parameters

availableSpace

g2d

See Also

StackPanel Members
StackPanel Class
com.mindfusion.diagramming.components Namespace

StackPanel.getDesiredSize Method

ContainerComponent.getDesiredSize override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public XDimension2D.Double getDesiredSize (
    XDimension2D.Double availableSize,
    Graphics2D g2d
)
```

Parameters

availableSize

g2d

Return Value

See Also

StackPanel Members
StackPanel Class
com.mindfusion.diagramming.components Namespace

StackPanel.getOrientation Method

Gets the orientation of the panel.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Orientation getOrientation ()
```

Return Value

A member of the ComponentBase.Orientation enumeration.

See Also

StackPanel Members
StackPanel Class
com.mindfusion.diagramming.components Namespace

StackPanel.getSpacing Method

Gets the distance between adjacent items in the panel.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public float getSpacing ()
```

Return Value

A floating point value specifying the distance in the current unit of measure.

See Also

StackPanel Members
StackPanel Class
com.mindfusion.diagramming.components Namespace

StackPanel.loadFromJson Method

Deserializes the component from a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the StackPanel data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

StackPanel Members
StackPanel Class
com.mindfusion.diagramming.components Namespace

StackPanel.loadFromXml Method

ContainerComponent.loadFromXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

StackPanel Members
StackPanel Class
com.mindfusion.diagramming.components Namespace

StackPanel.readExternal Method

ContainerComponent.readExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

StackPanel Members
StackPanel Class
com.mindfusion.diagramming.components Namespace

StackPanel.saveToJson Method

Serializes the component into a JsonObject

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the StackPanel data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

StackPanel Members
StackPanel Class
com.mindfusion.diagramming.components Namespace

StackPanel.saveToXml Method

ContainerComponent.saveToXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

StackPanel Members
StackPanel Class
com.mindfusion.diagramming.components Namespace

StackPanel.setOrientation Method

Sets the orientation of the panel.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value
A member of the ComponentBase.Orientation enumeration. The default is Vertical.

See Also

StackPanel Members
StackPanel Class
com.mindfusion.diagramming.components Namespace

StackPanel.setSpacing Method

Sets the distance between adjacent items in the panel.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setSpacing (
    float value
)
```

Parameters

value
A floating point value specifying the distance in the current unit of measure. The default is 0.

See Also

StackPanel Members
StackPanel Class
com.mindfusion.diagramming.components Namespace

StackPanel.writeExternal Method

ContainerComponent.writeExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

`public void writeExternal (`
`  ObjectOutput out`
`)`

Parameters

out

See Also

StackPanel Members
StackPanel Class
com.mindfusion.diagramming.components Namespace

TextComponent Class

Represents a component displaying static unformatted text.

Syntax

Java
`public class TextComponent extends ComponentBase`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ComponentBase
    com.mindfusion.diagramming.components.TextComponent

See Also

TextComponent Members
com.mindfusion.diagramming.components Namespace

TextComponent Members

Represents a component displaying static unformatted text.

The following tables list the members exposed by the TextComponent type.

Public Constructors

	Name	Description
	TextComponent	Initializes a new instance of the TextComponent class.

Protected Fields

	Name	Description

	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description
	addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	arrangeComponents	Recursively arranges the child components, within the specified space and using the specified graphics for measurement purposes. (Inherited from ComponentBase.)
	confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)
	contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
	createOutlinePath	For internal use. (Inherited from ComponentBase.)
	draw	ComponentBase.draw override.
	find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
	getBackground	Gets the brush used to fill the background of the component.
	getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	getChildCount	Gets the number of child components of this component. (Inherited from ComponentBase.)
	getCursor	Gets the cursor to display when the mouse is at the specified position. (Inherited from ComponentBase.)
	getDesiredSize	ComponentBase.getDesiredSize override.
	getDocumentBounds	For internal use. (Inherited from ComponentBase.)
	getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	getFont	Gets the font of the displayed text.
	getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel.

		(Inherited from ComponentBase.)
	getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
	getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	getName	Gets the name of the component. (Inherited from ComponentBase.)
	getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
	getParentHost	For internal use. (Inherited from ComponentBase.)
	getText	Gets the text displayed by the component.
	getTextColor	Gets the color of the displayed text.
	getTextFormat	Gets the formatting of the displayed text.
	getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
	invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
	invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)
	onContextChanged	(Inherited from ComponentBase.)
	onKeyDown	(Inherited from ComponentBase.)
	onKeyPress	Called when a character key is pressed when this component has the input focus. (Inherited from ComponentBase.)

onKeyUp	(Inherited from ComponentBase.)
onMouseMove	Overloaded. (Inherited from ComponentBase.)
onMouseUp	Overloaded. (Inherited from ComponentBase.)
onUnitChanged	Invoked when the measure unit of the document containing the component has changed. (Inherited from ComponentBase.)
raiseValidated	(Inherited from ComponentBase.)
readExternal	ComponentBase.readExternal override.
removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
setBackground	Sets the brush used to fill the background of the component.
setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
setFont	Sets the font of the displayed text.
setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)

	setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	setName	Sets the name of the component. (Inherited from ComponentBase.)
	setParent	For internal use. (Inherited from ComponentBase.)
	setText	Sets the text displayed by the component.
	setTextColor	Sets the color of the displayed text.
	setTextFormat	Sets the formatting of the displayed text.
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	ComponentBase.writeExternal override.

Protected Methods

	Name	Description
	loadFromJson	Deserializes the component from a JsonObject.
	loadFromXml	ComponentBase.loadFromXml override.
	onAddedToParent	Invoked when the component is added to a parent component. (Inherited from ComponentBase.)
	onGotFocus	Overloaded. (Inherited from ComponentBase.)
	onLostFocus	Overloaded. (Inherited from ComponentBase.)
	onMouseDown	Overloaded. (Inherited from ComponentBase.)
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidating	Raises the Validating event. (Inherited from ComponentBase.)

	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed. (Inherited from ComponentBase.)
	saveToJson	Serializes the component into a JsonObject.
	saveToXml	ComponentBase.saveToXml override.
	serializeSubcomponents	Invoked to query whether the underlying component structure should be automatically serialized or serialized by the user. (Inherited from ComponentBase.)

See Also

TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent Constructor

Initializes a new instance of the TextComponent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public TextComponent ()
```

See Also

TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent Methods

TextComponent.draw Method

ComponentBase.draw override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void draw (
    Graphics2D g2d,
    RenderOptions options
)
```

Parameters

g2d

options

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.getBackground Method

Gets the brush used to fill the background of the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Brush getBackground ()
```

Return Value

An instance of a Brush-derived class.

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.getDesiredSize Method

ComponentBase.getDesiredSize override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public XDimension2D.Double getDesiredSize (
    XDimension2D.Double availableSize,
    Graphics2D g2d
)
```

Parameters

availableSize

g2d

Return Value

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.getFont Method

Gets the font of the displayed text.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Font getFont ()
```

Return Value

A Font object. The default is Arial, 10.

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.getText Method

Gets the text displayed by the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public String getText ()
```

Return Value

A String value.

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.getTextColor Method

Gets the color of the displayed text.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public Color getTextColor ()
```

Return Value

A Color object.

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.getTextFormat Method

Gets the formatting of the displayed text.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public TextFormat getTextFormat ()
```

Return Value

A TextFormat object.

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.loadFromJson Method

Deserializes the component from a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the TextComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.loadFromXml Method

ComponentBase.loadFromXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void loadFromXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.readExternal Method

ComponentBase.readExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.saveToJson Method

Serializes the component into a JsonObject.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
An JsonObject containing the TextComponent data

context
An JsonPersistContext object providing information about the serialization process and some helper methods.

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.saveToXml Method

ComponentBase.saveToXml override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void saveToXml (
    Element xmlElement,
    XmlPersistContext context
)
```

Parameters

xmlElement

context

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.setBackground Method

Sets the brush used to fill the background of the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setBackground (
    Brush value
)
```

Parameters

value
An instance of a Brush-derived class. The default is null.

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.setFont Method

Sets the font of the displayed text.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setFont (
    Font value
)
```

Parameters

value
A Font object. The default is Arial, 10.

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.setText Method

Sets the text displayed by the component.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setText (
    String value
)
```

Parameters

value
A String value.

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.setTextColor Method

Sets the color of the displayed text.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setTextColor (
    Color value
)
```

Parameters

value
A Color object. The default is Black.

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.setTextFormat Method

Sets the formatting of the displayed text.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java

public void setTextFormat (
    TextFormat value
)
```

Parameters

value
A TextFormat object.

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextComponent.writeExternal Method

ComponentBase.writeExternal override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java

public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

TextComponent Members
TextComponent Class
com.mindfusion.diagramming.components Namespace

TextLayout Class

Encapsulates the layouting information for the text in edit components.

Syntax

Java
`public class TextLayout implements AutoCloseable`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.TextLayout

See Also

TextLayout Members
com.mindfusion.diagramming.components Namespace

TextLayout Members

Encapsulates the layouting information for the text in edit components.

The following tables list the members exposed by the TextLayout type.

Public Constructors

	Name	Description
	TextLayout	Initializes a new instance of the TextLayout class.

Public Methods

	Name	Description
	close	
	draw	
	getCharacterIndexFromPoint	Retrieves the character at the specified position.
	getCharBounds	Gets the bounding rectangle of the character with the specified index.
	getDesiredSize	
	getEndOfLine	Retrieves the index of the last character of the specified line.
	getFontHeight	Gets the height of the underlying font.
	getLineCount	Returns the number of lines in the layout.
	getLineFromCharacterIndex	Retrieves the line containing the character with the specified index.
	getRelativeCharacterIndex	Gets the index of the character, corresponding to the position of the specified character from the line above or the line below the line containing the character.
	getStartOfLine	Retrieves the index of the first character of the specified line.
	getText	
	getTextWrapping	

	invalidate	Invalidates the text layout. Subsequent calls to various layout methods will cause a new layout pass.
	setText	
	setTextWrapping	

See Also

TextLayout Class
com.mindfusion.diagramming.components Namespace

TextLayout Constructor

Initializes a new instance of the TextLayout class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public TextLayout (
    Graphics2D g2d,
    Font font
)
```

Parameters

g2d

font

See Also

TextLayout Class
com.mindfusion.diagramming.components Namespace

TextLayout Methods

TextLayout.close Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void close ()
```

See Also

TextLayout.draw Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void draw (
    Graphics2D g2d,
    Font font,
    Color color,
    Rectangle2D.Float bounds,
    boolean drawSelection,
    int selectionStart,
    int selectionLength,
    Color selectionColor,
    boolean drawCaret,
    int firstLine
)
```

Parameters

g2d

font

color

bounds

drawSelection

selectionStart

selectionLength

selectionColor

drawCaret

firstLine

See Also

TextLayout Members
TextLayout Class
com.mindfusion.diagramming.components Namespace

TextLayout.getCharacterIndexFromPoint Method

Retrieves the character at the specified position.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public int getCharacterIndexFromPoint (
    Rectangle2D.Float bounds,
    Point2D.Float position,
    int firstLine
)
```

Parameters

bounds

position

firstLine

Return Value

See Also

TextLayout Members
TextLayout Class
com.mindfusion.diagramming.components Namespace

TextLayout.getCharBounds Method

Gets the bounding rectangle of the character with the specified index.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public Rectangle2D.Float getCharBounds (
    int characterIndex,
    Rectangle2D.Float bounds
)
```

Parameters

characterIndex

bounds

Return Value

See Also

TextLayout Members
TextLayout Class
com.mindfusion.diagramming.components Namespace

TextLayout.getDesiredSize Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public XDimension2D.Double getDesiredSize (
    XDimension2D.Double availableSize,
    Graphics2D g2d
)
```

Parameters

availableSize

g2d

Return Value

See Also

TextLayout Members
TextLayout Class
com.mindfusion.diagramming.components Namespace

TextLayout.getEndOfLine Method

Retrieves the index of the last character of the specified line.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public int getEndOfLine (
    Rectangle2D.Float bounds,
    int lineIndex
)
```

Parameters

bounds

lineIndex

Return Value

See Also

TextLayout Members
TextLayout Class
com.mindfusion.diagramming.components Namespace

TextLayout.getFontHeight Method

Gets the height of the underlying font.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public float getFontHeight ()
```

Return Value

See Also

TextLayout Members
TextLayout Class
com.mindfusion.diagramming.components Namespace

TextLayout.getLineCount Method

Returns the number of lines in the layout.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public int getLineCount (
    Rectangle2D.Float bounds
)
```

Parameters

bounds

Return Value

See Also

TextLayout Members
TextLayout Class
com.mindfusion.diagramming.components Namespace

TextLayout.getLineFromCharacterIndex Method

Retrieves the line containing the character with the specified index.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public int getLineFromCharacterIndex (
    Rectangle2D.Float bounds,
    int characterIndex
)
```

Parameters

bounds

characterIndex

Return Value

See Also

TextLayout Members
TextLayout Class
com.mindfusion.diagramming.components Namespace

TextLayout.getRelativeCharacterIndex Method

Gets the index of the character, corresponding to the position of the specified character from the line above or the line below the line containing the character.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public int getRelativeCharacterIndex (
    Rectangle2D.Float bounds,
    int characterIndex,
    boolean up
)
```

Parameters

bounds

characterIndex

up

Return Value

See Also

TextLayout Members
TextLayout Class
com.mindfusion.diagramming.components Namespace

TextLayout.getStartOfLine Method

Retrieves the index of the first character of the specified line.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public int getStartOfLine (
    Rectangle2D.Float bounds,
    int lineIndex
)
```

Parameters

bounds

lineIndex

Return Value

See Also

TextLayout Members
TextLayout Class
com.mindfusion.diagramming.components Namespace

TextLayout.getText Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public String getText ()
```

Return Value

See Also

TextLayout Members
TextLayout Class
com.mindfusion.diagramming.components Namespace

TextLayout.getTextWrapping Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public TextWrapping getTextWrapping ()
```

Return Value

See Also

TextLayout Members
TextLayout Class

TextLayout.invalidate Method

Invalidates the text layout. Subsequent calls to various layout methods will cause a new layout pass.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void invalidate ()
```

See Also

TextLayout Members
TextLayout Class
com.mindfusion.diagramming.components Namespace

TextLayout.setText Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setText (
    String value
)
```

Parameters

value

See Also

TextLayout Members
TextLayout Class
com.mindfusion.diagramming.components Namespace

TextLayout.setTextWrapping Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setTextWrapping (
    TextWrapping value
)
```

Parameters

value

See Also

TextLayout Members
TextLayout Class
com.mindfusion.diagramming.components Namespace

TextWrapping Enumeration

Specifies the type of text wrapping.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public enum TextWrapping`

Members

	Member name	Description
	Character	Indicates wrapping at the nearest character.
	None	Indicates that text wrapping is disabled.
	Word	Indicates wrapping at the nearest word.

See Also

com.mindfusion.diagramming.components Namespace

ThumbComponent Class

Represents a thumb subcomponent in slider or similar components.

Syntax

Java
`public class ThumbComponent extends ShapeComponent`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.components.ComponentBase
com.mindfusion.diagramming.components.ShapeComponent
com.mindfusion.diagramming.components.ThumbComponent

See Also

ThumbComponent Members
com.mindfusion.diagramming.components Namespace

ThumbComponent Members

Represents a thumb subcomponent in slider or similar components.

The following tables list the members exposed by the ThumbComponent type.

Public Constructors

	Name	Description
	ThumbComponent	Initializes a new instance of the ThumbComponent class.

Protected Fields

	Name	Description
	eventListenerList	(Inherited from ComponentBase.)

Public Methods

	Name	Description
	addComponentEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentMouseEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addComponentValidationEventListener	Adds the specified component listener to receive events from this component. (Inherited from ComponentBase.)
	addDragEndedListener	
	addDraggedListener	
	addDragStartedListener	
	arrangeComponents	Recursively arranges the child components, within the specified space and using the specified graphics for measurement purposes. (Inherited from ComponentBase.)
	confirmValidating	Confirms validation by raising the Validating event. (Inherited from ComponentBase.)

	contains	Checks if the specified component is contained in the hierarchy defined by the current component. (Inherited from ComponentBase.)
	createOutlinePath	ComponentBase.createOutlinePath override. (Inherited from ShapeComponent.)
	draw	ShapeComponent.draw override.
	find	Returns the component with the specified name within the hierarchy defined by the current component. (Inherited from ComponentBase.)
	getBounds	Gets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	getBrush	Gets the brush used to fill the component. (Inherited from ShapeComponent.)
	getChildCount	Gets the number of child components of this component. (Inherited from ComponentBase.)
	getCursor	ComponentBase.getCursor override.
	getDesiredSize	Gets the desired size of this component in case the width and/or height have not been explicitly specified. (Inherited from ComponentBase.)
	getDocumentBounds	For internal use. (Inherited from ComponentBase.)
	getFocusable	Gets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	getGridColumn	Gets the index of the grid column this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getGridRow	Gets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	getHeight	Gets the explicit height of this component. (Inherited from ComponentBase.)
	getHorizontalAlignment	Gets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getIsEnabled	Gets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	getIsFocused	Gets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	getIsHitTestVisible	Gets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	getIsInteractive	Gets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)

	getIsOutline	Gets a value indicating whether this component defines the outline of its host. (Inherited from ShapeComponent.)
	getName	Gets the name of the component. (Inherited from ComponentBase.)
	getParent	Gets the parent component, if the current component is hosted. (Inherited from ComponentBase.)
	getParentHost	For internal use. (Inherited from ComponentBase.)
	getPen	Gets the pen used to stroke the outline of the component. (Inherited from ShapeComponent.)
	getShape	Gets the Shape object defining the outline of the component. (Inherited from ShapeComponent.)
	getVerticalAlignment	Gets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	getVisible	Gets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	getWidth	Gets the explicit width of this component. (Inherited from ComponentBase.)
	invalidate	Invalidates the visual appearance of the component. (Inherited from ComponentBase.)
	invalidateLayout	Invalidates the layout of this component and all its children. (Inherited from ComponentBase.)
	onContextChanged	(Inherited from ComponentBase.)
	onKeyDown	(Inherited from ComponentBase.)
	onKeyPress	Called when a character key is pressed when this component has the input focus. (Inherited from ComponentBase.)
	onKeyUp	(Inherited from ComponentBase.)
	onMouseDown	ComponentBase.onMouseDown override.
	onMouseMove	ComponentBase.onMouseMove override.
	onMouseUp	ComponentBase.onMouseUp override.
	onUnitChanged	Invoked when the measure unit of the document containing the component has changed. (Inherited from ComponentBase.)
	raiseValidated	(Inherited from ComponentBase.)
	readExternal	ComponentBase.readExternal override. (Inherited from ShapeComponent.)
	removeComponentEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)

	removeComponentMouseEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeComponentValidationEventListener	Removes the specified component listener to not receive events from this component. (Inherited from ComponentBase.)
	removeDragEndedListener	
	removeDraggedListener	
	removeDragStartedListener	
	setBounds	Sets the calculated bounds of this component relative to its parent. (Inherited from ComponentBase.)
	setBrush	Sets the brush used to fill the component. (Inherited from ShapeComponent.)
	setFocusable	Sets a value indicating whether the component can receive the input focus. (Inherited from ComponentBase.)
	setGridColumn	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setGridRow	Sets the index of the grid row this component will be associated with when added to a GridPanel. (Inherited from ComponentBase.)
	setHeight	Sets the explicit height of this component. (Inherited from ComponentBase.)
	setHorizontalAlignment	Sets the horizontal alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setIsEnabled	Sets a value indicating whether the component is enabled. (Inherited from ComponentBase.)
	setIsFocused	Sets a value indicating whether this component currently holds the input focus. (Inherited from ComponentBase.)
	setIsHitTestVisible	Sets a value indicating whether this component and all its children are subject to hit-testing operations. (Inherited from ComponentBase.)
	setIsInteractive	Sets a value indicating whether this component can be interacted with. (Inherited from ComponentBase.)
	setIsOutline	Sets a value indicating whether this component defines the outline of its host. (Inherited from ShapeComponent.)
	setName	Sets the name of the component. (Inherited from ComponentBase.)
	setParent	For internal use. (Inherited from ComponentBase.)

	setPen	Sets the pen used to stroke the outline of the component. (Inherited from ShapeComponent.)
	setShape	Sets the Shape object defining the outline of the component. (Inherited from ShapeComponent.)
	setVerticalAlignment	Sets the vertical alignment of this component relative to its parent. (Inherited from ComponentBase.)
	setVisible	Sets a value indicating whether the component is visible. (Inherited from ComponentBase.)
	setWidth	Sets the explicit width of this component. (Inherited from ComponentBase.)
	toDocument	Converts a point from local to document coordinates. (Inherited from ComponentBase.)
	toLocal	Converts a point from document to local coordinates. (Inherited from ComponentBase.)
	toParent	Converts a point from local coordinates to the specified parent's coordinates. (Inherited from ComponentBase.)
	writeExternal	ComponentBase.writeExternal override. (Inherited from ShapeComponent.)

Protected Methods

	Name	Description
	createGeneralPath	Creates a GeneralPath object representing the shape. (Inherited from ShapeComponent.)
	fireOnDragEnded	
	fireOnDragged	
	fireOnDragStarted	
	loadFromJson	Deserializes the component from a JsonObject. (Inherited from ShapeComponent.)
	loadFromXml	ComponentBase.loadFromXml override. (Inherited from ShapeComponent.)
	onAddedToParent	Invoked when the component is added to a parent component. (Inherited from ComponentBase.)
	onGotFocus	Overloaded. (Inherited from ComponentBase.)
	onLostFocus	Overloaded. (Inherited from ComponentBase.)
	onRemovedFromParent	Invoked when the component is removed from a parent component. (Inherited from ComponentBase.)
	onValidated	Raises the Validated event. (Inherited from ComponentBase.)
	onValidating	Raises the Validating event. (Inherited from ComponentBase.)

	onZoomChanged	Invoked when the zoom factor of the document containing the component has changed. (Inherited from ComponentBase.)
	saveToJson	Serializes the component into a JsonObject. (Inherited from ShapeComponent.)
	saveToXml	ComponentBase.saveToXml override. (Inherited from ShapeComponent.)
	serializeSubcomponents	Invoked to query whether the underlying component structure should be automatically serialized or serialized by the user. (Inherited from ComponentBase.)

See Also

ThumbComponent Class
com.mindfusion.diagramming.components Namespace

ThumbComponent Constructor

Initializes a new instance of the ThumbComponent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ThumbComponent ()
```

See Also

ThumbComponent Class
com.mindfusion.diagramming.components Namespace

ThumbComponent Methods

ThumbComponent.addDragEndedListener Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addDragEndedListener (
    ThumbComponentListener listener
)
```

Parameters

listener

See Also

ThumbComponent Members
ThumbComponent Class
com.mindfusion.diagramming.components Namespace

ThumbComponent.addDraggedListener Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addDraggedListener (
    ThumbComponentListener listener
)
```

Parameters

listener

See Also

ThumbComponent Members
ThumbComponent Class
com.mindfusion.diagramming.components Namespace

ThumbComponent.addDragStartedListener Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void addDragStartedListener (
    ThumbComponentListener listener
)
```

Parameters

listener

See Also

ThumbComponent Members
ThumbComponent Class
com.mindfusion.diagramming.components Namespace

ThumbComponent.draw Method

ShapeComponent.draw override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void draw (
    Graphics2D g2d,
    RenderOptions options
)
```

Parameters

g2d

options

See Also

ThumbComponent Members
ThumbComponent Class
com.mindfusion.diagramming.components Namespace

ThumbComponent.fireOnDragEnded Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
protected void fireOnDragEnded (
    ThumbDragEvent e
)
```

Parameters

e

See Also

ThumbComponent Members
ThumbComponent Class
com.mindfusion.diagramming.components Namespace

ThumbComponent.fireOnDragged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
protected void fireOnDragged (
    ThumbDragEvent e
)
```

Parameters

e

See Also

ThumbComponent Members
ThumbComponent Class
com.mindfusion.diagramming.components Namespace

ThumbComponent.fireOnDragStarted Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
protected void fireOnDragStarted (
    ThumbDragEvent e
)
```

Parameters

e

See Also

ThumbComponent Members
ThumbComponent Class
com.mindfusion.diagramming.components Namespace

ThumbComponent.getCursor Method

ComponentBase.getCursor override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public CursorHint getCursor (
    Point2D.Float point
)
```

Parameters

point

Return Value

See Also

ThumbComponent Members
ThumbComponent Class
com.mindfusion.diagramming.components Namespace

ThumbComponent.onMouseDown Method

ComponentBase.onMouseDown override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseDown (
    Point2D.Float point
)
```

Parameters

point

See Also

ThumbComponent Members
ThumbComponent Class
com.mindfusion.diagramming.components Namespace

ThumbComponent.onMouseMove Method

ComponentBase.onMouseMove override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseMove (
    Point2D.Float point
)
```

Parameters

point
A Point2D.Float instance that specifies the current mouse position.

See Also

ThumbComponent Members
ThumbComponent Class
com.mindfusion.diagramming.components Namespace

ThumbComponent.onMouseUp Method

ComponentBase.onMouseUp override.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void onMouseUp (
    Point2D.Float point
)
```

Parameters

point

See Also

ThumbComponent Members
ThumbComponent Class
com.mindfusion.diagramming.components Namespace

ThumbComponent.removeDragEndedListener Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void removeDragEndedListener (
    ThumbComponentListener listener
)
```

Parameters

listener

See Also

ThumbComponent Members
ThumbComponent Class
com.mindfusion.diagramming.components Namespace

ThumbComponent.removeDraggedListener Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void removeDraggedListener (
    ThumbComponentListener listener
)
```

Parameters

listener

See Also

ThumbComponent Members
ThumbComponent Class
com.mindfusion.diagramming.components Namespace

ThumbComponent.removeDragStartedListener Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void removeDragStartedListener (
    ThumbComponentListener listener
)
```

Parameters

listener

See Also

ThumbComponent Members
ThumbComponent Class
com.mindfusion.diagramming.components Namespace

ThumbComponentAdapter Class

Provides empty implementations for the methods defined in the ThumbComponentListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of ThumbComponentListener.

Syntax

Java
`public class ThumbComponentAdapter implements ThumbComponentListener`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ThumbComponentAdapter

See Also

ThumbComponentAdapter Members
com.mindfusion.diagramming.components Namespace

ThumbComponentAdapter Members

Provides empty implementations for the methods defined in the ThumbComponentListener interface. This lets you override only the handlers for the events you are interested in, instead of implementing all methods of ThumbComponentListener.

The following tables list the members exposed by the ThumbComponentAdapter type.

Public Constructors

	Name	Description
	ThumbComponentAdapter	

Public Methods

	Name	Description
	dragEnded	
	dragged	
	dragStarted	

See Also

ThumbComponentAdapter Class
com.mindfusion.diagramming.components Namespace

ThumbComponentAdapter Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public ThumbComponentAdapter ()`

See Also

ThumbComponentAdapter Class
com.mindfusion.diagramming.components Namespace

ThumbComponentAdapter Methods

ThumbComponentAdapter.dragEnded Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void dragEnded (
    Object sender,
    ThumbDragEvent e
)
```

Parameters

sender

e

See Also

ThumbComponentAdapter Members
ThumbComponentAdapter Class
com.mindfusion.diagramming.components Namespace

ThumbComponentAdapter.dragged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void dragged (
    Object sender,
    ThumbDragEvent e
)
```

Parameters

sender

e

See Also

ThumbComponentAdapter Members
ThumbComponentAdapter Class
com.mindfusion.diagramming.components Namespace

ThumbComponentAdapter.dragStarted Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void dragStarted (
    Object sender,
    ThumbDragEvent e
)
```

Parameters

sender

e

See Also

ThumbComponentAdapter Members
ThumbComponentAdapter Class
com.mindfusion.diagramming.components Namespace

ThumbComponentListener Interface

Defines the events that can be raised by ThumbComponent.

Syntax

Java

```
public interface ThumbComponentListener extends EventListener
```

Inheritors

com.mindfusion.diagramming.components.ThumbComponentAdapter

See Also

ThumbComponentListener Members
com.mindfusion.diagramming.components Namespace

ThumbComponentListener Members

Defines the events that can be raised by ThumbComponent.

The following tables list the members exposed by the ThumbComponentListener type.

Public Methods

	Name	Description
	dragEnded	
	dragged	
	dragStarted	

See Also

ThumbComponentListener Interface
com.mindfusion.diagramming.components Namespace

ThumbComponentListener Methods

ThumbComponentListener.dragEnded Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void dragEnded (
    Object sender,
    ThumbDragEvent e
)
```

Parameters

sender

e

See Also

ThumbComponentListener Members
ThumbComponentListener Interface
com.mindfusion.diagramming.components Namespace

ThumbComponentListener.dragged Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void dragged (
    Object sender,
```

```
    ThumbDragEvent e
)
```

Parameters

sender

e

See Also

ThumbComponentListener Members
ThumbComponentListener Interface
com.mindfusion.diagramming.components Namespace

ThumbComponentListener.dragStarted Method

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
void dragStarted (
    Object sender,
    ThumbDragEvent e
)
```

Parameters

sender

e

See Also

ThumbComponentListener Members
ThumbComponentListener Interface
com.mindfusion.diagramming.components Namespace

ThumbDragEvent Class

Provides data to the handlers of the ThumbComponent.Dragged event.

Syntax

Java

```
public class ThumbDragEvent
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ThumbDragEvent

See Also

ThumbDragEvent Members
com.mindfusion.diagramming.components Namespace

ThumbDragEvent Members

Provides data to the handlers of the ThumbComponent.Dragged event.

The following tables list the members exposed by the ThumbDragEvent type.

Public Constructors

	Name	Description
	ThumbDragEvent	Initializes a new instance of the ThumbDragEvent class.

Public Methods

	Name	Description
	getAmount	Gets the dragged amount.

See Also

ThumbDragEvent Class
com.mindfusion.diagramming.components Namespace

ThumbDragEvent Constructor

Initializes a new instance of the ThumbDragEvent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ThumbDragEvent (
    float amount
)
```

Parameters

amount
The dragged amount.

See Also

ThumbDragEvent Class
com.mindfusion.diagramming.components Namespace

ThumbDragEvent Methods

ThumbDragEvent.getAmount Method

Gets the dragged amount.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public float getAmount ()
```

Return Value

See Also

ThumbDragEvent Members
ThumbDragEvent Class
com.mindfusion.diagramming.components Namespace

TypeResolver Interface

Resolves types by their names.

Syntax

```
Java
public interface TypeResolver
```

See Also

TypeResolver Members
com.mindfusion.diagramming.components Namespace

TypeResolver Members

Resolves types by their names.

The following tables list the members exposed by the TypeResolver type.

Public Methods

	Name	Description
	resolveType	Returns the type corresponding to the specified name.

See Also

TypeResolver Methods

TypeResolver.resolveType Method

Returns the type corresponding to the specified name.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
Class<?> resolveType (
    String name
)
```

Parameters

name
The name or identifier of the type.

Return Value

The type corresponding to the specified name or identifier.

See Also

TypeResolver Members
TypeResolver Interface
com.mindfusion.diagramming.components Namespace

ValueChangedEvent<T> Class

Provides data for value change event handlers. @param <T> The type of the value that is changing.

Syntax

Java

```
public class ValueChangedEvent<T>
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.components.ValueChangedEvent(T)

See Also

ValueChangedEvent(T) Members
com.mindfusion.diagramming.components Namespace

ValueChangedEvent(T) Members

Provides data for value change event handlers. @param <T> The type of the value that is changing.

The following tables list the members exposed by the ValueChangedEvent(T) type.

Public Constructors

	Name	Description
	ValueChangedEvent	Overloaded.

Public Methods

	Name	Description
	getNewValue	Gets the new value.
	getOldValue	Gets the old value.

See Also

ValueChangedEvent<T> Class
com.mindfusion.diagramming.components Namespace

ValueChangedEvent(T) Constructor

Overload List

Name	Description
ValueChangedEvent(T) ()	Initializes a new instance of the ValueChangedEvent class.
ValueChangedEvent(T) (T, T)	Initializes a new instance of the ValueChangedEvent class.

See Also

ValueChangedEvent<T> Class
com.mindfusion.diagramming.components Namespace

ValueChangedEvent(T) Constructor ()

Initializes a new instance of the ValueChangedEvent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public ValueChangedEvent ()`

See Also

ValueChangedEvent(T) Constructor Overload List
ValueChangedEvent<T> Class
com.mindfusion.diagramming.components Namespace

ValueChangedEvent(T) Constructor (T, T)

Initializes a new instance of the ValueChangedEvent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ValueChangedEvent (
    T oldValue,
    T newValue
)
```

Parameters

oldValue
The old value.

newValue
The new value.

See Also

ValueChangedEvent(T) Constructor Overload List
ValueChangedEvent<T> Class
com.mindfusion.diagramming.components Namespace

ValueChangedEvent(T) Methods

ValueChangedEvent(T).getNewValue Method

Gets the new value.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public T getNewValue ()
```

Return Value

See Also

ValueChangedEvent(T) Members
ValueChangedEvent<T> Class
com.mindfusion.diagramming.components Namespace

ValueChangedEvent(T).getOldValue Method

Gets the old value.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public T getOldValue ()`

Return Value

See Also

ValueChangedEvent(T) Members
ValueChangedEvent<T> Class
com.mindfusion.diagramming.components Namespace

ValueChangingEvent<T> Class

Provides data for value validation event handlers. @param <T> The type of the value that is changing.

Syntax

Java
`public class ValueChangingEvent<T>`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.ValueChangingEvent(T)

See Also

ValueChangingEvent(T) Members
com.mindfusion.diagramming.components Namespace

ValueChangingEvent(T) Members

Provides data for value validation event handlers. @param <T> The type of the value that is changing.

The following tables list the members exposed by the ValueChangingEvent(T) type.

Public Constructors

	Name	Description
	ValueChangingEvent	Overloaded.

Public Methods

	Name	Description
	getNewValue	Gets the new value.
	getOldValue	Gets the old value.
	isConfirm	Gets a value indicating whether the change is confirmed.
	setConfirm	Sets a value indicating whether the change is confirmed.
	setNewValue	Sets the new value.

See Also

ValueChangingEvent<T> Class
com.mindfusion.diagramming.components Namespace

ValueChangingEvent(T) Constructor

Overload List

Name	Description
ValueChangingEvent(T) ()	Initializes a new instance of the ValueChangingEvent class.
ValueChangingEvent(T) (T, T)	Initializes a new instance of the ValueChangingEvent class.

See Also

ValueChangingEvent<T> Class
com.mindfusion.diagramming.components Namespace

ValueChangingEvent(T) Constructor ()

Initializes a new instance of the ValueChangingEvent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public ValueChangingEvent ()`

See Also

ValueChangingEvent(T) Constructor Overload List
ValueChangingEvent<T> Class
com.mindfusion.diagramming.components Namespace

ValueChangingEvent(T) Constructor (T, T)

Initializes a new instance of the ValueChangingEvent class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public ValueChangingEvent (
    T oldValue,
    T newValue
)
```

Parameters

oldValue
The old value.

newValue
The new value.

See Also

ValueChangingEvent(T) Constructor Overload List
ValueChangingEvent<T> Class
com.mindfusion.diagramming.components Namespace

ValueChangingEvent(T) Methods

ValueChangingEvent(T).getNewValue Method

Gets the new value.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public T getNewValue ()
```

Return Value

See Also

ValueChangingEvent(T) Members
ValueChangingEvent<T> Class
com.mindfusion.diagramming.components Namespace

ValueChangingEvent(T).getOldValue Method

Gets the old value.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public T getOldValue ()
```

Return Value

See Also

ValueChangingEvent(T) Members
ValueChangingEvent<T> Class
com.mindfusion.diagramming.components Namespace

ValueChangingEvent(T).isConfirm Method

Gets a value indicating whether the change is confirmed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public boolean isConfirm ()
```

Return Value

See Also

ValueChangingEvent(T) Members
ValueChangingEvent<T> Class
com.mindfusion.diagramming.components Namespace

ValueChangingEvent(T).setConfirm Method

Sets a value indicating whether the change is confirmed.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public void setConfirm (
    boolean value
)
```

Parameters

value

See Also

ValueChangingEvent(T) Members
ValueChangingEvent<T> Class
com.mindfusion.diagramming.components Namespace

ValueChangingEvent(T).setNewValue Method

Sets the new value.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public void setNewValue (
    T value
)
```

Parameters

value

See Also

ValueChangingEvent(T) Members
ValueChangingEvent<T> Class
com.mindfusion.diagramming.components Namespace

VerticalAlignment Class

Contains static constants that specify the vertical alignment of a component relative to its allocated space. Bottom - Indicates that the component should be bottom-aligned. Center - Indicates that the component should be centered. Stretch - Indicates that the component should be stretched vertically. Top - Indicates that the component should be top-aligned. @author Anton

Syntax

Java

```
public class VerticalAlignment
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.VerticalAlignment

See Also

VerticalAlignment Members
com.mindfusion.diagramming.components Namespace

VerticalAlignment Members

Contains static constants that specify the vertical alignment of a component relative to its allocated space. Bottom - Indicates that the component should be bottom-aligned. Center - Indicates that the component should be centered. Stretch - Indicates that the component should be stretched vertically. Top - Indicates that the component should be top-aligned. @author Anton

The following tables list the members exposed by the VerticalAlignment type.

Public Constructors

	Name	Description
	VerticalAlignment	

Public Fields

	Name	Description
	Bottom	
	Center	
	Stretch	
	Top	

See Also

VerticalAlignment Class
com.mindfusion.diagramming.components Namespace

VerticalAlignment Fields

VerticalAlignment.Bottom Field

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public static final int Bottom`

See Also

VerticalAlignment Members
VerticalAlignment Class
com.mindfusion.diagramming.components Namespace

VerticalAlignment.Center Field

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public static final int Center
```

See Also

VerticalAlignment Members
VerticalAlignment Class
com.mindfusion.diagramming.components Namespace

VerticalAlignment.Stretch Field

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public static final int Stretch
```

See Also

VerticalAlignment Members
VerticalAlignment Class
com.mindfusion.diagramming.components Namespace

VerticalAlignment.Top Field

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

```
Java
public static final int Top
```

See Also

VerticalAlignment Members
VerticalAlignment Class
com.mindfusion.diagramming.components Namespace

VerticalAlignment Constructor

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java
`public VerticalAlignment ()`

See Also

VerticalAlignment Class
com.mindfusion.diagramming.components Namespace

XmlLoader Class

Provides methods for loading component hierarchies from XML.

Syntax

Java
`public class XmlLoader`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.components.XmlLoader

See Also

XmlLoader Members
com.mindfusion.diagramming.components Namespace

XmlLoader Members

Provides methods for loading component hierarchies from XML.

The following tables list the members exposed by the XmlLoader type.

Public Methods

	Name	Description
	load	Overloaded.

See Also

XmlLoader Class
com.mindfusion.diagramming.components Namespace

XmlLoader Methods

XmlLoader.load Method

Overload List

Name	Description
XmlLoader.load (Document)	Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.
XmlLoader.load (Document, Object)	Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.
XmlLoader.load (Document, Object, TypeResolver)	Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.
XmlLoader.load (InputStream)	Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.
XmlLoader.load (InputStream, Object)	Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.
XmlLoader.load (InputStream, Object, TypeResolver)	Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.
XmlLoader.load (String)	Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.
XmlLoader.load (String, Object)	Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.
XmlLoader.load (String, Object, TypeResolver)	Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.

See Also

XmlLoader Members
XmlLoader Class
com.mindfusion.diagramming.components Namespace

XmlLoader.load Method (Document)

Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public static ComponentBase load (
    Document document
)
```

Parameters

document
The XmlDocument to load from.

Return Value

The root of the loaded hierarchy.

See Also

load Method Overload List
XmlLoader Members
XmlLoader Class
com.mindfusion.diagramming.components Namespace

XmlLoader.load Method (Document, Object)

Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public static ComponentBase load (
    Document document,
    Object target
)
```

Parameters

document
The XmlDocument to load from.

target
An object that is declaring the handlers for the events in the code and also used to evaluate expressions.

Return Value

The root of the loaded hierarchy.

See Also

load Method Overload List
XmlLoader Members
XmlLoader Class
com.mindfusion.diagramming.components Namespace

XmlLoader.load Method (Document, Object, TypeResolver)

Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public static ComponentBase load (
    Document document,
    Object target,
    TypeResolver typeResolver
)
```

Parameters

document
The XmlDocument to load from.

target
An object that is declaring the handlers for the events in the code and also used to evaluate expressions.

typeResolver
An object used to resolve unknown type names.

Return Value

The root of the loaded hierarchy.

See Also

load Method Overload List
XmlLoader Members
XmlLoader Class
com.mindfusion.diagramming.components Namespace

XmlLoader.load Method (InputStream)

Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public static ComponentBase load (
    InputStream xmlStream
)
```

Parameters

xmlStream
A **java.io.InputStream** representing a component hierarchy.

Return Value

The root of the loaded hierarchy.

See Also

load Method Overload List
XmlLoader Members

XmlLoader.load Method (InputStream, Object)

Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public static ComponentBase load (
    InputStream xmlStream,
    Object target
)
```

Parameters

xmlStream
A **java.io.InputStream** representing a component hierarchy.

target
An object that is declaring the handlers for the events in the code and also used to evaluate expressions.

Return Value

The root of the loaded hierarchy.

See Also

load Method Overload List
XmlLoader Members
XmlLoader Class
com.mindfusion.diagramming.components Namespace

XmlLoader.load Method (InputStream, Object, TypeResolver)

Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public static ComponentBase load (
    InputStream xmlStream,
    Object target,
    TypeResolver typeResolver
)
```

Parameters

xmlStream

A **java.io.InputStream** representing a component hierarchy.

target
An object that is declaring the handlers for the events in the code and also used to evaluate expressions.

typeResolver
An object used to resolve unknown type names.

Return Value

The root of the loaded hierarchy.

See Also

load Method Overload List
XmlLoader Members
XmlLoader Class
com.mindfusion.diagramming.components Namespace

XmlLoader.load Method (String)

Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public static ComponentBase load (
    String xml
)
```

Parameters

xml
A XML representing a component hierarchy.

Return Value

The root of the loaded hierarchy.

See Also

load Method Overload List
XmlLoader Members
XmlLoader Class
com.mindfusion.diagramming.components Namespace

XmlLoader.load Method (String, Object)

Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public static ComponentBase load (
    String xml,
    Object target
)
```

Parameters

xml
A XML representing a component hierarchy.

target
An object that is declaring the handlers for the events in the code and also used to evaluate expressions.

Return Value

The root of the loaded hierarchy.

See Also

load Method Overload List
XmlLoader Members
XmlLoader Class
com.mindfusion.diagramming.components Namespace

XmlLoader.load Method (String, Object, TypeResolver)

Loads the component hierarchy from the specified XML stream and returns the root of this hierarchy.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public static ComponentBase load (
    String xml,
    Object target,
    TypeResolver typeResolver
)
```

Parameters

xml
A XML representing a component hierarchy.

target
An object that is declaring the handlers for the events in the code and also used to evaluate expressions.

typeResolver
An object used to resolve unknown type names.

Return Value

The root of the loaded hierarchy.

See Also

load Method Overload List
XmlLoader Members
XmlLoader Class
com.mindfusion.diagramming.components Namespace

XmlLoaderException Class

An exception raised when a XmlLoader fails to parse XML content.

Syntax

Java
`public class XmlLoaderException extends Exception`

Inheritance Hierarchy

java.lang.Object
  java.lang.Throwable
    java.lang.Exception
      com.mindfusion.diagramming.components.XmlLoaderException

See Also

XmlLoaderException Members
com.mindfusion.diagramming.components Namespace

XmlLoaderException Members

An exception raised when a XmlLoader fails to parse XML content.

The following tables list the members exposed by the XmlLoaderException type.

Public Constructors

	Name	Description
	XmlLoaderException	Overloaded.

See Also

XmlLoaderException Class
com.mindfusion.diagramming.components Namespace

XmlLoaderException Constructor

Overload List

Name	Description
XmlLoaderException ()	Overloaded. Initializes a new instance of the XmlLoaderException class.

XmlLoaderException (String)	Overloaded. Initializes a new instance of the XmlLoaderException class.

See Also

XmlLoaderException Class
com.mindfusion.diagramming.components Namespace

XmlLoaderException Constructor ()

Overloaded. Initializes a new instance of the XmlLoaderException class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public XmlLoaderException ()
```

See Also

XmlLoaderException Constructor Overload List
XmlLoaderException Class
com.mindfusion.diagramming.components Namespace

XmlLoaderException Constructor (String)

Overloaded. Initializes a new instance of the XmlLoaderException class.

Namespace: com.mindfusion.diagramming.components
Package: com.mindfusion.diagramming.components

Syntax

Java

```
public XmlLoaderException (
    String message
)
```

Parameters

message

See Also

XmlLoaderException Constructor Overload List
XmlLoaderException Class
com.mindfusion.diagramming.components Namespace

com.mindfusion.diagramming.export Namespace

ExcelExporter Class

Exports MindFusion.Diagramming diagrams to Excel Open XML Format (XLSX) files.

Syntax

Java

```
public class ExcelExporter
```

Remarks

Diagrams are exported as Excel AutoShapes drawings. The export overload that takes a DiagramDocument parameter creates a sheet for each DiagramPage in the document. The export(Diagram) overload creates a single Excel sheet.

You must set the TemplatePath property before exporting to specify where the exporter should look for its template file.

Example

Java

```
ExcelExporter ex = new ExcelExporter();
ex.setTemplatePath(
    templatesFolder + "/ExcelTemplate.xlt");
ex.export(diagram, fileChooser.getSelectedFile().getAbsolutePath());
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.export.ExcelExporter

See Also

ExcelExporter Members
com.mindfusion.diagramming.export Namespace

ExcelExporter Members

Exports MindFusion.Diagramming diagrams to Excel Open XML Format (XLSX) files.

The following tables list the members exposed by the ExcelExporter type.

Public Constructors

	Name	Description
	ExcelExporter	Initializes a new instance of the **ExcelExporter** class.

Public Methods

	Name	Description

	export	Overloaded.
	getTemplatePath	Gets the full path to the 'ExcelTemplate.xlt' template file.
	setTemplatePath	Sets the full path to the 'ExcelTemplate.xlt' template file.

See Also

ExcelExporter Class
com.mindfusion.diagramming.export Namespace

ExcelExporter Constructor

Initializes a new instance of the ExcelExporter class.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java
`public ExcelExporter ()`

See Also

ExcelExporter Class
com.mindfusion.diagramming.export Namespace

ExcelExporter Methods

ExcelExporter.export Method

Overload List

Name	Description
ExcelExporter.export (Diagram, String)	Creates an XLSX file representing the specified diagram.
ExcelExporter.export (DiagramDocument, String)	Creates an XLSX file representing the specified DiagramDocument.

See Also

ExcelExporter Members
ExcelExporter Class
com.mindfusion.diagramming.export Namespace

ExcelExporter.export Method (Diagram, String)

Creates an XLSX file representing the specified diagram.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void export (
    Diagram diagram,
    String filePath
)
```

Parameters

diagram
A reference to the Diagram that will be exported.

filePath
The full path to the XLSX file.

See Also

export Method Overload List
ExcelExporter Members
ExcelExporter Class
com.mindfusion.diagramming.export Namespace

ExcelExporter.export Method (DiagramDocument, String)

Creates an XLSX file representing the specified DiagramDocument.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void export (
    DiagramDocument document,
    String filePath
)
```

Parameters

document
A reference to the DiagramDocument that will be exported.

filePath
The full path to the XLSX file.

See Also

export Method Overload List
ExcelExporter Members
ExcelExporter Class
com.mindfusion.diagramming.export Namespace

ExcelExporter.getTemplatePath Method

Gets the full path to the 'ExcelTemplate.xlt' template file.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public String getTemplatePath ()
```

Return Value

A String containing the full path to the 'ExcelTemplate.xlt' template file.

See Also

ExcelExporter Members
ExcelExporter Class
com.mindfusion.diagramming.export Namespace

ExcelExporter.setTemplatePath Method

Sets the full path to the 'ExcelTemplate.xlt' template file.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void setTemplatePath (
    String value
)
```

Parameters

value
A string specifying the full path to the 'ExcelTemplate.xlt' template file.

See Also

ExcelExporter Members
ExcelExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter Class

Exports JDiagram diagrams to Adobe Portable Document Format (PDF) files.

Syntax

Java

```
public class PdfExporter
```

Remarks

The Adobe Portable Document Format (PDF) is the most popular open format for representing textual and graphic information in resolution independent manner. In addition, PDF is a multiplatform format, viewable and printable on all popular operating systems. These features, along with its ability to describe complex documents that use a variety of graphics, images and fonts, make PDF a good choice when it comes to distributing your flowcharts and diagrams to others.

The **PdfExporter** class lets you create PDF files that represent JDiagram diagrams. In order to do that, create a **PdfExporter** instance and call its export method. If you need to set the page size and orientation, use the setPageSize, and setPageOrientation methods. To specify the page margins for all pages in the document, call the setMarginLeft, setMarginTop, etc. methods. setAutoScale lets you scale the diagram so that it fits in one or more PDF pages.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.export.PdfExporter

See Also

PdfExporter Members
com.mindfusion.diagramming.export Namespace

PdfExporter Members

Exports JDiagram diagrams to Adobe Portable Document Format (PDF) files.

The following tables list the members exposed by the PdfExporter type.

Public Constructors

	Name	Description
	PdfExporter	Initializes a new instance of the **PdfExporter** class.

Public Methods

	Name	Description
	export	Overloaded.
	getAutoScale	Gets a value indicating whether the diagram should be scaled to fit one or more pages of the PDF document.
	getDefaultCharset	
	getDisableTextClipping	Gets whether text clipping is disabled, as work-around for Adobe Reader V9+ issue when printing to some Postscript printers.
	getEnableGrid	Gets a value indicating whether the alignment grid is rendered.
	getHyperLinkStyle	

	getMarginBottom	Gets the bottom margin for the PDF pages, measured in Inches.
	getMarginLeft	Gets the left margin for the PDF pages, measured in Inches.
	getMarginRight	Gets the right margin for the PDF pages, measured in Inches.
	getMarginTop	Gets the top margin for the PDF pages, measured in Inches.
	getPageOrientation	Gets the orientation of the PDF pages.
	getPageSize	Gets the size of the PDF pages.
	getScale	Gets the scale of the PDF output relatively to the original on-screen size of the diagram.
	isAutoOrientation	Specifies whether the component should automatically choose the page orientation.
	setAutoOrientation	Specifies whether the component should automatically choose the page orientation.
	setAutoScale	Sets a value indicating whether the diagram should be scaled to fit one or more pages of the PDF document.
	setDefaultCharset	
	setDisableTextClipping	Sets whether text clipping is disabled, as work-around for Adobe Reader V9+ issue when printing to Postscript printers.
	setEnableGrid	Gets a value indicating whether the alignment grid is rendered.
	setHyperLinkStyle	
	setMarginBottom	Sets the bottom margin for the PDF pages, measured in Inches.
	setMarginLeft	Sets the left margin for the PDF pages, measured in Inches.
	setMarginRight	Sets the value of **right** margin of the destination PDF document.
	setMarginTop	Sets the value of **top** margin of the destination PDF document.
	setPageOrientation	Sets the orientation of the PDF pages.
	setPageSize	Sets the size of the PDF pages.
	setScale	Sets the scale of the PDF output relatively to the original on-screen size of the diagram.

See Also

PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter Constructor

Initializes a new instance of the PdfExporter class.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java
`public PdfExporter ()`

See Also

PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter Methods

PdfExporter.export Method

Overload List

Name	Description
PdfExporter.export (Diagram, String)	Creates a PDF file representing the specified JDiagram diagram.
PdfExporter.export (DiagramDocument, String)	Creates a PDF file representing the specified JDiagram document.

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.export Method (Diagram, String)

Creates a PDF file representing the specified JDiagram diagram.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void export (
    Diagram diagram,
    String filePath
)
```

Parameters

diagram
A reference to the Diagram that will be exported.

filePath
The full path to the PDF file.

Remarks

By default, PdfExporter preserves the original scale of the diagram. If Bounds can not fit in a single page of size set by the setPageSize method, the exported diagram is divided into multiple pages. The AutoScale attribute allows scaling the diagram so that it exactly fits in one or more pages.

See Also

export Method Overload List
PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.export Method (DiagramDocument, String)

Creates a PDF file representing the specified JDiagram document.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void export (
    DiagramDocument diagramDoc,
    String filePath
)
```

Parameters

diagramDoc
A reference to the DiagramDocument that will be exported.

filePath
The full path to the PDF file.

See Also

export Method Overload List
PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.getAutoScale Method

Gets a value indicating whether the diagram should be scaled to fit one or more pages of the PDF document.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public AutoScale getAutoScale ()
```

Return Value

A member of the AutoScale enumeration. The default is None.

Remarks

By default, the original scale of the diagram is preserved and the diagram is divided into multiple pages if needed. This property lets you scale the diagram so that it fits in one or more pages.

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.getDefaultCharset Method

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public String getDefaultCharset ()
```

Return Value

the default character set

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.getDisableTextClipping Method

Gets whether text clipping is disabled, as work-around for Adobe Reader V9+ issue when printing to some Postscript printers.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public boolean getDisableTextClipping ()
```

Return Value

true if text clipping is disabled, or **false** otherwise.

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.getEnableGrid Method

Gets a value indicating whether the alignment grid is rendered.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java
`public boolean getEnableGrid ()`

Return Value

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.getHyperLinkStyle Method

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java
`public HyperLinkStyle getHyperLinkStyle ()`

Return Value

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.getMarginBottom Method

Gets the bottom margin for the PDF pages, measured in Inches.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

```
Java
public float getMarginBottom ()
```

Return Value

the value of **bottom** margin of the destination PDF document measured in **Inches**

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.getMarginLeft Method

Gets the left margin for the PDF pages, measured in Inches.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

```
Java
public float getMarginLeft ()
```

Return Value

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.getMarginRight Method

Gets the right margin for the PDF pages, measured in Inches.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

```
Java
public float getMarginRight ()
```

Return Value

the value of **rigth** margin of the destination PDF document measured in **Inches**

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.getMarginTop Method

Gets the top margin for the PDF pages, measured in Inches.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public float getMarginTop ()
```

Return Value

the value of **top** margin of the destination PDF document measured in **Inches**

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.getPageOrientation Method

Gets the orientation of the PDF pages.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public PageOrientation getPageOrientation ()
```

Return Value

A member of the PageOrientation enumeration. The default is **Portrait**.

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.getPageSize Method

Gets the size of the PDF pages.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

```
Java
public PageSizesEnum getPageSize ()
```

Return Value

A PageSizesEnum member. The default value is **Document**.

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.getScale Method

Gets the scale of the PDF output relatively to the original on-screen size of the diagram.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

```
Java
public float getScale ()
```

Return Value

A float value specifying the scale as percent of the original size. The default is 100.

Remarks

This value is used only if AutoScale is disabled.

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.isAutoOrientation Method

Specifies whether the component should automatically choose the page orientation.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

```
Java
public boolean isAutoOrientation ()
```

Return Value

true if orientation of the page in destination PDF should be derived from the width/height ratio of the source diagram.

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.setAutoOrientation Method

Specifies whether the component should automatically choose the page orientation.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void setAutoOrientation (
    boolean autoOrientation
)
```

Parameters

autoOrientation
true if orientation of the page in destination PDF should be derived from the width/height ratio of the source diagram.

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.setAutoScale Method

Sets a value indicating whether the diagram should be scaled to fit one or more pages of the PDF document.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void setAutoScale (
    AutoScale autoScale
)
```

Parameters

autoScale

A member of the AutoScale enumeration. The default is **None**.

Remarks

By default, the original scale of the diagram is preserved and the diagram is divided into multiple pages if needed. This property lets you scale the diagram so that it fits in one or more pages.

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.setDefaultCharset Method

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void setDefaultCharset (
    String defaultCharset
)
```

Parameters

defaultCharset
the default character set

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.setDisableTextClipping Method

Sets whether text clipping is disabled, as work-around for Adobe Reader V9+ issue when printing to Postscript printers.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void setDisableTextClipping (
    boolean value
)
```

Parameters

value

true to disable text clipping, or **false** otherwise. The default value is **false**.

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.setEnableGrid Method

Gets a value indicating whether the alignment grid is rendered.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void setEnableGrid (
    boolean value
)
```

Parameters

value

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.setHyperLinkStyle Method

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void setHyperLinkStyle (
    HyperLinkStyle value
)
```

Parameters

value

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.setMarginBottom Method

Sets the bottom margin for the PDF pages, measured in Inches.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void setMarginBottom (
    float marginBottom
)
```

Parameters

marginBottom
the value of bottom margin of the destination PDF document, measured in Inches.

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.setMarginLeft Method

Sets the left margin for the PDF pages, measured in Inches.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void setMarginLeft (
    float marginLeft
)
```

Parameters

marginLeft
the value of left margin of the destination PDF document, measured in Inches.

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.setMarginRight Method

Sets the value of **right** margin of the destination PDF document.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

```
Java
public void setMarginRight (
    float marginRight
)
```

Parameters

marginRigth
value of margin measured in **Inches**

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.setMarginTop Method

Sets the value of **top** margin of the destination PDF document.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

```
Java
public void setMarginTop (
    float marginTop
)
```

Parameters

marginTop
the value of top margin of the destination PDF document, measured in Inches.

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.setPageOrientation Method

Sets the orientation of the PDF pages.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

```
Java
```

```
public void setPageOrientation (
    PageOrientation pageOrientation
)
```

Parameters

pageOrientation
A member of the PageOrientation enumeration. The default is **Portrait**.

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.setPageSize Method

Sets the size of the PDF pages.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void setPageSize (
    PageSizesEnum pageSize
)
```

Parameters

pageSize
A PageSizesEnum member. The default value is **Document**.

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

PdfExporter.setScale Method

Sets the scale of the PDF output relatively to the original on-screen size of the diagram.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void setScale (
    float scale
)
```

Parameters

scale
A float value specifying the scale as percent of the original size. The default is 100.

Remarks

This value is used only if AutoScale is disabled.

See Also

PdfExporter Members
PdfExporter Class
com.mindfusion.diagramming.export Namespace

SvgExporter Class

Creates an SVG (Scalable Vector Graphics) drawing representing the content of a Diagram.

Syntax

Java
`public class SvgExporter`

Remarks

Scalable Vector Graphics is an XML-based graphics language that describes images with vector shapes, text, and embedded raster graphics. SVG drawings can be displayed in web pages, or edited / imported by vector graphics editing applications.

In order to create an SVG file from a Diagram, create an **SvgExporter** instance and call its export method, passing a **Diagram** object as parameter.

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.export.SvgExporter

See Also

SvgExporter Members
com.mindfusion.diagramming.export Namespace

SvgExporter Members

Creates an SVG (Scalable Vector Graphics) drawing representing the content of a Diagram.

The following tables list the members exposed by the SvgExporter type.

Public Constructors

	Name	Description
	SvgExporter	

Public Methods

	Name	Description
	export	
	getHyperLinkStyle	
	setHyperLinkStyle	

See Also

SvgExporter Class
com.mindfusion.diagramming.export Namespace

SvgExporter Constructor

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public SvgExporter (
    Diagram diagram,
    String filePath
)
```

Parameters

diagram

filePath

See Also

SvgExporter Class
com.mindfusion.diagramming.export Namespace

SvgExporter Methods

SvgExporter.export Method

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void export ()
```

See Also

SvgExporter Members
SvgExporter Class

SvgExporter.getHyperLinkStyle Method

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public HyperLinkStyle getHyperLinkStyle ()
```

Return Value

See Also

SvgExporter Members
SvgExporter Class
com.mindfusion.diagramming.export Namespace

SvgExporter.setHyperLinkStyle Method

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void setHyperLinkStyle (
    HyperLinkStyle value
)
```

Parameters

value

See Also

SvgExporter Members
SvgExporter Class
com.mindfusion.diagramming.export Namespace

VisioExporter Class

Exports the contents of Diagram or DiagramDocument objects to Visio 2013 XML drawing files (*.vsdx).

Syntax

Java

```
public class VisioExporter
```

Remarks

This class allows exporting Visio 2003 XML Drawing files from JDiagram. ShapeNode objects are mapped to their closest Visio counterparts and DiagramLink instances are exported as Visio connectors of a similar style. In addition, most of the attributes of diagram items such as text, text formatting, fill and line colors and styles are preserved.

To function properly, the exporter object requires the *Visio2013.vxt* file to be present in the application's directory, or its location specified in TemplatePath. This file contains an XML template data used by the component to generate Visio documents.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.export.VisioExporter

See Also

VisioExporter Members
com.mindfusion.diagramming.export Namespace

VisioExporter Members

Exports the contents of Diagram or DiagramDocument objects to Visio 2013 XML drawing files (*.vsdx).

The following tables list the members exposed by the VisioExporter type.

Public Constructors

	Name	Description
	VisioExporter	Initializes a new instance of the **VisioExporter** class.

Public Methods

	Name	Description
	export	Overloaded.
	getTemplatePath	Gets the full path to the 'Visio2013.vxt' template file.
	setTemplatePath	Sets the full path to the 'Visio2013.vxt' template file.

See Also

VisioExporter Class
com.mindfusion.diagramming.export Namespace

VisioExporter Constructor

Initializes a new instance of the VisioExporter class.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java
`public VisioExporter ()`

See Also

VisioExporter Class
com.mindfusion.diagramming.export Namespace

VisioExporter Methods

VisioExporter.export Method

Overload List

Name	Description
VisioExporter.export (Diagram, String)	Creates a Visio .vsdx file representing the specified Diagram.
VisioExporter.export (DiagramDocument, String)	Creates a Visio .vsdx file representing the specified DiagramDocument.

See Also

VisioExporter Members
VisioExporter Class
com.mindfusion.diagramming.export Namespace

VisioExporter.export Method (Diagram, String)

Creates a Visio .vsdx file representing the specified Diagram.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void export (
    Diagram diagram,
    String filePath
)
```

Parameters

diagram
A Diagram instance.

filePath
The full path to the exported Visio .vsdx file.

Remarks

The exported document contains a single page, as big as the scrollable diagram area set in Bounds.

To run properly, this method requires the *Visio2013.vxt* file to be present in the application's directory, or its full path to be assigned to TemplatePath. That file contains an XML template data used by the component to construct Visio documents.

See Also

export Method Overload List
VisioExporter Members
VisioExporter Class
com.mindfusion.diagramming.export Namespace

VisioExporter.export Method (DiagramDocument, String)

Creates a Visio .vsdx file representing the specified DiagramDocument.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

Java

```
public void export (
    DiagramDocument doc,
    String filePath
)
```

Parameters

doc
A DiagramDocument object which represents a set of pages(diagrams)

filePath
The full path to the exported Visio .vsdx file.

Remarks

Each DiagramPage in the document is exported to an individual Visio page. The title of the Visio page is set to DiagramPage.Title.

See Also

export Method Overload List
VisioExporter Members
VisioExporter Class
com.mindfusion.diagramming.export Namespace

VisioExporter.getTemplatePath Method

Gets the full path to the 'Visio2013.vxt' template file.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

```
Java
public String getTemplatePath ()
```

Return Value

A string specifying the template file location.

See Also

VisioExporter Members
VisioExporter Class
com.mindfusion.diagramming.export Namespace

VisioExporter.setTemplatePath Method

Sets the full path to the 'Visio2013.vxt' template file.

Namespace: com.mindfusion.diagramming.export
Package: com.mindfusion.diagramming.export

Syntax

```
Java
public void setTemplatePath (
    String value
)
```

Parameters

value
A string specifying the template file location.

See Also

VisioExporter Members
VisioExporter Class
com.mindfusion.diagramming.export Namespace

com.mindfusion.diagramming.importers Namespace

DrawImporter Class

DrawImporter lets you import an OpenOffice Draw document into a Diagram or DiagramDocument object.

Syntax

```
Java
public class DrawImporter
```

Remarks

The **DrawImporter** class can import .odg files, created by the OpenOffice Draw vector graphics editor. In order to use it, you must import the com.mindfusion.diagramming.importers namespace.

Various overloads of the import method can be used to import the OpenOffice drawing into a DiagramDocument whose pages correspond to the Draw pages, or into a single Diagram whose content is merged from all imported pages.

DrawImporter supports shapes from the General and Flowchart shape palettes in Draw. For each node shape from the .odg file, the importer creates a ShapeNode object whose Shape, Text, Brush and Pen properties are set to values corresponding to the imported OpenOffice shape. For each connector shape, the importer creates a DiagramLink object whose Origin and Destination are set to the corresponding imported nodes, and whose ControlPoints reflect the geometry of the connector.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.importers.DrawImporter

See Also

DrawImporter Members
com.mindfusion.diagramming.importers Namespace

DrawImporter Members

DrawImporter lets you import an OpenOffice Draw document into a Diagram or DiagramDocument object.

The following tables list the members exposed by the **DrawImporter** type.

Public Constructors

	Name	Description
	DrawImporter	Initializes a new instance of the DrawImporter class.

Public Methods

	Name	Description
	getPagesPerRow	Gets how many Draw pages to import on a row before offsetting the import location vertically.
	importDiagram	Imports the specified OpenOffice Draw document into the specified Diagram.
	importDocument	Overloaded.
	importDrawXml	
	setPagesPerRow	Sets how many Draw pages to import on a row before offsetting the import location vertically.

See Also

DrawImporter Class
com.mindfusion.diagramming.importers Namespace

DrawImporter Constructor

Initializes a new instance of the DrawImporter class.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public DrawImporter ()
```

See Also

DrawImporter Class
com.mindfusion.diagramming.importers Namespace

DrawImporter Methods

DrawImporter.getPagesPerRow Method

Gets how many Draw pages to import on a row before offsetting the import location vertically.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public int getPagesPerRow ()
```

Return Value

Number of imported pages

See Also

DrawImporter Members
DrawImporter Class
com.mindfusion.diagramming.importers Namespace

DrawImporter.importDiagram Method

Imports the specified OpenOffice Draw document into the specified Diagram.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public void importDiagram (
    String filePath,
```

```
    Diagram diagram
)
```

Parameters

filePath
A String specifying the path to the .odg file.

diagram
A Diagram into which to import the OpenOffice drawing.

See Also

DrawImporter Members
DrawImporter Class
com.mindfusion.diagramming.importers Namespace

DrawImporter.importDocument Method

Overload List

Name	Description
DrawImporter.importDocument (String)	Imports the specified OpenOffice Draw document into a new DiagramDocument, where each Draw page is imported into a separate DiagramPage of the DiagramDocument.
DrawImporter.importDocument (String, DiagramDocument)	Imports the specified OpenOffice Draw document into an existing DiagramDocument, where each Draw page is imported into a separate DiagramPage of the DiagramDocument.

See Also

DrawImporter Members
DrawImporter Class
com.mindfusion.diagramming.importers Namespace

DrawImporter.importDocument Method (String)

Imports the specified OpenOffice Draw document into a new DiagramDocument, where each Draw page is imported into a separate DiagramPage of the DiagramDocument.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public DiagramDocument importDocument (
    String filePath
)
```

Parameters

filePath
A String specifying the path to the .odg file.

Return Value

A DiagramDocument containing the imported OpenOffice drawing.

See Also

importDocument Method Overload List
DrawImporter Members
DrawImporter Class
com.mindfusion.diagramming.importers Namespace

DrawImporter.importDocument Method (String, DiagramDocument)

Imports the specified OpenOffice Draw document into an existing DiagramDocument, where each Draw page is imported into a separate DiagramPage of the DiagramDocument.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public void importDocument (
    String filePath,
    DiagramDocument document
)
```

Parameters

filePath
A String specifying the path to the .odg file.

document
A DiagramDocument into which to import the OpenOffice drawing.

See Also

importDocument Method Overload List
DrawImporter Members
DrawImporter Class
com.mindfusion.diagramming.importers Namespace

DrawImporter.importDrawXml Method

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public void importDrawXml (
    String filePath,
```

```
    DrawImporter.IPageHandler handler
)
```

Parameters

filePath

handler

See Also

DrawImporter Members
DrawImporter Class
com.mindfusion.diagramming.importers Namespace

DrawImporter.setPagesPerRow Method

Sets how many Draw pages to import on a row before offsetting the import location vertically.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public void setPagesPerRow (
    int value
)
```

Parameters

value
Number of pages to import

See Also

DrawImporter Members
DrawImporter Class
com.mindfusion.diagramming.importers Namespace

ImportItemEvent Class

Contains the arguments passed to handlers of the importItem event of VisioImportListener.

Syntax

Java

```
public class ImportItemEvent extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.importers.ImportItemEvent

See Also

ImportItemEvent Members
com.mindfusion.diagramming.importers Namespace

ImportItemEvent Members

Contains the arguments passed to handlers of the importItem event of VisioImportListener.

The following tables list the members exposed by the ImportItemEvent type.

Public Constructors

	Name	Description
	ImportItemEvent	

Public Methods

	Name	Description
	getItem	Gets the item that should represent the Visio shape specified by ShapeXml in the imported diagram.
	getMasterName	Gets the name of the Visio master associated with current shape.
	getMasterXml	Gets the XML DOM Element corresponding to the Visio XML code that describes the shape master.
	getNamespaceMap	Gets a HashMap that maps Visio XML namespaces to prefixes.
	getShapeXml	Gets the XML DOM Element corresponding to the Visio document's XML code that describes the imported shape.
	setItem	Sets the item that should represent the Visio shape specified by ShapeXml in the imported diagram.

See Also

ImportItemEvent Class
com.mindfusion.diagramming.importers Namespace

ImportItemEvent Constructor

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public ImportItemEvent (
    Object source,
    Element shapeXml,
    Element masterXml,
```

```
    String masterName,
    DiagramItem item,
    HashMap<String, String> namespaceMap
)
```

Parameters

source

shapeXml

masterXml

masterName

item

namespaceMap

See Also

ImportItemEvent Class
com.mindfusion.diagramming.importers Namespace

ImportItemEvent Methods

ImportItemEvent.getItem Method

Gets the item that should represent the Visio shape specified by ShapeXml in the imported diagram.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public DiagramItem getItem ()
```

Return Value

A DiagramItem instance.

See Also

ImportItemEvent Members
ImportItemEvent Class
com.mindfusion.diagramming.importers Namespace

ImportItemEvent.getMasterName Method

Gets the name of the Visio master associated with current shape.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public String getMasterName ()
```

Return Value

A string specifying the master name, if there's a respective Name attribute defined in XML.

See Also

ImportItemEvent Members
ImportItemEvent Class
com.mindfusion.diagramming.importers Namespace

ImportItemEvent.getMasterXml Method

Gets the XML DOM Element corresponding to the Visio XML code that describes the shape master.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public Element getMasterXml ()
```

Return Value

An **org.w3c.dom.Element** instance.

See Also

ImportItemEvent Members
ImportItemEvent Class
com.mindfusion.diagramming.importers Namespace

ImportItemEvent.getNamespaceMap Method

Gets a HashMap that maps Visio XML namespaces to prefixes.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public HashMap<String, String> getNamespaceMap ()
```

Return Value

A HashMap instance.

See Also

ImportItemEvent Members
ImportItemEvent Class

ImportItemEvent.getShapeXml Method

Gets the XML DOM Element corresponding to the Visio document's XML code that describes the imported shape.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public Element getShapeXml ()
```

Return Value

An **org.w3c.dom.Element** instance.

See Also

ImportItemEvent Members
ImportItemEvent Class
com.mindfusion.diagramming.importers Namespace

ImportItemEvent.setItem Method

Sets the item that should represent the Visio shape specified by ShapeXml in the imported diagram.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public void setItem (
    DiagramItem value
)
```

Parameters

value
A DiagramItem instance.

See Also

ImportItemEvent Members
ImportItemEvent Class
com.mindfusion.diagramming.importers Namespace

IPageHandler Interface

Syntax

Java
`public interface IPageHandler`

See Also

IPageHandler Members
com.mindfusion.diagramming.importers Namespace

IPageHandler Members

The following tables list the members exposed by the IPageHandler type.

Public Methods

	Name	Description
	importPage	

See Also

IPageHandler Interface
com.mindfusion.diagramming.importers Namespace

IPageHandler Methods

IPageHandler.importPage Method

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

`void importPage (`
`  Element element,`
`  DrawImporter importer`
`)`

Parameters

element

importer

See Also

IPageHandler Members
IPageHandler Interface
com.mindfusion.diagramming.importers Namespace

VisioImporter Class

Imports Visio 2013 XML Drawing files (*.vsdx) into Diagram or DiagramDocument objects.

Syntax

Java
`public class VisioImporter`

Remarks

The **VisioImporter** class can import .vsdx files created by Visio 2013. In order to use it, you must import the com.mindfusion.diagramming.importers namespace.

Various overloads of the import method can be used to import the file into a DiagramDocument whose pages correspond to the Visio drawing pages, or into a single Diagram whose content is merged from all imported pages.

VisioImporter supports the basic flowchart and data flow Visio stencils. For each node shape from the .vsdx file, the importer creates a ShapeNode object whose Shape, Text, Brush and Pen properties are set to values corresponding to the imported Visio shape. For each connector shape, the importer creates a DiagramLink object whose Origin and Destination are set to the corresponding imported nodes, and whose ControlPoints reflect the geometry of the connector.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.importers.VisioImporter

See Also

VisioImporter Members
com.mindfusion.diagramming.importers Namespace

VisioImporter Members

Imports Visio 2013 XML Drawing files (*.vsdx) into Diagram or DiagramDocument objects.

The following tables list the members exposed by the VisioImporter type.

Public Constructors

	Name	Description
	VisioImporter	Initializes a new instance of the VisioImporter class.

Public Methods

	Name	Description
	addVisioImportListener	Adds VisioImportListener that listens for ImportItemEvent raised for each shape's XML element in the imported VSDX drawing to let you create a custom diagram item representing the Visio shape.

	getPagesPerRow	Gets how many Visio pages to import on a row before offsetting the import location vertically.
	importDiagram	Imports the specified Visio Graphics Service VSDX file into the specified Diagram.
	importDocument	Overloaded.
	removeVisioImportListener	Removes a VisioImportListener.
	setPagesPerRow	Sets how many Visio pages to import on a row before offsetting the import location vertically.

See Also

VisioImporter Class
com.mindfusion.diagramming.importers Namespace

VisioImporter Constructor

Initializes a new instance of the VisioImporter class.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public VisioImporter ()
```

See Also

VisioImporter Class
com.mindfusion.diagramming.importers Namespace

VisioImporter Methods

VisioImporter.addVisioImportListener Method

Adds VisioImportListener that listens for ImportItemEvent raised for each shape's XML element in the imported VSDX drawing to let you create a custom diagram item representing the Visio shape.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public void addVisioImportListener (
    VisioImportListener listener
)
```

Parameters

listener
- the added listener

See Also

VisioImporter Members
VisioImporter Class
com.mindfusion.diagramming.importers Namespace

VisioImporter.getPagesPerRow Method

Gets how many Visio pages to import on a row before offsetting the import location vertically.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public int getPagesPerRow ()
```

Return Value

See Also

VisioImporter Members
VisioImporter Class
com.mindfusion.diagramming.importers Namespace

VisioImporter.importDiagram Method

Imports the specified Visio Graphics Service VSDX file into the specified Diagram.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public void importDiagram (
    String filePath,
    Diagram diagram
)
```

Parameters

filePath
A string specifying the path to the .vsdx file.

diagram
A Diagram into which to import the Visio drawing.

See Also

VisioImporter.importDocument Method

Overload List

Name	Description
VisioImporter.importDocument (String)	Imports the specified Visio Graphics Service VSDX file into a new DiagramDocument, where each Visio page is imported into a separate DiagramPage of the DiagramDocument.
VisioImporter.importDocument (String, DiagramDocument)	Imports the specified Visio Graphics Service VSDX file into an existing DiagramDocument, where each Visio page is imported into a separate DiagramPage of the DiagramDocument.

See Also

VisioImporter Members
VisioImporter Class
com.mindfusion.diagramming.importers Namespace

VisioImporter.importDocument Method (String)

Imports the specified Visio Graphics Service VSDX file into a new DiagramDocument, where each Visio page is imported into a separate DiagramPage of the DiagramDocument.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public DiagramDocument importDocument (
    String filePath
)
```

Parameters

filePath
- A string specifying the path to the .vsdx file.

Return Value

A DiagramDocument containing the imported Visio drawing.

See Also

importDocument Method Overload List
VisioImporter Members

VisioImporter Class
com.mindfusion.diagramming.importers Namespace

VisioImporter.importDocument Method (String, DiagramDocument)

Imports the specified Visio Graphics Service VSDX file into an existing DiagramDocument, where each Visio page is imported into a separate DiagramPage of the DiagramDocument.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public void importDocument (
    String filePath,
    DiagramDocument document
)
```

Parameters

filePath
A string specifying the path to the .vsdx file.

document
A DiagramDocument into which to import the Visio drawing.

See Also

importDocument Method Overload List
VisioImporter Members
VisioImporter Class
com.mindfusion.diagramming.importers Namespace

VisioImporter.removeVisioImportListener Method

Removes a VisioImportListener.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public void removeVisioImportListener (
    VisioImportListener listener
)
```

Parameters

listener
- the removed listener

See Also

VisioImporter Members
VisioImporter Class
com.mindfusion.diagramming.importers Namespace

VisioImporter.setPagesPerRow Method

Sets how many Visio pages to import on a row before offsetting the import location vertically.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
public void setPagesPerRow (
    int value
)
```

Parameters

value
- how many Visio pages to import on a row

See Also

VisioImporter Members
VisioImporter Class
com.mindfusion.diagramming.importers Namespace

VisioImportListener Interface

Defines events raised by VisioImporter to let you customize imported shapes.

Syntax

Java

```
public interface VisioImportListener extends EventListener
```

See Also

VisioImportListener Members
com.mindfusion.diagramming.importers Namespace

VisioImportListener Members

Defines events raised by VisioImporter to let you customize imported shapes.

The following tables list the members exposed by the VisioImportListener type.

Public Methods

	Name	Description

	importItem	Raised for each shape's XML element in the imported VSDX drawing to let you create a custom diagram item representing the Visio shape.

See Also

VisioImportListener Interface
com.mindfusion.diagramming.importers Namespace

VisioImportListener Methods

VisioImportListener.importItem Method

Raised for each shape's XML element in the imported VSDX drawing to let you create a custom diagram item representing the Visio shape.

Namespace: com.mindfusion.diagramming.importers
Package: com.mindfusion.diagramming.importers

Syntax

Java

```
void importItem (
    ImportItemEvent e
)
```

Parameters

e
A ImportItemEvent instance providing information about the event.

See Also

VisioImportListener Members
VisioImportListener Interface
com.mindfusion.diagramming.importers Namespace

com.mindfusion.diagramming.jlayout Namespace

AdjacencyMatrix Class

Syntax

Java

```
public class AdjacencyMatrix
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.AdjacencyMatrix

See Also

AdjacencyMatrix Members
com.mindfusion.diagramming.jlayout Namespace

AdjacencyMatrix Members

The following tables list the members exposed by the AdjacencyMatrix type.

Public Constructors

	Name	Description
	AdjacencyMatrix	

See Also

AdjacencyMatrix Class
com.mindfusion.diagramming.jlayout Namespace

AdjacencyMatrix Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public AdjacencyMatrix (
    AGraph graph
)
```

Parameters

graph

See Also

AdjacencyMatrix Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayout Class

Syntax

Java

```
public class AnnealLayout
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.jlayout.AnnealLayout

See Also

AnnealLayout Members
com.mindfusion.diagramming.jlayout Namespace

AnnealLayout Members

The following tables list the members exposed by the AnnealLayout type.

Public Constructors

	Name	Description
	AnnealLayout	Initializes a new instance of the AnnealLayout class.

Public Methods

	Name	Description
	arrange	Applies the layout on the specified graph using the specified settings

See Also

AnnealLayout Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayout Constructor

Initializes a new instance of the AnnealLayout class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public AnnealLayout ()`

See Also

AnnealLayout Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayout Methods

AnnealLayout.arrange Method

Applies the layout on the specified graph using the specified settings

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean arrange (
    Graph graph,
    AnnealLayoutInfo info
)
```

Parameters

graph

info

Return Value

See Also

AnnealLayout Members
AnnealLayout Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo Class

Syntax

Java

```
public class AnnealLayoutInfo
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.AnnealLayoutInfo

See Also

AnnealLayoutInfo Members
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo Members

The following tables list the members exposed by the AnnealLayoutInfo type.

Public Constructors

	Name	Description
	AnnealLayoutInfo	

Public Methods

	Name	Description
	getBoundaryFactor	Gets a value indicating how important the distance from nodes to the layout area boundaries is relatively to the other criteria considered by the algorithm.
	getCrossingEdgesCost	Gets a value specifying how important the low number of link crossings is relatively to the other criteria considered by the algorithm.
	getDistributionFactor	Gets a value indicating the importance of node distribution relatively to the other criteria considered by the algorithm.
	getEdgeLengthFactor	Gets a value specifying how important the short length of links is relatively to the other criteria considered by the algorithm.
	getIterationsPerStage	Gets how many node shift iterations to perform at each stage of the algorithm.
	getLayoutArea	Gets the size of the layout area.
	getNodeEdgeCrossingCost	Gets a value specifying how important the low number of crossings of links with edges is relatively to the other criteria considered by the algorithm.
	getNodeEdgeDistFactor	Gets a value specifying the importance of the distance between nodes and links relative to the other criteria considered by the algorithm.
	getPrecision	Gets the cost calculations precision.
	getRandomize	Gets a value indicating whether the nodes should be placed at random positions when the layout routine starts.
	getStages	Gets how many cooling stages the algorithm should simulate.
	getTemperature	Gets the initial temperature of the simulated annealing process.
	getTemperatureScale	Gets how much the simulated temperature is decreased at each stage of the algorithm.
	getWidthHeightRatio	Gets what width / height ratio the layout area should have.
	setBoundaryFactor	Sets a value indicating how important the distance from nodes to the layout area boundaries is relatively to the other criteria considered by the algorithm.
	setCrossingEdgesCost	Sets a value specifying how important the low number of link crossings is relatively to the other criteria considered by the algorithm.
	setDistributionFactor	Sets a value indicating the importance of node distribution relatively to the other criteria considered by the algorithm.

	setEdgeLengthFactor	Sets a value specifying how important the short length of links is relatively to the other criteria considered by the algorithm.
	setIterationsPerStage	Sets how many node shift iterations to perform at each stage of the algorithm.
	setLayoutArea	Sets the size of the layout area.
	setNodeEdgeCrossingCost	Sets a value specifying how important the low number of crossings of links with edges is relatively to the other criteria considered by the algorithm.
	setNodeEdgeDistFactor	Sets a value specifying the importance of the distance between nodes and links relative to the other criteria considered by the algorithm.
	setPrecision	Sets the cost calculations precision. 1 speicifes highest precision. Accepted values are between 0.9 and 1. The algorithm completes faster when running with a lower precision, but produces slightly worse results.
	setRandomize	Sets a value indicating whether the nodes should be placed at random positions when the layout routine starts.
	setStages	Sets how many cooling stages the algorithm should simulate.
	setTemperature	Sets the initial temperature of the simulated annealing process.
	setTemperatureScale	Sets how much the simulated temperature is decreased at each stage of the algorithm.
	setWidthHeightRatio	Sets what width / height ratio the layout area should have.

See Also

AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public AnnealLayoutInfo ()
```

See Also

AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo Methods

AnnealLayoutInfo.getBoundaryFactor Method

Gets a value indicating how important the distance from nodes to the layout area boundaries is relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public double getBoundaryFactor ()
```

Return Value

A multiplier applied to the node-to-boundary distance cost when evaluating the total cost of a graph configuration.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.getCrossingEdgesCost Method

Gets a value specifying how important the low number of link crossings is relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public double getCrossingEdgesCost ()
```

Return Value

A value added to the total cost of a graph configuration for each pair of crossing links.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.getDistributionFactor Method

Gets a value indicating the importance of node distribution relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public double getDistributionFactor ()
```

Return Value

A multiplier applied to the node distribution cost when evaluating the total cost of a graph configuration.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.getEdgeLengthFactor Method

Gets a value specifying how important the short length of links is relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public double getEdgeLengthFactor ()
```

Return Value

A multiplier applied to the link length cost when evaluating the total cost of a graph configuration.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.getIterationsPerStage Method

Gets how many node shift iterations to perform at each stage of the algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public int getIterationsPerStage ()
```

Return Value

An integer value specifying the number of iterations.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.getLayoutArea Method

Gets the size of the layout area.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Rectangle2D.Float getLayoutArea ()
```

Return Value

The layout area coordinates.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.getNodeEdgeCrossingCost Method

Gets a value specifying how important the low number of crossings of links with edges is relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public double getNodeEdgeCrossingCost ()
```

Return Value

A value added to the total cost of a graph configuration for each crossing of link and node.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.getNodeEdgeDistFactor Method

Gets a value specifying the importance of the distance between nodes and links relative to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public double getNodeEdgeDistFactor ()`

Return Value

A multiplier applied to the node-to-link distance cost when evaluating the total cost of a graph configuration.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.getPrecision Method

Gets the cost calculations precision.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public double getPrecision ()`

Return Value

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.getRandomize Method

Gets a value indicating whether the nodes should be placed at random positions when the layout routine starts.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public boolean getRandomize ()
```

Return Value

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.getStages Method

Gets how many cooling stages the algorithm should simulate.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public int getStages ()
```

Return Value

The number of cooling stages

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.getTemperature Method

Gets the initial temperature of the simulated annealing process.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public double getTemperature ()
```

Return Value

A double value specifying the initial temperature of the simulated process.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class

AnnealLayoutInfo.getTemperatureScale Method

Gets how much the simulated temperature is decreased at each stage of the algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public double getTemperatureScale ()
```

Return Value

A multipler applied to the current temperature at the end of each cooling stage.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.getWidthHeightRatio Method

Gets what width / height ratio the layout area should have.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public double getWidthHeightRatio ()
```

Return Value

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.setBoundaryFactor Method

Sets a value indicating how important the distance from nodes to the layout area boundaries is relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setBoundaryFactor (
    double boundaryFactor
)
```

Parameters

boundaryFactor
A multiplier applied to the node-to-boundary distance cost when evaluating the total cost of a graph configuration. The default is 3000.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.setCrossingEdgesCost Method

Sets a value specifying how important the low number of link crossings is relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setCrossingEdgesCost (
    double crossingEdgesCost
)
```

Parameters

crossingEdgesCost
A value added to the total cost of a graph configuration for each pair of crossing links. The default is 100000.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.setDistributionFactor Method

Sets a value indicating the importance of node distribution relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setDistributionFactor (
    double distributionFactor
)
```

Parameters

distributionFactor
A multiplier applied to the node distribution cost when evaluating the total cost of a graph configuration. The default is 40000.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.setEdgeLengthFactor Method

Sets a value specifying how important the short length of links is relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setEdgeLengthFactor (
    double edgeLengthFactor
)
```

Parameters

edgeLengthFactor
A multiplier applied to the link length cost when evaluating the total cost of a graph configuration. The default is 0.25.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.setIterationsPerStage Method

Sets how many node shift iterations to perform at each stage of the algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setIterationsPerStage (
    int iterationsPerStage
)
```

Parameters

iterationsPerStage
An integer value specifying the number of iterations. The default is 50

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.setLayoutArea Method

Sets the size of the layout area.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setLayoutArea (
    Rectangle2D.Float layoutArea
)
```

Parameters

layoutArea
The layout area coordinates.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.setNodeEdgeCrossingCost Method

Sets a value specifying how important the low number of crossings of links with edges is relatively to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setNodeEdgeCrossingCost (
    double nodeEdgeCrossingCost
)
```

Parameters

nodeEdgeCrossingCost
A value added to the total cost of a graph configuration for each crossing of link and node. The default is 100000.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.setNodeEdgeDistFactor Method

Sets a value specifying the importance of the distance between nodes and links relative to the other criteria considered by the algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setNodeEdgeDistFactor (
    double nodeEdgeDistFactor
)
```

Parameters

nodeEdgeDistFactor
A multiplier applied to the node-to-link distance cost when evaluating the total cost of a graph configuration. The default is 20000.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.setPrecision Method

Sets the cost calculations precision. 1 speicifes highest precision. Accepted values are between 0.9 and 1. The algorithm completes faster when running with a lower precision, but produces slightly worse results.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setPrecision (
    double precision
)
```

Parameters

precision

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.setRandomize Method

Sets a value indicating whether the nodes should be placed at random positions when the layout routine starts.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setRandomize (
    boolean randomize
)
```

Parameters

randomize

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.setStages Method

Sets how many cooling stages the algorithm should simulate.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setStages (
    int stages
)
```

Parameters

stages
The number of cooling stages

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.setTemperature Method

Sets the initial temperature of the simulated annealing process.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setTemperature (
    double temperature
)
```

Parameters

temperature
A double value specifying the initial temperature of the simulated process.

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.setTemperatureScale Method

Sets how much the simulated temperature is decreased at each stage of the algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setTemperatureScale (
    double temperatureScale
)
```

Parameters

temperatureScale
A multipler applied to the current temperature at the end of each cooling stage. The default value is 0.75

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AnnealLayoutInfo.setWidthHeightRatio Method

Sets what width / height ratio the layout area should have.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setWidthHeightRatio (
    double widthHeightRatio
)
```

Parameters

widthHeightRatio

See Also

AnnealLayoutInfo Members
AnnealLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

AssistantType Class

Indicates the type of an assistant node in a tree.

Syntax

Java

```
public class AssistantType
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.AssistantType

See Also

AssistantType Members
com.mindfusion.diagramming.jlayout Namespace

AssistantType Members

Indicates the type of an assistant node in a tree.

The following tables list the members exposed by the AssistantType type.

Public Constructors

	Name	Description

	AssistantType	

Public Fields

	Name	Description
	Left	The node is an assistant and it is always positioned to the left of its parent.
	None	The node is not an assistant.
	Normal	The node is an assistant and its relative position is determined automatically by the layout.
	Right	The node is an assistant and it is always positioned to the right of its parent.

See Also

AssistantType Class
com.mindfusion.diagramming.jlayout Namespace

AssistantType Fields

AssistantType.Left Field

The node is an assistant and it is always positioned to the left of its parent.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public static final int Left
```

See Also

AssistantType Members
AssistantType Class
com.mindfusion.diagramming.jlayout Namespace

AssistantType.None Field

The node is not an assistant.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public static final int None
```

See Also

AssistantType Members
AssistantType Class
com.mindfusion.diagramming.jlayout Namespace

AssistantType.Normal Field

The node is an assistant and its relative position is determined automatically by the layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static final int Normal
```

See Also

AssistantType Members
AssistantType Class
com.mindfusion.diagramming.jlayout Namespace

AssistantType.Right Field

The node is an assistant and it is always positioned to the right of its parent.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static final int Right
```

See Also

AssistantType Members
AssistantType Class
com.mindfusion.diagramming.jlayout Namespace

AssistantType Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public AssistantType ()
```

See Also

AssistantType Class
com.mindfusion.diagramming.jlayout Namespace

BaseLayout Class

Specifies how OrthogonalLayout should arrange nodes.

Syntax

Java
`public class BaseLayout`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.BaseLayout

See Also

BaseLayout Members
com.mindfusion.diagramming.jlayout Namespace

BaseLayout Members

Specifies how OrthogonalLayout should arrange nodes.

The following tables list the members exposed by the BaseLayout type.

Public Constructors

	Name	Description
	BaseLayout	

Public Fields

	Name	Description
	Cascading	Use TreeLayout to arrange nodes.
	Custom	Use the current node configuration.
	Grid	Use GridLayout to arrange nodes.
	Layered	Use LayeredLayout to arrange nodes.

See Also

BaseLayout Class
com.mindfusion.diagramming.jlayout Namespace

BaseLayout Fields

BaseLayout.Cascading Field

Use TreeLayout to arrange nodes.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public static final int Cascading
```

See Also

BaseLayout Members
BaseLayout Class
com.mindfusion.diagramming.jlayout Namespace

BaseLayout.Custom Field

Use the current node configuration.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public static final int Custom
```

See Also

BaseLayout Members
BaseLayout Class
com.mindfusion.diagramming.jlayout Namespace

BaseLayout.Grid Field

Use GridLayout to arrange nodes.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public static final int Grid
```

See Also

BaseLayout Members
BaseLayout Class
com.mindfusion.diagramming.jlayout Namespace

BaseLayout.Layered Field

Use LayeredLayout to arrange nodes.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static final int Layered
```

See Also

BaseLayout Members
BaseLayout Class
com.mindfusion.diagramming.jlayout Namespace

BaseLayout Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public BaseLayout ()
```

See Also

BaseLayout Class
com.mindfusion.diagramming.jlayout Namespace

BaseList<E> Class

All JLayout list classes inherit from this one.

Syntax

Java

```
public class BaseList<E> extends AbstractList<E>
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)

java.util.AbstractList(E)
com.mindfusion.diagramming.jlayout.BaseList(E)
com.mindfusion.diagramming.jlayout.LinkList
com.mindfusion.diagramming.jlayout.NodeList
com.mindfusion.diagramming.jlayout.PathList
com.mindfusion.diagramming.jlayout.PointList

See Also

BaseList(E) Members
com.mindfusion.diagramming.jlayout Namespace

BaseList(E) Members

All JLayout list classes inherit from this one.

The following tables list the members exposed by the BaseList(E) type.

Protected Constructors

	Name	Description
	BaseList	Overloaded.

Protected Fields

	Name	Description
	list	

Public Methods

	Name	Description
	add	
	clear	
	contains	
	get	
	remove	Overloaded.
	removeRange	
	set	
	size	

See Also

BaseList<E> Class
com.mindfusion.diagramming.jlayout Namespace

BaseList(E) Fields

BaseList(E).list Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`protected ArrayList<E> list`

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming.jlayout Namespace

BaseList(E) Constructor

Overload List

Name	Description
BaseList(E) ()	
BaseList(E) (Collection)	
BaseList(E) (int)	

See Also

BaseList<E> Class
com.mindfusion.diagramming.jlayout Namespace

BaseList(E) Constructor ()

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`protected BaseList ()`

See Also

BaseList(E) Constructor Overload List
BaseList<E> Class
com.mindfusion.diagramming.jlayout Namespace

BaseList(E) Constructor (Collection<E>)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
protected BaseList (
    Collection<E> c
)
```

Parameters

c

See Also

BaseList(E) Constructor Overload List
BaseList<E> Class
com.mindfusion.diagramming.jlayout Namespace

BaseList(E) Constructor (int)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
protected BaseList (
    int capacity
)
```

Parameters

capacity

See Also

BaseList(E) Constructor Overload List
BaseList<E> Class
com.mindfusion.diagramming.jlayout Namespace

BaseList(E) Methods

BaseList(E).add Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void add (
    int index,
    E element
)
```

Parameters

index

element

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming.jlayout Namespace

BaseList(E).clear Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void clear ()
```

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming.jlayout Namespace

BaseList(E).contains Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean contains (
    Object element
)
```

Parameters

element

Return Value

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming.jlayout Namespace

BaseList(E).get Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public E get (
    int index
)
```

Parameters

index

Return Value

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming.jlayout Namespace

BaseList(E).remove Method

Overload List

Name	Description
BaseList(E).remove (int)	
BaseList(E).remove (Object)	

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming.jlayout Namespace

BaseList(E).remove Method (int)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public E remove (
    int index
)
```

Parameters

index

Return Value

See Also

remove Method Overload List
BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming.jlayout Namespace

BaseList(E).remove Method (Object)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean remove (
    Object element
)
```

Parameters

element

Return Value

See Also

remove Method Overload List
BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming.jlayout Namespace

BaseList(E).removeRange Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public void removeRange (
    int fromIndex,
    int toIndex
)
```

Parameters

fromIndex

toIndex

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming.jlayout Namespace

BaseList(E).set Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public E set (
    int index,
    E element
)
```

Parameters

index

element

Return Value

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming.jlayout Namespace

BaseList(E).size Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public int size ()`

Return Value

See Also

BaseList(E) Members
BaseList<E> Class
com.mindfusion.diagramming.jlayout Namespace

BorderTreeLayout Class

Syntax

Java
`public class BorderTreeLayout`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.BorderTreeLayout

See Also

BorderTreeLayout Members
com.mindfusion.diagramming.jlayout Namespace

BorderTreeLayout Members

The following tables list the members exposed by the BorderTreeLayout type.

Public Constructors

	Name	Description
	BorderTreeLayout	

Public Methods

	Name	Description
	arrange	

See Also

BorderTreeLayout Class
com.mindfusion.diagramming.jlayout Namespace

BorderTreeLayout Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public BorderTreeLayout ()
```

See Also

BorderTreeLayout Class
com.mindfusion.diagramming.jlayout Namespace

BorderTreeLayout Methods

BorderTreeLayout.arrange Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean arrange (
    Node rootNode,
    TreeLayoutInfo info
)
```

Parameters

rootNode

info

Return Value

See Also

BorderTreeLayout Members
BorderTreeLayout Class
com.mindfusion.diagramming.jlayout Namespace

CascadeLayout Class

Performs cascading layout on simple, connected graphs. The cascade layout places vertices on a virtual grid and arranges edges orthogonally, such that if the source graph is planar it is guaranteed that all edges will

have no more than two bends and will not intersect.

Syntax

Java
`public class CascadeLayout implements VertexSizeFunction`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.CascadeLayout

See Also

CascadeLayout Members
com.mindfusion.diagramming.jlayout Namespace

CascadeLayout Members

Performs cascading layout on simple, connected graphs. The cascade layout places vertices on a virtual grid and arranges edges orthogonally, such that if the source graph is planar it is guaranteed that all edges will have no more than two bends and will not intersect.

The following tables list the members exposed by the CascadeLayout type.

Public Constructors

	Name	Description
	CascadeLayout	Initializes a new instance of the **CascadeLayout** class.

Public Methods

	Name	Description
	arrange	Applies the layout to the specified graph using the specified settings.
	calc	VertexSizeFunction.calc implementation.
	getStatistics	Gets layout-specific information about the edges and vertices participating in the layout.

See Also

CascadeLayout Class
com.mindfusion.diagramming.jlayout Namespace

CascadeLayout Constructor

Initializes a new instance of the CascadeLayout class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public CascadeLayout ()
```

See Also

CascadeLayout Class
com.mindfusion.diagramming.jlayout Namespace

CascadeLayout Methods

CascadeLayout.arrange Method

Applies the layout to the specified graph using the specified settings.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public boolean arrange (
    Graph igraph,
    CascadeLayoutInfo info
)
```

Parameters

igraph

info

Return Value

See Also

CascadeLayout Members
CascadeLayout Class
com.mindfusion.diagramming.jlayout Namespace

CascadeLayout.calc Method

VertexSizeFunction.calc implementation.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public Size calc (
    Vertex vertex
)
```

Parameters

vertex

Return Value

See Also

CascadeLayout Members
CascadeLayout Class
com.mindfusion.diagramming.jlayout Namespace

CascadeLayout.getStatistics Method

Gets layout-specific information about the edges and vertices participating in the layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public CascadeLayoutStatistics getStatistics ()
```

Return Value

See Also

CascadeLayout Members
CascadeLayout Class
com.mindfusion.diagramming.jlayout Namespace

CascadeLayoutInfo Class

Contains settings for the CascadeLayout class.

Syntax

Java

```
public class CascadeLayoutInfo
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.CascadeLayoutInfo

See Also

CascadeLayoutInfo Members
com.mindfusion.diagramming.jlayout Namespace

CascadeLayoutInfo Members

Contains settings for the CascadeLayout class.

The following tables list the members exposed by the CascadeLayoutInfo type.

Public Constructors

	Name	Description
	CascadeLayoutInfo	Initializes a new instance of the **CascadeLayoutInfo** class.

Public Methods

	Name	Description
	getOrientation	Gets the orientation of the arranged graph.
	getPadding	Gets the spacing between nodes in adjacent layers.
	getUnitsPerMillimeter	Gets a coefficient representing the ratio between millimeter and the current default units of measure.
	setOrientation	Sets the orientation of the arranged graph.
	setPadding	Sets the spacing between nodes in adjacent layers.
	setUnitsPerMillimeter	Sets a coefficient representing the ratio between millimeter and the current default units of measure.

See Also

CascadeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

CascadeLayoutInfo Constructor

Initializes a new instance of the CascadeLayoutInfo class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public CascadeLayoutInfo ()
```

See Also

CascadeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

CascadeLayoutInfo Methods

CascadeLayoutInfo.getOrientation Method

Gets the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public Orientation getOrientation ()
```

Return Value

See Also

CascadeLayoutInfo Members
CascadeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

CascadeLayoutInfo.getPadding Method

Gets the spacing between nodes in adjacent layers.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public float getPadding ()
```

Return Value

See Also

CascadeLayoutInfo Members
CascadeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

CascadeLayoutInfo.getUnitsPerMillimeter Method

Gets a coefficient representing the ratio between millimeter and the current default units of measure.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public float getUnitsPerMillimeter ()
```

Return Value

See Also

CascadeLayoutInfo Members
CascadeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

CascadeLayoutInfo.setOrientation Method

Sets the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value

See Also

CascadeLayoutInfo Members
CascadeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

CascadeLayoutInfo.setPadding Method

Sets the spacing between nodes in adjacent layers.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setPadding (
    float value
)
```

Parameters

value

See Also

CascadeLayoutInfo Members
CascadeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

CascadeLayoutInfo.setUnitsPerMillimeter Method

Sets a coefficient representing the ratio between millimeter and the current default units of measure.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setUnitsPerMillimeter (
    float value
)
```

Parameters

value

See Also

CascadeLayoutInfo Members
CascadeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

CascadeLayoutStatistics Class

Encapsulates information about a cascade layout which has already complete.

Syntax

Java

```
public class CascadeLayoutStatistics
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.CascadeLayoutStatistics

See Also

CascadeLayoutStatistics Members
com.mindfusion.diagramming.jlayout Namespace

CascadeLayoutStatistics Members

Encapsulates information about a cascade layout which has already complete.

The following tables list the members exposed by the CascadeLayoutStatistics type.

Public Constructors

	Name	Description

	CascadeLayoutStatistics	Initializes a new instance of the CascadeLayoutStatistics class.

Public Methods

	Name	Description
	getNonplanarLinks	Gets the links which were breaking planarity in the source graph.

See Also

CascadeLayoutStatistics Class
com.mindfusion.diagramming.jlayout Namespace

CascadeLayoutStatistics Constructor

Initializes a new instance of the CascadeLayoutStatistics class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public CascadeLayoutStatistics ()
```

See Also

CascadeLayoutStatistics Class
com.mindfusion.diagramming.jlayout Namespace

CascadeLayoutStatistics Methods

CascadeLayoutStatistics.getNonplanarLinks Method

Gets the links which were breaking planarity in the source graph.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public ArrayList<Link> getNonplanarLinks ()
```

Return Value

See Also

CascadeLayoutStatistics Members
CascadeLayoutStatistics Class

CenterTreeLayout Class

Syntax

Java
`public class CenterTreeLayout`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.CenterTreeLayout

See Also

CenterTreeLayout Members
com.mindfusion.diagramming.jlayout Namespace

CenterTreeLayout Members

The following tables list the members exposed by the CenterTreeLayout type.

Public Constructors

	Name	Description
	CenterTreeLayout	

Public Methods

	Name	Description
	arrange	

See Also

CenterTreeLayout Class
com.mindfusion.diagramming.jlayout Namespace

CenterTreeLayout Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public CenterTreeLayout ()
```

See Also

CenterTreeLayout Class
com.mindfusion.diagramming.jlayout Namespace

CenterTreeLayout Methods

CenterTreeLayout.arrange Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean arrange (
    Node rootNode,
    TreeLayoutInfo info
)
```

Parameters

rootNode

info

Return Value

See Also

CenterTreeLayout Members
CenterTreeLayout Class
com.mindfusion.diagramming.jlayout Namespace

CircularLayout Class

Syntax

Java

```
public class CircularLayout extends Layout
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.Layout
    com.mindfusion.diagramming.jlayout.CircularLayout

See Also

CircularLayout Members

The following tables list the members exposed by the CircularLayout type.

Public Constructors

	Name	Description
	CircularLayout	Initializes a new instance of the **CircularLayout** class.

Public Methods

	Name	Description
	Arrange	Overloaded.

Protected Methods

	Name	Description
	GraphFromIGraph	(Inherited from Layout.)

See Also

CircularLayout Class
com.mindfusion.diagramming.jlayout Namespace

CircularLayout Constructor

Initializes a new instance of the CircularLayout class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public CircularLayout ()`

See Also

CircularLayout Class
com.mindfusion.diagramming.jlayout Namespace

CircularLayout Methods

CircularLayout.Arrange Method

Overload List

Name	Description
CircularLayout.Arrange (Graph, CircularLayoutInfo)	Applies the layout to the specified graph using the specified settings.
CircularLayout.Arrange (Graph, CircularLayoutInfo, LayoutProgress)	Applies the layout to the specified graph using the specified settings and progress callback delegate.

See Also

CircularLayout Members
CircularLayout Class
com.mindfusion.diagramming.jlayout Namespace

CircularLayout.Arrange Method (Graph, CircularLayoutInfo)

Applies the layout to the specified graph using the specified settings.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean Arrange (
    Graph graph,
    CircularLayoutInfo info
)
```

Parameters

graph

info

Return Value

See Also

Arrange Method Overload List
CircularLayout Members
CircularLayout Class
com.mindfusion.diagramming.jlayout Namespace

CircularLayout.Arrange Method (Graph, CircularLayoutInfo, LayoutProgress)

Applies the layout to the specified graph using the specified settings and progress callback delegate.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean Arrange (
    Graph igraph,
    CircularLayoutInfo info,
    LayoutProgress progress
)
```

Parameters

igraph

info

progress

Return Value

See Also

Arrange Method Overload List
CircularLayout Members
CircularLayout Class
com.mindfusion.diagramming.jlayout Namespace

CircularLayoutInfo Class

Syntax

Java

```
public class CircularLayoutInfo
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.CircularLayoutInfo

See Also

CircularLayoutInfo Members
com.mindfusion.diagramming.jlayout Namespace

CircularLayoutInfo Members

The following tables list the members exposed by the CircularLayoutInfo type.

Public Constructors

	Name	Description
	CircularLayoutInfo	Initializes a new instance of the CircularLayoutInfo class.

Public Methods

	Name	Description
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged tree and the top-left point of the document bounds.
	getRadius	Gets the radius of the layout circle.
	getSiftingRounds	Gets the number of sifts to perform during the layout.
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged tree and the top-left point of the document bounds.
	setRadius	Sets the radius of the layout circle.
	setSiftingRounds	Sets the number of sifts to perform during the layout.

See Also

CircularLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

CircularLayoutInfo Constructor

Initializes a new instance of the CircularLayoutInfo class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public CircularLayoutInfo ()`

See Also

CircularLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

CircularLayoutInfo Methods

CircularLayoutInfo.getMargins Method

Gets the distance between the top-left corner of the smallest rectangle containing the arranged tree and the top-left point of the document bounds.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public XDimension2D.Double getMargins ()`

Return Value

See Also

CircularLayoutInfo Members
CircularLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

CircularLayoutInfo.getRadius Method

Gets the radius of the layout circle.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public float getRadius ()
```

Return Value

A float value specifying the radius; the default is 60.

See Also

CircularLayoutInfo Members
CircularLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

CircularLayoutInfo.getSiftingRounds Method

Gets the number of sifts to perform during the layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public int getSiftingRounds ()
```

Return Value

An integer value specifying the number of sifting rounds; the default is 1.

See Also

CircularLayoutInfo Members
CircularLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

CircularLayoutInfo.setMargins Method

Sets the distance between the top-left corner of the smallest rectangle containing the arranged tree and the top-left point of the document bounds.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setMargins (
    XDimension2D.Double margins
)
```

Parameters

margins

See Also

CircularLayoutInfo Members
CircularLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

CircularLayoutInfo.setRadius Method

Sets the radius of the layout circle.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setRadius (
    float value
)
```

Parameters

value
A float value specifying the radius; the default is 60.

See Also

CircularLayoutInfo Members
CircularLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

CircularLayoutInfo.setSiftingRounds Method

Sets the number of sifts to perform during the layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

`public void setSiftingRounds (`
`  int value`
`)`

Parameters

value
An integer value specifying the number of sifting rounds; the default is 1.

See Also

CircularLayoutInfo Members
CircularLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

DecisionLayout Class

Performs decision layout on a graph.

Syntax

Java
`public class DecisionLayout`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.DecisionLayout

See Also

DecisionLayout Members
com.mindfusion.diagramming.jlayout Namespace

DecisionLayout Members

Performs decision layout on a graph.

The following tables list the members exposed by the DecisionLayout type.

Public Constructors

	Name	Description
	DecisionLayout	Initializes a new instance of the **DecisionLayout** class.

Public Methods

	Name	Description

	arrange	Performs the arrangement of the diagram.

See Also

DecisionLayout Class
com.mindfusion.diagramming.jlayout Namespace

DecisionLayout Constructor

Initializes a new instance of the DecisionLayout class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public DecisionLayout ()
```

See Also

DecisionLayout Class
com.mindfusion.diagramming.jlayout Namespace

DecisionLayout Methods

DecisionLayout.arrange Method

Performs the arrangement of the diagram.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean arrange (
    Graph graph,
    DecisionLayoutInfo info
)
```

Parameters

graph

info

Return Value

See Also

DecisionLayoutInfo Class

Contains settings for the DecisionLayout class.

Syntax

```
Java
public class DecisionLayoutInfo
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.DecisionLayoutInfo

See Also

DecisionLayoutInfo Members
com.mindfusion.diagramming.jlayout Namespace

DecisionLayoutInfo Members

Contains settings for the DecisionLayout class.

The following tables list the members exposed by the DecisionLayoutInfo type.

Public Constructors

	Name	Description
	DecisionLayoutInfo	Initializes a new instance of the **DecisionLayoutInfo** class.

Public Methods

	Name	Description
	getHorizontalPadding	Gets the horizontal distance between adjacent nodes.
	getLinkPadding	Gets the distance between parallel links.
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged graph and the top-left point of the document bounds.
	getOrientation	Gets a the overall orientation of the arranged diagram.
	getStartNode	Gets the initial (top-left) node in the arranged diagram.
	getVerticalPadding	Gets the vertical distance between adjacent nodes.
	setHorizontalPadding	Sets the horizontal distance between adjacent nodes.

	setLinkPadding	Sets the distance between parallel links.
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged graph and the top-left point of the document bounds.
	setOrientation	Sets a the overall orientation of the arranged diagram.
	setStartNode	Sets the initial (top-left) node in the arranged diagram.
	setVerticalPadding	Sets the vertical distance between adjacent nodes.

See Also

DecisionLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

DecisionLayoutInfo Constructor

Initializes a new instance of the DecisionLayoutInfo class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public DecisionLayoutInfo ()
```

See Also

DecisionLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

DecisionLayoutInfo Methods

DecisionLayoutInfo.getHorizontalPadding Method

Gets the horizontal distance between adjacent nodes.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getHorizontalPadding ()
```

Return Value

See Also

DecisionLayoutInfo Members
DecisionLayoutInfo Class

DecisionLayoutInfo.getLinkPadding Method

Gets the distance between parallel links.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getLinkPadding ()
```

Return Value

See Also

DecisionLayoutInfo Members
DecisionLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

DecisionLayoutInfo.getMargins Method

Gets the distance between the top-left corner of the smallest rectangle containing the arranged graph and the top-left point of the document bounds.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public XDimension2D.Double getMargins ()
```

Return Value

See Also

DecisionLayoutInfo Members
DecisionLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

DecisionLayoutInfo.getOrientation Method

Gets a the overall orientation of the arranged diagram.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Orientation getOrientation ()
```

Return Value

See Also

DecisionLayoutInfo Members
DecisionLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

DecisionLayoutInfo.getStartNode Method

Gets the initial (top-left) node in the arranged diagram.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Node getStartNode ()
```

Return Value

See Also

DecisionLayoutInfo Members
DecisionLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

DecisionLayoutInfo.getVerticalPadding Method

Gets the vertical distance between adjacent nodes.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getVerticalPadding ()
```

Return Value

See Also

DecisionLayoutInfo Members
DecisionLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

DecisionLayoutInfo.setHorizontalPadding Method

Sets the horizontal distance between adjacent nodes.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setHorizontalPadding (
    float value
)
```

Parameters

value

See Also

DecisionLayoutInfo Members
DecisionLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

DecisionLayoutInfo.setLinkPadding Method

Sets the distance between parallel links.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setLinkPadding (
    float value
)
```

Parameters

value

See Also

DecisionLayoutInfo Members
DecisionLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

DecisionLayoutInfo.setMargins Method

Sets the distance between the top-left corner of the smallest rectangle containing the arranged graph and the top-left point of the document bounds.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public void setMargins (
    XDimension2D.Double value
)
```

Parameters

value

See Also

DecisionLayoutInfo Members
DecisionLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

DecisionLayoutInfo.setOrientation Method

Sets a the overall orientation of the arranged diagram.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public void setOrientation (
    Orientation value
)
```

Parameters

value

See Also

DecisionLayoutInfo Members
DecisionLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

DecisionLayoutInfo.setStartNode Method

Sets the initial (top-left) node in the arranged diagram.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public void setStartNode (
    Node value
)
```

Parameters

value

See Also

DecisionLayoutInfo Members
DecisionLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

DecisionLayoutInfo.setVerticalPadding Method

Sets the vertical distance between adjacent nodes.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setVerticalPadding (
    float value
)
```

Parameters

value

See Also

DecisionLayoutInfo Members
DecisionLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

Direction Enumeration

Specifies layout direction.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public enum Direction
```

Members

	Member name	Description
	Reversed	Indicates either right-to-left or bottom-to-top direction.
	Straight	Indicates either left-to-right or top-to-bottom direction.

See Also

com.mindfusion.diagramming.jlayout Namespace

Double Class

Syntax

Java
`public class Double extends Dimension2D`

Inheritance Hierarchy

java.lang.Object
  java.awt.geom.Dimension2D
    com.mindfusion.diagramming.jlayout.XDimension2D.Double

See Also

Double Members
com.mindfusion.diagramming.jlayout Namespace

Double Members

The following tables list the members exposed by the Double type.

Public Constructors

	Name	Description
	Double	Overloaded.

Public Fields

	Name	Description
	height	
	width	

Public Methods

	Name	Description
	clone	
	getHeight	
	getWidth	
	setSize	

See Also

Double Class
com.mindfusion.diagramming.jlayout Namespace

Double Fields

Double.height Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public double height`

See Also

Double Members
Double Class
com.mindfusion.diagramming.jlayout Namespace

Double.width Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public double width`

See Also

Double Members
Double Class
com.mindfusion.diagramming.jlayout Namespace

Double Constructor

Overload List

Name	Description
Double ()	
Double (double, double)	

See Also

Double Class
com.mindfusion.diagramming.jlayout Namespace

Double Constructor ()

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public Double ()
```

See Also

Double Constructor Overload List
Double Class
com.mindfusion.diagramming.jlayout Namespace

Double Constructor (double, double)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public Double (
    double width,
    double height
)
```

Parameters

width

height

See Also

Double Constructor Overload List
Double Class
com.mindfusion.diagramming.jlayout Namespace

Double Methods

Double.clone Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public Object clone ()
```

Return Value

See Also

Double Members
Double Class
com.mindfusion.diagramming.jlayout Namespace

Double.getHeight Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public double getHeight ()
```

Return Value

See Also

Double Members
Double Class
com.mindfusion.diagramming.jlayout Namespace

Double.getWidth Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public double getWidth ()
```

Return Value

See Also

Double Members
Double Class
com.mindfusion.diagramming.jlayout Namespace

Double.setSize Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setSize (
    double width,
    double height
)
```

Parameters

width

height

See Also

Double Members
Double Class
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayout Class

Syntax

Java

```
public class FlowchartLayout
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.FlowchartLayout

See Also

FlowchartLayout Members
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayout Members

The following tables list the members exposed by the FlowchartLayout type.

Public Constructors

	Name	Description
	FlowchartLayout	

Public Methods

	Name	Description
	arrange	
	getLinkPadding	

See Also

FlowchartLayout Class
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayout Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public FlowchartLayout ()
```

See Also

FlowchartLayout Class
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayout Methods

FlowchartLayout.arrange Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean arrange (
    Graph graph,
    FlowchartLayoutInfo info
)
```

Parameters

graph

info

Return Value

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayout.getLinkPadding Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public float getLinkPadding ()`

Return Value

See Also

FlowchartLayout Members
FlowchartLayout Class
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayoutInfo Class

Syntax

Java
`public class FlowchartLayoutInfo`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.jlayout.FlowchartLayoutInfo

See Also

FlowchartLayoutInfo Members
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayoutInfo Members

The following tables list the members exposed by the FlowchartLayoutInfo type.

Public Constructors

	Name	Description
	FlowchartLayoutInfo	

Public Fields

	Name	Description
	mm	

Public Methods

	Name	Description
	getBranchPadding	
	getLinkPadding	
	getNodeDistance	
	getOrientation	
	setBranchPadding	
	setLinkPadding	
	setMM	
	setNodeDistance	
	setOrientation	

See Also

FlowchartLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayoutInfo Fields

FlowchartLayoutInfo.mm Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public float mm`

See Also

FlowchartLayoutInfo Members
FlowchartLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayoutInfo Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public FlowchartLayoutInfo ()
```

See Also

FlowchartLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayoutInfo Methods

FlowchartLayoutInfo.getBranchPadding Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getBranchPadding ()
```

Return Value

See Also

FlowchartLayoutInfo Members
FlowchartLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayoutInfo.getLinkPadding Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getLinkPadding ()
```

Return Value

See Also

FlowchartLayoutInfo Members
FlowchartLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayoutInfo.getNodeDistance Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public float getNodeDistance ()`

Return Value

See Also

FlowchartLayoutInfo Members
FlowchartLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayoutInfo.getOrientation Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public Orientation getOrientation ()`

Return Value

See Also

FlowchartLayoutInfo Members
FlowchartLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayoutInfo.setBranchPadding Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setBranchPadding (
    float value
)
```

Parameters

value

See Also

FlowchartLayoutInfo Members
FlowchartLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayoutInfo.setLinkPadding Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setLinkPadding (
    float value
)
```

Parameters

value

See Also

FlowchartLayoutInfo Members
FlowchartLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayoutInfo.setMM Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setMM (
    float value
)
```

Parameters

value

See Also

FlowchartLayoutInfo Members
FlowchartLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayoutInfo.setNodeDistance Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setNodeDistance (
    float value
)
```

Parameters

value

See Also

FlowchartLayoutInfo Members
FlowchartLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

FlowchartLayoutInfo.setOrientation Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value

See Also

FlowchartLayoutInfo Members
FlowchartLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

FractalLayout Class

Syntax

Java
`public class FractalLayout`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.FractalLayout

See Also

FractalLayout Members
com.mindfusion.diagramming.jlayout Namespace

FractalLayout Members

The following tables list the members exposed by the FractalLayout type.

Public Constructors

	Name	Description
	FractalLayout	Initializes a new instance of the FractalLayout class.

Public Methods

	Name	Description
	arrange	Applies the layout to the specified graph.
	getRoot	Gets the tree root.
	setRoot	Sets the tree root.

See Also

FractalLayout Class
com.mindfusion.diagramming.jlayout Namespace

FractalLayout Constructor

Initializes a new instance of the FractalLayout class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public FractalLayout ()
```

See Also

FractalLayout Class
com.mindfusion.diagramming.jlayout Namespace

FractalLayout Methods

FractalLayout.arrange Method

Applies the layout to the specified graph.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public boolean arrange (
    Graph igraph
)
```

Parameters

igraph

Return Value

See Also

FractalLayout Members
FractalLayout Class
com.mindfusion.diagramming.jlayout Namespace

FractalLayout.getRoot Method

Gets the tree root.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public Node getRoot ()
```

Return Value

A Node specifying the root.

See Also

FractalLayout Members
FractalLayout Class
com.mindfusion.diagramming.jlayout Namespace

FractalLayout.setRoot Method

Sets the tree root.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setRoot (
    Node value
)
```

Parameters

value
A Node specifying the root.

See Also

FractalLayout Members
FractalLayout Class
com.mindfusion.diagramming.jlayout Namespace

Graph Interface

Syntax

Java

```
public interface Graph
```

See Also

Graph Members
com.mindfusion.diagramming.jlayout Namespace

Graph Members

The following tables list the members exposed by the Graph type.

Public Methods

	Name	Description
	getBounds	

	getDocRect	Gets the bounding rectangle of the document, containing the graph.
	getLinks	Gets a collection with all links in this graph.
	getNodes	Gets a collection with all nodes in this graph.
	isDirected	Gets a value indicating whether the direction of links in this graph should be considered, i.e. the graph is a 'directed graph'.

See Also

Graph Interface
com.mindfusion.diagramming.jlayout Namespace

Graph Methods

Graph.getBounds Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
Rectangle2D.Float getBounds (
    boolean includeLinks
)
```

Parameters

includeLinks

Return Value

See Also

Graph Members
Graph Interface
com.mindfusion.diagramming.jlayout Namespace

Graph.getDocRect Method

Gets the bounding rectangle of the document, containing the graph.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
Rectangle2D.Float getDocRect ()
```

Return Value

See Also

Graph Members
Graph Interface
com.mindfusion.diagramming.jlayout Namespace

Graph.getLinks Method

Gets a collection with all links in this graph.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`LinkList getLinks ()`

Return Value

See Also

Graph Members
Graph Interface
com.mindfusion.diagramming.jlayout Namespace

Graph.getNodes Method

Gets a collection with all nodes in this graph.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`NodeList getNodes ()`

Return Value

See Also

Graph Members
Graph Interface
com.mindfusion.diagramming.jlayout Namespace

Graph.isDirected Method

Gets a value indicating whether the direction of links in this graph should be considered, i.e. the graph is a 'directed graph'.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`boolean isDirected ()`

Return Value

See Also

Graph Members
Graph Interface
com.mindfusion.diagramming.jlayout Namespace

GraphBuilder Interface

Factory class used to create graphs.

Syntax

Java
`public interface GraphBuilder`

See Also

GraphBuilder Members
com.mindfusion.diagramming.jlayout Namespace

GraphBuilder Members

Factory class used to create graphs.

The following tables list the members exposed by the GraphBuilder type.

Public Methods

	Name	Description
	create	Creates new empty graph.

See Also

GraphBuilder Interface
com.mindfusion.diagramming.jlayout Namespace

GraphBuilder Methods

GraphBuilder.create Method

Creates new empty graph.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`Graph create ()`

Return Value

See Also

GraphBuilder Members
GraphBuilder Interface
com.mindfusion.diagramming.jlayout Namespace

GraphLibUtilities Class

Provides utility methods for operating with the MindFusion.Graphs library.

Syntax

Java
`public class GraphLibUtilities`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.GraphLibUtilities

See Also

GraphLibUtilities Members
com.mindfusion.diagramming.jlayout Namespace

GraphLibUtilities Members

Provides utility methods for operating with the MindFusion.Graphs library.

The following tables list the members exposed by the GraphLibUtilities type.

Public Constructors

	Name	Description
	GraphLibUtilities	

Public Methods

	Name	Description
	graphFromIGraph	
	graphFromIGraphWithTables	

See Also

GraphLibUtilities Class
com.mindfusion.diagramming.jlayout Namespace

GraphLibUtilities Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public GraphLibUtilities ()
```

See Also

GraphLibUtilities Class
com.mindfusion.diagramming.jlayout Namespace

GraphLibUtilities Methods

GraphLibUtilities.graphFromIGraph Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static Graph graphFromIGraph (
    Graph igraph,
    HashMap<Vertex, Node> nodeMap,
    HashMap<Edge, Link> linkMap
)
```

Parameters

igraph

nodeMap

linkMap

Return Value

See Also

GraphLibUtilities Members
GraphLibUtilities Class
com.mindfusion.diagramming.jlayout Namespace

GraphLibUtilities.graphFromIGraphWithTables Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static Graph graphFromIGraphWithTables (
    Graph igraph,
    HashMap<Vertex, Node> nodeMap,
    HashMap<Edge, Link> linkMap
)
```

Parameters

igraph

nodeMap

linkMap

Return Value

See Also

GraphLibUtilities Members
GraphLibUtilities Class
com.mindfusion.diagramming.jlayout Namespace

GraphNodeHashMap Class

Syntax

Java

```
public class GraphNodeHashMap extends HashMap<K, V>
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractMap(K, V)
    java.util.HashMap(K, V)
      com.mindfusion.diagramming.jlayout.GraphNodeHashMap

See Also

GraphNodeHashMap Members
com.mindfusion.diagramming.jlayout Namespace

GraphNodeHashMap Members

The following tables list the members exposed by the GraphNodeHashMap type.

Public Constructors

	Name	Description
	GraphNodeHashMap	

See Also

GraphNodeHashMap Class
com.mindfusion.diagramming.jlayout Namespace

GraphNodeHashMap Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public GraphNodeHashMap ()
```

See Also

GraphNodeHashMap Class
com.mindfusion.diagramming.jlayout Namespace

GraphSplitter Class

Syntax

Java

```
public class GraphSplitter
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.GraphSplitter

See Also

GraphSplitter Members
com.mindfusion.diagramming.jlayout Namespace

GraphSplitter Members

The following tables list the members exposed by the GraphSplitter type.

Public Constructors

	Name	Description
	GraphSplitter	

Public Methods

	Name	Description
	split	Divides the supplied graph to its connected subgraphs.

See Also

GraphSplitter Class
com.mindfusion.diagramming.jlayout Namespace

GraphSplitter Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public GraphSplitter ()
```

See Also

GraphSplitter Class
com.mindfusion.diagramming.jlayout Namespace

GraphSplitter Methods

GraphSplitter.split Method

Divides the supplied graph to its connected subgraphs.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static ArrayList<Graph> split (
    Graph initial,
    GraphBuilder builder
)
```

Parameters

initial

builder

Return Value

See Also

GraphSplitter Members
GraphSplitter Class
com.mindfusion.diagramming.jlayout Namespace

GridLayout Class

Syntax

Java
`public class GridLayout`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.GridLayout

See Also

GridLayout Members
com.mindfusion.diagramming.jlayout Namespace

GridLayout Members

The following tables list the members exposed by the GridLayout type.

Public Constructors

	Name	Description
	GridLayout	

Public Methods

	Name	Description
	arrange	

See Also

GridLayout Class
com.mindfusion.diagramming.jlayout Namespace

GridLayout Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public GridLayout ()
```

See Also

GridLayout Class
com.mindfusion.diagramming.jlayout Namespace

GridLayout Methods

GridLayout.arrange Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean arrange (
    Graph graph,
    GridLayoutInfo info
)
```

Parameters

graph

info

Return Value

See Also

GridLayout Members
GridLayout Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo Class

Syntax

Java
`public class GridLayoutInfo`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.GridLayoutInfo

See Also

GridLayoutInfo Members
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo Members

The following tables list the members exposed by the GridLayoutInfo type.

Public Constructors

	Name	Description
	GridLayoutInfo	Overloaded.

Public Methods

	Name	Description
	getEndNode	
	getGridSize	
	getIterations	
	getRandomSeed	
	getStartNode	
	getXGap	
	getYGap	
	setEndNode	
	setGridSize	
	setIterations	
	setRandomSeed	
	setStartNode	
	setXGap	
	setYGap	

See Also

GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo Constructor

Overload List

Name	Description
GridLayoutInfo ()	
GridLayoutInfo (int, float, float, float)	

See Also

GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo Constructor ()

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public GridLayoutInfo ()
```

See Also

GridLayoutInfo Constructor Overload List
GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo Constructor (int, float, float, float)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public GridLayoutInfo (
    int iterations,
    float gridSize,
    float xGap,
    float yGap
)
```

Parameters

iterations

gridSize

xGap

yGap

See Also

GridLayoutInfo Constructor Overload List
GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo Methods

GridLayoutInfo.getEndNode Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public Node getEndNode ()`

Return Value

See Also

GridLayoutInfo Members
GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo.getGridSize Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public float getGridSize ()`

Return Value

See Also

GridLayoutInfo Members
GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo.getIterations Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public int getIterations ()
```

Return Value

See Also

GridLayoutInfo Members
GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo.getRandomSeed Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public int getRandomSeed ()
```

Return Value

See Also

GridLayoutInfo Members
GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo.getStartNode Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Node getStartNode ()
```

Return Value

See Also

GridLayoutInfo Members
GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo.getXGap Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public float getXGap ()`

Return Value

See Also

GridLayoutInfo Members
GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo.getYGap Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public float getYGap ()`

Return Value

See Also

GridLayoutInfo Members
GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo.setEndNode Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setEndNode (
    Node value
)
```

Parameters

value

See Also

GridLayoutInfo Members
GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo.setGridSize Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setGridSize (
    float value
)
```

Parameters

value

See Also

GridLayoutInfo Members
GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo.setIterations Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setIterations (
    int value
)
```

Parameters

value

See Also

GridLayoutInfo Members
GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo.setRandomSeed Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setRandomSeed (
    int value
)
```

Parameters

value

See Also

GridLayoutInfo Members
GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo.setStartNode Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setStartNode (
    Node value
)
```

Parameters

value

See Also

GridLayoutInfo Members
GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo.setXGap Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setXGap (
    float value
)
```

Parameters

value

See Also

GridLayoutInfo Members
GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

GridLayoutInfo.setYGap Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setYGap (
    float value
)
```

Parameters

value

See Also

GridLayoutInfo Members
GridLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

HierarchicalLayout Class

Performs hierarchical layout on simple, connected, level-planar graphs. The hierarchical layout places vertices on predefined levels, such that if the source graph is level-planar it is guaranteed that all edges will have a single segment and will not intersect. A planar graph is considered level-planar if it is still possible to draw it without edge intersections when its vertices are positioned on predefined levels.

Syntax

Java

```
public class HierarchicalLayout
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.HierarchicalLayout

See Also

HierarchicalLayout Members
com.mindfusion.diagramming.jlayout Namespace

HierarchicalLayout Members

Performs hierarchical layout on simple, connected, level-planar graphs. The hierarchical layout places vertices on predefined levels, such that if the source graph is level-planar it is guaranteed that all edges will have a single segment and will not intersect. A planar graph is considered level-planar if it is still possible to draw it without edge intersections when its vertices are positioned on predefined levels.

The following tables list the members exposed by the HierarchicalLayout type.

Public Constructors

	Name	Description
	HierarchicalLayout	Initializes a new instance of the **HierarchicalLayout** class.

Public Methods

	Name	Description
	arrange	Applies the layout to the specified graph using the specified settings.

See Also

HierarchicalLayout Class
com.mindfusion.diagramming.jlayout Namespace

HierarchicalLayout Constructor

Initializes a new instance of the HierarchicalLayout class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public HierarchicalLayout ()`

See Also

HierarchicalLayout Class
com.mindfusion.diagramming.jlayout Namespace

HierarchicalLayout Methods

HierarchicalLayout.arrange Method

Applies the layout to the specified graph using the specified settings.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean arrange (
    Graph igraph,
    HierarchicalLayoutInfo info
)
```

Parameters

igraph

info

Return Value

See Also

HierarchicalLayout Members
HierarchicalLayout Class
com.mindfusion.diagramming.jlayout Namespace

HierarchicalLayoutInfo Class

Contains settings for the HierarchicalLayout class.

Syntax

Java

```
public class HierarchicalLayoutInfo
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.HierarchicalLayoutInfo

See Also

HierarchicalLayoutInfo Members
com.mindfusion.diagramming.jlayout Namespace

HierarchicalLayoutInfo Members

Contains settings for the HierarchicalLayout class.

The following tables list the members exposed by the HierarchicalLayoutInfo type.

Public Constructors

	Name	Description
	HierarchicalLayoutInfo	Initializes a new instance of the **HierarchicalLayoutInfo** class.

Public Methods

	Name	Description
	getLevelDistance	Gets the distance between adjacent levels in the hierarchical layout.
	getOrientation	Gets the orientation of the arranged graph.
	setLevelDistance	Sets the distance between adjacent levels in the hierarchical layout.
	setOrientation	Sets the orientation of the arranged graph.

See Also

HierarchicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

HierarchicalLayoutInfo Constructor

Initializes a new instance of the HierarchicalLayoutInfo class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public HierarchicalLayoutInfo ()`

See Also

HierarchicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

HierarchicalLayoutInfo Methods

HierarchicalLayoutInfo.getLevelDistance Method

Gets the distance between adjacent levels in the hierarchical layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public float getLevelDistance ()
```

Return Value

See Also

HierarchicalLayoutInfo Members
HierarchicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

HierarchicalLayoutInfo.getOrientation Method

Gets the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public Orientation getOrientation ()
```

Return Value

See Also

HierarchicalLayoutInfo Members
HierarchicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

HierarchicalLayoutInfo.setLevelDistance Method

Sets the distance between adjacent levels in the hierarchical layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public void setLevelDistance (
    float value
)
```

Parameters

value

See Also

HierarchicalLayoutInfo Members
HierarchicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

HierarchicalLayoutInfo.setOrientation Method

Sets the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value

See Also

HierarchicalLayoutInfo Members
HierarchicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

HierarchicalLayoutTraits Enumeration

Indicates item traits specific to hierarchical layouts. Members of this enumeration can be used as keys in the DiagramItem.LayoutTraits hashtable.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public enum HierarchicalLayoutTraits
```

Members

	Member name	Description
	Level	The number associated with this key specifies the index of the level of the item in the level-planar graph.

See Also

LayerComparator Class

Syntax

Java
`public class LayerComparator implements Comparator<T>`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.LayerComparator

See Also

LayerComparator Members
com.mindfusion.diagramming.jlayout Namespace

LayerComparator Members

The following tables list the members exposed by the LayerComparator type.

Public Constructors

	Name	Description
	LayerComparator	

Public Methods

	Name	Description
	compare	

See Also

LayerComparator Class
com.mindfusion.diagramming.jlayout Namespace

LayerComparator Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public LayerComparator (
    Hashtable<GraphNode, Integer> layering
)
```

Parameters

layering

See Also

LayerComparator Class
com.mindfusion.diagramming.jlayout Namespace

LayerComparator Methods

LayerComparator.compare Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public int compare (
    GraphNode o1,
    GraphNode o2
)
```

Parameters

o1

o2

Return Value

See Also

LayerComparator Members
LayerComparator Class
com.mindfusion.diagramming.jlayout Namespace

LayerDistributor Class

Syntax

Java

```
public class LayerDistributor
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.jlayout.LayerDistributor

See Also

LayerDistributor Members
com.mindfusion.diagramming.jlayout Namespace

LayerDistributor Members

The following tables list the members exposed by the LayerDistributor type.

Public Constructors

	Name	Description
	LayerDistributor	

Public Methods

	Name	Description
	distribute	

See Also

LayerDistributor Class
com.mindfusion.diagramming.jlayout Namespace

LayerDistributor Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public LayerDistributor ()`

See Also

LayerDistributor Class
com.mindfusion.diagramming.jlayout Namespace

LayerDistributor Methods

LayerDistributor.distribute Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public static HashMap<GraphNode, Integer> distribute (
    AGraph graph,
    HashMap<Node, Integer> laneMap,
    ByRef<Integer> layerCount
)
```

Parameters

graph

laneMap

layerCount

Return Value

See Also

LayerDistributor Members
LayerDistributor Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayout Class

Syntax

```
Java
public class LayeredLayout
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.LayeredLayout

See Also

LayeredLayout Members
com.mindfusion.diagramming.jlayout Namespace

LayeredLayout Members

The following tables list the members exposed by the LayeredLayout type.

Public Constructors

	Name	Description
	LayeredLayout	

Public Methods

	Name	Description
	arrange	Performs the arrangement of the diagram.

See Also

LayeredLayout Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayout Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public LayeredLayout ()
```

See Also

LayeredLayout Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayout Methods

LayeredLayout.arrange Method

Performs the arrangement of the diagram.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean arrange (
    Graph graph,
    LayeredLayoutInfo info
)
```

Parameters

graph

info

Return Value

See Also

LayeredLayoutInfo Class

Syntax

Java
`public class LayeredLayoutInfo`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.LayeredLayoutInfo

See Also

LayeredLayoutInfo Members
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo Members

The following tables list the members exposed by the LayeredLayoutInfo type.

Public Constructors

	Name	Description
	LayeredLayoutInfo	Overloaded.

Public Methods

	Name	Description
	getDirection	
	getEnableCustomLayers	Gets a value indicating whether the layered layout will honor the LayeredLayoutTraits.Layer flags.
	getEndNode	
	getEnforceLinkFlow	Gets a value indicating whether the layout will force all links to go in the same direction. If the supplied graph has cycles, it will be made acyclic prior the layout. EnableCustomLayers and SplitLayers are ignored if this property is set to true.
	getIgnoreNodeSize	
	getLayerDistance	
	getLinksCompactFactor	

	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram
	getNodeDistance	
	getOrientation	
	getSplitLayers	
	getStartNode	
	getStatistics	Gets layout-specific information about the nodes and links participating in the layout.
	getStraightenLongLinks	
	getTimeLimit	
	setDirection	
	setEnableCustomLayers	Sets a value indicating whether the layered layout will honor the LayeredLayoutTraits.Layer flags.
	setEndNode	
	setEnforceLinkFlow	Sets a value indicating whether the layout will force all links to go in the same direction. If the supplied graph has cycles, it will be made acyclic prior the layout. EnableCustomLayers and SplitLayers are ignored if this property is set to true.
	setIgnoreNodeSize	
	setLayerDistance	
	setLinksCompactFactor	
	setMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram
	setNodeDistance	
	setOrientation	
	setSplitLayers	
	setStartNode	
	setStraightenLongLinks	
	setTimeLimit	

See Also

LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo Constructor

Overload List

Name	Description
LayeredLayoutInfo ()	
LayeredLayoutInfo (Orientation, float, float, XDimension2D.Double)	

See Also

LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo Constructor ()

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public LayeredLayoutInfo ()
```

See Also

LayeredLayoutInfo Constructor Overload List
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo Constructor (Orientation, float, float, XDimension2D.Double)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public LayeredLayoutInfo (
    Orientation orientation,
    float layerDistance,
    float nodeDistance,
    XDimension2D.Double margins
)
```

Parameters

orientation

layerDistance

nodeDistance

margins

See Also

LayeredLayoutInfo Constructor Overload List
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo Methods

LayeredLayoutInfo.getDirection Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public Direction getDirection ()`

Return Value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.getEnableCustomLayers Method

Gets a value indicating whether the layered layout will honor the LayeredLayoutTraits.Layer flags.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public boolean getEnableCustomLayers ()`

Return Value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.getEndNode Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public Node getEndNode ()
```

Return Value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.getEnforceLinkFlow Method

Gets a value indicating whether the layout will force all links to go in the same direction. If the supplied graph has cycles, it will be made acyclic prior the layout. EnableCustomLayers and SplitLayers are ignored if this property is set to true.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public boolean getEnforceLinkFlow ()
```

Return Value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.getIgnoreNodeSize Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public boolean getIgnoreNodeSize ()
```

Return Value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.getLayerDistance Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getLayerDistance ()
```

Return Value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.getLinksCompactFactor Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getLinksCompactFactor ()
```

Return Value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.getMargins Method

Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public XDimension2D.Double getMargins ()
```

Return Value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.getNodeDistance Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getNodeDistance ()
```

Return Value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.getOrientation Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Orientation getOrientation ()
```

Return Value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.getSplitLayers Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public boolean getSplitLayers ()
```

Return Value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.getStartNode Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public Node getStartNode ()
```

Return Value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.getStatistics Method

Gets layout-specific information about the nodes and links participating in the layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public LayeredLayoutStatistics getStatistics ()
```

Return Value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.getStraightenLongLinks Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean getStraightenLongLinks ()
```

Return Value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.getTimeLimit Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public long getTimeLimit ()
```

Return Value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.setDirection Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setDirection (
    Direction value
)
```

Parameters

value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.setEnableCustomLayers Method

Sets a value indicating whether the layered layout will honor the LayeredLayoutTraits.Layer flags.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setEnableCustomLayers (
    boolean value
)
```

Parameters

value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.setEndNode Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setEndNode (
    Node value
)
```

Parameters

value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.setEnforceLinkFlow Method

Sets a value indicating whether the layout will force all links to go in the same direction. If the supplied graph has cycles, it will be made acyclic prior the layout. EnableCustomLayers and SplitLayers are ignored if this property is set to true.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setEnforceLinkFlow (
    boolean value
)
```

Parameters

value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.setIgnoreNodeSize Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setIgnoreNodeSize (
    boolean value
)
```

Parameters

value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.setLayerDistance Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setLayerDistance (
    float value
)
```

Parameters

value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.setLinksCompactFactor Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setLinksCompactFactor (
    float value
)
```

Parameters

value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.setMargins Method

Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setMargins (
    XDimension2D.Double value
)
```

Parameters

value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.setNodeDistance Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setNodeDistance (
    float value
)
```

Parameters

value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.setOrientation Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.setSplitLayers Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setSplitLayers (
    boolean value
)
```

Parameters

value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.setStartNode Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setStartNode (
    Node value
)
```

Parameters

value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.setStraightenLongLinks Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setStraightenLongLinks (
    boolean value
)
```

Parameters

value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutInfo.setTimeLimit Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setTimeLimit (
    long value
)
```

Parameters

value

See Also

LayeredLayoutInfo Members
LayeredLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutNodeData Class

Syntax

Java

```
public class LayeredLayoutNodeData
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.LayeredLayoutNodeData

See Also

LayeredLayoutNodeData Members
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutNodeData Members

The following tables list the members exposed by the LayeredLayoutNodeData type.

Public Constructors

	Name	Description
	LayeredLayoutNodeData	

See Also

LayeredLayoutNodeData Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutNodeData Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public LayeredLayoutNodeData ()
```

See Also

LayeredLayoutNodeData Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutStatistics Class

Encapsulates information about a layered layout which has already complete.

Syntax

Java

```
public class LayeredLayoutStatistics
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.LayeredLayoutStatistics

See Also

LayeredLayoutStatistics Members

Encapsulates information about a layered layout which has already complete.

The following tables list the members exposed by the LayeredLayoutStatistics type.

Public Constructors

	Name	Description
	LayeredLayoutStatistics	Initializes a new instance of the **LayeredLayoutStatistics** class.

Public Methods

	Name	Description
	getLayerCount	Gets the total number of layers in the layout.
	getLinkLayerCount	Gets a mapping between links and the number of layers they run through.
	getNodeGridPositions	Gets a mapping between nodes and their assigned grid positions.
	getNodeLayerIndices	Gets a mapping between nodes and their assigned layers.

See Also

LayeredLayoutStatistics Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutStatistics Constructor

Initializes a new instance of the LayeredLayoutStatistics class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public LayeredLayoutStatistics ()`

See Also

LayeredLayoutStatistics Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutStatistics Methods

LayeredLayoutStatistics.getLayerCount Method

Gets the total number of layers in the layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public int getLayerCount ()
```

Return Value

See Also

LayeredLayoutStatistics Members
LayeredLayoutStatistics Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutStatistics.getLinkLayerCount Method

Gets a mapping between links and the number of layers they run through.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Hashtable<Link, Integer> getLinkLayerCount ()
```

Return Value

See Also

LayeredLayoutStatistics Members
LayeredLayoutStatistics Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutStatistics.getNodeGridPositions Method

Gets a mapping between nodes and their assigned grid positions.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Hashtable<Node, Double> getNodeGridPositions ()
```

Return Value

See Also

LayeredLayoutStatistics Members
LayeredLayoutStatistics Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutStatistics.getNodeLayerIndices Method

Gets a mapping between nodes and their assigned layers.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public Hashtable<Node, Integer> getNodeLayerIndices ()`

Return Value

See Also

LayeredLayoutStatistics Members
LayeredLayoutStatistics Class
com.mindfusion.diagramming.jlayout Namespace

LayeredLayoutTraits Enumeration

Indicates item traits specific to layered layouts. Members of this enumeration can be used as keys in the DiagramItem.LayoutTraits hashtable.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public enum LayeredLayoutTraits`

Members

	Member name	Description
	Layer	The number associated with this key specifies the index of the layer the layout should attempt to place the node to. Specifying a negative number indicates a layer starting from the last. For example, -1 would indicate the last layer, -2 - the layer before the last, and so on.

See Also

Layout Class

Syntax

Java
`public class Layout`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.Layout
    com.mindfusion.diagramming.jlayout.CircularLayout
    com.mindfusion.diagramming.jlayout.OrthogonalLayout
    com.mindfusion.diagramming.jlayout.TopologicalLayout

See Also

Layout Members
com.mindfusion.diagramming.jlayout Namespace

Layout Members

The following tables list the members exposed by the Layout type.

Public Constructors

	Name	Description
	Layout	

Protected Methods

	Name	Description
	GraphFromIGraph	

See Also

Layout Class
com.mindfusion.diagramming.jlayout Namespace

Layout Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Layout ()
```

See Also

Layout Class
com.mindfusion.diagramming.jlayout Namespace

Layout Methods

Layout.GraphFromIGraph Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
protected static Graph GraphFromIGraph (
    Graph igraph,
    HashMap<Vertex, Node> nodeMap,
    HashMap<Edge, Link> linkMap
)
```

Parameters

igraph

nodeMap

linkMap

Return Value

See Also

Layout Members
Layout Class
com.mindfusion.diagramming.jlayout Namespace

LayoutRules Class

Summary description for LayoutRules.

Syntax

Java

```
public class LayoutRules
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.jlayout.LayoutRules

See Also

LayoutRules Members
com.mindfusion.diagramming.jlayout Namespace

LayoutRules Members

Summary description for LayoutRules.

The following tables list the members exposed by the LayoutRules type.

Public Constructors

	Name	Description
	LayoutRules	Initializes a new instance of the **LayoutRules** class.

Public Methods

	Name	Description
	addLayoutRule	Adds or sets a new rule, depending on if the rule with key - Key already exists or no;
	AddLayoutRule	Builds a key as a pair of the objects Object1 and Object2 and adds or sets a new rule, with this key anf value - Value.
	buildKey	Builds a key - object for the new rule, as a pair of two objects: obj1 and obj2
	getLayoutRule	If there is rule with key - Key initializes - Value otherwise fails;

See Also

LayoutRules Class
com.mindfusion.diagramming.jlayout Namespace

LayoutRules Constructor

Initializes a new instance of the LayoutRules class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public LayoutRules ()`

See Also

LayoutRules Methods

LayoutRules.addLayoutRule Method

Adds or sets a new rule, depending on if the rule with key - Key already exists or no;

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean addLayoutRule (
    Object Key,
    Object Value
)
```

Parameters

Key

Value

Return Value

See Also

LayoutRules Members
LayoutRules Class
com.mindfusion.diagramming.jlayout Namespace

LayoutRules.AddLayoutRule Method

Builds a key as a pair of the objects Object1 and Object2 and adds or sets a new rule, with this key anf value - Value.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean AddLayoutRule (
    Object Object1,
    Object Object2,
    Object Value
)
```

Parameters

Object1

Object2

Value

Return Value

See Also

LayoutRules Members
LayoutRules Class
com.mindfusion.diagramming.jlayout Namespace

LayoutRules.buildKey Method

Builds a key - object for the new rule, as a pair of two objects: obj1 and obj2

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Object buildKey (
    Object obj1,
    Object obj2
)
```

Parameters

obj1

obj2

Return Value

See Also

LayoutRules Members
LayoutRules Class
com.mindfusion.diagramming.jlayout Namespace

LayoutRules.getLayoutRule Method

If there is rule with key - Key initializes - Value otherwise fails;

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean getLayoutRule (
    Object Key,
    ByRef<Object> Value
)
```

Parameters

Key

Value

Return Value

See Also

LayoutRules Members
LayoutRules Class
com.mindfusion.diagramming.jlayout Namespace

Link Interface

Syntax

Java
`public interface Link extends Routable`

See Also

Link Members
com.mindfusion.diagramming.jlayout Namespace

Link Members

The following tables list the members exposed by the Link type.

Public Methods

	Name	Description
	getDebugId	
	getDestination	Gets the destination Node for this link.
	getModified	Gets a value indicating whether the points of this link have been modified by the layouting algorithm.
	getOppositeNode	Returns the node at the opposite end of the link.
	getOrigin	Gets the origin Node for this link.
	getPoints	Gets the sequence of points defining this link.
	getRuntimeData	Gets custom data associated with this link.
	getTraits	Gets properties specific to each layout algorithm.
	getWeight	Gets the weight of the link.
	intersects	
	setModified	Sets a value indicating whether the points of this link have been modified by the layouting algorithm.
	setPoints	Overloaded.

	updatePoints	Invoked to update the link after its point sequence has been changed.

See Also

Link Interface
com.mindfusion.diagramming.jlayout Namespace

Link Methods

Link.getDebugId Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`String getDebugId ()`

Return Value

See Also

Link Members
Link Interface
com.mindfusion.diagramming.jlayout Namespace

Link.getDestination Method

Gets the destination Node for this link.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`Node getDestination ()`

Return Value

See Also

Link Members
Link Interface
com.mindfusion.diagramming.jlayout Namespace

Link.getModified Method

Gets a value indicating whether the points of this link have been modified by the layouting algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
boolean getModified ()
```

Return Value

See Also

Link Members
Link Interface
com.mindfusion.diagramming.jlayout Namespace

Link.getOppositeNode Method

Returns the node at the opposite end of the link.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
Node getOppositeNode (
    Node aNode
)
```

Parameters

aNode
Specifies a node whose opposite node should be returned.

Return Value

The node opposite to the specified node.

See Also

Link Members
Link Interface
com.mindfusion.diagramming.jlayout Namespace

Link.getOrigin Method

Gets the origin Node for this link.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
Node getOrigin ()
```

Return Value

See Also

Link Members
Link Interface
com.mindfusion.diagramming.jlayout Namespace

Link.getPoints Method

Gets the sequence of points defining this link.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
PointList getPoints ()
```

Return Value

See Also

Link Members
Link Interface
com.mindfusion.diagramming.jlayout Namespace

Link.getRuntimeData Method

Gets custom data associated with this link.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
Hashtable<Object, Object> getRuntimeData ()
```

Return Value

See Also

Link Members
Link Interface
com.mindfusion.diagramming.jlayout Namespace

Link.getTraits Method

Gets properties specific to each layout algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
Hashtable<Object, Object> getTraits ()
```

Return Value

See Also

Link Members
Link Interface
com.mindfusion.diagramming.jlayout Namespace

Link.getWeight Method

Gets the weight of the link.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
float getWeight ()
```

Return Value

See Also

Link Members
Link Interface
com.mindfusion.diagramming.jlayout Namespace

Link.intersects Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
boolean intersects (
    Rectangle2D.Float rect
)
```

Parameters

rect

Return Value

See Also

Link Members
Link Interface
com.mindfusion.diagramming.jlayout Namespace

Link.setModified Method

Sets a value indicating whether the points of this link have been modified by the layouting algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
void setModified (
    boolean value
)
```

Parameters

value

See Also

Link Members
Link Interface
com.mindfusion.diagramming.jlayout Namespace

Link.setPoints Method

Overload List

Name	Description
Link.setPoints (ArrayList)	Invoked by some layouting algorithms to update the sequence of points which define the link.
Link.setPoints (PointList)	Sets the sequence of points defining this link.

See Also

Link Members
Link Interface
com.mindfusion.diagramming.jlayout Namespace

Link.setPoints Method (ArrayList<Point2D.Float>)

Invoked by some layouting algorithms to update the sequence of points which define the link.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
void setPoints (
    ArrayList<Point2D.Float> points
)
```

Parameters

points

See Also

setPoints Method Overload List
Link Members
Link Interface
com.mindfusion.diagramming.jlayout Namespace

Link.setPoints Method (PointList)

Sets the sequence of points defining this link.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
void setPoints (
    PointList points
)
```

Parameters

points

See Also

setPoints Method Overload List
Link Members
Link Interface
com.mindfusion.diagramming.jlayout Namespace

Link.updatePoints Method

Invoked to update the link after its point sequence has been changed.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`void updatePoints ()`

See Also

Link Members
Link Interface
com.mindfusion.diagramming.jlayout Namespace

LinkList Class

Syntax

Java
`public class LinkList extends BaseList<E>`

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.jlayout.BaseList(E)
        com.mindfusion.diagramming.jlayout.LinkList

See Also

LinkList Members
com.mindfusion.diagramming.jlayout Namespace

LinkList Members

The following tables list the members exposed by the LinkList type.

Public Constructors

	Name	Description
	LinkList	

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	(Inherited from BaseList.)
	clear	(Inherited from BaseList.)
	clone	
	contains	(Inherited from BaseList.)
	get	(Inherited from BaseList.)
	remove	Overloaded. (Inherited from BaseList.)
	removeRange	(Inherited from BaseList.)
	set	(Inherited from BaseList.)
	size	(Inherited from BaseList.)

See Also

LinkList Class
com.mindfusion.diagramming.jlayout Namespace

LinkList Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public LinkList ()`

See Also

LinkList Class
com.mindfusion.diagramming.jlayout Namespace

LinkList Methods

LinkList.clone Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public Object clone ()`

Return Value

See Also

LinkList Members
LinkList Class
com.mindfusion.diagramming.jlayout Namespace

LinkOperations Class

Syntax

Java
`public class LinkOperations`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.LinkOperations

See Also

LinkOperations Members
com.mindfusion.diagramming.jlayout Namespace

LinkOperations Members

The following tables list the members exposed by the LinkOperations type.

Public Constructors

	Name	Description
	LinkOperations	

Public Methods

	Name	Description
	lagrangeInterpolation	

See Also

LinkOperations Class
com.mindfusion.diagramming.jlayout Namespace

LinkOperations Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public LinkOperations ()
```

See Also

LinkOperations Class
com.mindfusion.diagramming.jlayout Namespace

LinkOperations Methods

LinkOperations.lagrangeInterpolation Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public static boolean lagrangeInterpolation (
    boolean xFlag,
    Point2D.Float sp,
    Point2D.Float ep,
    Point2D.Float xy,
    ByRef<Float> res
)
```

Parameters

xFlag

sp

ep

xy

res

Return Value

See Also

LinkOperations Members
LinkOperations Class
com.mindfusion.diagramming.jlayout Namespace

Node Interface

Syntax

```
Java
```

```
public interface Node
```

See Also

Node Members
com.mindfusion.diagramming.jlayout Namespace

Node Members

The following tables list the members exposed by the Node type.

Public Methods

	Name	Description
	createVertex	Creates a Vertex of appropriate type to represent this node in a graph.
	getBounds	Gets or sets the bounding rectangle of the node.
	getCenter	Gets the geometric center of this node.
	getDebugId	
	getInLinks	Gets all incoming links.
	getMaster	Gets the master node in a graph with hierarchical relationships.
	getOutLinks	Gets all outgoing links.
	getRuntimeData	Gets custom data associated with this node.
	getSubordinates	Gets the subordinate nodes in a graph with hierarchical relationships.
	getTraits	Contains properties specific to each layout algorithm.
	getWeight	Gets the weight of the node.
	setBounds	Overloaded.
	setCenter	Sets the geometric center of this node.

See Also

Node Interface
com.mindfusion.diagramming.jlayout Namespace

Node Methods

Node.createVertex Method

Creates a Vertex of appropriate type to represent this node in a graph.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
Vertex createVertex ()
```

Return Value

An instance of the Vertex class.

See Also

Node Members
Node Interface
com.mindfusion.diagramming.jlayout Namespace

Node.getBounds Method

Gets or sets the bounding rectangle of the node.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
Rectangle2D.Float getBounds ()
```

Return Value

See Also

Node Members
Node Interface
com.mindfusion.diagramming.jlayout Namespace

Node.getCenter Method

Gets the geometric center of this node.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
Point2D.Float getCenter ()
```

Return Value

See Also

Node Members
Node Interface

Node.getDebugId Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
String getDebugId ()
```

Return Value

See Also

Node Members
Node Interface
com.mindfusion.diagramming.jlayout Namespace

Node.getInLinks Method

Gets all incoming links.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
LinkList getInLinks ()
```

Return Value

See Also

Node Members
Node Interface
com.mindfusion.diagramming.jlayout Namespace

Node.getMaster Method

Gets the master node in a graph with hierarchical relationships.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
Node getMaster ()
```

Return Value

See Also

Node Members
Node Interface
com.mindfusion.diagramming.jlayout Namespace

Node.getOutLinks Method

Gets all outgoing links.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`LinkList getOutLinks ()`

Return Value

See Also

Node Members
Node Interface
com.mindfusion.diagramming.jlayout Namespace

Node.getRuntimeData Method

Gets custom data associated with this node.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`Hashtable<Object, Object> getRuntimeData ()`

Return Value

See Also

Node Members
Node Interface
com.mindfusion.diagramming.jlayout Namespace

Node.getSubordinates Method

Gets the subordinate nodes in a graph with hierarchical relationships.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`NodeList getSubordinates ()`

Return Value

See Also

Node Members
Node Interface
com.mindfusion.diagramming.jlayout Namespace

Node.getTraits Method

Contains properties specific to each layout algorithm.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`Hashtable<Object, Object> getTraits ()`

Return Value

See Also

Node Members
Node Interface
com.mindfusion.diagramming.jlayout Namespace

Node.getWeight Method

Gets the weight of the node.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`float getWeight ()`

Return Value

See Also

Node Members
Node Interface
com.mindfusion.diagramming.jlayout Namespace

Node.setBounds Method

Overload List

Name	Description
Node.setBounds (Rectangle2D)	
Node.setBounds (Rectangle2D, boolean)	

See Also

Node Members
Node Interface
com.mindfusion.diagramming.jlayout Namespace

Node.setBounds Method (Rectangle2D)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
void setBounds (
    Rectangle2D value
)
```

Parameters

value

See Also

setBounds Method Overload List
Node Members
Node Interface
com.mindfusion.diagramming.jlayout Namespace

Node.setBounds Method (Rectangle2D, boolean)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
void setBounds (
    Rectangle2D value,
    boolean updateSize
)
```

Parameters

value

updateSize

See Also

setBounds Method Overload List
Node Members
Node Interface
com.mindfusion.diagramming.jlayout Namespace

Node.setCenter Method

Sets the geometric center of this node.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
void setCenter (
    Point2D.Float value
)
```

Parameters

value

See Also

Node Members
Node Interface
com.mindfusion.diagramming.jlayout Namespace

NodeList Class

Syntax

Java

```
public class NodeList extends BaseList<E>
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.jlayout.BaseList(E)
        com.mindfusion.diagramming.jlayout.NodeList

See Also

NodeList Members
com.mindfusion.diagramming.jlayout Namespace

NodeList Members

The following tables list the members exposed by the NodeList type.

Public Constructors

	Name	Description
	NodeList	

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	(Inherited from BaseList.)
	clear	(Inherited from BaseList.)
	clone	
	contains	(Inherited from BaseList.)
	get	(Inherited from BaseList.)
	remove	Overloaded. (Inherited from BaseList.)
	removeRange	(Inherited from BaseList.)
	set	(Inherited from BaseList.)
	size	(Inherited from BaseList.)

See Also

NodeList Class
com.mindfusion.diagramming.jlayout Namespace

NodeList Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public NodeList ()`

See Also

NodeList Class
com.mindfusion.diagramming.jlayout Namespace

NodeList Methods

NodeList.clone Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public Object clone ()`

Return Value

See Also

NodeList Members
NodeList Class
com.mindfusion.diagramming.jlayout Namespace

NodeOrderComparer Class

Syntax

Java
`public class NodeOrderComparer implements Comparator<T>`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.NodeOrderComparer

See Also

NodeOrderComparer Members

The following tables list the members exposed by the NodeOrderComparer type.

Public Constructors

	Name	Description
	NodeOrderComparer	

Public Methods

	Name	Description
	cartesianToPolar	
	compare	

See Also

NodeOrderComparer Class
com.mindfusion.diagramming.jlayout Namespace

NodeOrderComparer Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public NodeOrderComparer (
    Node node
)
```

Parameters

node

See Also

NodeOrderComparer Class
com.mindfusion.diagramming.jlayout Namespace

NodeOrderComparer Methods

NodeOrderComparer.cartesianToPolar Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static void cartesianToPolar (
    Point2D.Float coordCenter,
    Point2D.Float point,
    ByRef<Float> a,
    ByRef<Float> r
)
```

Parameters

coordCenter

point

a

r

See Also

NodeOrderComparer Members
NodeOrderComparer Class
com.mindfusion.diagramming.jlayout Namespace

NodeOrderComparer.compare Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public int compare (
    Link x,
    Link y
)
```

Parameters

x

y

Return Value

See Also

NodeOrderComparer Members
NodeOrderComparer Class
com.mindfusion.diagramming.jlayout Namespace

NodeOrderComparer2 Class

Syntax

Java
`public class NodeOrderComparer2 implements Comparator<T>`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.NodeOrderComparer2

See Also

NodeOrderComparer2 Members
com.mindfusion.diagramming.jlayout Namespace

NodeOrderComparer2 Members

The following tables list the members exposed by the NodeOrderComparer2 type.

Public Constructors

	Name	Description
	NodeOrderComparer2	

Public Methods

	Name	Description
	compare	

See Also

NodeOrderComparer2 Class
com.mindfusion.diagramming.jlayout Namespace

NodeOrderComparer2 Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

`public NodeOrderComparer2 (`
`  Node node`
`)`

Parameters

node

See Also

NodeOrderComparer2 Class
com.mindfusion.diagramming.jlayout Namespace

NodeOrderComparer2 Methods

NodeOrderComparer2.compare Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public int compare (
    Link x,
    Link y
)
```

Parameters

x

y

Return Value

See Also

NodeOrderComparer2 Members
NodeOrderComparer2 Class
com.mindfusion.diagramming.jlayout Namespace

OneWayLayout Class

Performs one-way layout on a graph.

Syntax

Java

```
public class OneWayLayout
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.OneWayLayout

See Also

OneWayLayout Members
com.mindfusion.diagramming.jlayout Namespace

OneWayLayout Members

Performs one-way layout on a graph.

The following tables list the members exposed by the OneWayLayout type.

Public Constructors

	Name	Description
	OneWayLayout	Initializes a new instance of the **OneWayLayout** class.

Public Methods

	Name	Description
	arrange	Applies the layout to the specified graph using the specified settings.

See Also

OneWayLayout Class
com.mindfusion.diagramming.jlayout Namespace

OneWayLayout Constructor

Initializes a new instance of the OneWayLayout class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public OneWayLayout ()`

See Also

OneWayLayout Class
com.mindfusion.diagramming.jlayout Namespace

OneWayLayout Methods

OneWayLayout.arrange Method

Applies the layout to the specified graph using the specified settings.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public boolean arrange (
    Graph igraph,
    OneWayLayoutInfo info
)
```

Parameters

igraph

info

Return Value

See Also

OneWayLayout Members
OneWayLayout Class
com.mindfusion.diagramming.jlayout Namespace

OneWayLayoutInfo Class

Contains settings for the OneWayLayout class.

Syntax

```
Java
public class OneWayLayoutInfo
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.OneWayLayoutInfo

See Also

OneWayLayoutInfo Members
com.mindfusion.diagramming.jlayout Namespace

OneWayLayoutInfo Members

Contains settings for the OneWayLayout class.

The following tables list the members exposed by the OneWayLayoutInfo type.

Public Constructors

	Name	Description

	OneWayLayoutInfo	Initializes a new instance of the **OneWayLayoutInfo** class.

Public Methods

	Name	Description
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged graph and the top-left point of the document bounds.
	getNodeDistance	Gets the minimum spacing between adjacent nodes in the final layout.
	getOrientation	Gets the orientation of the arranged graph.
	getRoundedLinks	Gets a value indicating whether the layout will smooth link bends.
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged graph and the top-left point of the document bounds.
	setNodeDistance	Gets the minimum spacing between adjacent nodes in the final layout.
	setOrientation	Gets the orientation of the arranged graph.
	setRoundedLinks	Sets a value indicating whether the layout will smooth link bends.

See Also

OneWayLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OneWayLayoutInfo Constructor

Initializes a new instance of the OneWayLayoutInfo class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public OneWayLayoutInfo ()
```

See Also

OneWayLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OneWayLayoutInfo Methods

OneWayLayoutInfo.getMargins Method

Gets the distance between the top-left corner of the smallest rectangle containing the arranged graph and the top-left point of the document bounds.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public XDimension2D.Double getMargins ()
```

Return Value

See Also

OneWayLayoutInfo Members
OneWayLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OneWayLayoutInfo.getNodeDistance Method

Gets the minimum spacing between adjacent nodes in the final layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public float getNodeDistance ()
```

Return Value

See Also

OneWayLayoutInfo Members
OneWayLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OneWayLayoutInfo.getOrientation Method

Gets the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public Orientation getOrientation ()
```

Return Value

See Also

OneWayLayoutInfo Members
OneWayLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OneWayLayoutInfo.getRoundedLinks Method

Gets a value indicating whether the layout will smooth link bends.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean getRoundedLinks ()
```

Return Value

See Also

OneWayLayoutInfo Members
OneWayLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OneWayLayoutInfo.setMargins Method

Sets the distance between the top-left corner of the smallest rectangle containing the arranged graph and the top-left point of the document bounds.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setMargins (
    XDimension2D.Double value
)
```

Parameters

value

See Also

OneWayLayoutInfo Members
OneWayLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OneWayLayoutInfo.setNodeDistance Method

Gets the minimum spacing between adjacent nodes in the final layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setNodeDistance (
    float value
)
```

Parameters

value

See Also

OneWayLayoutInfo Members
OneWayLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OneWayLayoutInfo.setOrientation Method

Gets the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value

See Also

OneWayLayoutInfo Members
OneWayLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OneWayLayoutInfo.setRoundedLinks Method

Sets a value indicating whether the layout will smooth link bends.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

`public void setRoundedLinks (`
`    boolean value`
`)`

Parameters

value

See Also

OneWayLayoutInfo Members
OneWayLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalBendLinks Class

Syntax

Java
`public class OrthogonalBendLinks`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.jlayout.OrthogonalBendLinks

See Also

OrthogonalBendLinks Members
com.mindfusion.diagramming.jlayout Namespace

OrthogonalBendLinks Members

The following tables list the members exposed by the OrthogonalBendLinks type.

Public Constructors

	Name	Description
	OrthogonalBendLinks	

Public Methods

	Name	Description
	isBended	
	isBendedFixedSecondary	
	isBendedSecondary	

See Also

OrthogonalBendLinks Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalBendLinks Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public OrthogonalBendLinks ()
```

See Also

OrthogonalBendLinks Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalBendLinks Methods

OrthogonalBendLinks.isBended Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static boolean isBended (
    boolean fixStartpts,
    Orientation startOrientation,
    Orientation endOrientation,
    Link outLink
)
```

Parameters

fixStartpts

startOrientation

endOrientation

outLink

Return Value

See Also

OrthogonalBendLinks Members
OrthogonalBendLinks Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalBendLinks.isBendedFixedSecondary Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static boolean isBendedFixedSecondary (
    Link outL
)
```

Parameters

outL

Return Value

See Also

OrthogonalBendLinks Members
OrthogonalBendLinks Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalBendLinks.isBendedSecondary Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static boolean isBendedSecondary (
    boolean fixStartpts,
    Orientation startOrientation,
    Orientation endOrientation,
    Link outL
)
```

Parameters

fixStartpts

startOrientation

endOrientation

outL

Return Value

See Also

OrthogonalLayout Class

Syntax

Java
`public class OrthogonalLayout extends Layout`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.Layout
    com.mindfusion.diagramming.jlayout.OrthogonalLayout

See Also

OrthogonalLayout Members
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayout Members

The following tables list the members exposed by the OrthogonalLayout type.

Public Constructors

	Name	Description
	OrthogonalLayout	Initializes a new instance of the OrthogonalLayout class.

Public Methods

	Name	Description
	arrange	Overloaded.

Protected Methods

	Name	Description
	GraphFromIGraph	(Inherited from Layout.)

See Also

OrthogonalLayout Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayout Constructor

Initializes a new instance of the OrthogonalLayout class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public OrthogonalLayout ()
```

See Also

OrthogonalLayout Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayout Methods

OrthogonalLayout.arrange Method

Overload List

Name	Description
OrthogonalLayout.arrange (Graph, OrthogonalLayoutInfo)	Applies the layout to the specified graph using the specified settings.
OrthogonalLayout.arrange (Graph, OrthogonalLayoutInfo, LayoutProgress)	Applies the layout to the specified graph using the specified settings and progress callback delegate.

See Also

OrthogonalLayout Members
OrthogonalLayout Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayout.arrange Method (Graph, OrthogonalLayoutInfo)

Applies the layout to the specified graph using the specified settings.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean arrange (
    Graph graph,
    OrthogonalLayoutInfo info
)
```

Parameters

graph

info

Return Value

See Also

arrange Method Overload List
OrthogonalLayout Members
OrthogonalLayout Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayout.arrange Method (Graph, OrthogonalLayoutInfo, LayoutProgress)

Applies the layout to the specified graph using the specified settings and progress callback delegate.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean arrange (
    Graph igraph,
    OrthogonalLayoutInfo info,
    LayoutProgress progress
)
```

Parameters

igraph

info

progress

Return Value

See Also

arrange Method Overload List
OrthogonalLayout Members
OrthogonalLayout Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayoutInfo Class

Syntax

Java

```
public class OrthogonalLayoutInfo
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.OrthogonalLayoutInfo

See Also

OrthogonalLayoutInfo Members
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayoutInfo Members

The following tables list the members exposed by the OrthogonalLayoutInfo type.

Public Constructors

	Name	Description
	OrthogonalLayoutInfo	Initializes a new instance of the OrthogonalLayoutInfo class.

Public Methods

	Name	Description
	getDirected	Gets a value indicating whether the graph being laid out is directed.
	getMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged tree and the top-left point of the document bounds.
	getMinimizeLinkBends	
	getMinLaneSize	Gets or sets a value indicating the minimum size of a lane.
	getPadding	Gets a value indicating how much space to leave between nodes in adjacent lanes.
	getRefine	Gets or sets a value indicating whether to refine the layout.
	setDirected	Sets a value indicating whether the graph being laid out is directed.
	setMargins	
	setMinimizeLinkBends	Sets a value indicating whether the layout should attempt to minimize link bends.
	setMinLaneSize	Gets or sets a value indicating the minimum size of a lane.
	setPadding	Sets a value indicating how much space to leave between nodes in adjacent lanes.
	setRefine	Gets or sets a value indicating whether to refine the layout.

See Also

OrthogonalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayoutInfo Constructor

Initializes a new instance of the OrthogonalLayoutInfo class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public OrthogonalLayoutInfo ()
```

See Also

OrthogonalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayoutInfo Methods

OrthogonalLayoutInfo.getDirected Method

Gets a value indicating whether the graph being laid out is directed.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public boolean getDirected ()
```

Return Value

See Also

OrthogonalLayoutInfo Members
OrthogonalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayoutInfo.getMargins Method

Sets the distance between the top-left corner of the smallest rectangle containing the arranged tree and the top-left point of the document bounds.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
```

Java

```
public XDimension2D.Double getMargins ()
```

Return Value

See Also

OrthogonalLayoutInfo Members
OrthogonalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayoutInfo.getMinimizeLinkBends Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean getMinimizeLinkBends ()
```

Return Value

Gets a value indicating whether the layout should attempt to minimize link bends.

See Also

OrthogonalLayoutInfo Members
OrthogonalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayoutInfo.getMinLaneSize Method

Gets or sets a value indicating the minimum size of a lane.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getMinLaneSize ()
```

Return Value

See Also

OrthogonalLayoutInfo Members
OrthogonalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayoutInfo.getPadding Method

Gets a value indicating how much space to leave between nodes in adjacent lanes.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getPadding ()
```

Return Value

See Also

OrthogonalLayoutInfo Members
OrthogonalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayoutInfo.getRefine Method

Gets or sets a value indicating whether to refine the layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean getRefine ()
```

Return Value

See Also

OrthogonalLayoutInfo Members
OrthogonalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayoutInfo.setDirected Method

Sets a value indicating whether the graph being laid out is directed.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setDirected (
    boolean directed
)
```

Parameters

directed

See Also

OrthogonalLayoutInfo Members
OrthogonalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayoutInfo.setMargins Method

Overload List

Name	Description
OrthogonalLayoutInfo.setMargins (XDimension2D.Double)	Sets the distance between the top-left corner of the smallest rectangle containing the arranged tree and the top-left point of the document bounds.

See Also

OrthogonalLayoutInfo Members
OrthogonalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayoutInfo.setMargins Method (XDimension2D.Double)

Sets the distance between the top-left corner of the smallest rectangle containing the arranged tree and the top-left point of the document bounds.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setMargins (
    XDimension2D.Double margins
)
```

Parameters

margins

See Also

OrthogonalLayoutInfo Members
OrthogonalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayoutInfo.setMinimizeLinkBends Method

Sets a value indicating whether the layout should attempt to minimize link bends.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setMinimizeLinkBends (
    boolean value
)
```

Parameters

value
true to minimize link bends, otherwise false. The default value is true.

See Also

OrthogonalLayoutInfo Members
OrthogonalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayoutInfo.setMinLaneSize Method

Gets or sets a value indicating the minimum size of a lane.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setMinLaneSize (
    float value
)
```

Parameters

value

See Also

OrthogonalLayoutInfo Members
OrthogonalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayoutInfo.setPadding Method

Sets a value indicating how much space to leave between nodes in adjacent lanes.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public void setPadding (
    float padding
)
```

Parameters

padding

See Also

OrthogonalLayoutInfo Members
OrthogonalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalLayoutInfo.setRefine Method

Gets or sets a value indicating whether to refine the layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public void setRefine (
    boolean refine
)
```

Parameters

refine

See Also

OrthogonalLayoutInfo Members
OrthogonalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouter Class

Syntax

```
Java
public class OrthogonalRouter
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.jlayout.OrthogonalRouter

See Also

OrthogonalRouter Members
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouter Members

The following tables list the members exposed by the OrthogonalRouter type.

Public Constructors

	Name	Description
	OrthogonalRouter	

Public Methods

	Name	Description
	arrange	Overloaded.

See Also

OrthogonalRouter Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouter Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public OrthogonalRouter ()`

See Also

OrthogonalRouter Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouter Methods

OrthogonalRouter.arrange Method

Overload List

Name	Description
OrthogonalRouter.arrange (Graph, OrthogonalRouterInfo, int, boolean)	
OrthogonalRouter.arrange (Graph, OrthogonalRouterInfo, int, boolean, RoutingOptions, ProcessLink)	

See Also

OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouter.arrange Method (Graph, OrthogonalRouterInfo, int, boolean)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean arrange (
    Graph fGraph,
    OrthogonalRouterInfo layoutInfo,
    int baseLayout,
    boolean fixStartpts
)
```

Parameters

fGraph

layoutInfo

baseLayout

fixStartpts

Return Value

See Also

arrange Method Overload List
OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouter.arrange Method (Graph, OrthogonalRouterInfo, int, boolean, RoutingOptions, ProcessLink)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean arrange (
    Graph fGraph,
    OrthogonalRouterInfo layoutInfo,
    int baseLayout,
    boolean fixStartpts,
    RoutingOptions routingOptions,
    ProcessLink processLink
)
```

Parameters

fGraph

layoutInfo

baseLayout

fixStartpts

routingOptions

processLink

Return Value

See Also

arrange Method Overload List
OrthogonalRouter Members
OrthogonalRouter Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo Class

Syntax

Java

```
public class OrthogonalRouterInfo
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.OrthogonalRouterInfo

See Also

OrthogonalRouterInfo Members
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo Members

The following tables list the members exposed by the OrthogonalRouterInfo type.

Public Constructors

	Name	Description
	OrthogonalRouterInfo	Overloaded.

Public Methods

	Name	Description
	getBendDistance	Gets for how many times to decrease the bending length.
	getEndOrientation	com.mindfusion.diagramming.Orientation.
	getGraphDirection	Direction.
	getGraphOrientation	Orientation.
	getGridSize	Gets the desired distance between adjacent grid points.
	getLayerDistance	
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged tree and the top-left point of the document bounds.
	getNodeDistance	
	getRandomSeed	Random seed.
	getStartOrientation	com.mindfusion.diagramming.Orientation.
	setBendDistance	Sets for how many times to decrease the bending length.
	setEndOrientation	com.mindfusion.diagramming.Orientation.
	setGraphDirection	Direction.
	setGraphOrientation	Orientation.
	setGridSize	Sets the desired distance between adjacent grid points.
	setLayerDistance	
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged tree and the top-left point of the document bounds.
	setNodeDistance	
	setRandomSeed	Random seed.
	setStartOrientation	com.mindfusion.diagramming.Orientation.

See Also

OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo Constructor

Overload List

Name	Description
OrthogonalRouterInfo ()	Initializes a new instance of the OrthogonalLayoutInfo class.
OrthogonalRouterInfo (float, XDimension2D.Double, float, float, float)	Initializes a new instance of the GridLayoutInfo class.

See Also

OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo Constructor ()

Initializes a new instance of the OrthogonalLayoutInfo class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public OrthogonalRouterInfo ()
```

See Also

OrthogonalRouterInfo Constructor Overload List
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo Constructor (float, XDimension2D.Double, float, float, float)

Initializes a new instance of the GridLayoutInfo class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public OrthogonalRouterInfo (
    float gridSize,
    XDimension2D.Double margins,
    float bendDistance,
    float layerDistance,
    float nodeDistance
)
```

Parameters

gridSize

margins

bendDistance

layerDistance

nodeDistance

See Also

OrthogonalRouterInfo Constructor Overload List
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo Methods

OrthogonalRouterInfo.getBendDistance Method

Gets for how many times to decrease the bending length.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getBendDistance ()
```

Return Value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.getEndOrientation Method

com.mindfusion.diagramming.Orientation.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Orientation getEndOrientation ()
```

Return Value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.getGraphDirection Method

Direction.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Direction getGraphDirection ()
```

Return Value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.getGraphOrientation Method

Orientation.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Orientation getGraphOrientation ()
```

Return Value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.getGridSize Method

Gets the desired distance between adjacent grid points.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getGridSize ()
```

Return Value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.getLayerDistance Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getLayerDistance ()
```

Return Value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.getMargins Method

Gets the distance between the top-left corner of the smallest rectangle containing the arranged tree and the top-left point of the document bounds.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public XDimension2D.Double getMargins ()
```

Return Value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.getNodeDistance Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public float getNodeDistance ()`

Return Value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.getRandomSeed Method

Random seed.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public int getRandomSeed ()`

Return Value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.getStartOrientation Method

com.mindfusion.diagramming.Orientation.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public Orientation getStartOrientation ()`

Return Value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.setBendDistance Method

Sets for how many times to decrease the bending length.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setBendDistance (
    float value
)
```

Parameters

value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.setEndOrientation Method

com.mindfusion.diagramming.Orientation.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setEndOrientation (
    Orientation value
)
```

Parameters

value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.setGraphDirection Method

Direction.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setGraphDirection (
    Direction value
)
```

Parameters

value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.setGraphOrientation Method

Orientation.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setGraphOrientation (
    Orientation value
)
```

Parameters

value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.setGridSize Method

Sets the desired distance between adjacent grid points.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setGridSize (
    float value
)
```

Parameters

value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.setLayerDistance Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setLayerDistance (
    float value
)
```

Parameters

value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.setMargins Method

Sets the distance between the top-left corner of the smallest rectangle containing the arranged tree and the top-left point of the document bounds.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setMargins (
    XDimension2D.Double value
)
```

Parameters

value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.setNodeDistance Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setNodeDistance (
    float value
)
```

Parameters

value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.setRandomSeed Method

Random seed.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setRandomSeed (
    int value
)
```

Parameters

value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

OrthogonalRouterInfo.setStartOrientation Method

com.mindfusion.diagramming.Orientation.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setStartOrientation (
    Orientation value
)
```

Parameters

value

See Also

OrthogonalRouterInfo Members
OrthogonalRouterInfo Class
com.mindfusion.diagramming.jlayout Namespace

Pair Class

Represents a coupling between two arbitrary objects.

Syntax

Java

```
public class Pair implements Comparable<T>
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.Pair

See Also

Pair Members
com.mindfusion.diagramming.jlayout Namespace

Pair Members

Represents a coupling between two arbitrary objects.

The following tables list the members exposed by the Pair type.

Public Constructors

	Name	Description

	Pair	Overloaded.

Public Methods

	Name	Description
	compareTo	Comparable.compareTo implementation.
	equals	Object.equals override.
	getFirstObject	Gets the first pair object.
	getPairElements	Gets the elements of the pair as an ArrayList.
	getSecondObject	Gets the second pair object.
	hashCode	Object.GetHashCode override.
	setFirstObject	Sets the first pair object.
	setSecondObject	Sets the second pair object.

See Also

Pair Class
com.mindfusion.diagramming.jlayout Namespace

Pair Constructor

Overload List

Name	Description
Pair ()	Initializes a new instance of the Pair class.
Pair (Object, Object)	Initializes a new instance of the Pair class.

See Also

Pair Class
com.mindfusion.diagramming.jlayout Namespace

Pair Constructor ()

Initializes a new instance of the Pair class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public Pair ()`

See Also

Pair Constructor Overload List
Pair Class
com.mindfusion.diagramming.jlayout Namespace

Pair Constructor (Object, Object)

Initializes a new instance of the Pair class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Pair (
    Object obj1,
    Object obj2
)
```

Parameters

obj1

obj2

See Also

Pair Constructor Overload List
Pair Class
com.mindfusion.diagramming.jlayout Namespace

Pair Methods

Pair.compareTo Method

Comparable.compareTo implementation.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public int compareTo (
    Pair pair
)
```

Parameters

pair

Return Value

See Also

Pair Members
Pair Class
com.mindfusion.diagramming.jlayout Namespace

Pair.equals Method

Object.equals override.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean equals (
    Object obj
)
```

Parameters

obj

Return Value

See Also

Pair Members
Pair Class
com.mindfusion.diagramming.jlayout Namespace

Pair.getFirstObject Method

Gets the first pair object.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Object getFirstObject ()
```

Return Value

See Also

Pair Members
Pair Class
com.mindfusion.diagramming.jlayout Namespace

Pair.getPairElements Method

Gets the elements of the pair as an ArrayList.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public ArrayList<Object> getPairElements ()
```

Return Value

See Also

Pair Members
Pair Class
com.mindfusion.diagramming.jlayout Namespace

Pair.getSecondObject Method

Gets the second pair object.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Object getSecondObject ()
```

Return Value

See Also

Pair Members
Pair Class
com.mindfusion.diagramming.jlayout Namespace

Pair.hashCode Method

Object.GetHashCode override.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public int hashCode ()
```

Return Value

See Also

Pair Members
Pair Class
com.mindfusion.diagramming.jlayout Namespace

Pair.setFirstObject Method

Sets the first pair object.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setFirstObject (
    Object value
)
```

Parameters

value

See Also

Pair Members
Pair Class
com.mindfusion.diagramming.jlayout Namespace

Pair.setSecondObject Method

Sets the second pair object.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setSecondObject (
    Object value
)
```

Parameters

value

See Also

Pair Members
Pair Class
com.mindfusion.diagramming.jlayout Namespace

Path Class

Syntax

Java
`public class Path`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.Path

See Also

Path Members
com.mindfusion.diagramming.jlayout Namespace

Path Members

The following tables list the members exposed by the Path type.

Public Constructors

	Name	Description
	Path	Overloaded.

Public Methods

	Name	Description
	add	Overloaded.
	contains	Overloaded.
	getItems	Gets a list with all items (nodes and links) composing the path.
	getLength	Gets the length of the path.
	getLinks	Gets a list of all links composing the path.
	getNodes	Gets the list of all nodes connected by the path.
	getWeight	Gets the length of the path expressed as a sum of the weights of all nodes and links, composing the path.
	sameCycle	Determines whether the current path traverses the same nodes as the specified path in the same order, disregard which one is the starting node.

See Also

Path Constructor

Overload List

Name	Description
Path ()	
Path (Path)	

See Also

Path Class
com.mindfusion.diagramming.jlayout Namespace

Path Constructor ()

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Path ()
```

See Also

Path Constructor Overload List
Path Class
com.mindfusion.diagramming.jlayout Namespace

Path Constructor (Path)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Path (
    Path p
)
```

Parameters

p

See Also

Path Constructor Overload List
Path Class
com.mindfusion.diagramming.jlayout Namespace

Path Methods

Path.add Method

Overload List

Name	Description
Path.add (Link, Node)	Append the node and the link to the path.
Path.add (Node)	Append the node to the path.

See Also

Path Members
Path Class
com.mindfusion.diagramming.jlayout Namespace

Path.add Method (Link, Node)

Append the node and the link to the path.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void add (
    Link link,
    Node node
)
```

Parameters

link

node

See Also

add Method Overload List
Path Members
Path Class
com.mindfusion.diagramming.jlayout Namespace

Path.add Method (Node)

Append the node to the path.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void add (
    Node node
)
```

Parameters

node

See Also

add Method Overload List
Path Members
Path Class
com.mindfusion.diagramming.jlayout Namespace

Path.contains Method

Overload List

Name	Description
Path.contains (Link)	Checks whether the specified link is a participant in the path.
Path.contains (Node)	Checks whether the specified node is a participant in the path.

See Also

Path Members
Path Class
com.mindfusion.diagramming.jlayout Namespace

Path.contains Method (Link)

Checks whether the specified link is a participant in the path.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean contains (
    Link link
```

```
)
```

Parameters

link

Return Value

See Also

contains Method Overload List
Path Members
Path Class
com.mindfusion.diagramming.jlayout Namespace

Path.contains Method (Node)

Checks whether the specified node is a participant in the path.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean contains (
    Node node
)
```

Parameters

node

Return Value

See Also

contains Method Overload List
Path Members
Path Class
com.mindfusion.diagramming.jlayout Namespace

Path.getItems Method

Gets a list with all items (nodes and links) composing the path.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public ArrayList<Object> getItems ()
```

Return Value

See Also

Path Members
Path Class
com.mindfusion.diagramming.jlayout Namespace

Path.getLength Method

Gets the length of the path.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public int getLength ()
```

Return Value

See Also

Path Members
Path Class
com.mindfusion.diagramming.jlayout Namespace

Path.getLinks Method

Gets a list of all links composing the path.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public LinkList getLinks ()
```

Return Value

See Also

Path Members
Path Class
com.mindfusion.diagramming.jlayout Namespace

Path.getNodes Method

Gets the list of all nodes connected by the path.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public NodeList getNodes ()
```

Return Value

See Also

Path Members
Path Class
com.mindfusion.diagramming.jlayout Namespace

Path.getWeight Method

Gets the length of the path expressed as a sum of the weights of all nodes and links, composing the path.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public float getWeight (
    boolean incNodes,
    boolean incLinks
)
```

Parameters

incNodes

incLinks

Return Value

See Also

Path Members
Path Class
com.mindfusion.diagramming.jlayout Namespace

Path.sameCycle Method

Determines whether the current path traverses the same nodes as the specified path in the same order, disregard which one is the starting node.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public boolean sameCycle (
    Path path
```

```
)
```

Parameters

path

Return Value

See Also

Path Members
Path Class
com.mindfusion.diagramming.jlayout Namespace

PathFinder Class

Syntax

Java
`public class PathFinder`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.jlayout.PathFinder

See Also

PathFinder Members
com.mindfusion.diagramming.jlayout Namespace

PathFinder Members

The following tables list the members exposed by the PathFinder type.

Public Constructors

	Name	Description
	PathFinder	

Public Methods

	Name	Description
	findAllCycles	
	findAllPaths	Overloaded.
	findCycle	Overloaded.
	findLongestPath	Overloaded.

	findShortestPath	Overloaded.

See Also

PathFinder Class
com.mindfusion.diagramming.jlayout Namespace

PathFinder Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public PathFinder ()
```

See Also

PathFinder Class
com.mindfusion.diagramming.jlayout Namespace

PathFinder Methods

PathFinder.findAllCycles Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static PathList findAllCycles (
    Graph graph
)
```

Parameters

graph

Return Value

See Also

PathFinder Members
PathFinder Class
com.mindfusion.diagramming.jlayout Namespace

PathFinder.findAllPaths Method

Overload List

Name	Description
PathFinder.findAllPaths (Graph, Node, Node)	Finds and returns all paths starting from node *from* and ending at node *to*. Returns empty collection if no path exists.
PathFinder.findAllPaths (Graph, Node, Node, int)	Finds and returns all paths starting from node *from* and ending at node *to*. Returns empty collection if no path exists.

See Also

PathFinder Members
PathFinder Class
com.mindfusion.diagramming.jlayout Namespace

PathFinder.findAllPaths Method (Graph, Node, Node)

Finds and returns all paths starting from node *from* and ending at node *to*. Returns empty collection if no path exists.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static PathList findAllPaths (
    Graph graph,
    Node from,
    Node to
)
```

Parameters

graph

from

to

Return Value

See Also

findAllPaths Method Overload List
PathFinder Members
PathFinder Class
com.mindfusion.diagramming.jlayout Namespace

PathFinder.findAllPaths Method (Graph, Node, Node, int)

Finds and returns all paths starting from node *from* and ending at node *to*. Returns empty collection if no path exists.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static PathList findAllPaths (
    Graph graph,
    Node from,
    Node to,
    int maxPaths
)
```

Parameters

graph

from

to

maxPaths

Return Value

See Also

findAllPaths Method Overload List
PathFinder Members
PathFinder Class
com.mindfusion.diagramming.jlayout Namespace

PathFinder.findCycle Method

Overload List

Name	Description
PathFinder.findCycle (Graph)	Detects whether there is a cycle in a graph.
PathFinder.findCycle (Graph, Node)	Detects whether the specified node participates in a cycle.

See Also

PathFinder Members
PathFinder Class
com.mindfusion.diagramming.jlayout Namespace

PathFinder.findCycle Method (Graph)

Detects whether there is a cycle in a graph.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static Path findCycle (
    Graph graph
)
```

Parameters

graph

Return Value

See Also

findCycle Method Overload List
PathFinder Members
PathFinder Class
com.mindfusion.diagramming.jlayout Namespace

PathFinder.findCycle Method (Graph, Node)

Detects whether the specified node participates in a cycle.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static Path findCycle (
    Graph graph,
    Node participant
)
```

Parameters

graph

participant

Return Value

See Also

findCycle Method Overload List
PathFinder Members
PathFinder Class
com.mindfusion.diagramming.jlayout Namespace

PathFinder.findLongestPath Method

Overload List

Name	Description
PathFinder.findLongestPath (Graph)	Finds the longest path in a graph. Returns null if path is not found.

PathFinder.findLongestPath (Graph, long)	Finds the longest path in the graph. The time limit specifies the maximum duration of the search process in milliseconds. Returns null if no path exists.
PathFinder.findLongestPath (Graph, Node, Node)	Finds the longest path between two nodes. Returns null if no path exists.

See Also

PathFinder Members
PathFinder Class
com.mindfusion.diagramming.jlayout Namespace

PathFinder.findLongestPath Method (Graph)

Finds the longest path in a graph. Returns null if path is not found.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static Path findLongestPath (
    Graph graph
)
```

Parameters

graph

Return Value

See Also

findLongestPath Method Overload List
PathFinder Members
PathFinder Class
com.mindfusion.diagramming.jlayout Namespace

PathFinder.findLongestPath Method (Graph, long)

Finds the longest path in the graph. The time limit specifies the maximum duration of the search process in milliseconds. Returns null if no path exists.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static Path findLongestPath (
    Graph graph,
    long timeLimit
)
```

Parameters

graph

timeLimit

Return Value

See Also

findLongestPath Method Overload List
PathFinder Members
PathFinder Class
com.mindfusion.diagramming.jlayout Namespace

PathFinder.findLongestPath Method (Graph, Node, Node)

Finds the longest path between two nodes. Returns null if no path exists.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static Path findLongestPath (
    Graph graph,
    Node from,
    Node to
)
```

Parameters

graph

from

to

Return Value

See Also

findLongestPath Method Overload List
PathFinder Members
PathFinder Class
com.mindfusion.diagramming.jlayout Namespace

PathFinder.findShortestPath Method

Overload List

Name	Description
PathFinder.findShortestPath (Graph, Node, Node)	Finds and returns the shortest path between *from* and *to*. Returns null if no path exists.

PathFinder.findShortestPath (Graph, Node, Node, boolean, boolean)	Finds and returns the shortest path between *from* and *to*, considering the weight of the nodes, the weight of the links or both.

See Also

PathFinder Members
PathFinder Class
com.mindfusion.diagramming.jlayout Namespace

PathFinder.findShortestPath Method (Graph, Node, Node)

Finds and returns the shortest path between *from* and *to*. Returns null if no path exists.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static Path findShortestPath (
    Graph graph,
    Node from,
    Node to
)
```

Parameters

graph

from

to

Return Value

See Also

findShortestPath Method Overload List
PathFinder Members
PathFinder Class
com.mindfusion.diagramming.jlayout Namespace

PathFinder.findShortestPath Method (Graph, Node, Node, boolean, boolean)

Finds and returns the shortest path between *from* and *to*, considering the weight of the nodes, the weight of the links or both.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static Path findShortestPath (
    Graph graph,
    Node from,
    Node to,
    boolean useNodeWeights,
    boolean useLinkWeights
)
```

Parameters

graph

from

to

useNodeWeights

useLinkWeights

Return Value

See Also

findShortestPath Method Overload List
PathFinder Members
PathFinder Class
com.mindfusion.diagramming.jlayout Namespace

PathList Class

Syntax

Java

```
public class PathList extends BaseList<E>
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.jlayout.BaseList(E)
        com.mindfusion.diagramming.jlayout.PathList

See Also

PathList Members
com.mindfusion.diagramming.jlayout Namespace

PathList Members

The following tables list the members exposed by the PathList type.

Public Constructors

	Name	Description
	PathList	

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	(Inherited from BaseList.)
	clear	(Inherited from BaseList.)
	contains	(Inherited from BaseList.)
	get	(Inherited from BaseList.)
	getPath	
	remove	Overloaded. (Inherited from BaseList.)
	removeRange	(Inherited from BaseList.)
	set	(Inherited from BaseList.)
	size	(Inherited from BaseList.)

See Also

PathList Class
com.mindfusion.diagramming.jlayout Namespace

PathList Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public PathList ()`

See Also

PathList Class
com.mindfusion.diagramming.jlayout Namespace

PathList Methods

PathList.getPath Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public Path getPath (
    int index
)
```

Parameters

index

Return Value

See Also

PathList Members
PathList Class
com.mindfusion.diagramming.jlayout Namespace

PathNode Class

Syntax

```
Java
public class PathNode implements Comparable<T>
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.jlayout.PathNode

See Also

PathNode Members
com.mindfusion.diagramming.jlayout Namespace

PathNode Members

The following tables list the members exposed by the PathNode type.

Public Constructors

	Name	Description
	PathNode	Initializes a new instance of the PathNode class.

Public Methods

	Name	Description
	compareTo	Comparable.compareTo implementation.

See Also

PathNode Class
com.mindfusion.diagramming.jlayout Namespace

PathNode Constructor

Initializes a new instance of the PathNode class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public PathNode (
    int x,
    int y
)
```

Parameters

x

y

See Also

PathNode Class
com.mindfusion.diagramming.jlayout Namespace

PathNode Methods

PathNode.compareTo Method

Comparable.compareTo implementation.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public int compareTo (
    PathNode obj
)
```

Parameters

obj

Return Value

See Also

PathNode Members
PathNode Class
com.mindfusion.diagramming.jlayout Namespace

PointList Class

Syntax

Java
`public class PointList extends BaseList<E>`

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.jlayout.BaseList(E)
        com.mindfusion.diagramming.jlayout.PointList

See Also

PointList Members
com.mindfusion.diagramming.jlayout Namespace

PointList Members

The following tables list the members exposed by the PointList type.

Public Constructors

	Name	Description
	PointList	Overloaded.

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	(Inherited from BaseList.)
	clear	(Inherited from BaseList.)
	clone	
	contains	(Inherited from BaseList.)
	get	(Inherited from BaseList.)
	remove	Overloaded. (Inherited from BaseList.)
	removeRange	(Inherited from BaseList.)
	set	(Inherited from BaseList.)
	size	(Inherited from BaseList.)

See Also

PointList Class
com.mindfusion.diagramming.jlayout Namespace

PointList Constructor

Overload List

Name	Description
PointList ()	
PointList (Point2D[])	

See Also

PointList Class
com.mindfusion.diagramming.jlayout Namespace

PointList Constructor ()

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public PointList ()`

See Also

PointList Constructor Overload List
PointList Class
com.mindfusion.diagramming.jlayout Namespace

PointList Constructor (Point2D[])

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public PointList (
    Point2D[] points
)
```

Parameters

points

See Also

PointList Constructor Overload List
PointList Class
com.mindfusion.diagramming.jlayout Namespace

PointList Methods

PointList.clone Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Object clone ()
```

Return Value

See Also

PointList Members
PointList Class
com.mindfusion.diagramming.jlayout Namespace

PointOperations Class

Syntax

Java
`public class PointOperations`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.PointOperations

See Also

PointOperations Members
com.mindfusion.diagramming.jlayout Namespace

PointOperations Members

The following tables list the members exposed by the PointOperations type.

Public Constructors

	Name	Description
	PointOperations	

Public Methods

	Name	Description
	middlePoint	

See Also

PointOperations Class
com.mindfusion.diagramming.jlayout Namespace

PointOperations Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public PointOperations ()`

See Also

PointOperations Class
com.mindfusion.diagramming.jlayout Namespace

PointOperations Methods

PointOperations.middlePoint Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static Point2D.Float middlePoint (
    Point2D.Float pf1,
    Point2D.Float pf2
)
```

Parameters

pf1

pf2

Return Value

See Also

PointOperations Members
PointOperations Class
com.mindfusion.diagramming.jlayout Namespace

ProcessLink Interface

Syntax

Java

```
public interface ProcessLink
```

See Also

ProcessLink Members
com.mindfusion.diagramming.jlayout Namespace

ProcessLink Members

The following tables list the members exposed by the ProcessLink type.

Public Methods

	Name	Description
	process	

See Also

ProcessLink Interface
com.mindfusion.diagramming.jlayout Namespace

ProcessLink Methods

ProcessLink.process Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
void process (
    Link link
)
```

Parameters

link

See Also

ProcessLink Members
ProcessLink Interface
com.mindfusion.diagramming.jlayout Namespace

RadialTreeLayout Class

Syntax

Java

```
public class RadialTreeLayout
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.RadialTreeLayout

See Also

RadialTreeLayout Members
com.mindfusion.diagramming.jlayout Namespace

RadialTreeLayout Members

The following tables list the members exposed by the RadialTreeLayout type.

Public Constructors

	Name	Description
	RadialTreeLayout	

Public Methods

	Name	Description
	arrange	

See Also

RadialTreeLayout Class
com.mindfusion.diagramming.jlayout Namespace

RadialTreeLayout Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public RadialTreeLayout ()
```

See Also

RadialTreeLayout Class
com.mindfusion.diagramming.jlayout Namespace

RadialTreeLayout Methods

RadialTreeLayout.arrange Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean arrange (
    Node rootNode,
    TreeLayoutInfo info
)
```

Parameters

rootNode

info

Return Value

See Also

RadialTreeLayout Members
RadialTreeLayout Class
com.mindfusion.diagramming.jlayout Namespace

RandomFactory Class

A replacement of java.util.Random that return values from a file, so it is equvalent to its .NET version Used to compare results of java and .NET algorithms using random generator

Syntax

Java
`public class RandomFactory extends Random`

Inheritance Hierarchy

java.lang.Object
  java.util.Random
    com.mindfusion.diagramming.jlayout.RandomFactory

See Also

RandomFactory Members
com.mindfusion.diagramming.jlayout Namespace

RandomFactory Members

A replacement of java.util.Random that return values from a file, so it is equvalent to its .NET version Used to compare results of java and .NET algorithms using random generator

The following tables list the members exposed by the RandomFactory type.

Public Methods

	Name	Description
	getInvocations	
	invocations	
	nextDouble	
	nextFloat	

Protected Methods

	Name	Description

	finalize	

See Also

RandomFactory Class
com.mindfusion.diagramming.jlayout Namespace

RandomFactory Methods

RandomFactory.finalize Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
protected void finalize ()
```

See Also

RandomFactory Members
RandomFactory Class
com.mindfusion.diagramming.jlayout Namespace

RandomFactory.getInvocations Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static int getInvocations ()
```

Return Value

See Also

RandomFactory Members
RandomFactory Class
com.mindfusion.diagramming.jlayout Namespace

RandomFactory.invocations Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static void invocations (
    String step
)
```

Parameters

step

See Also

RandomFactory Members
RandomFactory Class
com.mindfusion.diagramming.jlayout Namespace

RandomFactory.nextDouble Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public double nextDouble ()
```

Return Value

See Also

RandomFactory Members
RandomFactory Class
com.mindfusion.diagramming.jlayout Namespace

RandomFactory.nextFloat Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float nextFloat ()
```

Return Value

See Also

RandomFactory Members
RandomFactory Class
com.mindfusion.diagramming.jlayout Namespace

Routable Interface

Syntax

Java
`public interface Routable`

Inheritors

com.mindfusion.diagramming.DiagramLink
com.mindfusion.diagramming.jlayout.Link

See Also

Routable Members
com.mindfusion.diagramming.jlayout Namespace

Routable Members

The following tables list the members exposed by the Routable type.

Public Methods

	Name	Description
	applyRoute	
	createRouteDescriptor	

See Also

Routable Interface
com.mindfusion.diagramming.jlayout Namespace

Routable Methods

Routable.applyRoute Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
void applyRoute (
    ArrayList<Point> routePoints,
    RouteDescriptor routeDescriptor,
    PointList resultPoints
)
```

Parameters

routePoints

routeDescriptor

resultPoints

See Also

Routable Members
Routable Interface
com.mindfusion.diagramming.jlayout Namespace

Routable.createRouteDescriptor Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
RouteDescriptor createRouteDescriptor ()
```

Return Value

See Also

Routable Members
Routable Interface
com.mindfusion.diagramming.jlayout Namespace

RouteDescriptor Class

Syntax

Java

```
public class RouteDescriptor
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.jlayout.RouteDescriptor

See Also

RouteDescriptor Members
com.mindfusion.diagramming.jlayout Namespace

RouteDescriptor Members

The following tables list the members exposed by the RouteDescriptor type.

Public Constructors

	Name	Description
	RouteDescriptor	

Public Fields

	Name	Description
	dNearest	
	end	
	oNearest	
	routeBounds	
	routeHeuristics	
	routingGrid	
	routingOptions	
	start	

See Also

RouteDescriptor Class
com.mindfusion.diagramming.jlayout Namespace

RouteDescriptor Fields

RouteDescriptor.dNearest Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public int dNearest`

See Also

RouteDescriptor Members
RouteDescriptor Class
com.mindfusion.diagramming.jlayout Namespace

RouteDescriptor.end Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public Point end`

See Also

RouteDescriptor Members
RouteDescriptor Class
com.mindfusion.diagramming.jlayout Namespace

RouteDescriptor.oNearest Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public int oNearest`

See Also

RouteDescriptor Members
RouteDescriptor Class
com.mindfusion.diagramming.jlayout Namespace

RouteDescriptor.routeBounds Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public Rectangle2D routeBounds`

See Also

RouteDescriptor Members
RouteDescriptor Class
com.mindfusion.diagramming.jlayout Namespace

RouteDescriptor.routeHeuristics Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public RouteHeuristics routeHeuristics
```

See Also

RouteDescriptor Members
RouteDescriptor Class
com.mindfusion.diagramming.jlayout Namespace

RouteDescriptor.routingGrid Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public RoutingGrid routingGrid
```

See Also

RouteDescriptor Members
RouteDescriptor Class
com.mindfusion.diagramming.jlayout Namespace

RouteDescriptor.routingOptions Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public RoutingOptions routingOptions
```

See Also

RouteDescriptor Members
RouteDescriptor Class
com.mindfusion.diagramming.jlayout Namespace

RouteDescriptor.start Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public Point start`

See Also

RouteDescriptor Members
RouteDescriptor Class
com.mindfusion.diagramming.jlayout Namespace

RouteDescriptor Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public RouteDescriptor ()`

See Also

RouteDescriptor Class
com.mindfusion.diagramming.jlayout Namespace

RouteHeuristics Class

Syntax

Java
`public abstract class RouteHeuristics`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.RouteHeuristics

See Also

RouteHeuristics Members
com.mindfusion.diagramming.jlayout Namespace

RouteHeuristics Members

The following tables list the members exposed by the RouteHeuristics type.

Public Constructors

	Name	Description
	RouteHeuristics	

Public Methods

	Name	Description
	evaluate	

See Also

RouteHeuristics Class
com.mindfusion.diagramming.jlayout Namespace

RouteHeuristics Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public RouteHeuristics ()
```

See Also

RouteHeuristics Class
com.mindfusion.diagramming.jlayout Namespace

RouteHeuristics Methods

RouteHeuristics.evaluate Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public abstract int evaluate (
    Point start,
    Point end
)
```

Parameters

start

end

Return Value

See Also

RouteHeuristics Members
RouteHeuristics Class
com.mindfusion.diagramming.jlayout Namespace

Router Class

Syntax

Java
`public class Router`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.Router

See Also

Router Members
com.mindfusion.diagramming.jlayout Namespace

Router Members

The following tables list the members exposed by the Router type.

Public Constructors

	Name	Description
	Router	

Public Methods

	Name	Description
	route	Overloaded.

See Also

Router Class
com.mindfusion.diagramming.jlayout Namespace

Router Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public Router ()`

See Also

Router Class
com.mindfusion.diagramming.jlayout Namespace

Router Methods

Router.route Method

Overload List

Name	Description
Router.route (Routable)	
Router.route (RouteDescriptor)	

See Also

Router Members
Router Class
com.mindfusion.diagramming.jlayout Namespace

Router.route Method (Routable)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

`public static PointList route (`
`  Routable link`
`)`

Parameters

link

Return Value

See Also

route Method Overload List
Router Members
Router Class
com.mindfusion.diagramming.jlayout Namespace

Router.route Method (RouteDescriptor)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static ArrayList<Point> route (
    RouteDescriptor routeDescriptor
)
```

Parameters

routeDescriptor

Return Value

See Also

route Method Overload List
Router Members
Router Class
com.mindfusion.diagramming.jlayout Namespace

RoutingGrid Interface

Syntax

Java

```
public interface RoutingGrid
```

See Also

RoutingGrid Members
com.mindfusion.diagramming.jlayout Namespace

RoutingGrid Members

The following tables list the members exposed by the RoutingGrid type.

Public Methods

	Name	Description
	getClosedGrid	Returns the grid of closed path nodes.
	getColumnCount	
	getCostGrid	Returns the grid of costs assigned to diagram locations.
	getOpenGrid	Returns the grid of open path nodes.
	getRowCount	

See Also

RoutingGrid Interface
com.mindfusion.diagramming.jlayout Namespace

RoutingGrid Methods

RoutingGrid.getClosedGrid Method

Returns the grid of closed path nodes.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
PathNode[][] getClosedGrid ()
```

Return Value

See Also

RoutingGrid Members
RoutingGrid Interface
com.mindfusion.diagramming.jlayout Namespace

RoutingGrid.getColumnCount Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
int getColumnCount ()
```

Return Value

See Also

RoutingGrid Members
RoutingGrid Interface
com.mindfusion.diagramming.jlayout Namespace

RoutingGrid.getCostGrid Method

Returns the grid of costs assigned to diagram locations.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
short[][] getCostGrid ()
```

Return Value

See Also

RoutingGrid Members
RoutingGrid Interface
com.mindfusion.diagramming.jlayout Namespace

RoutingGrid.getOpenGrid Method

Returns the grid of open path nodes.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
PathNode[][] getOpenGrid ()
```

Return Value

See Also

RoutingGrid Members
RoutingGrid Interface
com.mindfusion.diagramming.jlayout Namespace

RoutingGrid.getRowCount Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
int getRowCount ()
```

Return Value

See Also

RoutingGrid Members
RoutingGrid Interface
com.mindfusion.diagramming.jlayout Namespace

RoutingOptions Interface

Syntax

Java
`public interface RoutingOptions`

Inheritors

com.mindfusion.diagramming.RoutingOptions

See Also

RoutingOptions Members
com.mindfusion.diagramming.jlayout Namespace

RoutingOptions Members

The following tables list the members exposed by the RoutingOptions type.

Public Methods

	Name	Description
	getGridSize	
	getIgnoreAnchoring	
	getLengthCost	
	getNodeVicinityCost	
	getTurnCost	
	setGridSize	

See Also

RoutingOptions Interface
com.mindfusion.diagramming.jlayout Namespace

RoutingOptions Methods

RoutingOptions.getGridSize Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
float getGridSize ()
```

Return Value

See Also

RoutingOptions Members
RoutingOptions Interface
com.mindfusion.diagramming.jlayout Namespace

RoutingOptions.getIgnoreAnchoring Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
boolean getIgnoreAnchoring ()
```

Return Value

See Also

RoutingOptions Members
RoutingOptions Interface
com.mindfusion.diagramming.jlayout Namespace

RoutingOptions.getLengthCost Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
short getLengthCost ()
```

Return Value

See Also

RoutingOptions Members
RoutingOptions Interface
com.mindfusion.diagramming.jlayout Namespace

RoutingOptions.getNodeVicinityCost Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`short getNodeVicinityCost ()`

Return Value

See Also

RoutingOptions Members
RoutingOptions Interface
com.mindfusion.diagramming.jlayout Namespace

RoutingOptions.getTurnCost Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`short getTurnCost ()`

Return Value

See Also

RoutingOptions Members
RoutingOptions Interface
com.mindfusion.diagramming.jlayout Namespace

RoutingOptions.setGridSize Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

`void setGridSize (`
`    float value`
`)`

Parameters

value

See Also

RoutingOptions Members
RoutingOptions Interface
com.mindfusion.diagramming.jlayout Namespace

SortOrder Class

Syntax

Java
`public class SortOrder`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.MaxBoundsComparer.SortOrder

See Also

SortOrder Members
com.mindfusion.diagramming.jlayout Namespace

SortOrder Members

The following tables list the members exposed by the SortOrder type.

Public Constructors

	Name	Description
	SortOrder	

Public Fields

	Name	Description
	AscendingHeight	
	AscendingSurface	
	AscendingWidth	

	DescendingHeight	
	DescendingSurface	
	DescendingWidth	

See Also

SortOrder Class
com.mindfusion.diagramming.jlayout Namespace

SortOrder Fields

SortOrder.AscendingHeight Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static final int AscendingHeight
```

See Also

SortOrder Members
SortOrder Class
com.mindfusion.diagramming.jlayout Namespace

SortOrder.AscendingSurface Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static final int AscendingSurface
```

See Also

SortOrder Members
SortOrder Class
com.mindfusion.diagramming.jlayout Namespace

SortOrder.AscendingWidth Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public static final int AscendingWidth
```

See Also

SortOrder Members
SortOrder Class
com.mindfusion.diagramming.jlayout Namespace

SortOrder.DescendingHeight Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public static final int DescendingHeight
```

See Also

SortOrder Members
SortOrder Class
com.mindfusion.diagramming.jlayout Namespace

SortOrder.DescendingSurface Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public static final int DescendingSurface
```

See Also

SortOrder Members
SortOrder Class
com.mindfusion.diagramming.jlayout Namespace

SortOrder.DescendingWidth Field

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public static final int DescendingWidth
```

See Also

SortOrder Members
SortOrder Class
com.mindfusion.diagramming.jlayout Namespace

SortOrder Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public SortOrder ()
```

See Also

SortOrder Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayout Class

Syntax

```
Java
public class SpringLayout
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.SpringLayout

See Also

SpringLayout Members
com.mindfusion.diagramming.jlayout Namespace

SpringLayout Members

The following tables list the members exposed by the SpringLayout type.

Public Constructors

	Name	Description
	SpringLayout	

Public Methods

	Name	Description
	arrange	
	getStretch	Gets the stretch factor.
	graphHasFrozenNodes	
	setStretch	

See Also

SpringLayout Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayout Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public SpringLayout ()`

See Also

SpringLayout Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayout Methods

SpringLayout.arrange Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean arrange (
    Graph graph,
    SpringLayoutInfo layoutInfo
)
```

Parameters

graph

layoutInfo

Return Value

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayout.getStretch Method

Gets the stretch factor.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public double getStretch ()
```

Return Value

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayout.graphHasFrozenNodes Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean graphHasFrozenNodes ()
```

Return Value

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayout.setStretch Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setStretch (
    float value
)
```

Parameters

value

See Also

SpringLayout Members
SpringLayout Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo Class

Syntax

Java

```
public class SpringLayoutInfo
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.jlayout.SpringLayoutInfo

See Also

SpringLayoutInfo Members
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo Members

The following tables list the members exposed by the SpringLayoutInfo type.

Public Constructors

	Name	Description
	SpringLayoutInfo	Overloaded.

Public Methods

	Name	Description
	getEnableClusters	
	getIterationCount	
	getMinimizeCrossings	
	getNodeDistance	
	getRandomSeed	
	getRepulsionFactor	
	setEnableClusters	
	setIterationCount	
	setMinimizeCrossings	
	setNodeDistance	
	setRandomSeed	
	setRepulsionFactor	

See Also

SpringLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo Constructor

Overload List

Name	Description
SpringLayoutInfo ()	
SpringLayoutInfo (int, float, boolean, boolean)	

See Also

SpringLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo Constructor ()

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public SpringLayoutInfo ()
```

See Also

SpringLayoutInfo Constructor Overload List
SpringLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo Constructor (int, float, boolean, boolean)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public SpringLayoutInfo (
    int iterationCount,
    float nodeDistance,
    boolean minimizeCrossings,
    boolean enableClusters
)
```

Parameters

iterationCount

nodeDistance

minimizeCrossings

enableClusters

See Also

SpringLayoutInfo Constructor Overload List
SpringLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo Methods

SpringLayoutInfo.getEnableClusters Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean getEnableClusters ()
```

Return Value

See Also

SpringLayoutInfo Members
SpringLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo.getIterationCount Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public int getIterationCount ()
```

Return Value

See Also

SpringLayoutInfo Members
SpringLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo.getMinimizeCrossings Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean getMinimizeCrossings ()
```

Return Value

See Also

SpringLayoutInfo Members
SpringLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo.getNodeDistance Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public float getNodeDistance ()`

Return Value

See Also

SpringLayoutInfo Members
SpringLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo.getRandomSeed Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public int getRandomSeed ()`

Return Value

See Also

SpringLayoutInfo Members
SpringLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo.getRepulsionFactor Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public double getRepulsionFactor ()`

Return Value

See Also

SpringLayoutInfo Members
SpringLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo.setEnableClusters Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setEnableClusters (
    boolean value
)
```

Parameters

value

See Also

SpringLayoutInfo Members
SpringLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo.setIterationCount Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setIterationCount (
    int value
)
```

Parameters

value

See Also

SpringLayoutInfo Members
SpringLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo.setMinimizeCrossings Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public void setMinimizeCrossings (
    boolean value
)
```

Parameters

value

See Also

SpringLayoutInfo Members
SpringLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo.setNodeDistance Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public void setNodeDistance (
    float value
)
```

Parameters

value

See Also

SpringLayoutInfo Members
SpringLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo.setRandomSeed Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public void setRandomSeed (
    int value
)
```

Parameters

value

See Also

SpringLayoutInfo Members
SpringLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutInfo.setRepulsionFactor Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setRepulsionFactor (
    double value
)
```

Parameters

value

See Also

SpringLayoutInfo Members
SpringLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SpringLayoutTraits Enumeration

Indicates item traits specific to SpringLayout. Members of this enumeration can be used as keys in the DiagramItem.LayoutTraits hashtable.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public enum SpringLayoutTraits
```

Members

	Member name	Description
	Frozen	If the LayoutTraits value associated with a node through this key is **true**, SpringLayout considers the repulsion forces exerted by the node to other nodes, but ignores forces acting on the node and keeps it in place.

See Also

com.mindfusion.diagramming.jlayout Namespace

SwimlaneGrid Interface

Syntax

Java
`public interface SwimlaneGrid`

See Also

SwimlaneGrid Members
com.mindfusion.diagramming.jlayout Namespace

SwimlaneGrid Members

The following tables list the members exposed by the SwimlaneGrid type.

Public Methods

	Name	Description
	getColumnCount	
	getColumnWidth	
	getRowCount	
	getRowHeight	
	setColumnCount	
	setColumnWidth	
	setLeftMargin	
	setRowCount	
	setRowHeight	
	setTopMargin	

See Also

SwimlaneGrid Interface
com.mindfusion.diagramming.jlayout Namespace

SwimlaneGrid Methods

SwimlaneGrid.getColumnCount Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
int getColumnCount ()
```

Return Value

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming.jlayout Namespace

SwimlaneGrid.getColumnWidth Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
float getColumnWidth (
    int index
)
```

Parameters

index

Return Value

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming.jlayout Namespace

SwimlaneGrid.getRowCount Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
int getRowCount ()
```

Return Value

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming.jlayout Namespace

SwimlaneGrid.getRowHeight Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
float getRowHeight (
    int index
)
```

Parameters

index

Return Value

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming.jlayout Namespace

SwimlaneGrid.setColumnCount Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
void setColumnCount (
    int value
)
```

Parameters

value

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming.jlayout Namespace

SwimlaneGrid.setColumnWidth Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
void setColumnWidth (
    int index,
    float value
)
```

Parameters

index

value

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming.jlayout Namespace

SwimlaneGrid.setLeftMargin Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
void setLeftMargin (
    float value
)
```

Parameters

value

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming.jlayout Namespace

SwimlaneGrid.setRowCount Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
void setRowCount (
    int value
)
```

Parameters

value

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming.jlayout Namespace

SwimlaneGrid.setRowHeight Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
void setRowHeight (
    int index,
    float value
)
```

Parameters

index

value

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming.jlayout Namespace

SwimlaneGrid.setTopMargin Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
void setTopMargin (
    float value
)
```

Parameters

value

See Also

SwimlaneGrid Members
SwimlaneGrid Interface
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayout Class

Performs layered layout on a graph.

Syntax

Java
`public class SwimlaneLayout`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.SwimlaneLayout

See Also

SwimlaneLayout Members
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayout Members

Performs layered layout on a graph.

The following tables list the members exposed by the SwimlaneLayout type.

Public Constructors

	Name	Description
	SwimlaneLayout	Initializes a new instance of the **SwimlaneLayout** class.

Public Methods

	Name	Description
	arrange	Applies the layout to the specified graph using the specified settings.

See Also

SwimlaneLayout Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayout Constructor

Initializes a new instance of the SwimlaneLayout class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public SwimlaneLayout ()
```

See Also

SwimlaneLayout Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayout Methods

SwimlaneLayout.arrange Method

Applies the layout to the specified graph using the specified settings.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean arrange (
    Graph graph,
    GraphBuilder builder,
    SwimlaneLayoutInfo info
)
```

Parameters

graph

builder

info

Return Value

See Also

SwimlaneLayout Members
SwimlaneLayout Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo Class

Contains settings for the SwimlaneLayout class.

Syntax

Java
`public class SwimlaneLayoutInfo`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.SwimlaneLayoutInfo

See Also

SwimlaneLayoutInfo Members
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo Members

Contains settings for the SwimlaneLayout class.

The following tables list the members exposed by the SwimlaneLayoutInfo type.

Public Constructors

	Name	Description
	SwimlaneLayoutInfo	Initializes a new instance of the **SwimlaneLayoutInfo** class.

Public Methods

	Name	Description
	getCollapseEmptyLanes	Get a value indicating whether lanes without associated nodes will shrink to zero size. By default, empty lanes will have size equal to LaneDistance.
	getCompactNodes	Gets a value indicating whether the nodes within individual lanes are compacted.
	getDirection	Gets the direction of the arranged diagram.
	getKeepLaneSizes	Gets a value indicating whether the layout will attempt to preserve the original sizes of the lanes in the supplied grid.
	getLaneDistance	Gets the spacing between adjacent lanes in the final layout.
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds.
	getNodeDistance	Gets the spacing between adjacent nodes within a lane in the final layout.

	getOrientation	Gets the overall orientation of the arranged diagram.
	getSwimlaneGrid	Gets the object through which the swimlane grid can be manipulated by the layout.
	setCollapseEmptyLanes	Set a value indicating whether lanes without associated nodes will shrink to zero size. By default, empty lanes will have size equal to LaneDistance.
	setCompactNodes	Sets a value indicating whether the nodes within individual lanes are compacted.
	setDirection	Gets the direction of the arranged diagram.
	setKeepLaneSizes	Gets a value indicating whether the layout will attempt to preserve the original sizes of the lanes in the supplied grid.
	setLaneDistance	Sets the spacing between adjacent lanes in the final layout.
	setMargins	Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds.
	setNodeDistance	Sets the spacing between adjacent nodes within a lane in the final layout.
	setOrientation	Sets the overall orientation of the arranged diagram.
	setSwimlaneGrid	Sets the object through which the swimlane grid can be manipulated by the layout.

See Also

SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo Constructor

Initializes a new instance of the SwimlaneLayoutInfo class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public SwimlaneLayoutInfo ()
```

See Also

SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo Methods

SwimlaneLayoutInfo.getCollapseEmptyLanes Method

Get a value indicating whether lanes without associated nodes will shrink to zero size. By default, empty lanes will have size equal to LaneDistance.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean getCollapseEmptyLanes ()
```

Return Value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.getCompactNodes Method

Gets a value indicating whether the nodes within individual lanes are compacted.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean getCompactNodes ()
```

Return Value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.getDirection Method

Gets the direction of the arranged diagram.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Direction getDirection ()
```

Return Value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.getKeepLaneSizes Method

Gets a value indicating whether the layout will attempt to preserve the original sizes of the lanes in the supplied grid.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public boolean getKeepLaneSizes ()`

Return Value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.getLaneDistance Method

Gets the spacing between adjacent lanes in the final layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public float getLaneDistance ()`

Return Value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.getMargins Method

Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public XDimension2D.Double getMargins ()
```

Return Value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.getNodeDistance Method

Gets the spacing between adjacent nodes within a lane in the final layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public float getNodeDistance ()
```

Return Value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.getOrientation Method

Gets the overall orientation of the arranged diagram.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public Orientation getOrientation ()
```

Return Value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.getSwimlaneGrid Method

Gets the object through which the swimlane grid can be manipulated by the layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public SwimlaneGrid getSwimlaneGrid ()
```

Return Value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.setCollapseEmptyLanes Method

Set a value indicating whether lanes without associated nodes will shrink to zero size. By default, empty lanes will have size equal to LaneDistance.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setCollapseEmptyLanes (
    boolean value
)
```

Parameters

value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.setCompactNodes Method

Sets a value indicating whether the nodes within individual lanes are compacted.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setCompactNodes (
    boolean value
)
```

Parameters

value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.setDirection Method

Gets the direction of the arranged diagram.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setDirection (
    Direction value
)
```

Parameters

value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.setKeepLaneSizes Method

Gets a value indicating whether the layout will attempt to preserve the original sizes of the lanes in the supplied grid.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setKeepLaneSizes (
    boolean value
)
```

Parameters

value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.setLaneDistance Method

Sets the spacing between adjacent lanes in the final layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setLaneDistance (
    float value
)
```

Parameters

value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.setMargins Method

Sets the distance between the top-left corner of the smallest rectangle containing the arranged diagram and the top-left point of the document bounds.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setMargins (
    XDimension2D.Double value
)
```

Parameters

value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.setNodeDistance Method

Sets the spacing between adjacent nodes within a lane in the final layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setNodeDistance (
    float value
)
```

Parameters

value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.setOrientation Method

Sets the overall orientation of the arranged diagram.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutInfo.setSwimlaneGrid Method

Sets the object through which the swimlane grid can be manipulated by the layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setSwimlaneGrid (
    SwimlaneGrid value
)
```

Parameters

value

See Also

SwimlaneLayoutInfo Members
SwimlaneLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

SwimlaneLayoutTraits Enumeration

Indicates item traits specific to swimlane layouts. Members of this enumeration can be used as keys in the DiagramItem.LayoutTraits hashtable.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public enum SwimlaneLayoutTraits
```

Members

	Member name	Description
	Lane	Specifies the lane to which a node should be assigned.

See Also

com.mindfusion.diagramming.jlayout Namespace

TopologicalLayout Class

Syntax

Java
`public class TopologicalLayout extends Layout`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.Layout
    com.mindfusion.diagramming.jlayout.TopologicalLayout

See Also

TopologicalLayout Members
com.mindfusion.diagramming.jlayout Namespace

TopologicalLayout Members

The following tables list the members exposed by the TopologicalLayout type.

Public Constructors

	Name	Description
	TopologicalLayout	

Public Methods

	Name	Description
	arrange	

Protected Methods

	Name	Description
	GraphFromIGraph	(Inherited from Layout.)

See Also

TopologicalLayout Class
com.mindfusion.diagramming.jlayout Namespace

TopologicalLayout Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public TopologicalLayout ()
```

See Also

TopologicalLayout Class
com.mindfusion.diagramming.jlayout Namespace

TopologicalLayout Methods

TopologicalLayout.arrange Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public boolean arrange (
    Graph igraph,
    TopologicalLayoutInfo info
)
```

Parameters

igraph

info

Return Value

See Also

TopologicalLayout Members
TopologicalLayout Class
com.mindfusion.diagramming.jlayout Namespace

TopologicalLayoutInfo Class

Syntax

```
Java
public class TopologicalLayoutInfo
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.TopologicalLayoutInfo

See Also

TopologicalLayoutInfo Members
com.mindfusion.diagramming.jlayout Namespace

TopologicalLayoutInfo Members

The following tables list the members exposed by the TopologicalLayoutInfo type.

Public Constructors

	Name	Description
	TopologicalLayoutInfo	

Public Methods

	Name	Description
	getBendAdjacentLinks	
	getDirection	
	getMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram
	getNodeDistance	
	getOrientation	
	setBendAdjacentLinks	
	setDirection	
	setMargins	Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram
	setNodeDistance	
	setOrientation	

See Also

TopologicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TopologicalLayoutInfo Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public TopologicalLayoutInfo ()
```

See Also

TopologicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TopologicalLayoutInfo Methods

TopologicalLayoutInfo.getBendAdjacentLinks Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean getBendAdjacentLinks ()
```

Return Value

See Also

TopologicalLayoutInfo Members
TopologicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TopologicalLayoutInfo.getDirection Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Direction getDirection ()
```

Return Value

See Also

TopologicalLayoutInfo Members
TopologicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TopologicalLayoutInfo.getMargins Method

Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public XDimension2D.Double getMargins ()`

Return Value

See Also

TopologicalLayoutInfo Members
TopologicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TopologicalLayoutInfo.getNodeDistance Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public float getNodeDistance ()`

Return Value

See Also

TopologicalLayoutInfo Members
TopologicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TopologicalLayoutInfo.getOrientation Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public Orientation getOrientation ()`

Return Value

See Also

TopologicalLayoutInfo Members
TopologicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TopologicalLayoutInfo.setBendAdjacentLinks Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java

public void setBendAdjacentLinks (
    boolean value
)
```

Parameters

value

See Also

TopologicalLayoutInfo Members
TopologicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TopologicalLayoutInfo.setDirection Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java

public void setDirection (
    Direction value
)
```

Parameters

value

See Also

TopologicalLayoutInfo Members
TopologicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TopologicalLayoutInfo.setMargins Method

Gets the distance between the top-left corner of the smallest rectangle containing the arranged diagram

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setMargins (
    XDimension2D.Double value
)
```

Parameters

value

See Also

TopologicalLayoutInfo Members
TopologicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TopologicalLayoutInfo.setNodeDistance Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setNodeDistance (
    float value
)
```

Parameters

value

See Also

TopologicalLayoutInfo Members
TopologicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TopologicalLayoutInfo.setOrientation Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value

See Also

TopologicalLayoutInfo Members
TopologicalLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TransparentGraphNode Class

A GraphNode wrapper which when checked for equality with another TransparentGraphNode returns true if its GraphNode.getNode() is equal to the target TransparentGraphNode's GraphNode.getNode().

Syntax

Java
`public class TransparentGraphNode`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.jlayout.TransparentGraphNode

See Also

TransparentGraphNode Members
com.mindfusion.diagramming.jlayout Namespace

TransparentGraphNode Members

A GraphNode wrapper which when checked for equality with another TransparentGraphNode returns true if its GraphNode.getNode() is equal to the target TransparentGraphNode's GraphNode.getNode().

The following tables list the members exposed by the TransparentGraphNode type.

Public Constructors

	Name	Description
	TransparentGraphNode	

Public Methods

	Name	Description
	equals	

	getNode	
	hashCode	
	toString	

See Also

TransparentGraphNode Class
com.mindfusion.diagramming.jlayout Namespace

TransparentGraphNode Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public TransparentGraphNode (
    GraphNode node
)
```

Parameters

node

See Also

TransparentGraphNode Class
com.mindfusion.diagramming.jlayout Namespace

TransparentGraphNode Methods

TransparentGraphNode.equals Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean equals (
    Object object
)
```

Parameters

object

Return Value

See Also

TransparentGraphNode Members
TransparentGraphNode Class
com.mindfusion.diagramming.jlayout Namespace

TransparentGraphNode.getNode Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public GraphNode getNode ()`

Return Value

See Also

TransparentGraphNode Members
TransparentGraphNode Class
com.mindfusion.diagramming.jlayout Namespace

TransparentGraphNode.hashCode Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public int hashCode ()`

Return Value

See Also

TransparentGraphNode Members
TransparentGraphNode Class
com.mindfusion.diagramming.jlayout Namespace

TransparentGraphNode.toString Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public String toString ()`

Return Value

See Also

TransparentGraphNode Members
TransparentGraphNode Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutBalance Enumeration

Specifies how to order child nodes in order to produce layouts with custom balance.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public enum TreeLayoutBalance`

Members

	Member name	Description
	Custom	Indicates that the child order will be determined by a user-provided function.
	LeftHeavy	Indicates that the child nodes with most total children will be processed first, thus producing a left-heavy layout.
	Original	Indicates that the child order should not be changed.
	Reversed	Indicates that the child order should be reversed.
	RightHeavy	Indicates that the child nodes with least total children will be processed first, thus producing a right-heavy layout.

See Also

com.mindfusion.diagramming.jlayout Namespace

TreeLayoutDirection Enumeration

The members of this enumeration specify the overall direction of the layouts produced by the com.mindfusion.diagramming.TreeLayout class. These constants can be used as parameters of the com.mindfusion.diagramming.TreeLayout.setDirection method.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public enum TreeLayoutDirection`

Members

	Member name	Description
	BottomToTop	Child nodes are laid out above their parent node.
	LeftToRight	Child nodes are laid out to the right of their parent node.
	RightToLeft	Child nodes are laid out to the left of their parent node.
	TopToBottom	Child nodes are laid out below their parent node.

See Also

com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo Class

Syntax

Java
`public class TreeLayoutInfo`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.TreeLayoutInfo

See Also

TreeLayoutInfo Members
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo Members

The following tables list the members exposed by the TreeLayoutInfo type.

Public Constructors

	Name	Description
	TreeLayoutInfo	Overloaded.

Public Methods

	Name	Description
	getBalance	Gets a value indicating the ordering of the child nodes in order to produce layouts with specific balance.
	getBalanceFunction	Gets the custom balancing function.
	getCompactAssistants	Gets a value indicating whether the "assistant" trait is regarded when performing the layout.
	getDirection	Gets or sets the layout direction.
	getEnableAssistants	Gets a value indicating whether the "assistant" trait is regarded when performing the layout.
	getKeepRootPosition	Gets or sets a flag, indicating whether the layout should preserve the position of the root node.
	getLevelDistance	Gets or sets the minimal distance between two adjacent tree levels.
	getNodeDistance	Gets or sets the minimal distance between two adjacent nodes in the same level.
	getStretchFactor	Gets or sets a value indicating the stretch factor in radial layouts.
	getXGap	Gets or sets the gap between the leftmost box and the left bound of the document.
	getYGap	Gets or sets the gap between the topmost box and the top bound of the document.
	setBalance	Sets a value indicating the ordering of the child nodes in order to produce layouts with specific balance.
	setBalanceFunction	Sets the custom balancing function.
	setCompactAssistants	Sets a value indicating whether the "assistant" trait is regarded when performing the layout.
	setDirection	
	setEnableAssistants	Sets a value indicating whether the "assistant" trait is regarded when performing the layout.
	setKeepRootPosition	
	setLevelDistance	
	setNodeDistance	
	setStretchFactor	
	setXGap	
	setYGap	

See Also

TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo Constructor

Overload List

Name	Description
TreeLayoutInfo ()	
TreeLayoutInfo (TreeLayoutDirection, float, float, boolean, float, float)	

See Also

TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo Constructor ()

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public TreeLayoutInfo ()`

See Also

TreeLayoutInfo Constructor Overload List
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo Constructor (TreeLayoutDirection, float, float, boolean, float, float)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public TreeLayoutInfo (
    TreeLayoutDirection direction,
    float levelDistance,
    float nodeDistance,
    boolean keepRootPosition,
    float xGap,
    float yGap
)
```

Parameters

direction

levelDistance

nodeDistance

keepRootPosition

xGap

yGap

See Also

TreeLayoutInfo Constructor Overload List
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo Methods

TreeLayoutInfo.getBalance Method

Gets a value indicating the ordering of the child nodes in order to produce layouts with specific balance.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public TreeLayoutBalance getBalance ()
```

Return Value

A member of the TreeLayoutBalance enumeration.

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.getBalanceFunction Method

Gets the custom balancing function.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Comparator<Node> getBalanceFunction ()
```

Return Value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.getCompactAssistants Method

Gets a value indicating whether the "assistant" trait is regarded when performing the layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean getCompactAssistants ()
```

Return Value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.getDirection Method

Gets or sets the layout direction.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public TreeLayoutDirection getDirection ()
```

Return Value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.getEnableAssistants Method

Gets a value indicating whether the "assistant" trait is regarded when performing the layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public boolean getEnableAssistants ()
```

Return Value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.getKeepRootPosition Method

Gets or sets a flag, indicating whether the layout should preserve the position of the root node.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public boolean getKeepRootPosition ()
```

Return Value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.getLevelDistance Method

Gets or sets the minimal distance between two adjacent tree levels.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public float getLevelDistance ()
```

Return Value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.getNodeDistance Method

Gets or sets the minimal distance between two adjacent nodes in the same level.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getNodeDistance ()
```

Return Value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.getStretchFactor Method

Gets or sets a value indicating the stretch factor in radial layouts.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getStretchFactor ()
```

Return Value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.getXGap Method

Gets or sets the gap between the leftmost box and the left bound of the document.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getXGap ()
```

Return Value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.getYGap Method

Gets or sets the gap between the topmost box and the top bound of the document.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getYGap ()
```

Return Value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.setBalance Method

Sets a value indicating the ordering of the child nodes in order to produce layouts with specific balance.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setBalance (
    TreeLayoutBalance value
)
```

Parameters

value
A member of the TreeLayoutBalance enumeration.

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.setBalanceFunction Method

Sets the custom balancing function.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setBalanceFunction (
    Comparator<Node> value
)
```

Parameters

value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.setCompactAssistants Method

Sets a value indicating whether the "assistant" trait is regarded when performing the layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setCompactAssistants (
    boolean value
)
```

Parameters

value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.setDirection Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setDirection (
    TreeLayoutDirection value
)
```

Parameters

value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.setEnableAssistants Method

Sets a value indicating whether the "assistant" trait is regarded when performing the layout.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setEnableAssistants (
    boolean value
)
```

Parameters

value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.setKeepRootPosition Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setKeepRootPosition (
    boolean value
)
```

Parameters

value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.setLevelDistance Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setLevelDistance (
    float value
)
```

Parameters

value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.setNodeDistance Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setNodeDistance (
    float value
)
```

Parameters

value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.setStretchFactor Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setStretchFactor (
    float value
)
```

Parameters

value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.setXGap Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setXGap (
    float value
)
```

Parameters

value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutInfo.setYGap Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setYGap (
    float value
)
```

Parameters

value

See Also

TreeLayoutInfo Members
TreeLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeLayoutTraits Enumeration

Indicates item traits specific to tree layouts. Members of this enumeration can be used as keys in the DiagramItem.LayoutTraits hashtable.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public enum TreeLayoutTraits`

Members

	Member name	Description
	Assistant	If the LayoutTraits value associated with a node through this key is **true**, centered TreeLayout treats this node as an "assistant" during the arrangement. If the value is **false** or is not present, the node is treated as "subordinate". The associated value can also be of type AssistantType if it is required to specify the position of the assistant node relative to its parent. This value is considered when the EnableAssistants property of **TreeLayout** is set to **true**.

See Also

com.mindfusion.diagramming.jlayout Namespace

TreeLevels Class

Syntax

Java
`public class TreeLevels extends ArrayList<E>`

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      java.util.ArrayList(E)
        com.mindfusion.diagramming.jlayout.TreeLevels

See Also

TreeLevels Members
com.mindfusion.diagramming.jlayout Namespace

TreeLevels Members

The following tables list the members exposed by the TreeLevels type.

Public Constructors

	Name	Description
	TreeLevels	

Public Methods

	Name	Description
	clone	

See Also

TreeLevels Class
com.mindfusion.diagramming.jlayout Namespace

TreeLevels Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java
`public TreeLevels ()`

See Also

TreeLevels Class
com.mindfusion.diagramming.jlayout Namespace

TreeLevels Methods

TreeLevels.clone Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public Object clone ()
```

Return Value

See Also

TreeLevels Members
TreeLevels Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayout Class

Performs tree map layout on a graph.

Syntax

```
Java
public class TreeMapLayout
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.TreeMapLayout

See Also

TreeMapLayout Members
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayout Members

Performs tree map layout on a graph.

The following tables list the members exposed by the TreeMapLayout type.

Public Constructors

	Name	Description
	TreeMapLayout	Initializes a new instance of the **TreeMapLayout** class.

Public Methods

	Name	Description
	arrange	Applies the layout to the specified graph using the specified settings.

See Also

TreeMapLayout Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayout Constructor

Initializes a new instance of the TreeMapLayout class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public TreeMapLayout ()
```

See Also

TreeMapLayout Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayout Methods

TreeMapLayout.arrange Method

Applies the layout to the specified graph using the specified settings.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public boolean arrange (
    Graph graph,
    TreeMapLayoutInfo info
)
```

Parameters

graph

info

Return Value

See Also

TreeMapLayout Members
TreeMapLayout Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayoutInfo Class

Contains settings for the TreeMapLayout class.

Syntax

Java
`public class TreeMapLayoutInfo`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.jlayout.TreeMapLayoutInfo

See Also

TreeMapLayoutInfo Members
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayoutInfo Members

Contains settings for the TreeMapLayout class.

The following tables list the members exposed by the TreeMapLayoutInfo type.

Public Constructors

	Name	Description
	TreeMapLayoutInfo	Initializes a new instance of the **TreeMapLayoutInfo** class.

Public Methods

	Name	Description
	getContainerPadding	Gets the padding inside containers.
	getLayoutArea	Gets the rectangle in which the layout will try to arrange the nodes.
	getMinNodeSize	Gets the minimal size of an arranged node.
	getOrientation	Gets the overall orientation of the arranged diagram.
	getPadding	Gets the distance between adjacent nodes.
	getSquarify	Gets a value indicating whether the layout should attempt to keep the dimension ratio of the nodes closer to 1.

	setContainerPadding	Sets the padding inside containers.
	setLayoutArea	Sets the rectangle in which the layout will try to arrange the nodes.
	setMinNodeSize	Sets the minimal size of an arranged node.
	setOrientation	Sets the overall orientation of the arranged diagram.
	setPadding	Sets the distance between adjacent nodes.
	setSquarify	Sets a value indicating whether the layout should attempt to keep the dimension ratio of the nodes closer to 1.

See Also

TreeMapLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayoutInfo Constructor

Initializes a new instance of the TreeMapLayoutInfo class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public TreeMapLayoutInfo ()
```

See Also

TreeMapLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayoutInfo Methods

TreeMapLayoutInfo.getContainerPadding Method

Gets the padding inside containers.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getContainerPadding ()
```

Return Value

See Also

TreeMapLayoutInfo Members
TreeMapLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayoutInfo.getLayoutArea Method

Gets the rectangle in which the layout will try to arrange the nodes.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Rectangle2D.Float getLayoutArea ()
```

Return Value

See Also

TreeMapLayoutInfo Members
TreeMapLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayoutInfo.getMinNodeSize Method

Gets the minimal size of an arranged node.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public float getMinNodeSize ()
```

Return Value

See Also

TreeMapLayoutInfo Members
TreeMapLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayoutInfo.getOrientation Method

Gets the overall orientation of the arranged diagram.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public Orientation getOrientation ()
```

Return Value

See Also

TreeMapLayoutInfo Members
TreeMapLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayoutInfo.getPadding Method

Gets the distance between adjacent nodes.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public float getPadding ()
```

Return Value

See Also

TreeMapLayoutInfo Members
TreeMapLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayoutInfo.getSquarify Method

Gets a value indicating whether the layout should attempt to keep the dimension ratio of the nodes closer to 1.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public boolean getSquarify ()
```

Return Value

See Also

TreeMapLayoutInfo Members
TreeMapLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayoutInfo.setContainerPadding Method

Sets the padding inside containers.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setContainerPadding (
    float value
)
```

Parameters

value

See Also

TreeMapLayoutInfo Members
TreeMapLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayoutInfo.setLayoutArea Method

Sets the rectangle in which the layout will try to arrange the nodes.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setLayoutArea (
    Rectangle2D.Float value
)
```

Parameters

value

See Also

TreeMapLayoutInfo Members
TreeMapLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayoutInfo.setMinNodeSize Method

Sets the minimal size of an arranged node.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setMinNodeSize (
    float value
)
```

Parameters

value

See Also

TreeMapLayoutInfo Members
TreeMapLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayoutInfo.setOrientation Method

Sets the overall orientation of the arranged diagram.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setOrientation (
    Orientation value
)
```

Parameters

value

See Also

TreeMapLayoutInfo Members
TreeMapLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayoutInfo.setPadding Method

Sets the distance between adjacent nodes.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setPadding (
    float value
)
```

Parameters

value

See Also

TreeMapLayoutInfo Members
TreeMapLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayoutInfo.setSquarify Method

Sets a value indicating whether the layout should attempt to keep the dimension ratio of the nodes closer to 1.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setSquarify (
    boolean value
)
```

Parameters

value

See Also

TreeMapLayoutInfo Members
TreeMapLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TreeMapLayoutTraits Enumeration

Indicates item traits specific to tree map layouts. Members of this enumeration can be used as keys in the DiagramItem.LayoutTraits hashtable.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public enum TreeMapLayoutTraits
```

Members

	Member name	Description
	HeaderSize	The header size of a master node in a tree-map layout.

See Also

TriangularLayout Class

Performs triangular layout on simple, connected graphs. The triangular layout places vertices on a virtual grid, such that if the source graph is planar it is guaranteed that all edges will have a single segment and will not intersect. If the graph is not planar, the intersecting edges are optionally segmented and bended in order to improve readability.

Syntax

Java
`public class TriangularLayout`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.TriangularLayout

See Also

TriangularLayout Members
com.mindfusion.diagramming.jlayout Namespace

TriangularLayout Members

Performs triangular layout on simple, connected graphs. The triangular layout places vertices on a virtual grid, such that if the source graph is planar it is guaranteed that all edges will have a single segment and will not intersect. If the graph is not planar, the intersecting edges are optionally segmented and bended in order to improve readability.

The following tables list the members exposed by the TriangularLayout type.

Public Constructors

	Name	Description
	TriangularLayout	Initializes a new instance of the **TriangularLayout** class.

Public Methods

	Name	Description
	arrange	Applies the layout to the specified graph using the specified settings.

See Also

TriangularLayout Class
com.mindfusion.diagramming.jlayout Namespace

TriangularLayout Constructor

Initializes a new instance of the TriangularLayout class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public TriangularLayout ()
```

See Also

TriangularLayout Class
com.mindfusion.diagramming.jlayout Namespace

TriangularLayout Methods

TriangularLayout.arrange Method

Applies the layout to the specified graph using the specified settings.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public boolean arrange (
    Graph igraph,
    TriangularLayoutInfo info
)
```

Parameters

igraph

info

Return Value

See Also

TriangularLayout Members
TriangularLayout Class
com.mindfusion.diagramming.jlayout Namespace

TriangularLayoutInfo Class

Contains settings for the TriangularLayout class.

Syntax

Java
`public class TriangularLayoutInfo`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.TriangularLayoutInfo

See Also

TriangularLayoutInfo Members
com.mindfusion.diagramming.jlayout Namespace

TriangularLayoutInfo Members

Contains settings for the TriangularLayout class.

The following tables list the members exposed by the TriangularLayoutInfo type.

Public Constructors

	Name	Description
	TriangularLayoutInfo	Initializes a new instance of the **TriangularLayoutInfo** class.

Public Methods

	Name	Description
	getBendNonplanarLinks	Gets a value indicating whether the intersecting links in a non-planar graphs will be segmented and bended to improve presentation.
	getGridSize	Gets the size of the virtual grid the layout will place vertices on.
	getOrientation	Gets the orientation of the arranged graph.
	setBendNonplanarLinks	Sets a value indicating whether the intersecting links in a non-planar graphs will be segmented and bended to improve presentation.
	setGridSize	Sets the size of the virtual grid the layout will place vertices on.
	setOrientation	Sets the orientation of the arranged graph.

See Also

TriangularLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TriangularLayoutInfo Constructor

Initializes a new instance of the TriangularLayoutInfo class.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public TriangularLayoutInfo ()
```

See Also

TriangularLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TriangularLayoutInfo Methods

TriangularLayoutInfo.getBendNonplanarLinks Method

Gets a value indicating whether the intersecting links in a non-planar graphs will be segmented and bended to improve presentation.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public boolean getBendNonplanarLinks ()
```

Return Value

See Also

TriangularLayoutInfo Members
TriangularLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TriangularLayoutInfo.getGridSize Method

Gets the size of the virtual grid the layout will place vertices on.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public float getGridSize ()
```

Return Value

See Also

TriangularLayoutInfo Members
TriangularLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TriangularLayoutInfo.getOrientation Method

Gets the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public Orientation getOrientation ()
```

Return Value

See Also

TriangularLayoutInfo Members
TriangularLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TriangularLayoutInfo.setBendNonplanarLinks Method

Sets a value indicating whether the intersecting links in a non-planar graphs will be segmented and bended to improve presentation.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public void setBendNonplanarLinks (
    boolean value
)
```

Parameters

value

See Also

TriangularLayoutInfo Members
TriangularLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TriangularLayoutInfo.setGridSize Method

Sets the size of the virtual grid the layout will place vertices on.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public void setGridSize (
    float value
)
```

Parameters

value

See Also

TriangularLayoutInfo Members
TriangularLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

TriangularLayoutInfo.setOrientation Method

Sets the orientation of the arranged graph.

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public void setOrientation (
    Orientation value
)
```

Parameters

value

See Also

TriangularLayoutInfo Members
TriangularLayoutInfo Class
com.mindfusion.diagramming.jlayout Namespace

XBoundsComparer Class

Syntax

```
Java
public class XBoundsComparer implements Comparator<T>
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.jlayout.XBoundsComparer

See Also

XBoundsComparer Members
com.mindfusion.diagramming.jlayout Namespace

XBoundsComparer Members

The following tables list the members exposed by the XBoundsComparer type.

Public Constructors

	Name	Description
	XBoundsComparer	Overloaded.

Public Methods

	Name	Description
	compare	

See Also

XBoundsComparer Class
com.mindfusion.diagramming.jlayout Namespace

XBoundsComparer Constructor

Overload List

Name	Description
XBoundsComparer ()	
XBoundsComparer (int)	

See Also

XBoundsComparer Class
com.mindfusion.diagramming.jlayout Namespace

XBoundsComparer Constructor ()

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public XBoundsComparer ()
```

See Also

XBoundsComparer Constructor Overload List
XBoundsComparer Class
com.mindfusion.diagramming.jlayout Namespace

XBoundsComparer Constructor (int)

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public XBoundsComparer (
    int sortOrder
)
```

Parameters

sortOrder

See Also

XBoundsComparer Constructor Overload List
XBoundsComparer Class
com.mindfusion.diagramming.jlayout Namespace

XBoundsComparer Methods

XBoundsComparer.compare Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

```
Java
public int compare (
    Object x,
    Object y
)
```

Parameters

x

y

Return Value

See Also

XBoundsComparer Members
XBoundsComparer Class
com.mindfusion.diagramming.jlayout Namespace

XDimension2D Class

Syntax

Java
`public class XDimension2D`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.jlayout.XDimension2D

See Also

XDimension2D Members
com.mindfusion.diagramming.jlayout Namespace

XDimension2D Members

The following tables list the members exposed by the XDimension2D type.

Public Constructors

	Name	Description
	XDimension2D	

Public Methods

	Name	Description
S	fromRect	

See Also

XDimension2D Class
com.mindfusion.diagramming.jlayout Namespace

XDimension2D Constructor

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public XDimension2D ()
```

See Also

XDimension2D Class
com.mindfusion.diagramming.jlayout Namespace

XDimension2D Methods

XDimension2D.fromRect Method

Namespace: com.mindfusion.diagramming.jlayout
Package: com.mindfusion.diagramming.jlayout

Syntax

Java

```
public static XDimension2D.Double fromRect (
    Rectangle2D rect
)
```

Parameters

rect

Return Value

See Also

XDimension2D Members
XDimension2D Class
com.mindfusion.diagramming.jlayout Namespace

com.mindfusion.diagramming.lanes Namespace

CellBoundsEvent Class

Syntax

Java

```
public class CellBoundsEvent extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.lanes.CellBoundsEvent

See Also

CellBoundsEvent Members
com.mindfusion.diagramming.lanes Namespace

CellBoundsEvent Members

The following tables list the members exposed by the CellBoundsEvent type.

Public Methods

	Name	Description
	getCell	Gets the cell which has been resized.
	getNewBounds	Gets the new bounding rectangle of the cell.
	getOldBounds	Gets the old bounding rectangle of the cell.

See Also

CellBoundsEvent Class
com.mindfusion.diagramming.lanes Namespace

CellBoundsEvent Methods

CellBoundsEvent.getCell Method

Gets the cell which has been resized.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`public ICell getCell ()`

Return Value

See Also

CellBoundsEvent Members
CellBoundsEvent Class
com.mindfusion.diagramming.lanes Namespace

CellBoundsEvent.getNewBounds Method

Gets the new bounding rectangle of the cell.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public Rectangle2D.Float getNewBounds ()
```

Return Value

See Also

CellBoundsEvent Members
CellBoundsEvent Class
com.mindfusion.diagramming.lanes Namespace

CellBoundsEvent.getOldBounds Method

Gets the old bounding rectangle of the cell.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public Rectangle2D.Float getOldBounds ()
```

Return Value

See Also

CellBoundsEvent Members
CellBoundsEvent Class
com.mindfusion.diagramming.lanes Namespace

Grid Class

Represents a lane grid.

Syntax

```
Java
public class Grid implements Externalizable
```

Remarks

The **Grid** class lets you define a background grid or table that can be used in Swimlane diagrams or Gantt charts. To activate the grid, set the EnableLanes property of the Diagram class to **true**.

Grids can include varying number of lanes, divided into child rows and columns whose intersections form cells. The grid can be resized by setting the ColumnCount and RowCount properties or by adding headers to the ColumnHeaders and RowHeaders collections. A column or row can be divided into child elements by adding to the SubHeaders collection of a Header, which lets you form a complex hierarchy of unlimited depth.

The intersection of rows and columns can be either a simple cell for bottommost elements in the lane hierarchy, or a group of cells for parent rows and columns. Cells or cell groups can be accessed via the get method, that lets you index cells either by their integer positions, or by their **Header** objects.

If the AllowResizeHeaders property of the **Grid** class is enabled, users can resize the grid columns and rows as desired. The LaneColumnResizeCursor and LaneRowResizeCursor properties of the DiagramView class specify the mouse cursor shown when resizing the lane column header or the lane row header. The CellBoundsChanged event is raised when lane cell bounds are resized.

The position of the grid and grid headers within the diagram document is defined by TopMargin and LeftMargin, which specify the grid offset relative to Bounds. HookHeaders enables lane headers to be anchored to the left or right side of the control's visible area. The sizes of headers at different levels in the lane hierarchy can be set in a single operation by using the RowHeadersWidths and ColumnHeadersHeights properties.

The appearance of the lanes grid can be customized further in the AlignCells property which specifies whether cells are aligned to each other, the HeadersOnTop property which specifies whether headers should appear on top of the z-order, and the TopLeftAreaStyle specifying the appearance of the grid's top left corner.

The **Grid** class provides many miscellaneous methods that can be used to find grid elements, for determining their bounds and for hit-testing.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.lanes.Grid

See Also

Grid Members
com.mindfusion.diagramming.lanes Namespace

Grid Members

Represents a lane grid.

The following tables list the members exposed by the Grid type.

Public Constructors

	Name	Description
	Grid	Overloaded.

Public Methods

	Name	Description
	addGridListener	

findColumn	Returns the first column header matching the specified caption.
findRow	Finds the first row whose header caption matches the specified string.
get	Overloaded.
getAllowResizeHeaders	Gets a value indicating whether users can resize the headers of the grid interactively.
getCellBounds	Returns the bounding rectangle of the specified cell.
getCellColumn	Returns the column index of the specified cell.
getCellFromPoint	Gets the cell located at the specified point.
getCellRow	Returns the row index of the specified cell.
getColumn	Returns the column header with the specified index from the bottommost column header level.
getColumnCount	Gets the number of columns in the grid.
getColumnHeaderBounds	Returns the bounding rectangle of all column headers.
getColumnHeaders	Gets the collection with the topmost column headers.
getColumnHeadersHeights	Gets an array with float values specifying the heights of individual column levels. If a value is non-positive or does not exist because the array has less arguments than the number of rows, then the height is calculated as the maximum height of the columns in that level.
getColumnIndex	Returns the 0-based index of the specified column. Only works for bottommost headers. If the specified column is a group header, returns -1.
getEnableStyledText	Gets a value indicating whether the text of the lane headers can contain formatting tags, such as <b>.
getHeaderBounds	Returns the bounding rectangle of the specified header.
getHeaderFromPoint	Overloaded.
getHeaderLevel	Gets the level of the specified header.
getheadersOnTop	Gets a value indicating whether lane headers appear at the top of the z-order above all other items.
getHookHeaders	Gets a value indicating whether headers will be anchored to the corresponding side (that is, the column header anchored to the top side and the row header anchored to the left side).
getLeftMargin	Gets the offset of the lane grid from the left side of the document bounds.
getMinHeaderSize	
getRow	Returns the row header with the specified index from the bottommost row header level.
getRowCount	Gets the number of rows in the grid.

getRowHeaderBounds	Returns the bounding rectangle of all row headers.
getRowHeaders	Gets the collection with the leftmost row headers.
getRowHeadersWidths	Gets an array with float values specifying the widths of individual row levels.
getRowIndex	Returns the 0-based index of the specified row. Only works for bottommost headers. If the specified row is a group header, returns -1;
getTopLeftAreaStyle	Gets the style of the area above all row headers and to the left of all column headers.
getTopLeftAreaText	Gets the text displayed in the top left area.
getTopLeftAreaTextColor	Gets the color of the text displayed in the top left area.
getTopLeftAreaTextFont	Gets the font used to display text in the top left area.
getTopLeftAreaTextFormat	Gets the format of the text displayed in the top left area.
getTopMargin	Gets the offset of the lane grid from the top side of the document bounds.
insertAfter	Inserts a new header after the specified header and returns a reference to it.
loadFromJson	Deserializes the lane grid from the specified JsonObject using the specified context.
loadFromXml	Deserializes the lane grid from the specified **Element** using the specified context.
raiseAppearanceChanged	
raiseCellBoundsChanged	
raiseHeaderAdded	
raiseHeaderResized	
raiseHeaderStartResizing	
readExternal	
removeGridListener	
renderFirst	Invoked in order to render the grid before any other diagram items are drawn.
renderLast	Invoked in order to render the grid after all other diagram items are drawn.
resizeColumnHeaderHeights	This method is for internal use only. Resizes the heights of all column headers from the specified level with the specified amount.
resizeRowHeaderWidths	This method is for internal use only. Resizes the widths of all row headers from the specified level with the specified amount.
saveToJson	Serializes the lane grid to the specified JsonObject using the specified context.

	saveToXml	Serializes the lane grid to the specified XmlElement using the specified context.
	setAllowResizeHeaders	Sets a value indicating whether users can resize the headers of the grid interactively.
	setColumnCount	Sets the number of columns in the grid.
	setColumnHeadersHeights	Sets an array with float values specifying the heights of individual column levels. If a value is non-positive or does not exist because the array has less arguments than the number of rows, then the height is calculated as the maximum height of the columns in that level.
	setEnableStyledText	Sets a value indicating whether the text of the lane headers can contain formatting tags, such as <b>.
	setHeadersOnTop	Sets a value indicating whether lane headers appear at the top of the z-order above all other items.
	setHookHeaders	Sets a value indicating whether headers will be anchored to the corresponding side (that is, the column header anchored to the top side and the row header anchored to the left side).
	setLeftMargin	Sets the offset of the lane grid from the left side of the document bounds.
	setMinHeaderSize	
	setParent	
	setRowCount	Sets the number of rows in the grid.
	setRowHeadersWidths	Sets an array with float values specifying the widths of individual row levels. If a value is non-positive or does not exist because the array has less arguments than the number of rows, then the width is calculated as the maximum width of the rows in that level.
	setTopLeftAreaStyle	Sets the style of the area above all row headers and to the left of all column headers.
	setTopLeftAreaText	Sets the text displayed in the top left area.
	setTopLeftAreaTextColor	Sets the color of the text displayed in the top left area.
	setTopLeftAreaTextFont	Sets the font used to display text in the top left area.
	setTopLeftAreaTextFormat	Sets the format of the text displayed in the top left area.
	setTopMargin	Sets the offset of the lane grid from the top side of the document bounds.
	writeExternal	

Protected Methods

	Name	Description
	columnHeaderAdded	Handles the HeaderAdded event on the master column header.

	columnHeaderHeightChanged	
	columnHeaderRemoved	
	columnHeaderSizeChanged	
	columnHeaderWidthChanged	
	headerSizeChanged	
	rowHeaderAdded	
	rowHeaderHeightChanged	
	rowHeaderRemoved	
	rowHeaderWidthChanged	

See Also

Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid Constructor

Overload List

Name	Description
Grid ()	Used internally to implement serialization functionality.
Grid (Diagram)	

See Also

Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid Constructor ()

Used internally to implement serialization functionality.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`public Grid ()`

See Also

Grid Constructor Overload List
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid Constructor (Diagram)

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Grid (
    Diagram parent
)
```

Parameters

parent

See Also

Grid Constructor Overload List
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid Methods

Grid.addGridListener Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void addGridListener (
    GridListener listener
)
```

Parameters

listener

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.columnHeaderAdded Method

Handles the HeaderAdded event on the master column header.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
protected void columnHeaderAdded (
    Header header
)
```

Parameters

header

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.columnHeaderHeightChanged Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
protected void columnHeaderHeightChanged (
    Header header,
    float oldValue
)
```

Parameters

header

oldValue

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.columnHeaderRemoved Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
protected void columnHeaderRemoved (
    Header header
)
```

Parameters

header

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.columnHeaderSizeChanged Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
protected void columnHeaderSizeChanged ()
```

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.columnHeaderWidthChanged Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
protected void columnHeaderWidthChanged (
    Header header,
    float oldValue
)
```

Parameters

header

oldValue

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.findColumn Method

Returns the first column header matching the specified caption.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Header findColumn (
    String title
)
```

Parameters

title
A string containing the header title to look for.

Return Value

Returns the first column Header that has the specified caption.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.findRow Method

Finds the first row whose header caption matches the specified string.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Header findRow (
    String title
)
```

Parameters

title
A string containing the header title to look for.

Return Value

Returns the first row Header that has the specified caption.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.get Method

Overload List

Name	Description
Grid.get (Header, Header) Grid.get (int, int)	Gets the cell or the cluster of cells corresponding to the specified row and column.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.get Method (Header, Header)

Gets the cell or the cluster of cells corresponding to the specified row and column.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public ICell get (
    Header column,
    Header row
)
```

Parameters

column

row

Return Value

See Also

get Method Overload List
Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.get Method (int, int)

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public ICell get (
    int column,
    int row
)
```

Parameters

column

row

Return Value

See Also

get Method Overload List
Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getAllowResizeHeaders Method

Gets a value indicating whether users can resize the headers of the grid interactively.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public boolean getAllowResizeHeaders ()
```

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getCellBounds Method

Returns the bounding rectangle of the specified cell.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Rectangle2D.Float getCellBounds (
    ICell cell
)
```

Parameters

cell
An ICell object representing a cell or a group of cells in the grid.

Return Value

A Rect instance representing the rectangle that bounds the specified cell or group of cells.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getCellColumn Method

Returns the column index of the specified cell.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public int getCellColumn (
    ICell cell
)
```

Parameters

cell
An ICell object representing a single cell in the grid.

Return Value

The index of the column that contains cell; -1 if cell is not found or refers to a group of cells.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getCellFromPoint Method

Gets the cell located at the specified point.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public ICell getCellFromPoint (
    Point2D point,
    Rectangle2D.Float cellBounds
)
```

Parameters

point
A Point instance specifying a point within the grid.

cellBounds
A Rect instance that receives the coordinates of the found cell.

Return Value

An ICell reference to the found cell, or **null** if there is no cell located at the specified point.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getCellRow Method

Returns the row index of the specified cell.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public int getCellRow (
    ICell cell
)
```

Parameters

cell
An ICell object representing a single cell in the grid.

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getColumn Method

Returns the column header with the specified index from the bottommost column header level.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Header getColumn (
    int index
)
```

Parameters

index
An integer value specifying the column index.

Return Value

A Header object representing the column at the specified index.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getColumnCount Method

Gets the number of columns in the grid.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public int getColumnCount ()
```

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getColumnHeaderBounds Method

Returns the bounding rectangle of all column headers.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public Rectangle2D.Float getColumnHeaderBounds ()
```

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getColumnHeaders Method

Gets the collection with the topmost column headers.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public HeaderList getColumnHeaders ()
```

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getColumnHeadersHeights Method

Gets an array with float values specifying the heights of individual column levels. If a value is non-positive or does not exist because the array has less arguments than the number of rows, then the height is calculated as the maximum height of the columns in that level.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public float[] getColumnHeadersHeights ()
```

Return Value

See Also

Grid Members
Grid Class

Grid.getColumnIndex Method

Returns the 0-based index of the specified column. Only works for bottommost headers. If the specified column is a group header, returns -1.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public int getColumnIndex (
    Header column
)
```

Parameters

column
A Header instance that represents a grid column.

Return Value

The index of column, or -1 if the specified header represents a row or a group of child columns.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getEnableStyledText Method

Gets a value indicating whether the text of the lane headers can contain formatting tags, such as <b>.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public boolean getEnableStyledText ()
```

Return Value

{@code true} if JDiagram should process formatting tags when rendering header texts, otherwise {@code false}.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getHeaderBounds Method

Returns the bounding rectangle of the specified header.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Rectangle2D.Float getHeaderBounds (
    Header header,
    boolean includeSubHeaders
)
```

Parameters

header
The Header object whose coordinates to return.

includeSubHeaders
true to include the coordinates of the child headers in the returned rectangle; otherwise, false.

Return Value

A **Rectangle2D.Float** that bounds the specified header, and optionally its child headers.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getHeaderFromPoint Method

Overload List

Name	Description
Grid.getHeaderFromPoint (Point2D, Rectangle2D, Point2D)	Gets the Header that is located at the specified point.
Grid.getHeaderFromPoint (Point2D, Rectangle2D.Float)	Gets the Header that is located at the specified point.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getHeaderFromPoint Method (Point2D, Rectangle2D, Point2D)

Gets the Header that is located at the specified point.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Header getHeaderFromPoint (
    Point2D point,
    Rectangle2D headerBounds,
    Point2D scrollPosition
)
```

Parameters

point
A Point instance specifying a point within the grid.

headerBounds
A Rect instance that receives the coordinates of the found header.

scrollPosition
When the headers are hooked this parameter should provide information about the current scroll position in the view.

Return Value

The found Header object, or **null** if there is no header located at the specified point.

See Also

getHeaderFromPoint Method Overload List
Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getHeaderFromPoint Method (Point2D, Rectangle2D.Float)

Gets the Header that is located at the specified point.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Header getHeaderFromPoint (
    Point2D point,
    Rectangle2D.Float headerBounds
)
```

Parameters

point
A Point instance specifying a point within the grid.

headerBounds
A Rect instance that receives the coordinates of the found header.

Return Value

The found Header object, or **null** if there is no header located at the specified point.

See Also

getHeaderFromPoint Method Overload List
Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getHeaderLevel Method

Gets the level of the specified header.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public int getHeaderLevel (
    Header header
)
```

Parameters

header

Return Value

This method is for internal use only.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getheadersOnTop Method

Gets a value indicating whether lane headers appear at the top of the z-order above all other items.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public boolean getheadersOnTop ()
```

Return Value

See Also

Grid Members
Grid Class

com.mindfusion.diagramming.lanes Namespace

Grid.getHookHeaders Method

Gets a value indicating whether headers will be anchored to the corresponding side (that is, the column header anchored to the top side and the row header anchored to the left side).

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public boolean getHookHeaders ()
```

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getLeftMargin Method

Gets the offset of the lane grid from the left side of the document bounds.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public float getLeftMargin ()
```

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getMinHeaderSize Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public float getMinHeaderSize ()
```

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getRow Method

Returns the row header with the specified index from the bottommost row header level.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Header getRow (
    int index
)
```

Parameters

index
An integer value specifying the row index.

Return Value

A Header object representing the row at the specified index.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getRowCount Method

Gets the number of rows in the grid.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public int getRowCount ()
```

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getRowHeaderBounds Method

Returns the bounding rectangle of all row headers.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public Rectangle2D.Float getRowHeaderBounds ()
```

Return Value

A **Rectangle2D.Float** that bounds all row headers.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getRowHeaders Method

Gets the collection with the leftmost row headers.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public HeaderList getRowHeaders ()
```

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getRowHeadersWidths Method

Gets an array with float values specifying the widths of individual row levels.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public float[] getRowHeadersWidths ()
```

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getRowIndex Method

Returns the 0-based index of the specified row. Only works for bottommost headers. If the specified row is a group header, returns -1;

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public int getRowIndex (
    Header row
)
```

Parameters

row
A Header instance that represents a grid row.

Return Value

The index of row, or -1 if the specified header represents a column or a group of child rows.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getTopLeftAreaStyle Method

Gets the style of the area above all row headers and to the left of all column headers.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Style getTopLeftAreaStyle ()
```

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getTopLeftAreaText Method

Gets the text displayed in the top left area.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public String getTopLeftAreaText ()
```

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getTopLeftAreaTextColor Method

Gets the color of the text displayed in the top left area.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Color getTopLeftAreaTextColor ()
```

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getTopLeftAreaTextFont Method

Gets the font used to display text in the top left area.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public Font getTopLeftAreaTextFont ()
```

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getTopLeftAreaTextFormat Method

Gets the format of the text displayed in the top left area.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public TextFormat getTopLeftAreaTextFormat ()
```

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.getTopMargin Method

Gets the offset of the lane grid from the top side of the document bounds.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public float getTopMargin ()
```

Return Value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.headerSizeChanged Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
protected void headerSizeChanged ()
```

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.insertAfter Method

Inserts a new header after the specified header and returns a reference to it.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Header insertAfter (
    Header header
)
```

Parameters

header
The header after which to insert the new header.

Return Value

A reference to the newly created header.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.loadFromJson Method

Deserializes the lane grid from the specified JsonObject using the specified context.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject

context
A JsonPersistContext

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.loadFromXml Method

Deserializes the lane grid from the specified **Element** using the specified context.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void loadFromXml (
    Element element,
    XmlPersistContext context
)
```

Parameters

element

context

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.raiseAppearanceChanged Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void raiseAppearanceChanged ()
```

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.raiseCellBoundsChanged Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void raiseCellBoundsChanged (
    CellBoundsEvent e
)
```

Parameters

e

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.raiseHeaderAdded Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void raiseHeaderAdded (
    Header header
)
```

Parameters

header

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.raiseHeaderResized Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void raiseHeaderResized (
    Header header,
    boolean horizontal,
    boolean vertical
)
```

Parameters

header

horizontal

vertical

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.raiseHeaderStartResizing Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void raiseHeaderStartResizing (
    Header header,
    boolean horizontal,
    boolean vertical
)
```

Parameters

header

horizontal

vertical

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.readExternal Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.removeGridListener Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void removeGridListener (
    GridListener listener
)
```

Parameters

listener

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.renderFirst Method

Invoked in order to render the grid before any other diagram items are drawn.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void renderFirst (
    Graphics2D target,
    Rectangle2D viewport
)
```

Parameters

target

viewport

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.renderLast Method

Invoked in order to render the grid after all other diagram items are drawn.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void renderLast (
    Graphics2D target,
    Rectangle2D viewport
)
```

Parameters

target

viewport

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.resizeColumnHeaderHeights Method

This method is for internal use only. Resizes the heights of all column headers from the specified level with the specified amount.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void resizeColumnHeaderHeights (
    int level,
    float increase
)
```

Parameters

level

increase

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.resizeRowHeaderWidths Method

This method is for internal use only. Resizes the widths of all row headers from the specified level with the specified amount.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void resizeRowHeaderWidths (
    int level,
    float increase
)
```

Parameters

level

increase

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.rowHeaderAdded Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
protected void rowHeaderAdded (
    Header header
)
```

Parameters

header

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.rowHeaderHeightChanged Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
protected void rowHeaderHeightChanged (
    Header header,
    float oldValue
)
```

Parameters

header

oldValue

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.rowHeaderRemoved Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
protected void rowHeaderRemoved (
    Header header
)
```

Parameters

header

See Also

Grid.rowHeaderWidthChanged Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
protected void rowHeaderWidthChanged (
    Header header,
    float oldValue
)
```

Parameters

header

oldValue

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.saveToJson Method

Serializes the lane grid to the specified JsonObject using the specified context.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject

context
A JsonPersistContext

See Also

Grid Members
Grid Class

Grid.saveToXml Method

Serializes the lane grid to the specified XmlElement using the specified context.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void saveToXml (
    Element element,
    XmlPersistContext context
)
```

Parameters

element

context

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setAllowResizeHeaders Method

Sets a value indicating whether users can resize the headers of the grid interactively.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setAllowResizeHeaders (
    boolean value
)
```

Parameters

value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setColumnCount Method

Sets the number of columns in the grid.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setColumnCount (
    int value
)
```

Parameters

value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setColumnHeadersHeights Method

Sets an array with float values specifying the heights of individual column levels. If a value is non-positive or does not exist because the array has less arguments than the number of rows, then the height is calculated as the maximum height of the columns in that level.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setColumnHeadersHeights (
    float[] value
)
```

Parameters

value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setEnableStyledText Method

Sets a value indicating whether the text of the lane headers can contain formatting tags, such as <b>.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public void setEnableStyledText (
    boolean value
)
```

Parameters

value
{@code true} if JDiagram should process formatting tags when rendering header texts, otherwise {@code false}.

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setHeadersOnTop Method

Sets a value indicating whether lane headers appear at the top of the z-order above all other items.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public void setHeadersOnTop (
    boolean value
)
```

Parameters

value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setHookHeaders Method

Sets a value indicating whether headers will be anchored to the corresponding side (that is, the column header anchored to the top side and the row header anchored to the left side).

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
```

```
public void setHookHeaders (
    boolean value
)
```

Parameters

value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setLeftMargin Method

Sets the offset of the lane grid from the left side of the document bounds.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setLeftMargin (
    float value
)
```

Parameters

value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setMinHeaderSize Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setMinHeaderSize (
    float value
)
```

Parameters

value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setParent Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setParent (
    Diagram parent
)
```

Parameters

parent

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setRowCount Method

Sets the number of rows in the grid.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setRowCount (
    int value
)
```

Parameters

value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setRowHeadersWidths Method

Sets an array with float values specifying the widths of individual row levels. If a value is non-positive or does not exist because the array has less arguments than the number of rows, then the width is calculated as the maximum width of the rows in that level.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setRowHeadersWidths (
    float[] values
)
```

Parameters

values

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setTopLeftAreaStyle Method

Sets the style of the area above all row headers and to the left of all column headers.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setTopLeftAreaStyle (
    Style value
)
```

Parameters

value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setTopLeftAreaText Method

Sets the text displayed in the top left area.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public void setTopLeftAreaText (
    String value
)
```

Parameters

value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setTopLeftAreaTextColor Method

Sets the color of the text displayed in the top left area.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public void setTopLeftAreaTextColor (
    Color value
)
```

Parameters

value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setTopLeftAreaTextFont Method

Sets the font used to display text in the top left area.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public void setTopLeftAreaTextFont (
    Font value
)
```

Parameters

value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setTopLeftAreaTextFormat Method

Sets the format of the text displayed in the top left area.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setTopLeftAreaTextFormat (
    TextFormat value
)
```

Parameters

value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.setTopMargin Method

Sets the offset of the lane grid from the top side of the document bounds.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setTopMargin (
    float value
)
```

Parameters

value

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

Grid.writeExternal Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

Grid Members
Grid Class
com.mindfusion.diagramming.lanes Namespace

GridAdapter Class

Syntax

Java

```
public class GridAdapter implements GridListener
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.lanes.GridAdapter

See Also

GridAdapter Members
com.mindfusion.diagramming.lanes Namespace

GridAdapter Members

The following tables list the members exposed by the GridAdapter type.

Public Constructors

	Name	Description
	GridAdapter	

Public Methods

	Name	Description
	appearanceChanged	
	cellBoundsChanged	
	headerAdded	
	headerResized	
	headerStartResizing	
	invalidated	

See Also

GridAdapter Class
com.mindfusion.diagramming.lanes Namespace

GridAdapter Constructor

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`public GridAdapter ()`

See Also

GridAdapter Class
com.mindfusion.diagramming.lanes Namespace

GridAdapter Methods

GridAdapter.appearanceChanged Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`public void appearanceChanged ()`

See Also

GridAdapter Members
GridAdapter Class
com.mindfusion.diagramming.lanes Namespace

GridAdapter.cellBoundsChanged Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void cellBoundsChanged (
    CellBoundsEvent e
)
```

Parameters

e

See Also

GridAdapter Members
GridAdapter Class
com.mindfusion.diagramming.lanes Namespace

GridAdapter.headerAdded Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void headerAdded (
    HeaderEvent e
)
```

Parameters

e

See Also

GridAdapter Members
GridAdapter Class
com.mindfusion.diagramming.lanes Namespace

GridAdapter.headerResized Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public void headerResized (
    HeaderResizeEvent e
)
```

Parameters

e

See Also

GridAdapter Members
GridAdapter Class
com.mindfusion.diagramming.lanes Namespace

GridAdapter.headerStartResizing Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public void headerStartResizing (
    HeaderResizeEvent e
)
```

Parameters

e

See Also

GridAdapter Members
GridAdapter Class
com.mindfusion.diagramming.lanes Namespace

GridAdapter.invalidated Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public void invalidated ()
```

See Also

GridAdapter Members
GridAdapter Class
com.mindfusion.diagramming.lanes Namespace

GridListener Interface

Syntax

Java
`public interface GridListener extends EventListener`

Inheritors

com.mindfusion.diagramming.lanes.GridAdapter

See Also

GridListener Members
com.mindfusion.diagramming.lanes Namespace

GridListener Members

The following tables list the members exposed by the GridListener type.

Public Methods

	Name	Description
	appearanceChanged	Raised when the appearance of any of the underlying cells or headers has changed (including when the size of the underlying headers or cells has changed).
	cellBoundsChanged	Raised when the bounding rectangle of a cell has been changed.
	headerAdded	Raised when a header has been inserted to the grid either interactively or through a call to the InsertBefore or InsertAfter methods.
	headerResized	Raised when the user finished resizing a header.
	headerStartResizing	Raises when the user starts resizing a header.
	invalidated	

See Also

GridListener Interface
com.mindfusion.diagramming.lanes Namespace

GridListener Methods

GridListener.appearanceChanged Method

Raised when the appearance of any of the underlying cells or headers has changed (including when the size of the underlying headers or cells has changed).

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
void appearanceChanged ()
```

See Also

GridListener Members
GridListener Interface
com.mindfusion.diagramming.lanes Namespace

GridListener.cellBoundsChanged Method

Raised when the bounding rectangle of a cell has been changed.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
void cellBoundsChanged (
    CellBoundsEvent e
)
```

Parameters

e

See Also

GridListener Members
GridListener Interface
com.mindfusion.diagramming.lanes Namespace

GridListener.headerAdded Method

Raised when a header has been inserted to the grid either interactively or through a call to the InsertBefore or InsertAfter methods.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
void headerAdded (
    HeaderEvent e
)
```

Parameters

e

See Also

GridListener Members
GridListener Interface
com.mindfusion.diagramming.lanes Namespace

GridListener.headerResized Method

Raised when the user finished resizing a header.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
void headerResized (
    HeaderResizeEvent e
)
```

Parameters

e

See Also

GridListener Members
GridListener Interface
com.mindfusion.diagramming.lanes Namespace

GridListener.headerStartResizing Method

Raises when the user starts resizing a header.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
void headerStartResizing (
    HeaderResizeEvent e
)
```

Parameters

e

See Also

GridListener Members
GridListener Interface
com.mindfusion.diagramming.lanes Namespace

GridListener.invalidated Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
void invalidated ()
```

See Also

GridListener Members
GridListener Interface
com.mindfusion.diagramming.lanes Namespace

Header Class

Represents a header in a grid view.

Syntax

Java

```
public class Header implements Externalizable
```

Remarks

The **Header** class provides the properties to define and adjust headers in the lanes grid.

The size of a header can be set through the Height and Width properties. Note that the size of the rows and columns in the grid is controlled through the size of their headers. The SubHeaders property lets you add child rows or columns to the grid. The ResizeType property is used to specify how to resize child columns and rows when the topmost headers are resized. The possible values for the **ResizeType** property are defined in the ResizeType enumeration.

In order to specify the color, font or alignment of the header Title, set the TitleColor, TitleFont or TitleFormat properties.

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.lanes.Header

See Also

Header Members

Represents a header in a grid view.

The following tables list the members exposed by the Header type.

Public Constructors

	Name	Description
	Header	Overloaded.

Public Methods

	Name	Description
	getHeight	
	getResizeType	
	getRotateTitle	
	getStyle	
	getSubHeaders	
	getTitle	
	getTitleColor	
	getTitleFont	
	getTitleFormat	
	getWidth	
	isColumnHeader	
	isRowHeader	
	loadFromXml	Loads the header from the specified **Element** using the specified context.
	readExternal	
	saveToXml	Saves the header to the specified XmlElement using the specified context.
	setHeight	
	setResizeType	
	setRotateTitle	
	setStyle	
	setTitle	
	setTitleColor	

	setTitleFont	
	setTitleFormat	
	setWidth	
	writeExternal	

Protected Methods

	Name	Description
	loadFromJson	Loads the header from the specified JsonObject using the specified context.
	saveToJson	Saves the header to the specified JsonObject using the specified context.

See Also

Header Class
com.mindfusion.diagramming.lanes Namespace

Header Constructor

Overload List

Name	Description
Header ()	
Header (String)	

See Also

Header Class
com.mindfusion.diagramming.lanes Namespace

Header Constructor ()

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`public Header ()`

See Also

Header Constructor Overload List
Header Class

Header Constructor (String)

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Header (
    String title
)
```

Parameters

title

See Also

Header Constructor Overload List
Header Class
com.mindfusion.diagramming.lanes Namespace

Header Methods

Header.getHeight Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public float getHeight ()
```

Return Value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.getResizeType Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public int getResizeType ()
```

Return Value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.getRotateTitle Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public boolean getRotateTitle ()
```

Return Value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.getStyle Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public Style getStyle ()
```

Return Value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.getSubHeaders Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`public HeaderList getSubHeaders ()`

Return Value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.getTitle Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`public String getTitle ()`

Return Value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.getTitleColor Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`public Color getTitleColor ()`

Return Value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.getTitleFont Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Font getTitleFont ()
```

Return Value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.getTitleFormat Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public TextFormat getTitleFormat ()
```

Return Value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.getWidth Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public float getWidth ()
```

Return Value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.isColumnHeader Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`public boolean isColumnHeader ()`

Return Value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.isRowHeader Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`public boolean isRowHeader ()`

Return Value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.loadFromJson Method

Loads the header from the specified JsonObject using the specified context.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
protected void loadFromJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj

context

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.loadFromXml Method

Loads the header from the specified **Element** using the specified context.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public void loadFromXml (
    Element element,
    XmlPersistContext context
)
```

Parameters

element

context

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.readExternal Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
```

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.saveToJson Method

Saves the header to the specified JsonObject using the specified context.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
protected void saveToJson (
    JsonObject obj,
    JsonPersistContext context
)
```

Parameters

obj
A JsonObject

context
A JsonPersistContext

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.saveToXml Method

Saves the header to the specified XmlElement using the specified context.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void saveToXml (
    Element element,
```

```
    XmlPersistContext context
)
```

Parameters

element

context

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.setHeight Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setHeight (
    float value
)
```

Parameters

value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.setResizeType Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setResizeType (
    int value
)
```

Parameters

value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.setRotateTitle Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setRotateTitle (
    boolean value
)
```

Parameters

value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.setStyle Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setStyle (
    Style value
)
```

Parameters

value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.setTitle Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public void setTitle (
    String value
)
```

Parameters

value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.setTitleColor Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public void setTitleColor (
    Color value
)
```

Parameters

value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.setTitleFont Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public void setTitleFont (
    Font value
)
```

Parameters

value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.setTitleFormat Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setTitleFormat (
    TextFormat value
)
```

Parameters

value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.setWidth Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setWidth (
    float value
)
```

Parameters

value

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

Header.writeExternal Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

Header Members
Header Class
com.mindfusion.diagramming.lanes Namespace

HeaderEvent Class

Syntax

Java

```
public class HeaderEvent extends EventObject
```

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.lanes.HeaderEvent
      com.mindfusion.diagramming.lanes.HeaderResizeEvent

See Also

HeaderEvent Members
com.mindfusion.diagramming.lanes Namespace

HeaderEvent Members

The following tables list the members exposed by the HeaderEvent type.

Public Methods

	Name	Description
	getHeader	Gets the header related to the event.

	setHeader	Sets the header related to the event.

See Also

HeaderEvent Class
com.mindfusion.diagramming.lanes Namespace

HeaderEvent Methods

HeaderEvent.getHeader Method

Gets the header related to the event.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Header getHeader ()
```

Return Value

See Also

HeaderEvent Members
HeaderEvent Class
com.mindfusion.diagramming.lanes Namespace

HeaderEvent.setHeader Method

Sets the header related to the event.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setHeader (
    Header value
)
```

Parameters

value

See Also

HeaderEvent Members
HeaderEvent Class
com.mindfusion.diagramming.lanes Namespace

HeaderList Class

Syntax

Java
`public class HeaderList extends BaseList<E> implements Cloneable`

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.diagramming.BaseList(E)
        com.mindfusion.diagramming.lanes.HeaderList

See Also

HeaderList Members
com.mindfusion.diagramming.lanes Namespace

HeaderList Members

The following tables list the members exposed by the HeaderList type.

Public Constructors

	Name	Description
	HeaderList	

Protected Fields

	Name	Description
	list	(Inherited from BaseList.)
	listEvent	(Inherited from BaseList.)
	notifyParent	(Inherited from BaseList.)

Public Methods

	Name	Description
	add	Overloaded.
	clear	
	clone	
	contains	

	contains	Determines if this list contains the specified element. (Inherited from BaseList.)
	first	Gets the first element of this list. (Inherited from BaseList.)
	get	
	indexOf	
	last	Gets the last element of this list. (Inherited from BaseList.)
	readExternal	Loads the list's contents. (Inherited from BaseList.)
	remove	Overloaded.
	removeRange	Removes a range of elements from this list. (Inherited from BaseList.)
	set	Sets the element at the specified position in this list. (Inherited from BaseList.)
	set	
	size	Gets the number of elements in this list. (Inherited from BaseList.)
	writeExternal	Saves the list's contents. (Inherited from BaseList.)

Protected Methods

	Name	Description
	raiseAdding	Raises the adding event. (Inherited from BaseList.)
	raiseClearing	Raises the clearing event. (Inherited from BaseList.)
	raiseRemoving	Raises the removing event. (Inherited from BaseList.)

See Also

HeaderList Class
com.mindfusion.diagramming.lanes Namespace

HeaderList Constructor

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`public HeaderList ()`

See Also

HeaderList Methods

HeaderList.add Method

Overload List

Name	Description
HeaderList.add (Header)	
HeaderList.add (int, Header)	

See Also

HeaderList Members
HeaderList Class
com.mindfusion.diagramming.lanes Namespace

HeaderList.add Method (Header)

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public boolean add (
    Header header
)
```

Parameters

header

Return Value

See Also

add Method Overload List
HeaderList Members
HeaderList Class
com.mindfusion.diagramming.lanes Namespace

HeaderList.add Method (int, Header)

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public void add (
    int index,
    Header header
)
```

Parameters

index

header

See Also

add Method Overload List
HeaderList Members
HeaderList Class
com.mindfusion.diagramming.lanes Namespace

HeaderList.clear Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public void clear ()
```

See Also

HeaderList Members
HeaderList Class
com.mindfusion.diagramming.lanes Namespace

HeaderList.clone Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public Object clone ()
```

Return Value

See Also

HeaderList Members
HeaderList Class
com.mindfusion.diagramming.lanes Namespace

HeaderList.contains Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public boolean contains (
    Header header
)
```

Parameters

header

Return Value

See Also

HeaderList Members
HeaderList Class
com.mindfusion.diagramming.lanes Namespace

HeaderList.get Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Header get (
    int index
)
```

Parameters

index

Return Value

See Also

HeaderList Members
HeaderList Class
com.mindfusion.diagramming.lanes Namespace

HeaderList.indexOf Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

`public int indexOf (`
`  Header header`
`)`

Parameters

header

Return Value

See Also

HeaderList Members
HeaderList Class
com.mindfusion.diagramming.lanes Namespace

HeaderList.remove Method

Overload List

Name	Description
HeaderList.remove (Header)	
HeaderList.remove (int)	

See Also

HeaderList Members
HeaderList Class
com.mindfusion.diagramming.lanes Namespace

HeaderList.remove Method (Header)

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

`public void remove (`
`  Header header`
`)`

Parameters

header

See Also

remove Method Overload List
HeaderList Members
HeaderList Class
com.mindfusion.diagramming.lanes Namespace

HeaderList.remove Method (int)

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Header remove (
    int index
)
```

Parameters

index

Return Value

See Also

remove Method Overload List
HeaderList Members
HeaderList Class
com.mindfusion.diagramming.lanes Namespace

HeaderList.set Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public Header set (
    int index,
    Header value
)
```

Parameters

index

value

Return Value

See Also

HeaderList Members
HeaderList Class
com.mindfusion.diagramming.lanes Namespace

HeaderResizeEvent Class

Syntax

Java
`public class HeaderResizeEvent extends HeaderEvent`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.diagramming.lanes.HeaderEvent
      com.mindfusion.diagramming.lanes.HeaderResizeEvent

See Also

HeaderResizeEvent Members
com.mindfusion.diagramming.lanes Namespace

HeaderResizeEvent Members

The following tables list the members exposed by the HeaderResizeEvent type.

Public Methods

	Name	Description
	getHeader	Gets the header related to the event. (Inherited from HeaderEvent.)
	IsHorizontal	Gets a value indicating whether the user resizes the header horizontally.
	isVertical	Gets a value indicating whether the user resizes the header vertically.
	setHeader	Sets the header related to the event. (Inherited from HeaderEvent.)

See Also

HeaderResizeEvent Class
com.mindfusion.diagramming.lanes Namespace

HeaderResizeEvent Methods

HeaderResizeEvent.IsHorizontal Method

Gets a value indicating whether the user resizes the header horizontally.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public boolean IsHorizontal ()
```

Return Value

See Also

HeaderResizeEvent Members
HeaderResizeEvent Class
com.mindfusion.diagramming.lanes Namespace

HeaderResizeEvent.isVertical Method

Gets a value indicating whether the user resizes the header vertically.

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public boolean isVertical ()
```

Return Value

See Also

HeaderResizeEvent Members
HeaderResizeEvent Class
com.mindfusion.diagramming.lanes Namespace

ICell Interface

Syntax

```
Java
public interface ICell
```

See Also

ICell Members

The following tables list the members exposed by the ICell type.

Public Methods

	Name	Description
	getStyle	
	getText	
	getTextColor	
	getTextFont	
	getTextFormat	
	setStyle	
	setText	
	setTextColor	
	setTextFont	
	setTextFormat	

See Also

ICell Interface
com.mindfusion.diagramming.lanes Namespace

ICell Methods

ICell.getStyle Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`Style getStyle ()`

Return Value

See Also

ICell Members
ICell Interface

ICell.getText Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`String getText ()`

Return Value

See Also

ICell Members
ICell Interface
com.mindfusion.diagramming.lanes Namespace

ICell.getTextColor Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`Color getTextColor ()`

Return Value

See Also

ICell Members
ICell Interface
com.mindfusion.diagramming.lanes Namespace

ICell.getTextFont Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`Font getTextFont ()`

Return Value

See Also

ICell Members
ICell Interface
com.mindfusion.diagramming.lanes Namespace

ICell.getTextFormat Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
TextFormat getTextFormat ()
```

Return Value

See Also

ICell Members
ICell Interface
com.mindfusion.diagramming.lanes Namespace

ICell.setStyle Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
void setStyle (
    Style style
)
```

Parameters

style

See Also

ICell Members
ICell Interface
com.mindfusion.diagramming.lanes Namespace

ICell.setText Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
void setText (
    String text
)
```

Parameters

text

See Also

ICell Members
ICell Interface
com.mindfusion.diagramming.lanes Namespace

ICell.setTextColor Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
void setTextColor (
    Color textColor
)
```

Parameters

textColor

See Also

ICell Members
ICell Interface
com.mindfusion.diagramming.lanes Namespace

ICell.setTextFont Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
void setTextFont (
    Font textFont
)
```

Parameters

textFont

See Also

ICell Members
ICell Interface
com.mindfusion.diagramming.lanes Namespace

ICell.setTextFormat Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
void setTextFormat (
    TextFormat textFormat
)
```

Parameters

textFormat

See Also

ICell Members
ICell Interface
com.mindfusion.diagramming.lanes Namespace

ResizeType Class

Syntax

Java

```
public class ResizeType
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.diagramming.lanes.ResizeType

See Also

ResizeType Members
com.mindfusion.diagramming.lanes Namespace

ResizeType Members

The following tables list the members exposed by the ResizeType type.

Public Constructors

	Name	Description
	ResizeType	

Public Fields

	Name	Description
	Fixed	
	Proportional	

See Also

ResizeType Class
com.mindfusion.diagramming.lanes Namespace

ResizeType Fields

ResizeType.Fixed Field

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public static final int Fixed
```

See Also

ResizeType Members
ResizeType Class
com.mindfusion.diagramming.lanes Namespace

ResizeType.Proportional Field

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public static final int Proportional
```

See Also

ResizeType Members
ResizeType Class
com.mindfusion.diagramming.lanes Namespace

ResizeType Constructor

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`public ResizeType ()`

See Also

ResizeType Class
com.mindfusion.diagramming.lanes Namespace

Style Class

Syntax

Java
`public class Style implements Externalizable`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.diagramming.lanes.Style

See Also

Style Members
com.mindfusion.diagramming.lanes Namespace

Style Members

The following tables list the members exposed by the Style type.

Public Constructors

	Name	Description
	Style	

Public Methods

	Name	Description
	addStyleListener	
	getBackgroundBrush	
	getBottomBorderPen	
	getLeftBorderPen	
	getRightBorderPen	
	getTopBorderPen	
	readExternal	
	removeStyleListener	
	setBackgroundBrush	
	setBottomBorderPen	
	setLeftBorderPen	
	setRightBorderPen	
	setTopBorderPen	
	writeExternal	

See Also

Style Class
com.mindfusion.diagramming.lanes Namespace

Style Constructor

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`public Style ()`

See Also

Style Class
com.mindfusion.diagramming.lanes Namespace

Style Methods

Style.addStyleListener Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public void addStyleListener (
    StyleListener listener
)
```

Parameters

listener

See Also

Style Members
Style Class
com.mindfusion.diagramming.lanes Namespace

Style.getBackgroundBrush Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public Brush getBackgroundBrush ()
```

Return Value

See Also

Style Members
Style Class
com.mindfusion.diagramming.lanes Namespace

Style.getBottomBorderPen Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

```
Java
public Pen getBottomBorderPen ()
```

Return Value

See Also

Style Members
Style Class
com.mindfusion.diagramming.lanes Namespace

Style.getLeftBorderPen Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`public Pen getLeftBorderPen ()`

Return Value

See Also

Style Members
Style Class
com.mindfusion.diagramming.lanes Namespace

Style.getRightBorderPen Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`public Pen getRightBorderPen ()`

Return Value

See Also

Style Members
Style Class
com.mindfusion.diagramming.lanes Namespace

Style.getTopBorderPen Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java
`public Pen getTopBorderPen ()`

Return Value

See Also

Style Members
Style Class
com.mindfusion.diagramming.lanes Namespace

Style.readExternal Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

Style Members
Style Class
com.mindfusion.diagramming.lanes Namespace

Style.removeStyleListener Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void removeStyleListener (
    StyleListener listener
)
```

Parameters

listener

See Also

Style Members
Style Class
com.mindfusion.diagramming.lanes Namespace

Style.setBackgroundBrush Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setBackgroundBrush (
    Brush backgroundBrush
)
```

Parameters

backgroundBrush

See Also

Style Members
Style Class
com.mindfusion.diagramming.lanes Namespace

Style.setBottomBorderPen Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setBottomBorderPen (
    Pen bottomBorderPen
)
```

Parameters

bottomBorderPen

See Also

Style Members
Style Class
com.mindfusion.diagramming.lanes Namespace

Style.setLeftBorderPen Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setLeftBorderPen (
    Pen leftBorderPen
)
```

Parameters

leftBorderPen

See Also

Style Members
Style Class
com.mindfusion.diagramming.lanes Namespace

Style.setRightBorderPen Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setRightBorderPen (
    Pen rightBorderPen
)
```

Parameters

rightBorderPen

See Also

Style Members
Style Class
com.mindfusion.diagramming.lanes Namespace

Style.setTopBorderPen Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void setTopBorderPen (
    Pen topBorderPen
)
```

Parameters

topBorderPen

See Also

Style Members
Style Class
com.mindfusion.diagramming.lanes Namespace

Style.writeExternal Method

Namespace: com.mindfusion.diagramming.lanes
Package: com.mindfusion.diagramming.lanes

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

Style Members
Style Class
com.mindfusion.diagramming.lanes Namespace

com.mindfusion.drawing Namespace

Align Enumeration

The members of this enumeration specify how text should be aligned to the text layout rectangle.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public enum Align
```

Members

	Member name	Description
	Center	Specifies that the text should be centered horizontally or vertically.
	Far	Specifies that the text should be right- or bottom-aligned.
	Near	Specifies that the text should be left- or top-aligned.

See Also

Brush Class

A Brush specifies how the interior of an element should be filled. The SolidBrush and GradientBrush classes inherit this abstract class.

Syntax

Java

```
public abstract class Brush implements Cloneable, Externalizable
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.drawing.Brush
    com.mindfusion.drawing.GradientBrush
    com.mindfusion.drawing.HatchBrush
    com.mindfusion.drawing.RadialGradientBrush
    com.mindfusion.drawing.SolidBrush
    com.mindfusion.drawing.TextureBrush

See Also

Brush Members
com.mindfusion.drawing Namespace

Brush Members

A Brush specifies how the interior of an element should be filled. The SolidBrush and GradientBrush classes inherit this abstract class.

The following tables list the members exposed by the Brush type.

Public Constructors

	Name	Description
	Brush	

Public Methods

	Name	Description
	applyTo	Applies the brush to the specified graphics.
	clone	Creates a copy of a brush.
	toColor	Returns a single color approximation of the brush.

See Also

Brush Constructor

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Brush ()
```

See Also

Brush Class
com.mindfusion.drawing Namespace

Brush Methods

Brush.applyTo Method

Applies the brush to the specified graphics.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public abstract void applyTo (
    Graphics2D g,
    Rectangle2D bounds
)
```

Parameters

g

bounds

See Also

Brush Members
Brush Class
com.mindfusion.drawing Namespace

Brush.clone Method

Creates a copy of a brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public abstract Brush clone ()
```

Return Value

A Brush instance.

See Also

Brush Members
Brush Class
com.mindfusion.drawing Namespace

Brush.toColor Method

Returns a single color approximation of the brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public abstract Color toColor ()
```

Return Value

See Also

Brush Members
Brush Class
com.mindfusion.drawing Namespace

Brushes Class

Contains the predefined Brush objects.

Syntax

```
Java
public class Brushes
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.drawing.Brushes

See Also

Brushes Members

Contains the predefined Brush objects.

The following tables list the members exposed by the Brushes type.

Public Fields

	Name	Description
S	AliceBlue	Represents a brush that has an ARGB value of #FFF0F8FF.
S	AntiqueWhite	Represents a brush that has an ARGB value of #FFFAEBD7.
S	Aqua	Represents a brush that has an ARGB value of #FF00FFFF.
S	Aquamarine	Represents a brush that has an ARGB value of #FF7FFFD4.
S	Azure	Represents a brush that has an ARGB value of #FFF0FFFF.
S	Beige	Represents a brush that has an ARGB value of #FFF5F5DC.
S	Bisque	Represents a brush that has an ARGB value of #FFFFE4C4.
S	Black	Represents a brush that has an ARGB value of #FF000000.
S	BlanchedAlmond	Represents a brush that has an ARGB value of #FFFFEBCD.
S	Blue	Represents a brush that has an ARGB value of #FF0000FF.
S	BlueViolet	Represents a brush that has an ARGB value of #FF8A2BE2.
S	Brown	Represents a brush that has an ARGB value of #FFA52A2A.
S	BurlyWood	Represents a brush that has an ARGB value of #FFDEB887.
S	CadetBlue	Represents a brush that has an ARGB value of #FF5F9EA0.
S	Chartreuse	Represents a brush that has an ARGB value of #FF7FFF00.
S	Chocolate	Represents a brush that has an ARGB value of #FFD2691E.
S	Coral	Represents a brush that has an ARGB value of #FFFF7F50.
S	CornflowerBlue	Represents a brush that has an ARGB value of #FF6495ED.
S	Cornsilk	Represents a brush that has an ARGB value of #FFFFF8DC.
S	Crimson	Represents a brush that has an ARGB value of #FFDC143C.
S	Cyan	Represents a brush that has an ARGB value of #FF00FFFF.
S	DarkBlue	Represents a brush that has an ARGB value of #FF00008B.
S	DarkCyan	Represents a brush that has an ARGB value of #FF008B8B.
S	DarkGoldenrod	Represents a brush that has an ARGB value of #FFB8860B.
S	DarkGray	Represents a brush that has an ARGB value of #FFA9A9A9.

	DarkGreen	Represents a brush that has an ARGB value of #FF006400.
	DarkKhaki	Represents a brush that has an ARGB value of #FFBDB76B.
	DarkMagenta	Represents a brush that has an ARGB value of #FF8B008B.
	DarkOliveGreen	Represents a brush that has an ARGB value of #FF556B2F.
	DarkOrange	Represents a brush that has an ARGB value of #FFFF8C00.
	DarkOrchid	Represents a brush that has an ARGB value of #FF9932CC.
	DarkRed	Represents a brush that has an ARGB value of #FF8B0000.
	DarkSalmon	Represents a brush that has an ARGB value of #FFE9967A.
	DarkSeaGreen	Represents a brush that has an ARGB value of #FF8FBC8F.
	DarkSlateBlue	Represents a brush that has an ARGB value of #FF483D8B.
	DarkSlateGray	Represents a brush that has an ARGB value of #FF2F4F4F.
	DarkTurquoise	Represents a brush that has an ARGB value of #FF00CED1.
	DarkViolet	Represents a brush that has an ARGB value of #FF9400D3.
	DeepPink	Represents a brush that has an ARGB value of #FFFF1493.
	DeepSkyBlue	Represents a brush that has an ARGB value of #FF00BFFF.
	DimGray	Represents a brush that has an ARGB value of #FF696969.
	DodgerBlue	Represents a brush that has an ARGB value of #FF1E90FF.
	Firebrick	Represents a brush that has an ARGB value of #FFB22222.
	FloralWhite	Represents a brush that has an ARGB value of #FFFFFAF0.
	ForestGreen	Represents a brush that has an ARGB value of #FF228B22.
	Fuchsia	Represents a brush that has an ARGB value of #FFFF00FF.
	Gainsboro	Represents a brush that has an ARGB value of #FFDCDCDC.
	GhostWhite	Represents a brush that has an ARGB value of #FFF8F8FF.
	Gold	Represents a brush that has an ARGB value of #FFFFD700.
	Goldenrod	Represents a brush that has an ARGB value of #FFDAA520.
	Gray	Represents a brush that has an ARGB value of #FF808080.
	Green	Represents a brush that has an ARGB value of #FF008000.
	GreenYellow	Represents a brush that has an ARGB value of #FFADFF2F.
	Honeydew	Represents a brush that has an ARGB value of #FFF0FFF0.
	HotPink	Represents a brush that has an ARGB value of #FFFF69B4.
	IndianRed	Represents a brush that has an ARGB value of #FFCD5C5C.
	Indigo	Represents a brush that has an ARGB value of #FF4B0082.
	Ivory	Represents a brush that has an ARGB value of #FFFFFFF0.

	Khaki	Represents a brush that has an ARGB value of #FFF0E68C.
	Lavender	Represents a brush that has an ARGB value of #FFE6E6FA.
	LavenderBlush	Represents a brush that has an ARGB value of #FFFFF0F5.
	LawnGreen	Represents a brush that has an ARGB value of #FF7CFC00.
	LemonChiffon	Represents a brush that has an ARGB value of #FFFFFACD.
	LightBlue	Represents a brush that has an ARGB value of #FFADD8E6.
	LightCoral	Represents a brush that has an ARGB value of #FFF08080.
	LightCyan	Represents a brush that has an ARGB value of #FFE0FFFF.
	LightGoldenrodYellow	Represents a brush that has an ARGB value of #FFFAFAD2.
	LightGray	Represents a brush that has an ARGB value of #FFD3D3D3.
	LightGreen	Represents a brush that has an ARGB value of #FF90EE90.
	LightPink	Represents a brush that has an ARGB value of #FFFFB6C1.
	LightSalmon	Represents a brush that has an ARGB value of #FFFFA07A.
	LightSeaGreen	Represents a brush that has an ARGB value of #FF20B2AA.
	LightSkyBlue	Represents a brush that has an ARGB value of #FF87CEFA.
	LightSlateGray	Represents a brush that has an ARGB value of #FF778899.
	LightSteelBlue	Represents a brush that has an ARGB value of #FFB0C4DE.
	LightYellow	Represents a brush that has an ARGB value of #FFFFFFE0.
	Lime	Represents a brush that has an ARGB value of #FF00FF00.
	LimeGreen	Represents a brush that has an ARGB value of #FF32CD32.
	Linen	Represents a brush that has an ARGB value of #FFFAF0E6.
	Magenta	Represents a brush that has an ARGB value of #FFFF00FF.
	Maroon	Represents a brush that has an ARGB value of #FF800000.
	MediumAquamarine	Represents a brush that has an ARGB value of #FF66CDAA.
	MediumBlue	Represents a brush that has an ARGB value of #FF0000CD.
	MediumOrchid	Represents a brush that has an ARGB value of #FFBA55D3.
	MediumPurple	Represents a brush that has an ARGB value of #FF9370DB.
	MediumSeaGreen	Represents a brush that has an ARGB value of #FF3CB371.
	MediumSlateBlue	Represents a brush that has an ARGB value of #FF7B68EE.
	MediumSpringGreen	Represents a brush that has an ARGB value of #FF00FA9A.
	MediumTurquoise	Represents a brush that has an ARGB value of #FF48D1CC.
	MediumVioletRed	Represents a brush that has an ARGB value of #FFC71585.
	MidnightBlue	Represents a brush that has an ARGB value of #FF191970.

	MintCream	Represents a brush that has an ARGB value of #FFF5FFFA.
	MistyRose	Represents a brush that has an ARGB value of #FFFFE4E1.
	Moccasin	Represents a brush that has an ARGB value of #FFFFE4B5.
	NavajoWhite	Represents a brush that has an ARGB value of #FFFFDEAD.
	Navy	Represents a brush that has an ARGB value of #FF000080.
	OldLace	Represents a brush that has an ARGB value of #FFFDF5E6.
	Olive	Represents a brush that has an ARGB value of #FF808000.
	OliveDrab	Represents a brush that has an ARGB value of #FF6B8E23.
	Orange	Represents a brush that has an ARGB value of #FFFFA500.
	OrangeRed	Represents a brush that has an ARGB value of #FFFF4500.
	Orchid	Represents a brush that has an ARGB value of #FFDA70D6.
	PaleGoldenrod	Represents a brush that has an ARGB value of #FFEEE8AA.
	PaleGreen	Represents a brush that has an ARGB value of #FF98FB98.
	PaleTurquoise	Represents a brush that has an ARGB value of #FFAFEEEE.
	PaleVioletRed	Represents a brush that has an ARGB value of #FFDB7093.
	PapayaWhip	Represents a brush that has an ARGB value of #FFFFEFD5.
	PeachPuff	Represents a brush that has an ARGB value of #FFFFDAB9.
	Peru	Represents a brush that has an ARGB value of #FFCD853F.
	Pink	Represents a brush that has an ARGB value of #FFFFC0CB.
	Plum	Represents a brush that has an ARGB value of #FFDDA0DD.
	PowderBlue	Represents a brush that has an ARGB value of #FFB0E0E6.
	Purple	Represents a brush that has an ARGB value of #FF800080.
	Red	Represents a brush that has an ARGB value of #FFFF0000.
	RosyBrown	Represents a brush that has an ARGB value of #FFBC8F8F.
	RoyalBlue	Represents a brush that has an ARGB value of #FF4169E1.
	SaddleBrown	Represents a brush that has an ARGB value of #FF8B4513.
	Salmon	Represents a brush that has an ARGB value of #FFFA8072.
	SandyBrown	Represents a brush that has an ARGB value of #FFF4A460.
	SeaGreen	Represents a brush that has an ARGB value of #FF2E8B57.
	SeaShell	Represents a brush that has an ARGB value of #FFFFF5EE.
	Sienna	Represents a brush that has an ARGB value of #FFA0522D.
	Silver	Represents a brush that has an ARGB value of #FFC0C0C0.
	SkyBlue	Represents a brush that has an ARGB value of #FF87CEEB.

	SlateBlue	Represents a brush that has an ARGB value of #FF6A5ACD.
	SlateGray	Represents a brush that has an ARGB value of #FF708090.
	Snow	Represents a brush that has an ARGB value of #FFFFFAFA.
	SpringGreen	Represents a brush that has an ARGB value of #FF00FF7F.
	SteelBlue	Represents a brush that has an ARGB value of #FF4682B4.
	Tan	Represents a brush that has an ARGB value of #FFD2B48C.
	Teal	Represents a brush that has an ARGB value of #FF008080.
	Thistle	Represents a brush that has an ARGB value of #FFD8BFD8.
	Tomato	Represents a brush that has an ARGB value of #FFFF6347.
	Transparent	Represents a fully transparent brush.
	Turquoise	Represents a brush that has an ARGB value of #FF40E0D0.
	Violet	Represents a brush that has an ARGB value of #FFEE82EE.
	Wheat	Represents a brush that has an ARGB value of #FFF5DEB3.
	White	Represents a brush that has an ARGB value of #FFFFFFFF.
	WhiteSmoke	Represents a brush that has an ARGB value of #FFF5F5F5.
	Yellow	Represents a brush that has an ARGB value of #FFFFFF00.
	YellowGreen	Represents a brush that has an ARGB value of #FF9ACD32.

See Also

Brushes Class
com.mindfusion.drawing Namespace

Brushes Fields

Brushes.AliceBlue Field

Represents a brush that has an ARGB value of #FFF0F8FF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush AliceBlue
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.AntiqueWhite Field

Represents a brush that has an ARGB value of #FFFAEBD7.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush AntiqueWhite`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Aqua Field

Represents a brush that has an ARGB value of #FF00FFFF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Aqua`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Aquamarine Field

Represents a brush that has an ARGB value of #FF7FFFD4.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Aquamarine`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Azure Field

Represents a brush that has an ARGB value of #FFF0FFFF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Azure
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Beige Field

Represents a brush that has an ARGB value of #FFF5F5DC.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Beige
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Bisque Field

Represents a brush that has an ARGB value of #FFFFE4C4.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Bisque
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Black Field

Represents a brush that has an ARGB value of #FF000000.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Black
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.BlanchedAlmond Field

Represents a brush that has an ARGB value of #FFFFEBCD.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush BlanchedAlmond
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Blue Field

Represents a brush that has an ARGB value of #FF0000FF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Blue
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.BlueViolet Field

Represents a brush that has an ARGB value of #FF8A2BE2.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush BlueViolet
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Brown Field

Represents a brush that has an ARGB value of #FFA52A2A.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Brown
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.BurlyWood Field

Represents a brush that has an ARGB value of #FFDEB887.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush BurlyWood
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.CadetBlue Field

Represents a brush that has an ARGB value of #FF5F9EA0.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush CadetBlue
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Chartreuse Field

Represents a brush that has an ARGB value of #FF7FFF00.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Chartreuse
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Chocolate Field

Represents a brush that has an ARGB value of #FFD2691E.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Chocolate`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Coral Field

Represents a brush that has an ARGB value of #FFFF7F50.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Coral`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.CornflowerBlue Field

Represents a brush that has an ARGB value of #FF6495ED.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush CornflowerBlue`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Cornsilk Field

Represents a brush that has an ARGB value of #FFFFF8DC.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Cornsilk`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Crimson Field

Represents a brush that has an ARGB value of #FFDC143C.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Crimson`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Cyan Field

Represents a brush that has an ARGB value of #FF00FFFF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Cyan`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkBlue Field

Represents a brush that has an ARGB value of #FF00008B.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush DarkBlue`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkCyan Field

Represents a brush that has an ARGB value of #FF008B8B.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush DarkCyan`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkGoldenrod Field

Represents a brush that has an ARGB value of #FFB8860B.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush DarkGoldenrod`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkGray Field

Represents a brush that has an ARGB value of #FFA9A9A9.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush DarkGray
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkGreen Field

Represents a brush that has an ARGB value of #FF006400.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush DarkGreen
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkKhaki Field

Represents a brush that has an ARGB value of #FFBDB76B.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush DarkKhaki
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkMagenta Field

Represents a brush that has an ARGB value of #FF8B008B.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush DarkMagenta
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkOliveGreen Field

Represents a brush that has an ARGB value of #FF556B2F.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush DarkOliveGreen
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkOrange Field

Represents a brush that has an ARGB value of #FFFF8C00.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush DarkOrange
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkOrchid Field

Represents a brush that has an ARGB value of #FF9932CC.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush DarkOrchid
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkRed Field

Represents a brush that has an ARGB value of #FF8B0000.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush DarkRed
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkSalmon Field

Represents a brush that has an ARGB value of #FFE9967A.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush DarkSalmon
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkSeaGreen Field

Represents a brush that has an ARGB value of #FF8FBC8F.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush DarkSeaGreen
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkSlateBlue Field

Represents a brush that has an ARGB value of #FF483D8B.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush DarkSlateBlue
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkSlateGray Field

Represents a brush that has an ARGB value of #FF2F4F4F.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush DarkSlateGray
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkTurquoise Field

Represents a brush that has an ARGB value of #FF00CED1.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush DarkTurquoise
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DarkViolet Field

Represents a brush that has an ARGB value of #FF9400D3.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush DarkViolet
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DeepPink Field

Represents a brush that has an ARGB value of #FFFF1493.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush DeepPink
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DeepSkyBlue Field

Represents a brush that has an ARGB value of #FF00BFFF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush DeepSkyBlue
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DimGray Field

Represents a brush that has an ARGB value of #FF696969.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush DimGray
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.DodgerBlue Field

Represents a brush that has an ARGB value of #FF1E90FF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush DodgerBlue`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Firebrick Field

Represents a brush that has an ARGB value of #FFB22222.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Firebrick`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.FloralWhite Field

Represents a brush that has an ARGB value of #FFFFFAF0.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush FloralWhite`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.ForestGreen Field

Represents a brush that has an ARGB value of #FF228B22.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush ForestGreen
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Fuchsia Field

Represents a brush that has an ARGB value of #FFFF00FF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Fuchsia
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Gainsboro Field

Represents a brush that has an ARGB value of #FFDCDCDC.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Gainsboro
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.GhostWhite Field

Represents a brush that has an ARGB value of #FFF8F8FF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush GhostWhite
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Gold Field

Represents a brush that has an ARGB value of #FFFFD700.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Gold
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Goldenrod Field

Represents a brush that has an ARGB value of #FFDAA520.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Goldenrod
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Gray Field

Represents a brush that has an ARGB value of #FF808080.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Gray`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Green Field

Represents a brush that has an ARGB value of #FF008000.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Green`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.GreenYellow Field

Represents a brush that has an ARGB value of #FFADFF2F.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush GreenYellow
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Honeydew Field

Represents a brush that has an ARGB value of #FFF0FFF0.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Honeydew
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.HotPink Field

Represents a brush that has an ARGB value of #FFFF69B4.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush HotPink
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.IndianRed Field

Represents a brush that has an ARGB value of #FFCD5C5C.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush IndianRed`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Indigo Field

Represents a brush that has an ARGB value of #FF4B0082.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Indigo`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Ivory Field

Represents a brush that has an ARGB value of #FFFFFFF0.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Ivory`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Khaki Field

Represents a brush that has an ARGB value of #FFF0E68C.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush Khaki
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Lavender Field

Represents a brush that has an ARGB value of #FFE6E6FA.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush Lavender
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LavenderBlush Field

Represents a brush that has an ARGB value of #FFFFF0F5.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush LavenderBlush
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LawnGreen Field

Represents a brush that has an ARGB value of #FF7CFC00.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush LawnGreen`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LemonChiffon Field

Represents a brush that has an ARGB value of #FFFFFACD.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush LemonChiffon`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LightBlue Field

Represents a brush that has an ARGB value of #FFADD8E6.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush LightBlue`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LightCoral Field

Represents a brush that has an ARGB value of #FFF08080.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush LightCoral
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LightCyan Field

Represents a brush that has an ARGB value of #FFE0FFFF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush LightCyan
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LightGoldenrodYellow Field

Represents a brush that has an ARGB value of #FFFAFAD2.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush LightGoldenrodYellow
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LightGray Field

Represents a brush that has an ARGB value of #FFD3D3D3.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush LightGray
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LightGreen Field

Represents a brush that has an ARGB value of #FF90EE90.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush LightGreen
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LightPink Field

Represents a brush that has an ARGB value of #FFFFB6C1.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush LightPink
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LightSalmon Field

Represents a brush that has an ARGB value of #FFFFA07A.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush LightSalmon`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LightSeaGreen Field

Represents a brush that has an ARGB value of #FF20B2AA.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush LightSeaGreen`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LightSkyBlue Field

Represents a brush that has an ARGB value of #FF87CEFA.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush LightSkyBlue
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LightSlateGray Field

Represents a brush that has an ARGB value of #FF778899.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush LightSlateGray
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LightSteelBlue Field

Represents a brush that has an ARGB value of #FFB0C4DE.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush LightSteelBlue
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LightYellow Field

Represents a brush that has an ARGB value of #FFFFFFE0.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush LightYellow
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Lime Field

Represents a brush that has an ARGB value of #FF00FF00.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush Lime
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.LimeGreen Field

Represents a brush that has an ARGB value of #FF32CD32.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush LimeGreen
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Linen Field

Represents a brush that has an ARGB value of #FFFAF0E6.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Linen`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Magenta Field

Represents a brush that has an ARGB value of #FFFF00FF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Magenta`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Maroon Field

Represents a brush that has an ARGB value of #FF800000.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Maroon`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.MediumAquamarine Field

Represents a brush that has an ARGB value of #FF66CDAA.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush MediumAquamarine`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.MediumBlue Field

Represents a brush that has an ARGB value of #FF0000CD.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush MediumBlue`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.MediumOrchid Field

Represents a brush that has an ARGB value of #FFBA55D3.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush MediumOrchid`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.MediumPurple Field

Represents a brush that has an ARGB value of #FF9370DB.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush MediumPurple
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.MediumSeaGreen Field

Represents a brush that has an ARGB value of #FF3CB371.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush MediumSeaGreen
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.MediumSlateBlue Field

Represents a brush that has an ARGB value of #FF7B68EE.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush MediumSlateBlue
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.MediumSpringGreen Field

Represents a brush that has an ARGB value of #FF00FA9A.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush MediumSpringGreen
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.MediumTurquoise Field

Represents a brush that has an ARGB value of #FF48D1CC.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush MediumTurquoise
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.MediumVioletRed Field

Represents a brush that has an ARGB value of #FFC71585.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush MediumVioletRed
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.MidnightBlue Field

Represents a brush that has an ARGB value of #FF191970.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush MidnightBlue
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.MintCream Field

Represents a brush that has an ARGB value of #FFF5FFFA.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush MintCream
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.MistyRose Field

Represents a brush that has an ARGB value of #FFFFE4E1.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush MistyRose
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Moccasin Field

Represents a brush that has an ARGB value of #FFFFE4B5.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Moccasin
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.NavajoWhite Field

Represents a brush that has an ARGB value of #FFFFDEAD.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush NavajoWhite
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Navy Field

Represents a brush that has an ARGB value of #FF000080.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Navy`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.OldLace Field

Represents a brush that has an ARGB value of #FFFDF5E6.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush OldLace`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Olive Field

Represents a brush that has an ARGB value of #FF808000.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Olive`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.OliveDrab Field

Represents a brush that has an ARGB value of #FF6B8E23.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush OliveDrab
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Orange Field

Represents a brush that has an ARGB value of #FFFFA500.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush Orange
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.OrangeRed Field

Represents a brush that has an ARGB value of #FFFF4500.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush OrangeRed
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Orchid Field

Represents a brush that has an ARGB value of #FFDA70D6.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Orchid`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.PaleGoldenrod Field

Represents a brush that has an ARGB value of #FFEEE8AA.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush PaleGoldenrod`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.PaleGreen Field

Represents a brush that has an ARGB value of #FF98FB98.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush PaleGreen`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.PaleTurquoise Field

Represents a brush that has an ARGB value of #FFAFEEEE.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush PaleTurquoise
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.PaleVioletRed Field

Represents a brush that has an ARGB value of #FFDB7093.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush PaleVioletRed
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.PapayaWhip Field

Represents a brush that has an ARGB value of #FFFFEFD5.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush PapayaWhip
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.PeachPuff Field

Represents a brush that has an ARGB value of #FFFFDAB9.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush PeachPuff
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Peru Field

Represents a brush that has an ARGB value of #FFCD853F.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Peru
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Pink Field

Represents a brush that has an ARGB value of #FFFFC0CB.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Pink
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Plum Field

Represents a brush that has an ARGB value of #FFDDA0DD.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Plum
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.PowderBlue Field

Represents a brush that has an ARGB value of #FFB0E0E6.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush PowderBlue
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Purple Field

Represents a brush that has an ARGB value of #FF800080.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Purple
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Red Field

Represents a brush that has an ARGB value of #FFFF0000.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Red
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.RosyBrown Field

Represents a brush that has an ARGB value of #FFBC8F8F.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush RosyBrown
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.RoyalBlue Field

Represents a brush that has an ARGB value of #FF4169E1.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush RoyalBlue`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.SaddleBrown Field

Represents a brush that has an ARGB value of #FF8B4513.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush SaddleBrown`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Salmon Field

Represents a brush that has an ARGB value of #FFFA8072.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Salmon`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.SandyBrown Field

Represents a brush that has an ARGB value of #FFF4A460.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush SandyBrown
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.SeaGreen Field

Represents a brush that has an ARGB value of #FF2E8B57.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush SeaGreen
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.SeaShell Field

Represents a brush that has an ARGB value of #FFFFF5EE.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush SeaShell
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Sienna Field

Represents a brush that has an ARGB value of #FFA0522D.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Sienna`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Silver Field

Represents a brush that has an ARGB value of #FFC0C0C0.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Silver`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.SkyBlue Field

Represents a brush that has an ARGB value of #FF87CEEB.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush SkyBlue`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.SlateBlue Field

Represents a brush that has an ARGB value of #FF6A5ACD.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush SlateBlue
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.SlateGray Field

Represents a brush that has an ARGB value of #FF708090.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush SlateGray
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Snow Field

Represents a brush that has an ARGB value of #FFFFFAFA.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Snow
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.SpringGreen Field

Represents a brush that has an ARGB value of #FF00FF7F.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush SpringGreen
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.SteelBlue Field

Represents a brush that has an ARGB value of #FF4682B4.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush SteelBlue
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Tan Field

Represents a brush that has an ARGB value of #FFD2B48C.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Tan
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Teal Field

Represents a brush that has an ARGB value of #FF008080.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Teal`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Thistle Field

Represents a brush that has an ARGB value of #FFD8BFD8.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Brush Thistle`

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Tomato Field

Represents a brush that has an ARGB value of #FFFF6347.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Tomato
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Transparent Field

Represents a fully transparent brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Transparent
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Turquoise Field

Represents a brush that has an ARGB value of #FF40E0D0.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Brush Turquoise
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Violet Field

Represents a brush that has an ARGB value of #FFEE82EE.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush Violet
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Wheat Field

Represents a brush that has an ARGB value of #FFF5DEB3.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush Wheat
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.White Field

Represents a brush that has an ARGB value of #FFFFFFFF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush White
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.WhiteSmoke Field

Represents a brush that has an ARGB value of #FFF5F5F5.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush WhiteSmoke
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.Yellow Field

Represents a brush that has an ARGB value of #FFFFFF00.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush Yellow
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

Brushes.YellowGreen Field

Represents a brush that has an ARGB value of #FF9ACD32.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Brush YellowGreen
```

See Also

Brushes Members
Brushes Class
com.mindfusion.drawing Namespace

CardinalSpline Class

Syntax

Java
`public class CardinalSpline`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.drawing.CardinalSpline

See Also

CardinalSpline Members
com.mindfusion.drawing Namespace

CardinalSpline Members

The following tables list the members exposed by the CardinalSpline type.

Public Constructors

	Name	Description
	CardinalSpline	Overloaded.

Public Methods

	Name	Description
	addToPath	
	draw	

See Also

CardinalSpline Class
com.mindfusion.drawing Namespace

CardinalSpline Constructor

Overload List

Name	Description
CardinalSpline (List)	
CardinalSpline (List, Point2D, Point2D)	

See Also

CardinalSpline Class
com.mindfusion.drawing Namespace

CardinalSpline Constructor (List<Point2D>)

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public CardinalSpline (
    List<Point2D> points
)
```

Parameters

points

See Also

CardinalSpline Constructor Overload List
CardinalSpline Class
com.mindfusion.drawing Namespace

CardinalSpline Constructor (List<Point2D>, Point2D, Point2D)

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public CardinalSpline (
    List<Point2D> points,
    Point2D from,
    Point2D to
)
```

Parameters

points

from

to

See Also

CardinalSpline Constructor Overload List
CardinalSpline Class
com.mindfusion.drawing Namespace

CardinalSpline Methods

CardinalSpline.addToPath Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java

public void addToPath (
    GeneralPath path
)
```

Parameters

path

See Also

CardinalSpline Members
CardinalSpline Class
com.mindfusion.drawing Namespace

CardinalSpline.draw Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java

public void draw (
    Graphics2D graphics
)
```

Parameters

graphics

See Also

CardinalSpline Members
CardinalSpline Class
com.mindfusion.drawing Namespace

Colors Class

Contains the predefined Color objects.

Syntax

Java
`public class Colors`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.drawing.Colors

See Also

Colors Members
com.mindfusion.drawing Namespace

Colors Members

Contains the predefined Color objects.

The following tables list the members exposed by the Colors type.

Public Fields

	Name	Description
	AliceBlue	Represents a color that has an ARGB value of #FFF0F8FF.
	AntiqueWhite	Represents a color that has an ARGB value of #FFFAEBD7.
	Aqua	Represents a color that has an ARGB value of #FF00FFFF.
	Aquamarine	Represents a color that has an ARGB value of #FF7FFFD4.
	Azure	Represents a color that has an ARGB value of #FFF0FFFF.
	Beige	Represents a color that has an ARGB value of #FFF5F5DC.
	Bisque	Represents a color that has an ARGB value of #FFFFE4C4.
	Black	Represents a color that has an ARGB value of #FF000000.
	BlanchedAlmond	Represents a color that has an ARGB value of #FFFFEBCD.
	Blue	Represents a color that has an ARGB value of #FF0000FF.
	BlueViolet	Represents a color that has an ARGB value of #FF8A2BE2.
	Brown	Represents a color that has an ARGB value of #FFA52A2A.
	BurlyWood	Represents a color that has an ARGB value of #FFDEB887.
	CadetBlue	Represents a color that has an ARGB value of #FF5F9EA0.
	Chartreuse	Represents a color that has an ARGB value of #FF7FFF00.
	Chocolate	Represents a color that has an ARGB value of #FFD2691E.
	Coral	Represents a color that has an ARGB value of #FFFF7F50.
	CornflowerBlue	Represents a color that has an ARGB value of #FF6495ED.
	Cornsilk	Represents a color that has an ARGB value of #FFFFF8DC.

Crimson	Represents a color that has an ARGB value of #FFDC143C.
Cyan	Represents a color that has an ARGB value of #FF00FFFF.
DarkBlue	Represents a color that has an ARGB value of #FF00008B.
DarkCyan	Represents a color that has an ARGB value of #FF008B8B.
DarkGoldenrod	Represents a color that has an ARGB value of #FFB8860B.
DarkGray	Represents a color that has an ARGB value of #FFA9A9A9.
DarkGreen	Represents a color that has an ARGB value of #FF006400.
DarkKhaki	Represents a color that has an ARGB value of #FFBDB76B.
DarkMagenta	Represents a color that has an ARGB value of #FF8B008B.
DarkOliveGreen	Represents a color that has an ARGB value of #FF556B2F.
DarkOrange	Represents a color that has an ARGB value of #FFFF8C00.
DarkOrchid	Represents a color that has an ARGB value of #FF9932CC.
DarkRed	Represents a color that has an ARGB value of #FF8B0000.
DarkSalmon	Represents a color that has an ARGB value of #FFE9967A.
DarkSeaGreen	Represents a color that has an ARGB value of #FF8FBC8F.
DarkSlateBlue	Represents a color that has an ARGB value of #FF483D8B.
DarkSlateGray	Represents a color that has an ARGB value of #FF2F4F4F.
DarkTurquoise	Represents a color that has an ARGB value of #FF00CED1.
DarkViolet	Represents a color that has an ARGB value of #FF9400D3.
DeepPink	Represents a color that has an ARGB value of #FFFF1493.
DeepSkyBlue	Represents a color that has an ARGB value of #FF00BFFF.
DimGray	Represents a color that has an ARGB value of #FF696969.
DodgerBlue	Represents a color that has an ARGB value of #FF1E90FF.
Empty	Represents an undefined color.
Firebrick	Represents a color that has an ARGB value of #FFB22222.
FloralWhite	Represents a color that has an ARGB value of #FFFFFAF0.
ForestGreen	Represents a color that has an ARGB value of #FF228B22.
Fuchsia	Represents a color that has an ARGB value of #FFFF00FF.
Gainsboro	Represents a color that has an ARGB value of #FFDCDCDC.
GhostWhite	Represents a color that has an ARGB value of #FFF8F8FF.
Gold	Represents a color that has an ARGB value of #FFFFD700.
Goldenrod	Represents a color that has an ARGB value of #FFDAA520.
Gray	Represents a color that has an ARGB value of #FF808080.

Green	Represents a color that has an ARGB value of #FF008000.
GreenYellow	Represents a color that has an ARGB value of #FFADFF2F.
Honeydew	Represents a color that has an ARGB value of #FFF0FFF0.
HotPink	Represents a color that has an ARGB value of #FFFF69B4.
IndianRed	Represents a color that has an ARGB value of #FFCD5C5C.
Indigo	Represents a color that has an ARGB value of #FF4B0082.
Ivory	Represents a color that has an ARGB value of #FFFFFFF0.
Khaki	Represents a color that has an ARGB value of #FFF0E68C.
Lavender	Represents a color that has an ARGB value of #FFE6E6FA.
LavenderBlush	Represents a color that has an ARGB value of #FFFFF0F5.
LawnGreen	Represents a color that has an ARGB value of #FF7CFC00.
LemonChiffon	Represents a color that has an ARGB value of #FFFFFACD.
LightBlue	Represents a color that has an ARGB value of #FFADD8E6.
LightCoral	Represents a color that has an ARGB value of #FFF08080.
LightCyan	Represents a color that has an ARGB value of #FFE0FFFF.
LightGoldenrodYellow	Represents a color that has an ARGB value of #FFFAFAD2.
LightGray	Represents a color that has an ARGB value of #FFD3D3D3.
LightGreen	Represents a color that has an ARGB value of #FF90EE90.
LightPink	Represents a color that has an ARGB value of #FFFFB6C1.
LightSalmon	Represents a color that has an ARGB value of #FFFFA07A.
LightSeaGreen	Represents a color that has an ARGB value of #FF20B2AA.
LightSkyBlue	Represents a color that has an ARGB value of #FF87CEFA.
LightSlateGray	Represents a color that has an ARGB value of #FF778899.
LightSteelBlue	Represents a color that has an ARGB value of #FFB0C4DE.
LightYellow	Represents a color that has an ARGB value of #FFFFFFE0.
Lime	Represents a color that has an ARGB value of #FF00FF00.
LimeGreen	Represents a color that has an ARGB value of #FF32CD32.
Linen	Represents a color that has an ARGB value of #FFFAF0E6.
Magenta	Represents a color that has an ARGB value of #FFFF00FF.
Maroon	Represents a color that has an ARGB value of #FF800000.
MediumAquamarine	Represents a color that has an ARGB value of #FF66CDAA.
MediumBlue	Represents a color that has an ARGB value of #FF0000CD.
MediumOrchid	Represents a color that has an ARGB value of #FFBA55D3.

	MediumPurple	Represents a color that has an ARGB value of #FF9370DB.
	MediumSeaGreen	Represents a color that has an ARGB value of #FF3CB371.
	MediumSlateBlue	Represents a color that has an ARGB value of #FF7B68EE.
	MediumSpringGreen	Represents a color that has an ARGB value of #FF00FA9A.
	MediumTurquoise	Represents a color that has an ARGB value of #FF48D1CC.
	MediumVioletRed	Represents a color that has an ARGB value of #FFC71585.
	MidnightBlue	Represents a color that has an ARGB value of #FF191970.
	MintCream	Represents a color that has an ARGB value of #FFF5FFFA.
	MistyRose	Represents a color that has an ARGB value of #FFFFE4E1.
	Moccasin	Represents a color that has an ARGB value of #FFFFE4B5.
	NavajoWhite	Represents a color that has an ARGB value of #FFFFDEAD.
	Navy	Represents a color that has an ARGB value of #FF000080.
	OldLace	Represents a color that has an ARGB value of #FFFDF5E6.
	Olive	Represents a color that has an ARGB value of #FF808000.
	OliveDrab	Represents a color that has an ARGB value of #FF6B8E23.
	Orange	Represents a color that has an ARGB value of #FFFFA500.
	OrangeRed	Represents a color that has an ARGB value of #FFFF4500.
	Orchid	Represents a color that has an ARGB value of #FFDA70D6.
	PaleGoldenrod	Represents a color that has an ARGB value of #FFEEE8AA.
	PaleGreen	Represents a color that has an ARGB value of #FF98FB98.
	PaleTurquoise	Represents a color that has an ARGB value of #FFAFEEEE.
	PaleVioletRed	Represents a color that has an ARGB value of #FFDB7093.
	PapayaWhip	Represents a color that has an ARGB value of #FFFFEFD5.
	PeachPuff	Represents a color that has an ARGB value of #FFFFDAB9.
	Peru	Represents a color that has an ARGB value of #FFCD853F.
	Pink	Represents a color that has an ARGB value of #FFFFC0CB.
	Plum	Represents a color that has an ARGB value of #FFDDA0DD.
	PowderBlue	Represents a color that has an ARGB value of #FFB0E0E6.
	Purple	Represents a color that has an ARGB value of #FF800080.
	Red	Represents a color that has an ARGB value of #FFFF0000.
	RosyBrown	Represents a color that has an ARGB value of #FFBC8F8F.
	RoyalBlue	Represents a color that has an ARGB value of #FF4169E1.
	SaddleBrown	Represents a color that has an ARGB value of #FF8B4513.

	Salmon	Represents a color that has an ARGB value of #FFFA8072.
	SandyBrown	Represents a color that has an ARGB value of #FFF4A460.
	SeaGreen	Represents a color that has an ARGB value of #FF2E8B57.
	SeaShell	Represents a color that has an ARGB value of #FFFFF5EE.
	Sienna	Represents a color that has an ARGB value of #FFA0522D.
	Silver	Represents a color that has an ARGB value of #FFC0C0C0.
	SkyBlue	Represents a color that has an ARGB value of #FF87CEEB.
	SlateBlue	Represents a color that has an ARGB value of #FF6A5ACD.
	SlateGray	Represents a color that has an ARGB value of #FF708090.
	Snow	Represents a color that has an ARGB value of #FFFFFAFA.
	SpringGreen	Represents a color that has an ARGB value of #FF00FF7F.
	SteelBlue	Represents a color that has an ARGB value of #FF4682B4.
	Tan	Represents a color that has an ARGB value of #FFD2B48C.
	Teal	Represents a color that has an ARGB value of #FF008080.
	Thistle	Represents a color that has an ARGB value of #FFD8BFD8.
	Tomato	Represents a color that has an ARGB value of #FFFF6347.
	Transparent	Represents a fully transparent color.
	Turquoise	Represents a color that has an ARGB value of #FF40E0D0.
	Violet	Represents a color that has an ARGB value of #FFEE82EE.
	Wheat	Represents a color that has an ARGB value of #FFF5DEB3.
	White	Represents a color that has an ARGB value of #FFFFFFFF.
	WhiteSmoke	Represents a color that has an ARGB value of #FFF5F5F5.
	Yellow	Represents a color that has an ARGB value of #FFFFFF00.
	YellowGreen	Represents a color that has an ARGB value of #FF9ACD32.

Public Methods

	Name	Description
	fromName	

See Also

Colors Class
com.mindfusion.drawing Namespace

Colors Fields

Colors.AliceBlue Field

Represents a color that has an ARGB value of #FFF0F8FF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color AliceBlue
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.AntiqueWhite Field

Represents a color that has an ARGB value of #FFFAEBD7.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color AntiqueWhite
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Aqua Field

Represents a color that has an ARGB value of #FF00FFFF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Aqua
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Aquamarine Field

Represents a color that has an ARGB value of #FF7FFFD4.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Aquamarine
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Azure Field

Represents a color that has an ARGB value of #FFF0FFFF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Azure
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Beige Field

Represents a color that has an ARGB value of #FFF5F5DC.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Beige
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Bisque Field

Represents a color that has an ARGB value of #FFFFE4C4.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Bisque
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Black Field

Represents a color that has an ARGB value of #FF000000.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Black
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.BlanchedAlmond Field

Represents a color that has an ARGB value of #FFFFEBCD.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color BlanchedAlmond
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Blue Field

Represents a color that has an ARGB value of #FF0000FF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Blue
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.BlueViolet Field

Represents a color that has an ARGB value of #FF8A2BE2.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color BlueViolet
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Brown Field

Represents a color that has an ARGB value of #FFA52A2A.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Brown
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.BurlyWood Field

Represents a color that has an ARGB value of #FFDEB887.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color BurlyWood
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.CadetBlue Field

Represents a color that has an ARGB value of #FF5F9EA0.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color CadetBlue
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Chartreuse Field

Represents a color that has an ARGB value of #FF7FFF00.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color Chartreuse`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Chocolate Field

Represents a color that has an ARGB value of #FFD2691E.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color Chocolate`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Coral Field

Represents a color that has an ARGB value of #FFFF7F50.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color Coral`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.CornflowerBlue Field

Represents a color that has an ARGB value of #FF6495ED.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color CornflowerBlue
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Cornsilk Field

Represents a color that has an ARGB value of #FFFFF8DC.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Cornsilk
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Crimson Field

Represents a color that has an ARGB value of #FFDC143C.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Crimson
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Cyan Field

Represents a color that has an ARGB value of #FF00FFFF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color Cyan`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkBlue Field

Represents a color that has an ARGB value of #FF00008B.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color DarkBlue`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkCyan Field

Represents a color that has an ARGB value of #FF008B8B.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color DarkCyan`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkGoldenrod Field

Represents a color that has an ARGB value of #FFB8860B.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color DarkGoldenrod
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkGray Field

Represents a color that has an ARGB value of #FFA9A9A9.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color DarkGray
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkGreen Field

Represents a color that has an ARGB value of #FF006400.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color DarkGreen
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkKhaki Field

Represents a color that has an ARGB value of #FFBDB76B.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color DarkKhaki
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkMagenta Field

Represents a color that has an ARGB value of #FF8B008B.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color DarkMagenta
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkOliveGreen Field

Represents a color that has an ARGB value of #FF556B2F.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color DarkOliveGreen
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkOrange Field

Represents a color that has an ARGB value of #FFFF8C00.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color DarkOrange
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkOrchid Field

Represents a color that has an ARGB value of #FF9932CC.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color DarkOrchid
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkRed Field

Represents a color that has an ARGB value of #FF8B0000.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color DarkRed
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkSalmon Field

Represents a color that has an ARGB value of #FFE9967A.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color DarkSalmon
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkSeaGreen Field

Represents a color that has an ARGB value of #FF8FBC8F.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color DarkSeaGreen
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkSlateBlue Field

Represents a color that has an ARGB value of #FF483D8B.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color DarkSlateBlue`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkSlateGray Field

Represents a color that has an ARGB value of #FF2F4F4F.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color DarkSlateGray`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkTurquoise Field

Represents a color that has an ARGB value of #FF00CED1.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color DarkTurquoise`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DarkViolet Field

Represents a color that has an ARGB value of #FF9400D3.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color DarkViolet
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DeepPink Field

Represents a color that has an ARGB value of #FFFF1493.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color DeepPink
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DeepSkyBlue Field

Represents a color that has an ARGB value of #FF00BFFF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color DeepSkyBlue
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DimGray Field

Represents a color that has an ARGB value of #FF696969.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color DimGray`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.DodgerBlue Field

Represents a color that has an ARGB value of #FF1E90FF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color DodgerBlue`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Empty Field

Represents an undefined color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color Empty`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Firebrick Field

Represents a color that has an ARGB value of #FFB22222.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Firebrick
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.FloralWhite Field

Represents a color that has an ARGB value of #FFFFFAF0.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color FloralWhite
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.ForestGreen Field

Represents a color that has an ARGB value of #FF228B22.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color ForestGreen
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Fuchsia Field

Represents a color that has an ARGB value of #FFFF00FF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Fuchsia
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Gainsboro Field

Represents a color that has an ARGB value of #FFDCDCDC.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Gainsboro
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.GhostWhite Field

Represents a color that has an ARGB value of #FFF8F8FF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color GhostWhite
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Gold Field

Represents a color that has an ARGB value of #FFFFD700.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Gold
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Goldenrod Field

Represents a color that has an ARGB value of #FFDAA520.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Goldenrod
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Gray Field

Represents a color that has an ARGB value of #FF808080.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Gray
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Green Field

Represents a color that has an ARGB value of #FF008000.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Green
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.GreenYellow Field

Represents a color that has an ARGB value of #FFADFF2F.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color GreenYellow
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Honeydew Field

Represents a color that has an ARGB value of #FFF0FFF0.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Honeydew
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.HotPink Field

Represents a color that has an ARGB value of #FFFF69B4.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color HotPink
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.IndianRed Field

Represents a color that has an ARGB value of #FFCD5C5C.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color IndianRed
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Indigo Field

Represents a color that has an ARGB value of #FF4B0082.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Indigo
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Ivory Field

Represents a color that has an ARGB value of #FFFFFFF0.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Ivory
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Khaki Field

Represents a color that has an ARGB value of #FFF0E68C.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Khaki
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Lavender Field

Represents a color that has an ARGB value of #FFE6E6FA.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color Lavender`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LavenderBlush Field

Represents a color that has an ARGB value of #FFFFF0F5.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color LavenderBlush`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LawnGreen Field

Represents a color that has an ARGB value of #FF7CFC00.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color LawnGreen`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LemonChiffon Field

Represents a color that has an ARGB value of #FFFFFACD.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color LemonChiffon
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LightBlue Field

Represents a color that has an ARGB value of #FFADD8E6.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color LightBlue
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LightCoral Field

Represents a color that has an ARGB value of #FFF08080.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color LightCoral
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LightCyan Field

Represents a color that has an ARGB value of #FFE0FFFF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color LightCyan
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LightGoldenrodYellow Field

Represents a color that has an ARGB value of #FFFAFAD2.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color LightGoldenrodYellow
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LightGray Field

Represents a color that has an ARGB value of #FFD3D3D3.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color LightGray
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LightGreen Field

Represents a color that has an ARGB value of #FF90EE90.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color LightGreen
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LightPink Field

Represents a color that has an ARGB value of #FFFFB6C1.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color LightPink
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LightSalmon Field

Represents a color that has an ARGB value of #FFFFA07A.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color LightSalmon
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LightSeaGreen Field

Represents a color that has an ARGB value of #FF20B2AA.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color LightSeaGreen
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LightSkyBlue Field

Represents a color that has an ARGB value of #FF87CEFA.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color LightSkyBlue
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LightSlateGray Field

Represents a color that has an ARGB value of #FF778899.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color LightSlateGray
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LightSteelBlue Field

Represents a color that has an ARGB value of #FFB0C4DE.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color LightSteelBlue
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LightYellow Field

Represents a color that has an ARGB value of #FFFFFFE0.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color LightYellow
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Lime Field

Represents a color that has an ARGB value of #FF00FF00.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Lime
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.LimeGreen Field

Represents a color that has an ARGB value of #FF32CD32.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color LimeGreen
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Linen Field

Represents a color that has an ARGB value of #FFFAF0E6.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Linen
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Magenta Field

Represents a color that has an ARGB value of #FFFF00FF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Magenta
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Maroon Field

Represents a color that has an ARGB value of #FF800000.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Maroon
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.MediumAquamarine Field

Represents a color that has an ARGB value of #FF66CDAA.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color MediumAquamarine
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.MediumBlue Field

Represents a color that has an ARGB value of #FF0000CD.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color MediumBlue
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.MediumOrchid Field

Represents a color that has an ARGB value of #FFBA55D3.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color MediumOrchid
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.MediumPurple Field

Represents a color that has an ARGB value of #FF9370DB.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color MediumPurple
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.MediumSeaGreen Field

Represents a color that has an ARGB value of #FF3CB371.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color MediumSeaGreen
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.MediumSlateBlue Field

Represents a color that has an ARGB value of #FF7B68EE.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color MediumSlateBlue
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.MediumSpringGreen Field

Represents a color that has an ARGB value of #FF00FA9A.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color MediumSpringGreen
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.MediumTurquoise Field

Represents a color that has an ARGB value of #FF48D1CC.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color MediumTurquoise
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.MediumVioletRed Field

Represents a color that has an ARGB value of #FFC71585.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color MediumVioletRed
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.MidnightBlue Field

Represents a color that has an ARGB value of #FF191970.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color MidnightBlue
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.MintCream Field

Represents a color that has an ARGB value of #FFF5FFFA.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color MintCream
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.MistyRose Field

Represents a color that has an ARGB value of #FFFFE4E1.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color MistyRose
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Moccasin Field

Represents a color that has an ARGB value of #FFFFE4B5.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Moccasin
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.NavajoWhite Field

Represents a color that has an ARGB value of #FFFFDEAD.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color NavajoWhite
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Navy Field

Represents a color that has an ARGB value of #FF000080.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Navy
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.OldLace Field

Represents a color that has an ARGB value of #FFFDF5E6.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color OldLace`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Olive Field

Represents a color that has an ARGB value of #FF808000.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color Olive`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.OliveDrab Field

Represents a color that has an ARGB value of #FF6B8E23.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color OliveDrab`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Orange Field

Represents a color that has an ARGB value of #FFFFA500.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color Orange`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.OrangeRed Field

Represents a color that has an ARGB value of #FFFF4500.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color OrangeRed`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Orchid Field

Represents a color that has an ARGB value of #FFDA70D6.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color Orchid`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.PaleGoldenrod Field

Represents a color that has an ARGB value of #FFEEE8AA.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color PaleGoldenrod
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.PaleGreen Field

Represents a color that has an ARGB value of #FF98FB98.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color PaleGreen
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.PaleTurquoise Field

Represents a color that has an ARGB value of #FFAFEEEE.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color PaleTurquoise
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.PaleVioletRed Field

Represents a color that has an ARGB value of #FFDB7093.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color PaleVioletRed
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.PapayaWhip Field

Represents a color that has an ARGB value of #FFFFEFD5.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color PapayaWhip
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.PeachPuff Field

Represents a color that has an ARGB value of #FFFFDAB9.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color PeachPuff
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Peru Field

Represents a color that has an ARGB value of #FFCD853F.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Peru
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Pink Field

Represents a color that has an ARGB value of #FFFFC0CB.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Pink
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Plum Field

Represents a color that has an ARGB value of #FFDDA0DD.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Plum
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.PowderBlue Field

Represents a color that has an ARGB value of #FFB0E0E6.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color PowderBlue
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Purple Field

Represents a color that has an ARGB value of #FF800080.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Purple
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Red Field

Represents a color that has an ARGB value of #FFFF0000.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color Red`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.RosyBrown Field

Represents a color that has an ARGB value of #FFBC8F8F.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color RosyBrown`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.RoyalBlue Field

Represents a color that has an ARGB value of #FF4169E1.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Color RoyalBlue`

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.SaddleBrown Field

Represents a color that has an ARGB value of #FF8B4513.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color SaddleBrown
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Salmon Field

Represents a color that has an ARGB value of #FFFA8072.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Salmon
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.SandyBrown Field

Represents a color that has an ARGB value of #FFF4A460.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color SandyBrown
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.SeaGreen Field

Represents a color that has an ARGB value of #FF2E8B57.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color SeaGreen
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.SeaShell Field

Represents a color that has an ARGB value of #FFFFF5EE.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color SeaShell
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Sienna Field

Represents a color that has an ARGB value of #FFA0522D.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Sienna
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Silver Field

Represents a color that has an ARGB value of #FFC0C0C0.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Silver
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.SkyBlue Field

Represents a color that has an ARGB value of #FF87CEEB.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color SkyBlue
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.SlateBlue Field

Represents a color that has an ARGB value of #FF6A5ACD.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color SlateBlue
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.SlateGray Field

Represents a color that has an ARGB value of #FF708090.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color SlateGray
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Snow Field

Represents a color that has an ARGB value of #FFFFFAFA.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Snow
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.SpringGreen Field

Represents a color that has an ARGB value of #FF00FF7F.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color SpringGreen
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.SteelBlue Field

Represents a color that has an ARGB value of #FF4682B4.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color SteelBlue
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Tan Field

Represents a color that has an ARGB value of #FFD2B48C.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Tan
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Teal Field

Represents a color that has an ARGB value of #FF008080.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Teal
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Thistle Field

Represents a color that has an ARGB value of #FFD8BFD8.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Thistle
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Tomato Field

Represents a color that has an ARGB value of #FFFF6347.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Tomato
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Transparent Field

Represents a fully transparent color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Transparent
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Turquoise Field

Represents a color that has an ARGB value of #FF40E0D0.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Turquoise
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Violet Field

Represents a color that has an ARGB value of #FFEE82EE.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Violet
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Wheat Field

Represents a color that has an ARGB value of #FFF5DEB3.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color Wheat
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.White Field

Represents a color that has an ARGB value of #FFFFFFFF.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color White
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.WhiteSmoke Field

Represents a color that has an ARGB value of #FFF5F5F5.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Color WhiteSmoke
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.Yellow Field

Represents a color that has an ARGB value of #FFFFFF00.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color Yellow
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors.YellowGreen Field

Represents a color that has an ARGB value of #FF9ACD32.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Color YellowGreen
```

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

Colors Methods

Colors.fromName Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static Color fromName (
    String name
)
```

Parameters

name

Return Value

See Also

Colors Members
Colors Class
com.mindfusion.drawing Namespace

CombineMode Enumeration

Specifies how different clipping regions can be combined.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public enum CombineMode`

Members

	Member name	Description
	Complement	Specifies that the existing region is replaced by the result of the existing region being removed from the new region. Said differently, the existing region is excluded from the new region.
	Exclude	Specifies that the existing region is replaced by the result of the new region being removed from the existing region. Said differently, the new region is excluded from the existing region.
	Intersect	Two clipping regions are combined by taking their intersection.
	Replace	One clipping region is replaced by another.
	Union	Two clipping regions are combined by taking the union of both.
	Xor	Two clipping regions are combined by taking only the areas enclosed by one or the other region, but not both.

See Also

com.mindfusion.drawing Namespace

DashStyle Class

Represents the dash style of a contour.

Syntax

Java
`public class DashStyle implements Externalizable`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.drawing.DashStyle

See Also

DashStyle Members
com.mindfusion.drawing Namespace

DashStyle Members

Represents the dash style of a contour.

The following tables list the members exposed by the DashStyle type.

Public Constructors

	Name	Description
	DashStyle	Overloaded.

Public Fields

	Name	Description
	Dash	
	DashDot	
	DashDotDot	
	Dot	
	Solid	

Public Methods

	Name	Description
	clone	Creates a copy of the **DashStyle**.
	equals	
	fromId	
	getDashArray	Returns the array that defines the dash pattern.
	getDashPhase	Gets a value indicating the start offset into the dash pattern.

	getId	
	readExternal	Implements Externalizable.
	writeExternal	Implements Externalizable.

See Also

DashStyle Class
com.mindfusion.drawing Namespace

DashStyle Fields

DashStyle.Dash Field

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final DashStyle Dash
```

See Also

DashStyle Members
DashStyle Class
com.mindfusion.drawing Namespace

DashStyle.DashDot Field

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final DashStyle DashDot
```

See Also

DashStyle Members
DashStyle Class
com.mindfusion.drawing Namespace

DashStyle.DashDotDot Field

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final DashStyle DashDotDot
```

See Also

DashStyle Members
DashStyle Class
com.mindfusion.drawing Namespace

DashStyle.Dot Field

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final DashStyle Dot
```

See Also

DashStyle Members
DashStyle Class
com.mindfusion.drawing Namespace

DashStyle.Solid Field

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final DashStyle Solid
```

See Also

DashStyle Members
DashStyle Class
com.mindfusion.drawing Namespace

DashStyle Constructor

Overload List

Name	Description
DashStyle ()	Initializes a new DashStyle instance.
DashStyle (float[], float)	Initializes a new **DashStyle** instance.

See Also

DashStyle Class
com.mindfusion.drawing Namespace

DashStyle Constructor ()

Initializes a new DashStyle instance.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public DashStyle ()`

See Also

DashStyle Constructor Overload List
DashStyle Class
com.mindfusion.drawing Namespace

DashStyle Constructor (float[], float)

Initializes a new DashStyle instance.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

`public DashStyle (`
`  float[] dashArray,`
`  float dashPhase`
`)`

Parameters

dashArray
A float array containing dash lengths.

dashPhase
A float value specifying the start offset.

See Also

DashStyle Constructor Overload List
DashStyle Class
com.mindfusion.drawing Namespace

DashStyle Methods

DashStyle.clone Method

Creates a copy of the DashStyle.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public Object clone ()
```

Return Value

A DashStyle instance.

See Also

DashStyle Members
DashStyle Class
com.mindfusion.drawing Namespace

DashStyle.equals Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public boolean equals (
    Object obj
)
```

Parameters

obj

Return Value

See Also

DashStyle Members
DashStyle Class
com.mindfusion.drawing Namespace

DashStyle.fromId Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static DashStyle fromId (
    int id
)
```

Parameters

id

Return Value

See Also

DashStyle Members
DashStyle Class
com.mindfusion.drawing Namespace

DashStyle.getDashArray Method

Returns the array that defines the dash pattern.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public float[] getDashArray ()
```

Return Value

A float array containing dash lengths.

See Also

DashStyle Members
DashStyle Class
com.mindfusion.drawing Namespace

DashStyle.getDashPhase Method

Gets a value indicating the start offset into the dash pattern.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public float getDashPhase ()
```

Return Value

A float value specifying the start offset.

See Also

DashStyle Members
DashStyle Class
com.mindfusion.drawing Namespace

DashStyle.getId Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public int getId ()
```

Return Value

See Also

DashStyle Members
DashStyle Class
com.mindfusion.drawing Namespace

DashStyle.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

DashStyle Members
DashStyle Class

DashStyle.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

DashStyle Members
DashStyle Class
com.mindfusion.drawing Namespace

ExternalizableImage Class

Implement support for serialization of shared images.

Syntax

Java

```
public class ExternalizableImage implements Externalizable
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.drawing.ExternalizableImage

See Also

ExternalizableImage Members
com.mindfusion.drawing Namespace

ExternalizableImage Members

Implement support for serialization of shared images.

The following tables list the members exposed by the ExternalizableImage type.

Public Constructors

	Name	Description
	ExternalizableImage	

Public Methods

	Name	Description
	getExImage	
	getImage	
	imageToBufferedImage	
	readExternal	
	writeExternal	

See Also

ExternalizableImage Class
com.mindfusion.drawing Namespace

ExternalizableImage Constructor

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public ExternalizableImage ()
```

See Also

ExternalizableImage Class
com.mindfusion.drawing Namespace

ExternalizableImage Methods

ExternalizableImage.getExImage Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static ExternalizableImage getExImage (
    Image image
)
```

Parameters

image

Return Value

See Also

ExternalizableImage Members
ExternalizableImage Class
com.mindfusion.drawing Namespace

ExternalizableImage.getImage Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Image getImage ()
```

Return Value

See Also

ExternalizableImage Members
ExternalizableImage Class
com.mindfusion.drawing Namespace

ExternalizableImage.imageToBufferedImage Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static BufferedImage imageToBufferedImage (
    Image img
)
```

Parameters

img

Return Value

See Also

ExternalizableImage Members
ExternalizableImage Class
com.mindfusion.drawing Namespace

ExternalizableImage.readExternal Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

ExternalizableImage Members
ExternalizableImage Class
com.mindfusion.drawing Namespace

ExternalizableImage.writeExternal Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

ExternalizableImage Members
ExternalizableImage Class
com.mindfusion.drawing Namespace

FillMode Enumeration

Typed enumeration corresponding to .NET enum FillMode

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public enum FillMode`

Members

	Member name	Description
	Alternate	
	Winding	

See Also

com.mindfusion.drawing Namespace

FontStyle Enumeration

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public enum FontStyle`

Members

	Member name	Description
	BOLD	
	ITALIC	
	PLAIN	
	REGULAR	

See Also

com.mindfusion.drawing Namespace

GradientBrush Class

Represents a gradient brush which paints the interior of objects starting with one color and gradually changing to another color by interpolating the RGB values of the two colors.

Syntax

Java
`public class GradientBrush extends Brush`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.drawing.Brush
    com.mindfusion.drawing.GradientBrush

See Also

GradientBrush Members
com.mindfusion.drawing Namespace

GradientBrush Members

Represents a gradient brush which paints the interior of objects starting with one color and gradually changing to another color by interpolating the RGB values of the two colors.

The following tables list the members exposed by the GradientBrush type.

Public Constructors

	Name	Description
	GradientBrush	Overloaded.

Public Methods

	Name	Description
	applyTo	Applies the brush to the specified graphics.
	clone	Creates a clone of the brush.
	getAngle	Gets the gradient orientation angle.
	getColor1	Gets the first gradient color.
	getColor2	Gets the second gradient color.
	getColors	
	getFractions	
	readExternal	Implements Externalizable.
	setAngle	Sets the gradient orientation angle.
	setColor1	Sets the first gradient color.
	setColor2	Sets the second gradient color.
	setColors	
	setFractions	

	toColor	
	writeExternal	Implements Externalizable.

See Also

GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush Constructor

Overload List

Name	Description
GradientBrush ()	Initializes a new instance of the GradientBrush class.
GradientBrush (Color, Color, int)	Initializes a new instance of the **GradientBrush** class.
GradientBrush (float[], Color[], int)	Initializes a new instance of the **GradientBrush** class.

See Also

GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush Constructor ()

Initializes a new instance of the GradientBrush class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public GradientBrush ()`

See Also

GradientBrush Constructor Overload List
GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush Constructor (Color, Color, int)

Initializes a new instance of the GradientBrush class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public GradientBrush (
    Color color1,
    Color color2,
    int angle
)
```

Parameters

color1
A Color object representing the start color of the gradient.

color2
A Color object representing the end color of the gradient.

angle
An integer value specifying the gradient orientation.

See Also

GradientBrush Constructor Overload List
GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush Constructor (float[], Color[], int)

Initializes a new instance of the GradientBrush class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public GradientBrush (
    float[] fractions,
    Color[] colors,
    int angle
)
```

Parameters

fractions
An array of float numbers specifying the positions of the colors along the gradient.

colors
An array of Color objects representing the colors of the gradient.

angle
An integer value specifying the gradient orientation.

Remarks

Instances of the GradientBrush class created using this constructor are currently not serialized.

See Also

GradientBrush Constructor Overload List
GradientBrush Class

GradientBrush Methods

GradientBrush.applyTo Method

Applies the brush to the specified graphics.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void applyTo (
    Graphics2D g,
    Rectangle2D bounds
)
```

Parameters

g

bounds

See Also

GradientBrush Members
GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush.clone Method

Creates a clone of the brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public GradientBrush clone ()
```

Return Value

A GradientBrush instance.

See Also

GradientBrush Members
GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush.getAngle Method

Gets the gradient orientation angle.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public int getAngle ()
```

Return Value

A float value specifying the gradient angle.

See Also

GradientBrush Members
GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush.getColor1 Method

Gets the first gradient color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Color getColor1 ()
```

Return Value

A Color object representing the fill color.

See Also

GradientBrush Members
GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush.getColor2 Method

Gets the second gradient color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Color getColor2 ()
```

Return Value

A Color object representing the fill color.

See Also

GradientBrush Members
GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush.getColors Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public Color[] getColors ()`

Return Value

See Also

GradientBrush Members
GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush.getFractions Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public float[] getFractions ()`

Return Value

See Also

GradientBrush Members
GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

GradientBrush Members
GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush.setAngle Method

Sets the gradient orientation angle.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setAngle (
    int angle
)
```

Parameters

angle
A float value specifying the gradient angle.

See Also

GradientBrush Members
GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush.setColor1 Method

Sets the first gradient color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setColor1 (
    Color value
)
```

Parameters

value
A Color object representing the fill color.

See Also

GradientBrush Members
GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush.setColor2 Method

Sets the second gradient color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setColor2 (
    Color value
)
```

Parameters

value
A Color object representing the fill color.

See Also

GradientBrush Members
GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush.setColors Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setColors (
    Color[] value
)
```

Parameters

value

See Also

GradientBrush Members
GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush.setFractions Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setFractions (
    float[] value
)
```

Parameters

value

See Also

GradientBrush Members
GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush.toColor Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Color toColor ()
```

Return Value

See Also

GradientBrush Members
GradientBrush Class
com.mindfusion.drawing Namespace

GradientBrush.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

GradientBrush Members
GradientBrush Class
com.mindfusion.drawing Namespace

GraphicsEx Interface

Syntax

```
Java
public interface GraphicsEx
```

Inheritors

com.mindfusion.pdf.PdfGraphics2D
com.mindfusion.svg.SvgGraphics2D

See Also

GraphicsEx Members
com.mindfusion.drawing Namespace

GraphicsEx Members

The following tables list the members exposed by the GraphicsEx type.

Public Methods

	Name	Description
	beginHyperLink	
	endHyperLink	
	supportsPenWidth0	

	transformsPenWidth	

See Also

GraphicsEx Interface
com.mindfusion.drawing Namespace

GraphicsEx Methods

GraphicsEx.beginHyperLink Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
void beginHyperLink (
    String hyperLink,
    String target
)
```

Parameters

hyperLink

target

See Also

GraphicsEx Members
GraphicsEx Interface
com.mindfusion.drawing Namespace

GraphicsEx.endHyperLink Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
void endHyperLink ()
```

See Also

GraphicsEx Members
GraphicsEx Interface
com.mindfusion.drawing Namespace

GraphicsEx.supportsPenWidth0 Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`boolean supportsPenWidth0 ()`

Return Value

See Also

GraphicsEx Members
GraphicsEx Interface
com.mindfusion.drawing Namespace

GraphicsEx.transformsPenWidth Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`boolean transformsPenWidth ()`

Return Value

See Also

GraphicsEx Members
GraphicsEx Interface
com.mindfusion.drawing Namespace

GraphicsUnit Enumeration

The members of this enumeration specify the unit of measure for graphic objects drawn by JDiagram.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public enum GraphicsUnit`

Members

	Member name	Description
	Centimeter	Specifies centimeters as the unit of measure.
	Display	Specifies 1/100 inch as the unit of measure.
	Document	Specifies the document unit (1/300 inch) as the unit of measure.
	Inch	Specifies the inch as the unit of measure.
	Millimeter	Specifies the millimeter as the unit of measure.
	Percent	Specifies percents as the unit of measure.
	Pixel	Specifies a device pixel as the unit of measure.
	Point	Specifies a printer's point (1/72 inch) as the unit of measure.
	World	
	WpfPoint	Specifies device-independent pixels (1/96 inch) as the unit of measure.

See Also

com.mindfusion.drawing Namespace

HatchBrush Class

Represents a brush that fills the interiors of objects with a hatch pattern.

Syntax

Java
`public class HatchBrush extends Brush`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.drawing.Brush
    com.mindfusion.drawing.HatchBrush

See Also

HatchBrush Members
com.mindfusion.drawing Namespace

HatchBrush Members

Represents a brush that fills the interiors of objects with a hatch pattern.

The following tables list the members exposed by the HatchBrush type.

Public Constructors

	Name	Description
	HatchBrush	Overloaded.

Public Methods

	Name	Description
	applyTo	Applies the brush to the specified graphics.
	clone	Creates a copy of a brush.
	getBackgroundColor	Gets the color of spaces between the hatch lines drawn by this brush.
	getForegroundColor	Gets the color of hatch lines drawn by this brush.
	getHatchStyle	Gets the hatch style of this brush.
	readExternal	Implements Externalizable.
	setBackgroundColor	Sets the color of spaces between the hatch lines drawn by this brush.
	setForegroundColor	Sets the color of hatch lines drawn by this brush.
	setHatchStyle	Sets the hatch style of this brush.
	toColor	
	writeExternal	Implements Externalizable.

See Also

HatchBrush Class
com.mindfusion.drawing Namespace

HatchBrush Constructor

Overload List

Name	Description
HatchBrush ()	Initializes a new HatchBrush instance.
HatchBrush (HatchStyle, Color)	Initializes a new HatchBrush instance.
HatchBrush (HatchStyle, Color, Color)	Initializes a new HatchBrush instance.

See Also

HatchBrush Class
com.mindfusion.drawing Namespace

HatchBrush Constructor ()

Initializes a new HatchBrush instance.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public HatchBrush ()
```

See Also

HatchBrush Constructor Overload List
HatchBrush Class
com.mindfusion.drawing Namespace

HatchBrush Constructor (HatchStyle, Color)

Initializes a new HatchBrush instance.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public HatchBrush (
    HatchStyle hatchStyle,
    Color color
)
```

Parameters

hatchStyle

color

See Also

HatchBrush Constructor Overload List
HatchBrush Class
com.mindfusion.drawing Namespace

HatchBrush Constructor (HatchStyle, Color, Color)

Initializes a new HatchBrush instance.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public HatchBrush (
    HatchStyle hatchStyle,
    Color foregroundColor,
    Color backgroundColor
)
```

Parameters

hatchStyle

foregroundColor

backgroundColor

See Also

HatchBrush Constructor Overload List
HatchBrush Class
com.mindfusion.drawing Namespace

HatchBrush Methods

HatchBrush.applyTo Method

Applies the brush to the specified graphics.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void applyTo (
    Graphics2D g,
    Rectangle2D bounds
)
```

Parameters

g

bounds

See Also

HatchBrush Members
HatchBrush Class
com.mindfusion.drawing Namespace

HatchBrush.clone Method

Creates a copy of a brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public HatchBrush clone ()
```

Return Value

A Brush instance.

See Also

HatchBrush Members
HatchBrush Class
com.mindfusion.drawing Namespace

HatchBrush.getBackgroundColor Method

Gets the color of spaces between the hatch lines drawn by this brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Color getBackgroundColor ()
```

Return Value

A Color instance specifying the hatch background color.

See Also

HatchBrush Members
HatchBrush Class
com.mindfusion.drawing Namespace

HatchBrush.getForegroundColor Method

Gets the color of hatch lines drawn by this brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Color getForegroundColor ()
```

Return Value

A Color instance specifying the hatch foreground color.

See Also

HatchBrush Members
HatchBrush Class
com.mindfusion.drawing Namespace

HatchBrush.getHatchStyle Method

Gets the hatch style of this brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public HatchStyle getHatchStyle ()
```

Return Value

A member of the HatchStyle enumeration.

See Also

HatchBrush Members
HatchBrush Class
com.mindfusion.drawing Namespace

HatchBrush.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

HatchBrush Members
HatchBrush Class
com.mindfusion.drawing Namespace

HatchBrush.setBackgroundColor Method

Sets the color of spaces between the hatch lines drawn by this brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public void setBackgroundColor (
    Color value
)
```

Parameters

value
A Color instance specifying the hatch background color.

See Also

HatchBrush Members
HatchBrush Class
com.mindfusion.drawing Namespace

HatchBrush.setForegroundColor Method

Sets the color of hatch lines drawn by this brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public void setForegroundColor (
    Color value
)
```

Parameters

value
A Color instance specifying the hatch foreground color.

See Also

HatchBrush Members
HatchBrush Class
com.mindfusion.drawing Namespace

HatchBrush.setHatchStyle Method

Sets the hatch style of this brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setHatchStyle (
    HatchStyle value
)
```

Parameters

value
A member of the HatchStyle enumeration.

See Also

HatchBrush Members
HatchBrush Class
com.mindfusion.drawing Namespace

HatchBrush.toColor Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Color toColor ()
```

Return Value

See Also

HatchBrush Members
HatchBrush Class
com.mindfusion.drawing Namespace

HatchBrush.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

HatchStyle Enumeration

Represents hatch patterns available to HatchBrush objects.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public enum HatchStyle
```

Members

	Member name	Description
	BackwardDiagonal	A pattern of lines on a diagonal from upper right to lower left.
	Cross	Specifies horizontal and vertical lines that cross.
	DarkDownwardDiagonal	Specifies diagonal lines that slant to the right from top points to bottom points, are spaced 50 percent closer together than, and are twice the width of ForwardDiagonal.
	DarkHorizontal	Specifies horizontal lines that are spaced 50 percent closer together than Horizontal and are twice the width of Horizontal.
	DarkUpwardDiagonal	Specifies diagonal lines that slant to the left from top points to bottom points, are spaced 50 percent closer together than BackwardDiagonal, and are twice its width.
	DarkVertical	Specifies vertical lines that are spaced 50 percent closer together than Vertical and are twice its width.
	DashedDownwardDiagonal	Specifies dashed diagonal lines, that slant to the right from top points to bottom points.
	DashedHorizontal	Specifies dashed horizontal lines.
	DashedUpwardDiagonal	Specifies dashed diagonal lines, that slant to the left from top points to bottom points.
	DashedVertical	Specifies dashed vertical lines.
	DiagonalBrick	Specifies a hatch that has the appearance of layered bricks that slant to the left from top points to bottom points.
	DiagonalCross	A pattern of crisscross diagonal lines.
	Divot	Specifies a hatch that has the appearance of divots.
	DottedDiamond	Specifies forward diagonal and backward diagonal lines, each of which is composed of dots, that cross.

DottedGrid	Specifies horizontal and vertical lines, each of which is composed of dots, that cross.
ForwardDiagonal	A pattern of lines on a diagonal from upper left to lower right.
Horizontal	A pattern of horizontal lines.
HorizontalBrick	Specifies a hatch that has the appearance of horizontally layered bricks.
LargeCheckerBoard	Specifies a hatch that has the appearance of a checkerboard with squares that are twice the size of SmallCheckerBoard.
LargeConfetti	Specifies a hatch that has the appearance of confetti, and is composed of larger pieces than SmallConfetti.
LargeGrid	Specifies the hatch style Cross.
LightDownwardDiagonal	Specifies diagonal lines that slant to the right from top points to bottom points and are spaced 50 percent closer together than ForwardDiagonal, but are not antialiased.
LightHorizontal	Specifies horizontal lines that are spaced 50 percent closer together than Horizontal.
LightUpwardDiagonal	Specifies diagonal lines that slant to the left from top points to bottom points and are spaced 50 percent closer together than BackwardDiagonal.
LightVertical	Specifies vertical lines that are spaced 50 percent closer together than Vertical.
Max	Specifies hatch style SolidDiamond.
Min	Specifies hatch style Horizontal.
NarrowHorizontal	Specifies horizontal lines that are spaced 75 percent closer together than hatch style Horizontal.
NarrowVertical	Specifies vertical lines that are spaced 75 percent closer together than hatch style Vertical.
OutlinedDiamond	Specifies forward diagonal and backward diagonal lines that cross.
Percent05	Specifies a 5-percent hatch. The ratio of foreground color to background color is 5:100.
Percent10	Specifies a 10-percent hatch. The ratio of foreground color to background color is 10:100.
Percent20	Specifies a 20-percent hatch. The ratio of foreground color to background color is 20:100.
Percent25	Specifies a 25-percent hatch. The ratio of foreground color to background color is 25:100.
Percent30	Specifies a 30-percent hatch. The ratio of foreground color to background color is 30:100.
Percent40	Specifies a 40-percent hatch. The ratio of foreground color to background color is 40:100.

	Percent50	Specifies a 50-percent hatch. The ratio of foreground color to background color is 50:100.
	Percent60	Specifies a 60-percent hatch. The ratio of foreground color to background color is 60:100.
	Percent70	Specifies a 70-percent hatch. The ratio of foreground color to background color is 70:100.
	Percent75	Specifies a 75-percent hatch. The ratio of foreground color to background color is 75:100.
	Percent80	Specifies a 80-percent hatch. The ratio of foreground color to background color is 80:100.
	Percent90	Specifies a 90-percent hatch. The ratio of foreground color to background color is 90:100.
	Plaid	Specifies a hatch that has the appearance of a plaid material.
	Shingle	Specifies a hatch that has the appearance of diagonally layered shingles that slant to the right from top points to bottom points.
	SmallCheckerBoard	Specifies a hatch that has the appearance of a checkerboard.
	SmallConfetti	Specifies a hatch that has the appearance of confetti.
	SmallGrid	Specifies horizontal and vertical lines that cross and are spaced 50 percent closer together than hatch style Cross.
	SolidDiamond	Specifies a hatch that has the appearance of a checkerboard placed diagonally.
	Sphere	Specifies a hatch that has the appearance of spheres laid adjacent to one another.
	Trellis	Specifies a hatch that has the appearance of a trellis.
	Vertical	A pattern of vertical lines.
	Wave	Specifies horizontal lines that are composed of tildes.
	Weave	Specifies a hatch that has the appearance of a woven material.
	WideDownwardDiagonal	Specifies diagonal lines that slant to the right from top points to bottom points, have the same spacing as hatch style ForwardDiagonal, and are triple its width.
	WideUpwardDiagonal	Specifies diagonal lines that slant to the left from top points to bottom points, have the same spacing as hatch style BackwardDiagonal, and are triple its width.
	ZigZag	Specifies horizontal lines that are composed of zigzags.

See Also

com.mindfusion.drawing Namespace

ImageAlignment Enumeration

Specifies the alignment of an image.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public enum ImageAlignment`

Members

	Member name	Description
	Bottom	The image is aligned to the bottom side of the layout rectangle.
	Center	The image is centered within the layout rectangle.
	Fit	The image is stretched to fit in the layout rectangle, but its original ratio is preserved.
	Left	The image is aligned to the left side of the layout rectangle.
	None	Same as Center.
	Right	The image is aligned to the right side of the layout rectangle.
	Stretch	The image is stretched. Equal to (Left | Top | Right | Bottom).
	Tile	The image is tiled across the layout rectangle.
	Top	The image is aligned to the top side of the layout rectangle.

See Also

com.mindfusion.drawing Namespace

ImageAttributes Class

Contains information about how image colors are manipulated during rendering.

Syntax

Java
`public class ImageAttributes`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.drawing.ImageAttributes

See Also

ImageAttributes Members
com.mindfusion.drawing Namespace

ImageAttributes Members

Contains information about how image colors are manipulated during rendering.

The following tables list the members exposed by the ImageAttributes type.

Public Constructors

	Name	Description
	ImageAttributes	Initializes a new instance of the **ImageAttributes** class.

Public Methods

	Name	Description
	getOpacity	Gets the opacity to apply to the image during rendering.
	setOpacity	Sets the opacity to apply to the image during rendering.

See Also

ImageAttributes Class
com.mindfusion.drawing Namespace

ImageAttributes Constructor

Initializes a new instance of the ImageAttributes class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public ImageAttributes ()`

See Also

ImageAttributes Class
com.mindfusion.drawing Namespace

ImageAttributes Methods

ImageAttributes.getOpacity Method

Gets the opacity to apply to the image during rendering.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public double getOpacity ()
```

Return Value

A float value in the range [0..1].

See Also

ImageAttributes Members
ImageAttributes Class
com.mindfusion.drawing Namespace

ImageAttributes.setOpacity Method

Sets the opacity to apply to the image during rendering.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public void setOpacity (
    double value
)
```

Parameters

value
A float value in the range [0..1].

See Also

ImageAttributes Members
ImageAttributes Class
com.mindfusion.drawing Namespace

ImagePainter Class

Provides advanced methods for drawing images.

Syntax

```
Java
public class ImagePainter
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.drawing.ImagePainter

See Also

ImagePainter Members
com.mindfusion.drawing Namespace

ImagePainter Members

Provides advanced methods for drawing images.

The following tables list the members exposed by the ImagePainter type.

Public Fields

	Name	Description
	TransparencyOpaque	

Public Methods

	Name	Description
	draw	Overloaded.

See Also

ImagePainter Class
com.mindfusion.drawing Namespace

ImagePainter Fields

ImagePainter.TransparencyOpaque Field

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static int TransparencyOpaque`

See Also

ImagePainter Members
ImagePainter Class
com.mindfusion.drawing Namespace

ImagePainter Methods

ImagePainter.draw Method

Overload List

Name	Description
ImagePainter.draw (Graphics2D, Image, Rectangle, EnumSet)	Draws the specified image in the target rectangle in the specified graphics using the specified image alignment.
ImagePainter.draw (Graphics2D, Image, Rectangle, EnumSet, int)	Draws the specified image in the target rectangle in the specified graphics using the specified image alignment and semi-transparency factor. The transparency ranges from 0 (invisible) to 255 (opaque).
ImagePainter.draw (Graphics2D, Image, Rectangle, ImageAlignment)	Draws the specified image in the target rectangle in the specified graphics using the specified image alignment.
ImagePainter.draw (Graphics2D, Image, Rectangle2D, EnumSet)	Draws the specified image in the target rectangle in the specified graphics using the specified image alignment.
ImagePainter.draw (Graphics2D, Image, Rectangle2D, EnumSet, int)	Draws the specified image in the target rectangle in the specified graphics using the specified image alignment and semi-transparency factor. The transparency ranges from 0 (invisible) to 255 (opaque).
ImagePainter.draw (Graphics2D, Image, Rectangle2D, ImageAlignment)	Draws the specified image in the target rectangle in the specified graphics using the specified image alignment.

See Also

ImagePainter Members
ImagePainter Class
com.mindfusion.drawing Namespace

ImagePainter.draw Method (Graphics2D, Image, Rectangle, EnumSet<ImageAlignment>)

Draws the specified image in the target rectangle in the specified graphics using the specified image alignment.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static void draw (
    Graphics2D g,
    Image image,
    Rectangle rect,
    EnumSet<ImageAlignment> align
)
```

Parameters

g

image

rect

align

See Also

draw Method Overload List
ImagePainter Members
ImagePainter Class
com.mindfusion.drawing Namespace

ImagePainter.draw Method (Graphics2D, Image, Rectangle, EnumSet<ImageAlignment>, int)

Draws the specified image in the target rectangle in the specified graphics using the specified image alignment and semi-transparency factor. The transparency ranges from 0 (invisible) to 255 (opaque).

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static void draw (
    Graphics2D g,
    Image image,
    Rectangle rect,
    EnumSet<ImageAlignment> align,
    int transparency
)
```

Parameters

g

image

rect

align

transparency

See Also

draw Method Overload List
ImagePainter Members
ImagePainter Class
com.mindfusion.drawing Namespace

ImagePainter.draw Method (Graphics2D, Image, Rectangle, ImageAlignment)

Draws the specified image in the target rectangle in the specified graphics using the specified image alignment.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static void draw (
    Graphics2D g,
    Image image,
    Rectangle rect,
    ImageAlignment align
)
```

Parameters

g

image

rect

align

See Also

draw Method Overload List
ImagePainter Members
ImagePainter Class
com.mindfusion.drawing Namespace

ImagePainter.draw Method (Graphics2D, Image, Rectangle2D, EnumSet<ImageAlignment>)

Draws the specified image in the target rectangle in the specified graphics using the specified image alignment.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static void draw (
    Graphics2D g,
    Image image,
    Rectangle2D rect,
    EnumSet<ImageAlignment> align
)
```

Parameters

g

image

rect

align

See Also

draw Method Overload List
ImagePainter Members
ImagePainter Class
com.mindfusion.drawing Namespace

ImagePainter.draw Method (Graphics2D, Image, Rectangle2D, EnumSet<ImageAlignment>, int)

Draws the specified image in the target rectangle in the specified graphics using the specified image alignment and semi-transparency factor. The transparency ranges from 0 (invisible) to 255 (opaque).

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static void draw (
    Graphics2D g,
    Image image,
    Rectangle2D rect,
    EnumSet<ImageAlignment> align,
    int transparency
)
```

Parameters

g

image

rect

align

transparency

See Also

draw Method Overload List
ImagePainter Members
ImagePainter Class
com.mindfusion.drawing Namespace

ImagePainter.draw Method (Graphics2D, Image, Rectangle2D, ImageAlignment)

Draws the specified image in the target rectangle in the specified graphics using the specified image alignment.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static void draw (
    Graphics2D g,
```

```
    Image image,
    Rectangle2D rect,
    ImageAlignment align
)
```

Parameters

g

image

rect

align

See Also

draw Method Overload List
ImagePainter Members
ImagePainter Class
com.mindfusion.drawing Namespace

Pen Class

A Pen specifies how the outline of an element should be stroked.

Syntax

Java
`public class Pen implements Externalizable`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.drawing.Pen

See Also

Pen Members
com.mindfusion.drawing Namespace

Pen Members

A Pen specifies how the outline of an element should be stroked.

The following tables list the members exposed by the Pen type.

Public Constructors

	Name	Description
	Pen	Overloaded.

Public Methods

	Name	Description
	applyTo	Overloaded.
	clone	Creates a copy of this pen.
	getBrush	Gets the Brush of this pen.
	getCap	
	getColor	Gets the color of this pen.
	getDashStyle	Gets the dash style of this pen.
	getEffectiveWidth	Gets the effective width of the lines drawn with this pen once it has been applied to a Graphics2D object.
	getLineJoin	Gets the line join.
	getWidth	Gets the width of the lines drawn with this pen.
	readExternal	Implements Externalizable.
	setBrush	Gets a **Brush** of this pen.
	setCap	
	setColor	Sets the color of this pen.
	setDashStyle	Sets the dash style of this pen.
	setLineJoin	Sets the line join.
	setWidth	Sets what the width of the lines drawn with this pen should be.
	toColor	
	writeExternal	Implements Externalizable.

See Also

Pen Class
com.mindfusion.drawing Namespace

Pen Constructor

Overload List

Name	Description
Pen ()	Initializes a new instance of the Pen class.
Pen (Brush, double)	Initializes a new instance of the **Pen** class. Instances of the Pen class created using this constructor are currently not serialised.
Pen (Brush, double, DashStyle)	Initializes a new instance of the **Pen** class. Instances of the Pen class created using this constructor are currently not serialized.

Pen (Color)	Initializes a new instance of the **Pen** class.
Pen (Color, double)	Initializes a new instance of the **Pen** class.
Pen (Color, double, DashStyle)	Initializes a new instance of the **Pen** class.

See Also

Pen Class
com.mindfusion.drawing Namespace

Pen Constructor ()

Initializes a new instance of the Pen class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Pen ()
```

See Also

Pen Constructor Overload List
Pen Class
com.mindfusion.drawing Namespace

Pen Constructor (Brush, double)

Initializes a new instance of the Pen class. Instances of the Pen class created using this constructor are currently not serialised.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Pen (
    Brush brush,
    double width
)
```

Parameters

brush
A Brush object representing the pen color.

width
A double value representing the pen width.

See Also

Pen Constructor Overload List
Pen Class
com.mindfusion.drawing Namespace

Pen Constructor (Brush, double, DashStyle)

Initializes a new instance of the Pen class. Instances of the Pen class created using this constructor are currently not serialized.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Pen (
    Brush brush,
    double width,
    DashStyle dashStyle
)
```

Parameters

brush
A Brush object representing the pen color.

width
A double value representing the pen width.

dashStyle
A DashStyle object representing the pen's dash pattern.

See Also

Pen Constructor Overload List
Pen Class
com.mindfusion.drawing Namespace

Pen Constructor (Color)

Initializes a new instance of the Pen class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Pen (
    Color color
)
```

Parameters

color
A Color object representing the pen color.

See Also

Pen Constructor Overload List
Pen Class
com.mindfusion.drawing Namespace

Pen Constructor (Color, double)

Initializes a new instance of the Pen class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Pen (
    Color color,
    double width
)
```

Parameters

color
A Color object representing the pen color.

width
A double value representing the pen width.

See Also

Pen Constructor Overload List
Pen Class
com.mindfusion.drawing Namespace

Pen Constructor (Color, double, DashStyle)

Initializes a new instance of the Pen class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Pen (
    Color color,
    double width,
    DashStyle dashStyle
)
```

Parameters

color
A Color object representing the pen color.

width

A double value representing the pen width.

dashStyle
A DashStyle object representing the pen's dash pattern.

See Also

Pen Constructor Overload List
Pen Class
com.mindfusion.drawing Namespace

Pen Methods

Pen.applyTo Method

Overload List

Name	Description
Pen.applyTo (Graphics2D)	Sets the pen as the current pen for the specified Graphics2D object.
Pen.applyTo (Graphics2D, Rectangle2D)	Sets the pen as the current pen for the specified Graphics2D object.

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.applyTo Method (Graphics2D)

Sets the pen as the current pen for the specified Graphics2D object.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void applyTo (
    Graphics2D g
)
```

Parameters

g

See Also

applyTo Method Overload List
Pen Members

Pen.applyTo Method (Graphics2D, Rectangle2D)

Sets the pen as the current pen for the specified Graphics2D object.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void applyTo (
    Graphics2D g,
    Rectangle2D bounds
)
```

Parameters

g

bounds

See Also

applyTo Method Overload List
Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.clone Method

Creates a copy of this pen.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Pen clone ()
```

Return Value

The new Pen object.

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.getBrush Method

Gets the Brush of this pen.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public Brush getBrush ()
```

Return Value

A Brush object used to paint lines.

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.getCap Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public int getCap ()
```

Return Value

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.getColor Method

Gets the color of this pen.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public Color getColor ()
```

Return Value

A Color object representing the pen color.

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.getDashStyle Method

Gets the dash style of this pen.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public DashStyle getDashStyle ()
```

Return Value

A DashStyle object representing the pen's dash pattern.

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.getEffectiveWidth Method

Gets the effective width of the lines drawn with this pen once it has been applied to a Graphics2D object.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public double getEffectiveWidth (
    Graphics2D g2d
)
```

Parameters

g2d

Return Value

A double value representing the effective pen width.

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.getLineJoin Method

Gets the line join.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public int getLineJoin ()
```

Return Value

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.getWidth Method

Gets the width of the lines drawn with this pen.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public double getWidth ()
```

Return Value

A double value representing the pen width.

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.setBrush Method

Gets a Brush of this pen.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setBrush (
    Brush value
)
```

Parameters

value
A Brush object used to paint lines.

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.setCap Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setCap (
    int value
)
```

Parameters

value

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.setColor Method

Sets the color of this pen.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setColor (
    Color value
)
```

Parameters

value
A Color object representing the pen color.

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.setDashStyle Method

Sets the dash style of this pen.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setDashStyle (
    DashStyle value
)
```

Parameters

value
A DashStyle object representing the pen's dash pattern.

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.setLineJoin Method

Sets the line join.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setLineJoin (
    int value
)
```

Parameters

value

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.setWidth Method

Sets what the width of the lines drawn with this pen should be.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setWidth (
    double value
)
```

Parameters

value
A double value representing the pen width.

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.toColor Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Color toColor ()
```

Return Value

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pen.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

Pen Members
Pen Class
com.mindfusion.drawing Namespace

Pens Class

Contains pens for all standard colors.

Syntax

Java

```
public class Pens
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.drawing.Pens

See Also

Pens Members
com.mindfusion.drawing Namespace

Pens Members

Contains pens for all standard colors.

The following tables list the members exposed by the Pens type.

Public Fields

	Name	Description
	AliceBlue	Represents a pen with the Colors.AliceBlue color.
	AntiqueWhite	Represents a pen with the Colors.AntiqueWhite color.
	Aqua	Represents a pen with the Colors.Aqua color.
	Aquamarine	Represents a pen with the Colors.Aquamarine color.
	Azure	Represents a pen with the Colors.Azure color.
	Beige	Represents a pen with the Colors.Beige color.
	Bisque	Represents a pen with the Colors.Bisque color.
	Black	Represents a pen with the Colors.Black color.
	BlanchedAlmond	Represents a pen with the Colors.BlanchedAlmond color.
	Blue	Represents a pen with the Colors.Blue color.
	BlueViolet	Represents a pen with the Colors.BlueViolet color.
	Brown	Represents a pen with the Colors.Brown color.
	BurlyWood	Represents a pen with the Colors.BurlyWood color.
	CadetBlue	Represents a pen with the Colors.CadetBlue color.
	Chartreuse	Represents a pen with the Colors.Chartreuse color.
	Chocolate	Represents a pen with the Colors.Chocolate color.
	Coral	Represents a pen with the Colors.Coral color.
	CornflowerBlue	Represents a pen with the Colors.CornflowerBlue color.
	Cornsilk	Represents a pen with the Colors.Cornsilk color.
	Crimson	Represents a pen with the Colors.Crimson color.
	Cyan	Represents a pen with the Colors.Cyan color.

	DarkBlue	Represents a pen with the Colors.DarkBlue color.
	DarkCyan	Represents a pen with the Colors.DarkCyan color.
	DarkGoldenrod	Represents a pen with the Colors.DarkGoldenrod color.
	DarkGray	Represents a pen with the Colors.DarkGray color.
	DarkGreen	Represents a pen with the Colors.DarkGreen color.
	DarkKhaki	Represents a pen with the Colors.DarkKhaki color.
	DarkMagenta	Represents a pen with the Colors.DarkMagenta color.
	DarkOliveGreen	Represents a pen with the Colors.DarkOliveGreen color.
	DarkOrange	Represents a pen with the Colors.DarkOrange color.
	DarkOrchid	Represents a pen with the Colors.DarkOrchid color.
	DarkRed	Represents a pen with the Colors.DarkRed color.
	DarkSalmon	Represents a pen with the Colors.DarkSalmon color.
	DarkSeaGreen	Represents a pen with the Colors.DarkSeaGreen color.
	DarkSlateBlue	Represents a pen with the Colors.DarkSlateBlue color.
	DarkSlateGray	Represents a pen with the Colors.DarkSlateGray color.
	DarkTurquoise	Represents a pen with the Colors.DarkTurquoise color.
	DarkViolet	Represents a pen with the Colors.DarkViolet color.
	DeepPink	Represents a pen with the Colors.DeepPink color.
	DeepSkyBlue	Represents a pen with the Colors.DeepSkyBlue color.
	DimGray	Represents a pen with the Colors.DimGray color.
	DodgerBlue	Represents a pen with the Colors.DodgerBlue color.
	Firebrick	Represents a pen with the Colors.Firebrick color.
	FloralWhite	Represents a pen with the Colors.FloralWhite color.
	ForestGreen	Represents a pen with the Colors.ForestGreen color.
	Fuchsia	Represents a pen with the Colors.Fuchsia color.
	Gainsboro	Represents a pen with the Colors.Gainsboro color.
	GhostWhite	Represents a pen with the Colors.GhostWhite color.
	Gold	Represents a pen with the Colors.Gold color.
	Goldenrod	Represents a pen with the Colors.Goldenrod color.
	Gray	Represents a pen with the Colors.Gray color.
	Green	Represents a pen with the Colors.Green color.
	GreenYellow	Represents a pen with the Colors.GreenYellow color.
	Honeydew	Represents a pen with the Colors.Honeydew color.

	HotPink	Represents a pen with the Colors.HotPink color.
	IndianRed	Represents a pen with the Colors.IndianRed color.
	Indigo	Represents a pen with the Colors.Indigo color.
	Ivory	Represents a pen with the Colors.Ivory color.
	Khaki	Represents a pen with the Colors.Khaki color.
	Lavender	Represents a pen with the Colors.Lavender color.
	LavenderBlush	Represents a pen with the Colors.LavenderBlush color.
	LawnGreen	Represents a pen with the Colors.LawnGreen color.
	LemonChiffon	Represents a pen with the Colors.LemonChiffon color.
	LightBlue	Represents a pen with the Colors.LightBlue color.
	LightCoral	Represents a pen with the Colors.LightCoral color.
	LightCyan	Represents a pen with the Colors.LightCyan color.
	LightGoldenrodYellow	Represents a pen with the Colors.LightGoldenrodYellow color.
	LightGray	Represents a pen with the Colors.LightGray color.
	LightGreen	Represents a pen with the Colors.LightGreen color.
	LightPink	Represents a pen with the Colors.LightPink color.
	LightSalmon	Represents a pen with the Colors.LightSalmon color.
	LightSeaGreen	Represents a pen with the Colors.LightSeaGreen color.
	LightSkyBlue	Represents a pen with the Colors.LightSkyBlue color.
	LightSlateGray	Represents a pen with the Colors.LightSlateGray color.
	LightSteelBlue	Represents a pen with the Colors.LightSteelBlue color.
	LightYellow	Represents a pen with the Colors.LightYellow color.
	Lime	Represents a pen with the Colors.Lime color.
	LimeGreen	Represents a pen with the Colors.LimeGreen color.
	Linen	Represents a pen with the Colors.Linen color.
	Magenta	Represents a pen with the Colors.Magenta color.
	Maroon	Represents a pen with the Colors.Maroon color.
	MediumAquamarine	Represents a pen with the Colors.MediumAquamarine color.
	MediumBlue	Represents a pen with the Colors.MediumBlue color.
	MediumOrchid	Represents a pen with the Colors.MediumOrchid color.
	MediumPurple	Represents a pen with the Colors.MediumPurple color.
	MediumSeaGreen	Represents a pen with the Colors.MediumSeaGreen color.

	MediumSlateBlue	Represents a pen with the Colors.MediumSlateBlue color.
	MediumSpringGreen	Represents a pen with the Colors.MediumSpringGreen color.
	MediumTurquoise	Represents a pen with the Colors.MediumTurquoise color.
	MediumVioletRed	Represents a pen with the Colors.MediumVioletRed color.
	MidnightBlue	Represents a pen with the Colors.MidnightBlue color.
	MintCream	Represents a pen with the Colors.MintCream color.
	MistyRose	Represents a pen with the Colors.MistyRose color.
	Moccasin	Represents a pen with the Colors.Moccasin color.
	NavajoWhite	Represents a pen with the Colors.NavajoWhite color.
	Navy	Represents a pen with the Colors.Navy color.
	OldLace	Represents a pen with the Colors.OldLace color.
	Olive	Represents a pen with the Colors.Olive color.
	OliveDrab	Represents a pen with the Colors.OliveDrab color.
	Orange	Represents a pen with the Colors.Orange color.
	OrangeRed	Represents a pen with the Colors.OrangeRed color.
	Orchid	Represents a pen with the Colors.Orchid color.
	PaleGoldenrod	Represents a pen with the Colors.PaleGoldenrod color.
	PaleGreen	Represents a pen with the Colors.PaleGreen color.
	PaleTurquoise	Represents a pen with the Colors.PaleTurquoise color.
	PaleVioletRed	Represents a pen with the Colors.PaleVioletRed color.
	PapayaWhip	Represents a pen with the Colors.PapayaWhip color.
	PeachPuff	Represents a pen with the Colors.PeachPuff color.
	Peru	Represents a pen with the Colors.Peru color.
	Pink	Represents a pen with the Colors.Pink color.
	Plum	Represents a pen with the Colors.Plum color.
	PowderBlue	Represents a pen with the Colors.PowderBlue color.
	Purple	Represents a pen with the Colors.Purple color.
	Red	Represents a pen with the Colors.Red color.
	RosyBrown	Represents a pen with the Colors.RosyBrown color.
	RoyalBlue	Represents a pen with the Colors.RoyalBlue color.
	SaddleBrown	Represents a pen with the Colors.SaddleBrown color.
	Salmon	Represents a pen with the Colors.Salmon color.
	SandyBrown	Represents a pen with the Colors.SandyBrown color.

	SeaGreen	Represents a pen with the Colors.SeaGreen color.
	SeaShell	Represents a pen with the Colors.SeaShell color.
	Sienna	Represents a pen with the Colors.Sienna color.
	Silver	Represents a pen with the Colors.Silver color.
	SkyBlue	Represents a pen with the Colors.SkyBlue color.
	SlateBlue	Represents a pen with the Colors.SlateBlue color.
	SlateGray	Represents a pen with the Colors.SlateGray color.
	Snow	Represents a pen with the Colors.Snow color.
	SpringGreen	Represents a pen with the Colors.SpringGreen color.
	SteelBlue	Represents a pen with the Colors.SteelBlue color.
	Tan	Represents a pen with the Colors.Tan color.
	Teal	Represents a pen with the Colors.Teal color.
	Thistle	Represents a pen with the Colors.Thistle color.
	Tomato	Represents a pen with the Colors.Tomato color.
	Transparent	Represents a pen with the Colors.Transparent color.
	Turquoise	Represents a pen with the Colors.Turquoise color.
	Violet	Represents a pen with the Colors.Violet color.
	Wheat	Represents a pen with the Colors.Wheat color.
	White	Represents a pen with the Colors.White color.
	WhiteSmoke	Represents a pen with the Colors.WhiteSmoke color.
	Yellow	Represents a pen with the Colors.Yellow color.
	YellowGreen	Represents a pen with the Colors.YellowGreen color.

See Also

Pens Class
com.mindfusion.drawing Namespace

Pens Fields

Pens.AliceBlue Field

Represents a pen with the Colors.AliceBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen AliceBlue
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.AntiqueWhite Field

Represents a pen with the Colors.AntiqueWhite color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen AntiqueWhite
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Aqua Field

Represents a pen with the Colors.Aqua color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Aqua
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Aquamarine Field

Represents a pen with the Colors.Aquamarine color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen Aquamarine
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Azure Field

Represents a pen with the Colors.Azure color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen Azure
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Beige Field

Represents a pen with the Colors.Beige color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen Beige
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Bisque Field

Represents a pen with the Colors.Bisque color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen Bisque
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Black Field

Represents a pen with the Colors.Black color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen Black
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.BlanchedAlmond Field

Represents a pen with the Colors.BlanchedAlmond color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen BlanchedAlmond
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Blue Field

Represents a pen with the Colors.Blue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen Blue`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.BlueViolet Field

Represents a pen with the Colors.BlueViolet color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen BlueViolet`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Brown Field

Represents a pen with the Colors.Brown color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen Brown`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.BurlyWood Field

Represents a pen with the Colors.BurlyWood color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen BurlyWood
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.CadetBlue Field

Represents a pen with the Colors.CadetBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen CadetBlue
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Chartreuse Field

Represents a pen with the Colors.Chartreuse color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen Chartreuse
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Chocolate Field

Represents a pen with the Colors.Chocolate color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Chocolate
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Coral Field

Represents a pen with the Colors.Coral color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Coral
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.CornflowerBlue Field

Represents a pen with the Colors.CornflowerBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen CornflowerBlue
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Cornsilk Field

Represents a pen with the Colors.Cornsilk color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Cornsilk
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Crimson Field

Represents a pen with the Colors.Crimson color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Crimson
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Cyan Field

Represents a pen with the Colors.Cyan color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen Cyan
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkBlue Field

Represents a pen with the Colors.DarkBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen DarkBlue
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkCyan Field

Represents a pen with the Colors.DarkCyan color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen DarkCyan
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkGoldenrod Field

Represents a pen with the Colors.DarkGoldenrod color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen DarkGoldenrod`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkGray Field

Represents a pen with the Colors.DarkGray color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen DarkGray`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkGreen Field

Represents a pen with the Colors.DarkGreen color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen DarkGreen`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkKhaki Field

Represents a pen with the Colors.DarkKhaki color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen DarkKhaki`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkMagenta Field

Represents a pen with the Colors.DarkMagenta color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen DarkMagenta`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkOliveGreen Field

Represents a pen with the Colors.DarkOliveGreen color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen DarkOliveGreen`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkOrange Field

Represents a pen with the Colors.DarkOrange color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen DarkOrange`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkOrchid Field

Represents a pen with the Colors.DarkOrchid color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen DarkOrchid`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkRed Field

Represents a pen with the Colors.DarkRed color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen DarkRed`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkSalmon Field

Represents a pen with the Colors.DarkSalmon color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen DarkSalmon
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkSeaGreen Field

Represents a pen with the Colors.DarkSeaGreen color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen DarkSeaGreen
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkSlateBlue Field

Represents a pen with the Colors.DarkSlateBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen DarkSlateBlue
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkSlateGray Field

Represents a pen with the Colors.DarkSlateGray color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen DarkSlateGray
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkTurquoise Field

Represents a pen with the Colors.DarkTurquoise color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen DarkTurquoise
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DarkViolet Field

Represents a pen with the Colors.DarkViolet color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen DarkViolet
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DeepPink Field

Represents a pen with the Colors.DeepPink color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen DeepPink
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DeepSkyBlue Field

Represents a pen with the Colors.DeepSkyBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen DeepSkyBlue
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DimGray Field

Represents a pen with the Colors.DimGray color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen DimGray
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.DodgerBlue Field

Represents a pen with the Colors.DodgerBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen DodgerBlue
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Firebrick Field

Represents a pen with the Colors.Firebrick color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Firebrick
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.FloralWhite Field

Represents a pen with the Colors.FloralWhite color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen FloralWhite`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.ForestGreen Field

Represents a pen with the Colors.ForestGreen color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen ForestGreen`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Fuchsia Field

Represents a pen with the Colors.Fuchsia color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen Fuchsia`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Gainsboro Field

Represents a pen with the Colors.Gainsboro color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen Gainsboro
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.GhostWhite Field

Represents a pen with the Colors.GhostWhite color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen GhostWhite
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Gold Field

Represents a pen with the Colors.Gold color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen Gold
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Goldenrod Field

Represents a pen with the Colors.Goldenrod color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen Goldenrod`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Gray Field

Represents a pen with the Colors.Gray color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen Gray`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Green Field

Represents a pen with the Colors.Green color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen Green`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.GreenYellow Field

Represents a pen with the Colors.GreenYellow color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen GreenYellow
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Honeydew Field

Represents a pen with the Colors.Honeydew color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Honeydew
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.HotPink Field

Represents a pen with the Colors.HotPink color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen HotPink
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.IndianRed Field

Represents a pen with the Colors.IndianRed color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen IndianRed
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Indigo Field

Represents a pen with the Colors.Indigo color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Indigo
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Ivory Field

Represents a pen with the Colors.Ivory color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Ivory
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Khaki Field

Represents a pen with the Colors.Khaki color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Khaki
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Lavender Field

Represents a pen with the Colors.Lavender color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Lavender
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LavenderBlush Field

Represents a pen with the Colors.LavenderBlush color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen LavenderBlush
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LawnGreen Field

Represents a pen with the Colors.LawnGreen color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen LawnGreen
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LemonChiffon Field

Represents a pen with the Colors.LemonChiffon color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen LemonChiffon
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LightBlue Field

Represents a pen with the Colors.LightBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen LightBlue
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LightCoral Field

Represents a pen with the Colors.LightCoral color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen LightCoral
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LightCyan Field

Represents a pen with the Colors.LightCyan color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen LightCyan
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LightGoldenrodYellow Field

Represents a pen with the Colors.LightGoldenrodYellow color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen LightGoldenrodYellow
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LightGray Field

Represents a pen with the Colors.LightGray color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen LightGray
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LightGreen Field

Represents a pen with the Colors.LightGreen color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen LightGreen
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LightPink Field

Represents a pen with the Colors.LightPink color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen LightPink`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LightSalmon Field

Represents a pen with the Colors.LightSalmon color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen LightSalmon`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LightSeaGreen Field

Represents a pen with the Colors.LightSeaGreen color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen LightSeaGreen`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LightSkyBlue Field

Represents a pen with the Colors.LightSkyBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen LightSkyBlue
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LightSlateGray Field

Represents a pen with the Colors.LightSlateGray color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen LightSlateGray
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LightSteelBlue Field

Represents a pen with the Colors.LightSteelBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen LightSteelBlue
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LightYellow Field

Represents a pen with the Colors.LightYellow color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen LightYellow
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Lime Field

Represents a pen with the Colors.Lime color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Lime
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.LimeGreen Field

Represents a pen with the Colors.LimeGreen color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen LimeGreen
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Linen Field

Represents a pen with the Colors.Linen color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen Linen`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Magenta Field

Represents a pen with the Colors.Magenta color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen Magenta`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Maroon Field

Represents a pen with the Colors.Maroon color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Maroon
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.MediumAquamarine Field

Represents a pen with the Colors.MediumAquamarine color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen MediumAquamarine
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.MediumBlue Field

Represents a pen with the Colors.MediumBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen MediumBlue
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.MediumOrchid Field

Represents a pen with the Colors.MediumOrchid color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen MediumOrchid
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.MediumPurple Field

Represents a pen with the Colors.MediumPurple color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen MediumPurple
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.MediumSeaGreen Field

Represents a pen with the Colors.MediumSeaGreen color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen MediumSeaGreen
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.MediumSlateBlue Field

Represents a pen with the Colors.MediumSlateBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen MediumSlateBlue
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.MediumSpringGreen Field

Represents a pen with the Colors.MediumSpringGreen color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen MediumSpringGreen
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.MediumTurquoise Field

Represents a pen with the Colors.MediumTurquoise color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen MediumTurquoise
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.MediumVioletRed Field

Represents a pen with the Colors.MediumVioletRed color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen MediumVioletRed
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.MidnightBlue Field

Represents a pen with the Colors.MidnightBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen MidnightBlue
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.MintCream Field

Represents a pen with the Colors.MintCream color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen MintCream
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.MistyRose Field

Represents a pen with the Colors.MistyRose color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen MistyRose
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Moccasin Field

Represents a pen with the Colors.Moccasin color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen Moccasin
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.NavajoWhite Field

Represents a pen with the Colors.NavajoWhite color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen NavajoWhite
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Navy Field

Represents a pen with the Colors.Navy color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Navy
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.OldLace Field

Represents a pen with the Colors.OldLace color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen OldLace
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Olive Field

Represents a pen with the Colors.Olive color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Olive
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.OliveDrab Field

Represents a pen with the Colors.OliveDrab color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen OliveDrab
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Orange Field

Represents a pen with the Colors.Orange color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Orange
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.OrangeRed Field

Represents a pen with the Colors.OrangeRed color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen OrangeRed
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Orchid Field

Represents a pen with the Colors.Orchid color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Orchid
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.PaleGoldenrod Field

Represents a pen with the Colors.PaleGoldenrod color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen PaleGoldenrod
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.PaleGreen Field

Represents a pen with the Colors.PaleGreen color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen PaleGreen`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.PaleTurquoise Field

Represents a pen with the Colors.PaleTurquoise color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen PaleTurquoise`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.PaleVioletRed Field

Represents a pen with the Colors.PaleVioletRed color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen PaleVioletRed`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.PapayaWhip Field

Represents a pen with the Colors.PapayaWhip color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen PapayaWhip`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.PeachPuff Field

Represents a pen with the Colors.PeachPuff color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen PeachPuff`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Peru Field

Represents a pen with the Colors.Peru color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen Peru`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Pink Field

Represents a pen with the Colors.Pink color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen Pink`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Plum Field

Represents a pen with the Colors.Plum color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen Plum`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.PowderBlue Field

Represents a pen with the Colors.PowderBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen PowderBlue`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Purple Field

Represents a pen with the Colors.Purple color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen Purple
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Red Field

Represents a pen with the Colors.Red color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen Red
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.RosyBrown Field

Represents a pen with the Colors.RosyBrown color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen RosyBrown
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.RoyalBlue Field

Represents a pen with the Colors.RoyalBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen RoyalBlue
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.SaddleBrown Field

Represents a pen with the Colors.SaddleBrown color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen SaddleBrown
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Salmon Field

Represents a pen with the Colors.Salmon color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Salmon
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.SandyBrown Field

Represents a pen with the Colors.SandyBrown color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen SandyBrown
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.SeaGreen Field

Represents a pen with the Colors.SeaGreen color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen SeaGreen
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.SeaShell Field

Represents a pen with the Colors.SeaShell color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen SeaShell
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Sienna Field

Represents a pen with the Colors.Sienna color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Sienna
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Silver Field

Represents a pen with the Colors.Silver color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Silver
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.SkyBlue Field

Represents a pen with the Colors.SkyBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen SkyBlue`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.SlateBlue Field

Represents a pen with the Colors.SlateBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen SlateBlue`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.SlateGray Field

Represents a pen with the Colors.SlateGray color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen SlateGray`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Snow Field

Represents a pen with the Colors.Snow color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen Snow
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.SpringGreen Field

Represents a pen with the Colors.SpringGreen color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen SpringGreen
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.SteelBlue Field

Represents a pen with the Colors.SteelBlue color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public static final Pen SteelBlue
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Tan Field

Represents a pen with the Colors.Tan color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen Tan`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Teal Field

Represents a pen with the Colors.Teal color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen Teal`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Thistle Field

Represents a pen with the Colors.Thistle color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen Thistle`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Tomato Field

Represents a pen with the Colors.Tomato color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Tomato
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Transparent Field

Represents a pen with the Colors.Transparent color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Transparent
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Turquoise Field

Represents a pen with the Colors.Turquoise color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Turquoise
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Violet Field

Represents a pen with the Colors.Violet color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Violet
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Wheat Field

Represents a pen with the Colors.Wheat color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Wheat
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.White Field

Represents a pen with the Colors.White color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen White
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.WhiteSmoke Field

Represents a pen with the Colors.WhiteSmoke color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen WhiteSmoke
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.Yellow Field

Represents a pen with the Colors.Yellow color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public static final Pen Yellow
```

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

Pens.YellowGreen Field

Represents a pen with the Colors.YellowGreen color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public static final Pen YellowGreen`

See Also

Pens Members
Pens Class
com.mindfusion.drawing Namespace

PointList Class

A strongly-typed list of Point2D.Float objects.

Syntax

Java
`public class PointList extends BaseList<E> implements Cloneable`

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.common.BaseList(E)
        com.mindfusion.drawing.PointList

See Also

PointList Members
com.mindfusion.drawing Namespace

PointList Members

A strongly-typed list of Point2D.Float objects.

The following tables list the members exposed by the PointList type.

Public Constructors

	Name	Description
	PointList	Overloaded.

Public Methods

	Name	Description
	add	Overloaded. (Inherited from BaseList.)
	addBaseListListener	Adds a BaseListListener to the list. (Inherited from BaseList.)
	clear	Removes all elements from the list. (Inherited from BaseList.)

clone	
first	Gets the first element of this list. (Inherited from BaseList.)
get	Returns the element at the specified position in the list. (Inherited from BaseList.)
getArray	
getCopy	
last	Gets the last element of this list. (Inherited from BaseList.)
readExternal	
remove	Overloaded. (Inherited from BaseList.)
removeBaseListListener	Removes the specified **BaseListListener** from the list. (Inherited from BaseList.)
set	Replaces the element at the specified position in this list with the specified element. (Inherited from BaseList.)
set	
size	Returns the number of elements in the list. (Inherited from BaseList.)
writeExternal	

See Also

PointList Class
com.mindfusion.drawing Namespace

PointList Constructor

Overload List

Name	Description
PointList ()	
PointList (int)	
PointList (List)	
PointList (Point2D.Float[])	
PointList (PointList)	

See Also

PointList Class
com.mindfusion.drawing Namespace

PointList Constructor ()

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public PointList ()
```

See Also

PointList Constructor Overload List
PointList Class
com.mindfusion.drawing Namespace

PointList Constructor (int)

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public PointList (
    int size
)
```

Parameters

size

See Also

PointList Constructor Overload List
PointList Class
com.mindfusion.drawing Namespace

PointList Constructor (List<Point2D.Float>)

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public PointList (
    List<Point2D.Float> points
)
```

Parameters

points

See Also

PointList Constructor Overload List
PointList Class
com.mindfusion.drawing Namespace

PointList Constructor (Point2D.Float[])

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public PointList (
    Point2D.Float[] points
)
```

Parameters

points

See Also

PointList Constructor Overload List
PointList Class
com.mindfusion.drawing Namespace

PointList Constructor (PointList)

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public PointList (
    PointList points
)
```

Parameters

points

See Also

PointList Constructor Overload List
PointList Class
com.mindfusion.drawing Namespace

PointList Methods

PointList.clone Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public Object clone ()
```

Return Value

See Also

PointList Members
PointList Class
com.mindfusion.drawing Namespace

PointList.getArray Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public Point2D.Float[] getArray ()
```

Return Value

See Also

PointList Members
PointList Class
com.mindfusion.drawing Namespace

PointList.getCopy Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public Point2D.Float getCopy (
    int i
)
```

Parameters

i

Return Value

See Also

PointList Members
PointList Class
com.mindfusion.drawing Namespace

PointList.readExternal Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

PointList Members
PointList Class
com.mindfusion.drawing Namespace

PointList.set Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void set (
    int i,
    Point2D pt
)
```

Parameters

i

pt

See Also

PointList Members
PointList Class
com.mindfusion.drawing Namespace

PointList.writeExternal Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

PointList Members
PointList Class
com.mindfusion.drawing Namespace

Polygon Class

Syntax

Java

```
public class Polygon
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.drawing.Polygon

See Also

Polygon Members
com.mindfusion.drawing Namespace

Polygon Members

The following tables list the members exposed by the Polygon type.

Public Constructors

	Name	Description
	Polygon	Overloaded.

Public Methods

	Name	Description
	contains	Checks whether the specified point lies whithin the polygon.
	getBounds	Gets the smallest rectangle bounding the polygon.
	getPoints	Gets a collection of the polygon points.
	intersectLine	Calculates the intersections between the polygon and the line defined by the given points. The result is a list containing all points of intersection.
	intersectSegment	Overloaded.

See Also

Polygon Class
com.mindfusion.drawing Namespace

Polygon Constructor

Overload List

Name	Description
Polygon (List)	Builds new polygon object from a given points list.
Polygon (Rectangle2D)	Builds new polygon object from the specified rectangle.
Polygon (Rectangle2D.Float, int)	Build new polygon from ellipse. The ellipse is defined by the specified bounding rectangle. The second parameter specifies how close the polygon approximates the ellipse. Factor of 0 specifies simplest polygon, while factor 100 specifies the most complex polygon.

See Also

Polygon Class
com.mindfusion.drawing Namespace

Polygon Constructor (List<Point2D.Float>)

Builds new polygon object from a given points list.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Polygon (
    List<Point2D.Float> points
)
```

Parameters

points

See Also

Polygon Constructor Overload List
Polygon Class
com.mindfusion.drawing Namespace

Polygon Constructor (Rectangle2D)

Builds new polygon object from the specified rectangle.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Polygon (
    Rectangle2D rect
)
```

Parameters

rect

See Also

Polygon Constructor Overload List
Polygon Class
com.mindfusion.drawing Namespace

Polygon Constructor (Rectangle2D.Float, int)

Build new polygon from ellipse. The ellipse is defined by the specified bounding rectangle. The second parameter specifies how close the polygon approximates the ellipse. Factor of 0 specifies simplest polygon, while factor 100 specifies the most complex polygon.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Polygon (
    Rectangle2D.Float bounds,
    int factor
)
```

Parameters

bounds

factor

See Also

Polygon Constructor Overload List
Polygon Class
com.mindfusion.drawing Namespace

Polygon Methods

Polygon.contains Method

Checks whether the specified point lies whithin the polygon.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public boolean contains (
    Point2D.Float point
)
```

Parameters

point

Return Value

See Also

Polygon Members
Polygon Class
com.mindfusion.drawing Namespace

Polygon.getBounds Method

Gets the smallest rectangle bounding the polygon.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Rectangle2D.Float getBounds ()
```

Return Value

See Also

Polygon Members
Polygon Class
com.mindfusion.drawing Namespace

Polygon.getPoints Method

Gets a collection of the polygon points.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public PointList getPoints ()
```

Return Value

See Also

Polygon Members
Polygon Class
com.mindfusion.drawing Namespace

Polygon.intersectLine Method

Calculates the intersections between the polygon and the line defined by the given points. The result is a list containing all points of intersection.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public PointList intersectLine (
    Point2D.Float a,
    Point2D.Float b
)
```

Parameters

a

b

Return Value

See Also

Polygon Members
Polygon Class
com.mindfusion.drawing Namespace

Polygon.intersectSegment Method

Overload List

Name	Description
Polygon.intersectSegment (Line)	Calculates the intersections between the polygon and the given line segment. The result is a list containing all points of intersection.
Polygon.intersectSegment (Point2D.Float, Point2D.Float)	Calculates the intersections between the polygon and the line segment defined by the given points. The result is a list containing all points of intersection.

See Also

Polygon Members
Polygon Class
com.mindfusion.drawing Namespace

Polygon.intersectSegment Method (Line)

Calculates the intersections between the polygon and the given line segment. The result is a list containing all points of intersection.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public PointList intersectSegment (
    Line line
)
```

Parameters

line

Return Value

See Also

intersectSegment Method Overload List
Polygon Members
Polygon Class
com.mindfusion.drawing Namespace

Polygon.intersectSegment Method (Point2D.Float, Point2D.Float)

Calculates the intersections between the polygon and the line segment defined by the given points. The result is a list containing all points of intersection.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public PointList intersectSegment (
    Point2D.Float a,
    Point2D.Float b
)
```

Parameters

a

b

Return Value

See Also

intersectSegment Method Overload List
Polygon Members
Polygon Class
com.mindfusion.drawing Namespace

RadialGradientBrush Class

Syntax

```
Java
public class RadialGradientBrush extends Brush
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.drawing.Brush
    com.mindfusion.drawing.RadialGradientBrush

See Also

RadialGradientBrush Members
com.mindfusion.drawing Namespace

RadialGradientBrush Members

The following tables list the members exposed by the RadialGradientBrush type.

Public Constructors

	Name	Description
	RadialGradientBrush	Overloaded.

Public Methods

	Name	Description
	applyTo	
	clone	Creates a clone of the brush.
	getCenterColor	Gets the center color.
	getColors	
	getFractions	
	getSurroundingColor	Gets the surrounding color.
	getX	Gets the relative x-coordinate of the center point.
	getY	Gets the relative y-coordinate of the center point.
	readExternal	Implements Externalizable.
	setCenterColor	Sets the center color.
	setColors	
	setFractions	
	setSurroundingColor	Sets the surrounding color.
	setX	Sets the relative x-coordinate of the center point.
	setY	Sets the relative y-coordinate of the center point.
	toColor	Returns a single color approximation of the brush.
	writeExternal	Implements Externalizable.

See Also

RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush Constructor

Overload List

Name	Description
RadialGradientBrush ()	Initializes a new instance of the RadialGradientBrush class.
RadialGradientBrush (Color, Color)	Initializes a new instance of the **RadialGradientBrush** class.
RadialGradientBrush (Color, Color, double, double)	Initializes a new instance of the **RadialGradientBrush** class.
RadialGradientBrush (float[], Color[], double, double)	Initializes a new instance of the **RadialGradientBrush** class.

See Also

RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush Constructor ()

Initializes a new instance of the RadialGradientBrush class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public RadialGradientBrush ()
```

See Also

RadialGradientBrush Constructor Overload List
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush Constructor (Color, Color)

Initializes a new instance of the RadialGradientBrush class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public RadialGradientBrush (
    Color centerColor,
    Color surroundingColor
)
```

Parameters

centerColor
A Color object representing the color at the center point.

surroundingColor
A Color object representing the surrounding color.

See Also

RadialGradientBrush Constructor Overload List
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush Constructor (Color, Color, double, double)

Initializes a new instance of the RadialGradientBrush class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public RadialGradientBrush (
    Color centerColor,
    Color surroundingColor,
    double x,
    double y
)
```

Parameters

centerColor
A Color object representing the color at the center point.

surroundingColor
A Color object representing the surrounding color.

x
The relative x-coordinate of the center point. Value 0.5 indicates the middle of the destination rectangle.

y
The relative y-coordinate of the center point. Value 0.5 indicates the middle of the destination rectangle.

See Also

RadialGradientBrush Constructor Overload List
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush Constructor (float[], Color[], double, double)

Initializes a new instance of the RadialGradientBrush class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public RadialGradientBrush (
    float[] fractions,
    Color[] colors,
    double x,
    double y
)
```

Parameters

fractions

An array of float numbers specifying the positions of the colors along the gradient.

colors
An array of Color objects representing the colors of the gradient.

x
The relative x-coordinate of the center point. Value 0.5 indicates the middle of the destination rectangle.

y
The relative y-coordinate of the center point. Value 0.5 indicates the middle of the destination rectangle.

Remarks

Instances of the RadialGradientBrush class created using this constructor are currently not serialized.

See Also

RadialGradientBrush Constructor Overload List
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush Methods

RadialGradientBrush.applyTo Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void applyTo (
    Graphics2D g,
    Rectangle2D bounds
)
```

Parameters

g

bounds

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush.clone Method

Creates a clone of the brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public RadialGradientBrush clone ()
```

Return Value

A RadialGradientBrush instance.

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush.getCenterColor Method

Gets the center color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public Color getCenterColor ()
```

Return Value

A Color object representing the center color.

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush.getColors Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

```
Java
public Color[] getColors ()
```

Return Value

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush.getFractions Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public float[] getFractions ()
```

Return Value

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush.getSurroundingColor Method

Gets the surrounding color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Color getSurroundingColor ()
```

Return Value

A Color object representing the surrounding color.

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush.getX Method

Gets the relative x-coordinate of the center point.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public double getX ()
```

Return Value

A double value specifying the relative x-coordinate.

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush.getY Method

Gets the relative y-coordinate of the center point.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public double getY ()
```

Return Value

A double value specifying the relative x-coordinate.

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush.setCenterColor Method

Sets the center color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setCenterColor (
    Color value
)
```

Parameters

value
A Color object representing the center color.

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush.setColors Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setColors (
    Color[] value
)
```

Parameters

value

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush.setFractions Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setFractions (
    float[] value
)
```

Parameters

value

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush.setSurroundingColor Method

Sets the surrounding color.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setSurroundingColor (
    Color value
)
```

Parameters

value
A Color object representing the surrounding color.

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush.setX Method

Sets the relative x-coordinate of the center point.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setX (
    double value
)
```

Parameters

value
A double value specifying the relative x-coordinate.

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush.setY Method

Sets the relative y-coordinate of the center point.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setY (
    double value
)
```

Parameters

value
A double value specifying the relative x-coordinate.

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush.toColor Method

Returns a single color approximation of the brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Color toColor ()
```

Return Value

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

RadialGradientBrush.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

RadialGradientBrush Members
RadialGradientBrush Class
com.mindfusion.drawing Namespace

SolidBrush Class

Represents a brush that paints the interior of objects with a single color.

Syntax

Java

```
public class SolidBrush extends Brush
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.drawing.Brush
    com.mindfusion.drawing.SolidBrush

See Also

SolidBrush Members
com.mindfusion.drawing Namespace

SolidBrush Members

Represents a brush that paints the interior of objects with a single color.

The following tables list the members exposed by the SolidBrush type.

Public Constructors

	Name	Description
	SolidBrush	Overloaded.

Public Methods

	Name	Description
	applyTo	
	clone	Create a copy of this brush.
	getColor	Gets the color that fills the interior of objects painted with this brush.
	readExternal	Implements Externalizable.
	setColor	Sets the color that fills the interior of objects painted with this brush.
	toColor	
	writeExternal	Implements Externalizable.

See Also

SolidBrush Class
com.mindfusion.drawing Namespace

SolidBrush Constructor

Overload List

Name	Description
SolidBrush ()	Initializes a new instance of the SolidBrush class.
SolidBrush (Color)	Initializes a new instance of the **SolidBrush** class.
SolidBrush (String)	Initializes a new instance of the **SolidBrush** class.

See Also

SolidBrush Class
com.mindfusion.drawing Namespace

SolidBrush Constructor ()

Initializes a new instance of the SolidBrush class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public SolidBrush ()
```

See Also

SolidBrush Constructor Overload List
SolidBrush Class
com.mindfusion.drawing Namespace

SolidBrush Constructor (Color)

Initializes a new instance of the SolidBrush class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public SolidBrush (
    Color color
)
```

Parameters

color
A Color object representing the brush color.

See Also

SolidBrush Constructor Overload List
SolidBrush Class
com.mindfusion.drawing Namespace

SolidBrush Constructor (String)

Initializes a new instance of the SolidBrush class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public SolidBrush (
    String color
```

```
)
```

Parameters

color
A string specifying color hex code.

See Also

SolidBrush Constructor Overload List
SolidBrush Class
com.mindfusion.drawing Namespace

SolidBrush Methods

SolidBrush.applyTo Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void applyTo (
    Graphics2D g,
    Rectangle2D bounds
)
```

Parameters

g

bounds

See Also

SolidBrush Members
SolidBrush Class
com.mindfusion.drawing Namespace

SolidBrush.clone Method

Create a copy of this brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public SolidBrush clone ()
```

Return Value

The new SolidBrush object.

See Also

SolidBrush Members
SolidBrush Class
com.mindfusion.drawing Namespace

SolidBrush.getColor Method

Gets the color that fills the interior of objects painted with this brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Color getColor ()
```

Return Value

A Color object representing the brush color.

See Also

SolidBrush Members
SolidBrush Class
com.mindfusion.drawing Namespace

SolidBrush.readExternal Method

Implements Externalizable.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

SolidBrush Members
SolidBrush Class
com.mindfusion.drawing Namespace

SolidBrush.setColor Method

Sets the color that fills the interior of objects painted with this brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setColor (
    Color value
)
```

Parameters

value
The new brush color.

See Also

SolidBrush Members
SolidBrush Class
com.mindfusion.drawing Namespace

SolidBrush.toColor Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Color toColor ()
```

Return Value

See Also

SolidBrush Members
SolidBrush Class
com.mindfusion.drawing Namespace

SolidBrush.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

SolidBrush Members
SolidBrush Class
com.mindfusion.drawing Namespace

TextAlignment Enumeration

Specifies the alignment of text on the drawing surface.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public enum TextAlignment
```

Members

	Member name	Description
	BottomCenter	Text is vertically aligned at the bottom, and horizontally aligned at the center.
	BottomLeft	Text is vertically aligned at the bottom, and horizontally aligned on the left.
	BottomRight	Text is vertically aligned at the bottom, and horizontally aligned on the right.
	MiddleCenter	Text is vertically aligned in the middle, and horizontally aligned at the center.
	MiddleLeft	Text is vertically aligned in the middle, and horizontally aligned on the left.
	MiddleRight	Text is vertically aligned in the middle, and horizontally aligned on the right.
	NoWrap	The only flag that can be combines with any of the alignment flags. Specifies that the drawn text should not wrap when the text does not fit in a single line.
	TopCenter	Text is vertically aligned at the top, and horizontally aligned at the center.
	TopLeft	Text is vertically aligned at the top, and horizontally aligned on the left.

	TopRight	Text is vertically aligned at the top, and horizontally aligned on the right.

See Also

com.mindfusion.drawing Namespace

TextFormat Class

Specifies the format and alignment of text.

Syntax

Java
`public class TextFormat implements Cloneable`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.drawing.TextFormat

See Also

TextFormat Members
com.mindfusion.drawing Namespace

TextFormat Members

Specifies the format and alignment of text.

The following tables list the members exposed by the TextFormat type.

Public Constructors

	Name	Description
	TextFormat	Overloaded.

Public Methods

	Name	Description
	clone	Creates a copy of this **TextFormat**.
	drawText	
	equals	Object.equals override.
	getHorizontalAlign	Gets the horizontal text alignment.
	getNoWrap	Gets a value indicating whether automatic text wrapping is disabled.
	getRightToLeft	

	getVerticalAlign	Gets the vertical text alignment.
	getWrapAtCharacter	Gets a value indicating whether text can be wrapped to a new line at an arbitrary character, or only after a whole word.
	getWrapOverflowingSingleWordLines	Gets whether a single-word line should wrap when overflowing.
	setHorizontalAlign	Sets the horizontal text alignment.
	setNoWrap	Sets a value indicating whether automatic text wrapping is disabled.
	setRightToLeft	
	setVerticalAlign	Sets the vertical text alignment.
	setWrapAtCharacter	Sets a value indicating whether text can be wrapped to a new line at an arbitrary character, or only after a whole word.
	setWrapOverflowingSingleWordLines	Sets whether a single-word line should wrap when overflowing.

See Also

TextFormat Class
com.mindfusion.drawing Namespace

TextFormat Constructor

Overload List

Name	Description
TextFormat ()	Initializes a new instance of the TextFormat class.
TextFormat (Align, Align)	Initializes a new instance of the **TextFormat** class.

See Also

TextFormat Class
com.mindfusion.drawing Namespace

TextFormat Constructor ()

Initializes a new instance of the TextFormat class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public TextFormat ()
```

See Also

TextFormat Constructor Overload List
TextFormat Class
com.mindfusion.drawing Namespace

TextFormat Constructor (Align, Align)

Initializes a new instance of the TextFormat class.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public TextFormat (
    Align horizontalAlign,
    Align verticalAlign
)
```

Parameters

horizontalAlign
One of the Align constants.

verticalAlign
One of the **Align** constants.

See Also

TextFormat Constructor Overload List
TextFormat Class
com.mindfusion.drawing Namespace

TextFormat Methods

TextFormat.clone Method

Creates a copy of this TextFormat.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public TextFormat clone ()
```

Return Value

The new TextFormat object.

See Also

TextFormat Members
TextFormat Class
com.mindfusion.drawing Namespace

TextFormat.drawText Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void drawText (
    String text,
    Graphics2D graphics,
    Font font,
    Rectangle2D bounds
)
```

Parameters

text

graphics

font

bounds

See Also

TextFormat Members
TextFormat Class
com.mindfusion.drawing Namespace

TextFormat.equals Method

Object.equals override.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public boolean equals (
    TextFormat other
)
```

Parameters

other
The object to compare to this instance.

Return Value

true if the value parameter equals the value of this instance; otherwise, false.

See Also

TextFormat Members
TextFormat Class
com.mindfusion.drawing Namespace

TextFormat.getHorizontalAlign Method

Gets the horizontal text alignment.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Align getHorizontalAlign ()
```

Return Value

A member of the Align enumeration.

See Also

TextFormat Members
TextFormat Class
com.mindfusion.drawing Namespace

TextFormat.getNoWrap Method

Gets a value indicating whether automatic text wrapping is disabled.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public boolean getNoWrap ()
```

Return Value

true if text wrapping is disabled, otherwise false.

Remarks

If wrapping is enabled, the control automatically wraps the text to a new line when there is not enough space to fit it in one line. If automatic wrapping is disabled, the control wraps text only at new-line characters.

See Also

TextFormat Members
TextFormat Class
com.mindfusion.drawing Namespace

TextFormat.getRightToLeft Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public boolean getRightToLeft ()
```

Return Value

See Also

TextFormat Members
TextFormat Class
com.mindfusion.drawing Namespace

TextFormat.getVerticalAlign Method

Gets the vertical text alignment.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Align getVerticalAlign ()
```

Return Value

A member of the Align enumeration.

See Also

TextFormat Members
TextFormat Class
com.mindfusion.drawing Namespace

TextFormat.getWrapAtCharacter Method

Gets a value indicating whether text can be wrapped to a new line at an arbitrary character, or only after a whole word.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public boolean getWrapAtCharacter ()
```

Return Value

true if text can be wrapped at an arbitrary character, otherwise false.

See Also

TextFormat Members
TextFormat Class
com.mindfusion.drawing Namespace

TextFormat.getWrapOverflowingSingleWordLines Method

Gets whether a single-word line should wrap when overflowing.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public boolean getWrapOverflowingSingleWordLines ()
```

Return Value

true if long word should wrap when it cannot fit on a line, or false if it should be drawn clipped.

See Also

TextFormat Members
TextFormat Class
com.mindfusion.drawing Namespace

TextFormat.setHorizontalAlign Method

Sets the horizontal text alignment.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setHorizontalAlign (
    Align value
)
```

Parameters

value
A member of the Align enumeration.

See Also

TextFormat Members
TextFormat Class
com.mindfusion.drawing Namespace

TextFormat.setNoWrap Method

Sets a value indicating whether automatic text wrapping is disabled.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setNoWrap (
    boolean wrap
)
```

Parameters

wrap
true to disable text wrapping, otherwise false.

Remarks

If wrapping is enabled, the control automatically wraps the text to a new line when there is not enough space to fit it in one line. If automatic wrapping is disabled, the control wraps text only at new-line characters.

See Also

TextFormat Members
TextFormat Class
com.mindfusion.drawing Namespace

TextFormat.setRightToLeft Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setRightToLeft (
    boolean value
)
```

Parameters

value

See Also

TextFormat Members
TextFormat Class
com.mindfusion.drawing Namespace

TextFormat.setVerticalAlign Method

Sets the vertical text alignment.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setVerticalAlign (
    Align value
)
```

Parameters

value
A member of the Align enumeration.

See Also

TextFormat Members
TextFormat Class
com.mindfusion.drawing Namespace

TextFormat.setWrapAtCharacter Method

Sets a value indicating whether text can be wrapped to a new line at an arbitrary character, or only after a whole word.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setWrapAtCharacter (
    boolean value
)
```

Parameters

value
true if text can be wrapped at an arbitrary character, otherwise false.

See Also

TextFormat Members
TextFormat Class
com.mindfusion.drawing Namespace

TextFormat.setWrapOverflowingSingleWordLines Method

Sets whether a single-word line should wrap when overflowing.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setWrapOverflowingSingleWordLines (
    boolean value
)
```

Parameters

value
true if long word should wrap when it cannot fit on a line, or false if it should be drawn clipped.

See Also

TextFormat Members
TextFormat Class
com.mindfusion.drawing Namespace

TextureBrush Class

Represents a brush that fills the interiors of objects with a texture pattern.

Syntax

Java

```
public class TextureBrush extends Brush
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.drawing.Brush
    com.mindfusion.drawing.TextureBrush

See Also

TextureBrush Members
com.mindfusion.drawing Namespace

TextureBrush Members

Represents a brush that fills the interiors of objects with a texture pattern.

The following tables list the members exposed by the TextureBrush type.

Public Constructors

	Name	Description
	TextureBrush	Overloaded.

Public Methods

	Name	Description
	applyTo	Applies the brush to the specified graphics.
	clone	Creates a copy of a brush.
	getTexture	
	readExternal	
	setTexture	
	toColor	Returns a single color approximation of the brush.
	writeExternal	Implements Externalizable.

See Also

TextureBrush Class
com.mindfusion.drawing Namespace

TextureBrush Constructor

Overload List

Name	Description
TextureBrush ()	Initializes a new TextureBrush instance.
TextureBrush (Image)	Initializes a new TextureBrush instance with the specified pattern.

See Also

TextureBrush Class
com.mindfusion.drawing Namespace

TextureBrush Constructor ()

Initializes a new TextureBrush instance.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java
`public TextureBrush ()`

See Also

TextureBrush Constructor Overload List
TextureBrush Class
com.mindfusion.drawing Namespace

TextureBrush Constructor (Image)

Initializes a new TextureBrush instance with the specified pattern.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public TextureBrush (
    Image image
)
```

Parameters

image

See Also

TextureBrush Constructor Overload List
TextureBrush Class
com.mindfusion.drawing Namespace

TextureBrush Methods

TextureBrush.applyTo Method

Applies the brush to the specified graphics.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void applyTo (
    Graphics2D g,
    Rectangle2D bounds
)
```

Parameters

g

bounds

See Also

TextureBrush Members
TextureBrush Class
com.mindfusion.drawing Namespace

TextureBrush.clone Method

Creates a copy of a brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public TextureBrush clone ()
```

Return Value

A Brush instance.

See Also

TextureBrush Members
TextureBrush Class
com.mindfusion.drawing Namespace

TextureBrush.getTexture Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Image getTexture ()
```

Return Value

See Also

TextureBrush Members
TextureBrush Class
com.mindfusion.drawing Namespace

TextureBrush.readExternal Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void readExternal (
    ObjectInput in
)
```

Parameters

in

See Also

TextureBrush Members
TextureBrush Class
com.mindfusion.drawing Namespace

TextureBrush.setTexture Method

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void setTexture (
    Image value
)
```

Parameters

value

See Also

TextureBrush Members
TextureBrush Class
com.mindfusion.drawing Namespace

TextureBrush.toColor Method

Returns a single color approximation of the brush.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public Color toColor ()
```

Return Value

See Also

TextureBrush Members
TextureBrush Class
com.mindfusion.drawing Namespace

TextureBrush.writeExternal Method

Implements Externalizable.

Namespace: com.mindfusion.drawing
Package: com.mindfusion.drawing

Syntax

Java

```
public void writeExternal (
    ObjectOutput out
)
```

Parameters

out

See Also

TextureBrush Members
TextureBrush Class
com.mindfusion.drawing Namespace

com.mindfusion.graphs Namespace

Attribute Class

Syntax

Java

```
public class Attribute
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Attribute

See Also

Attribute Members
com.mindfusion.graphs Namespace

Attribute Members

The following tables list the members exposed by the Attribute type.

Public Constructors

	Name	Description
	Attribute	

Public Methods

	Name	Description
	getData	
	getEdges	
	getHeight	
	setData	
	setHeight	

See Also

Attribute Class
com.mindfusion.graphs Namespace

Attribute Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Attribute ()`

See Also

Attribute Class
com.mindfusion.graphs Namespace

Attribute Methods

Attribute.getData Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Object getData ()`

Return Value

See Also

Attribute Members
Attribute Class
com.mindfusion.graphs Namespace

Attribute.getEdges Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public ArrayList<Edge> getEdges ()`

Return Value

See Also

Attribute Members
Attribute Class
com.mindfusion.graphs Namespace

Attribute.getHeight Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public double getHeight ()`

Return Value

See Also

Attribute Members
Attribute Class
com.mindfusion.graphs Namespace

Attribute.setData Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setData (
    Object value
)
```

Parameters

value

See Also

Attribute Members
Attribute Class
com.mindfusion.graphs Namespace

Attribute.setHeight Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setHeight (
    double value
)
```

Parameters

value

See Also

Attribute Members
Attribute Class
com.mindfusion.graphs Namespace

Bend Class

Syntax

Java

```
public class Bend
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Bend

See Also

Bend Members
com.mindfusion.graphs Namespace

Bend Members

The following tables list the members exposed by the Bend type.

Public Constructors

	Name	Description
	Bend	

Public Methods

	Name	Description
	getEdge	
	getHorizontalLane	
	getMaxHNeighbors	
	getMaxVNeighbors	
	getNeighborPoints	
	getVerticalLane	
	setHorizontalLane	
	setMaxHNeighbors	
	setMaxVNeighbors	
	setNeighborPoints	
	setVerticalLane	

See Also

Bend Class
com.mindfusion.graphs Namespace

Bend Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Bend (
    Edge edge
)
```

Parameters

edge

See Also

Bend Class
com.mindfusion.graphs Namespace

Bend Methods

Bend.getEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Edge getEdge ()`

Return Value

See Also

Bend Members
Bend Class
com.mindfusion.graphs Namespace

Bend.getHorizontalLane Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public int getHorizontalLane ()`

Return Value

See Also

Bend Members
Bend Class
com.mindfusion.graphs Namespace

Bend.getMaxHNeighbors Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public int getMaxHNeighbors ()
```

Return Value

See Also

Bend Members
Bend Class
com.mindfusion.graphs Namespace

Bend.getMaxVNeighbors Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public int getMaxVNeighbors ()
```

Return Value

See Also

Bend Members
Bend Class
com.mindfusion.graphs Namespace

Bend.getNeighborPoints Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Point[] getNeighborPoints ()
```

Return Value

See Also

Bend Members
Bend Class
com.mindfusion.graphs Namespace

Bend.getVerticalLane Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int getVerticalLane ()
```

Return Value

See Also

Bend Members
Bend Class
com.mindfusion.graphs Namespace

Bend.setHorizontalLane Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setHorizontalLane (
    int value
)
```

Parameters

value

See Also

Bend Members
Bend Class
com.mindfusion.graphs Namespace

Bend.setMaxHNeighbors Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setMaxHNeighbors (
    int value
)
```

Parameters

value

See Also

Bend Members
Bend Class
com.mindfusion.graphs Namespace

Bend.setMaxVNeighbors Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setMaxVNeighbors (
    int value
)
```

Parameters

value

See Also

Bend Members
Bend Class
com.mindfusion.graphs Namespace

Bend.setNeighborPoints Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setNeighborPoints (
    Point[] value
)
```

Parameters

value

See Also

Bend Members
Bend Class
com.mindfusion.graphs Namespace

Bend.setVerticalLane Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setVerticalLane (
    int value
)
```

Parameters

value

See Also

Bend Members
Bend Class
com.mindfusion.graphs Namespace

BimodalSplit Class

Syntax

Java

```
public class BimodalSplit
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.graphs.BimodalSplit

See Also

BimodalSplit Members
com.mindfusion.graphs Namespace

BimodalSplit Members

The following tables list the members exposed by the BimodalSplit type.

Public Methods

	Name	Description
	undo	
	undoOnCopy	

See Also

BimodalSplit Class
com.mindfusion.graphs Namespace

BimodalSplit Methods

BimodalSplit.undo Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void undo ()
```

See Also

BimodalSplit Members
BimodalSplit Class
com.mindfusion.graphs Namespace

BimodalSplit.undoOnCopy Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void undoOnCopy (
    Graph copy
)
```

Parameters

copy

See Also

BimodalSplit Members
BimodalSplit Class

BinaryTree<T> Class

Syntax

Java
`public class BinaryTree<T>`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.BinaryTree(T)

See Also

BinaryTree(T) Members
com.mindfusion.graphs Namespace

BinaryTree(T) Members

The following tables list the members exposed by the BinaryTree(T) type.

Public Constructors

	Name	Description
	BinaryTree	

Public Fields

	Name	Description
	root	

Public Methods

	Name	Description
	getLeaves	

See Also

BinaryTree<T> Class
com.mindfusion.graphs Namespace

BinaryTree(T) Fields

BinaryTree(T).root Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public BinaryTree.Node root
```

See Also

BinaryTree(T) Members
BinaryTree<T> Class
com.mindfusion.graphs Namespace

BinaryTree(T) Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public BinaryTree (
    T item
)
```

Parameters

item

See Also

BinaryTree<T> Class
com.mindfusion.graphs Namespace

BinaryTree(T) Methods

BinaryTree(T).getLeaves Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public ArrayList<T> getLeaves ()
```

Return Value

See Also

BinaryTree(T) Members
BinaryTree<T> Class
com.mindfusion.graphs Namespace

BlockCutpointGraph Class

Syntax

Java
`public class BlockCutpointGraph extends Graph implements ComponentBlocksHandler`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Graph
    com.mindfusion.graphs.BlockCutpointGraph

See Also

BlockCutpointGraph Members
com.mindfusion.graphs Namespace

BlockCutpointGraph Members

The following tables list the members exposed by the BlockCutpointGraph type.

Public Constructors

	Name	Description
	BlockCutpointGraph	

Public Fields

	Name	Description
	edgeCopyToOrigMap	(Inherited from Graph.)
	edgeOrigToCopyMap	(Inherited from Graph.)
	searchOrder	(Inherited from Graph.)
	vertexCopyToOrigMap	(Inherited from Graph.)
	vertexOrigToCopyMap	(Inherited from Graph.)

Protected Fields

	Name	Description

	edges	(Inherited from Graph.)
	vertices	(Inherited from Graph.)

Public Methods

	Name	Description
	addBlocks	
	addEdge	Overloaded. (Inherited from Graph.)
	addVertex	Overloaded. (Inherited from Graph.)
	addVertexAndOutEdges	(Inherited from Graph.)
	adjacentBlocks	
	allPairShortestPaths	Overloaded. (Inherited from Graph.)
	assignTreeLevels	(Inherited from Graph.)
	bestTreeRoot	(Inherited from Graph.)
	coarsen	(Inherited from Graph.)
	containsRepeatedEdges	(Inherited from Graph.)
	contractEdge	(Inherited from Graph.)
	convertToStGraph	Overloaded. (Inherited from Graph.)
	convertToStGraphVirtualEnds	The input should be biconnected undirected graph. The output is directed acyclic ST graph. (Inherited from Graph.)
	createReverseMaps	(Inherited from Graph.)
	cutVertices	Overloaded.
	depthFirstSearch	Overloaded. (Inherited from Graph.)
	directFromRoot	
	eliminateIntermediateSourcesAndSinks	(Inherited from Graph.)
	embedOnSameFace	(Inherited from Graph.)
	father	(Inherited from Graph.)
	findPendantCut	
	findPlanarSubgraph	(Inherited from Graph.)
	findPlanarSubgraphByBookEmbedding	(Inherited from Graph.)
	findPlanarSubgraphBySimpleEdgeInsertion	(Inherited from Graph.)
	findShortestPath	Overloaded. (Inherited from Graph.)
	findShortestWeightedPath	Overloaded. (Inherited from Graph.)
	getBiconnectedComponents	Overloaded. (Inherited from Graph.)

	getBlock	
	getBlocks	
	getCanonicalOrder	(Inherited from Graph.)
	getCnode	
	getConnectedComponents	(Inherited from Graph.)
	getConnectedComponentsQuickFind	(Inherited from Graph.)
	getConnectedComponentsQuickUnion	(Inherited from Graph.)
	getCutvertex	
	getDualGraph	Overloaded. (Inherited from Graph.)
	getEdgeConnectedComponents	(Inherited from Graph.)
	getEdges	(Inherited from Graph.)
	getLayers	(Inherited from Graph.)
	getLevelPlanarEmbedding	Must be called on a proper hierarchical graph. (Inherited from Graph.)
	getOutsideVertex	Overloaded.
	getPlanarEmbedding	(Inherited from Graph.)
	getRoot	
	getStNumbering	Overloaded. (Inherited from Graph.)
	getTreeChildren	(Inherited from Graph.)
	getVertices	(Inherited from Graph.)
	getWeightedTopologicalNumbering	Overloaded. (Inherited from Graph.)
	isAcyclic	(Inherited from Graph.)
	isBnode	
	isCnode	
	isPendant	
	isPlanar	(Inherited from Graph.)
	isProperHierarchical	Must be called on a simple hierarchical graph. (Inherited from Graph.)
	isTree	(Inherited from Graph.)
	load	(Inherited from Graph.)
	loadMappings	(Inherited from Graph.)
	makeAcyclic	Must be called on a simple connected graph. (Inherited from Graph.)
	makeBiconnected	(Inherited from Graph.)

	makeBimodal	(Inherited from Graph.)
	makeProperHierarchical	Replaces long links with a sequence of virtual nodes and links that connect adjacent levels. Must be called on a simple hierarchical graph. (Inherited from Graph.)
	makeStPlanar	(Inherited from Graph.)
	maximalMatching	(Inherited from Graph.)
	maxWeightedCliqueOfTransitiveDAG	Must be called on a transitive DAG. (Inherited from Graph.)
	minCostPathOrNegativeCycle	(Inherited from Graph.)
	optimalTopologicalNumbering	Overloaded. (Inherited from Graph.)
	partition	(Inherited from Graph.)
	partitionTree	(Inherited from Graph.)
	planarize	Overloaded. (Inherited from Graph.)
	planarMakeBiconnected	Must be called on a planar graph. (Inherited from Graph.)
	removeAllEdges	(Inherited from Graph.)
	removeBnode	
	removeCnode	
	removeEdge	(Inherited from Graph.)
	removeVertex	(Inherited from Graph.)
	reorderTopologically	(Inherited from Graph.)
S	reverse	(Inherited from Graph.)
	save	(Inherited from Graph.)
	saveMappings	(Inherited from Graph.)
	setNewParent	
	splitToMaxDegree	Overloaded. (Inherited from Graph.)
	topologicalSort	(Inherited from Graph.)
	toString	(Inherited from Graph.)
	triangulate	Overloaded. (Inherited from Graph.)

See Also

BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public BlockCutpointGraph (
    Graph graph
)
```

Parameters

graph

See Also

BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph Methods

BlockCutpointGraph.addBlocks Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void addBlocks (
    ArrayList<Graph> blocks,
    ArrayList<Vertex> cuts
)
```

Parameters

blocks

cuts

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.adjacentBlocks Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ExtendedArrayList<Graph> adjacentBlocks (
    Vertex cutVertex
)
```

Parameters

cutVertex

Return Value

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.cutVertices Method

Overload List

Name	Description
BlockCutpointGraph.cutVertices (Graph)	
BlockCutpointGraph.cutVertices (Vertex)	

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.cutVertices Method (Graph)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ExtendedArrayList<Vertex> cutVertices (
    Graph block
)
```

Parameters

block

Return Value

See Also

cutVertices Method Overload List
BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.cutVertices Method (Vertex)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ExtendedArrayList<Vertex> cutVertices (
    Vertex bNode
)
```

Parameters

bNode

Return Value

See Also

cutVertices Method Overload List
BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.directFromRoot Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void directFromRoot ()
```

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.findPendantCut Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Vertex findPendantCut ()
```

Return Value

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.getBlock Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Graph getBlock (
    Vertex bNode
)
```

Parameters

bNode

Return Value

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.getBlocks Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Graph[] getBlocks ()
```

Return Value

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.getCnode Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Vertex getCnode (
    Vertex cut
)
```

Parameters

cut

Return Value

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.getCutvertex Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Vertex getCutvertex (
    Vertex cNode
)
```

Parameters

cNode

Return Value

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.getOutsideVertex Method

Overload List

Name	Description
BlockCutpointGraph.getOutsideVertex (Vertex)	
BlockCutpointGraph.getOutsideVertex (Vertex, Vertex)	

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.getOutsideVertex Method (Vertex)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Vertex getOutsideVertex (
    Vertex bNode
)
```

Parameters

bNode

Return Value

See Also

getOutsideVertex Method Overload List
BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.getOutsideVertex Method (Vertex, Vertex)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Vertex getOutsideVertex (
    Vertex bNode,
    Vertex neighborCnode
)
```

Parameters

bNode

neighborCnode

Return Value

See Also

getOutsideVertex Method Overload List
BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.getRoot Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Vertex getRoot ()
```

Return Value

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.isBnode Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean isBnode (
    Vertex vertex
)
```

Parameters

vertex

Return Value

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.isCnode Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean isCnode (
    Vertex vertex
)
```

Parameters

vertex

Return Value

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.isPendant Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean isPendant (
    Vertex bNode
)
```

Parameters

bNode

Return Value

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.removeBnode Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void removeBnode (
    Vertex bNode
)
```

Parameters

bNode

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.removeCnode Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void removeCnode (
    Vertex cNode
)
```

Parameters

cNode

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

BlockCutpointGraph.setNewParent Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

`public void setNewParent (`
`  Vertex vertex,`
`  Vertex parent`
`)`

Parameters

vertex

parent

See Also

BlockCutpointGraph Members
BlockCutpointGraph Class
com.mindfusion.graphs Namespace

Cell Class

Syntax

Java
`public class Cell`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.DrawingGrid.Cell

See Also

Cell Members
com.mindfusion.graphs Namespace

Cell Members

The following tables list the members exposed by the Cell type.

Public Constructors

	Name	Description
	Cell	

Public Methods

	Name	Description

	add	
	containsVertex	
	containsVertexOrBend	
	countEdges	
	getContent	
	removeEdgeOrBend	

See Also

Cell Class
com.mindfusion.graphs Namespace

Cell Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Cell ()
```

See Also

Cell Class
com.mindfusion.graphs Namespace

Cell Methods

Cell.add Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void add (
    Object item
)
```

Parameters

item

See Also

Cell Members
Cell Class
com.mindfusion.graphs Namespace

Cell.containsVertex Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean containsVertex ()
```

Return Value

See Also

Cell Members
Cell Class
com.mindfusion.graphs Namespace

Cell.containsVertexOrBend Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean containsVertexOrBend ()
```

Return Value

See Also

Cell Members
Cell Class
com.mindfusion.graphs Namespace

Cell.countEdges Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int countEdges (
    boolean horizontal
```

```
)
```

Parameters

horizontal

Return Value

See Also

Cell Members
Cell Class
com.mindfusion.graphs Namespace

Cell.getContent Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Object> getContent ()
```

Return Value

See Also

Cell Members
Cell Class
com.mindfusion.graphs Namespace

Cell.removeEdgeOrBend Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void removeEdgeOrBend (
    Edge e,
    boolean horizontal
)
```

Parameters

e

horizontal

See Also

Cell Members
Cell Class
com.mindfusion.graphs Namespace

CircularDrawing Class

Syntax

Java
`public class CircularDrawing`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.CircularDrawing

See Also

CircularDrawing Members
com.mindfusion.graphs Namespace

CircularDrawing Members

The following tables list the members exposed by the CircularDrawing type.

Public Constructors

	Name	Description
	CircularDrawing	

Public Methods

	Name	Description
	getVertexOrder	

See Also

CircularDrawing Class
com.mindfusion.graphs Namespace

CircularDrawing Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public CircularDrawing (
    Graph graph,
    int siftingRounds
)
```

Parameters

graph

siftingRounds

See Also

CircularDrawing Class
com.mindfusion.graphs Namespace

CircularDrawing Methods

CircularDrawing.getVertexOrder Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Vertex> getVertexOrder ()
```

Return Value

See Also

CircularDrawing Members
CircularDrawing Class
com.mindfusion.graphs Namespace

ComponentBlocksHandler Interface

Syntax

Java

```
public interface ComponentBlocksHandler
```

Inheritors

com.mindfusion.graphs.BlockCutpointGraph

See Also

ComponentBlocksHandler Members
com.mindfusion.graphs Namespace

ComponentBlocksHandler Members

The following tables list the members exposed by the ComponentBlocksHandler type.

Public Methods

	Name	Description
	addBlocks	

See Also

ComponentBlocksHandler Interface
com.mindfusion.graphs Namespace

ComponentBlocksHandler Methods

ComponentBlocksHandler.addBlocks Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
void addBlocks (
    ArrayList<Graph> blocks,
    ArrayList<Vertex> cuts
)
```

Parameters

blocks

cuts

See Also

ComponentBlocksHandler Members
ComponentBlocksHandler Interface
com.mindfusion.graphs Namespace

ConstrainedVisibility Class

Syntax

Java

```
public class ConstrainedVisibility extends Representation
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Representation
    com.mindfusion.graphs.ConstrainedVisibility

See Also

ConstrainedVisibility Members
com.mindfusion.graphs Namespace

ConstrainedVisibility Members

The following tables list the members exposed by the ConstrainedVisibility type.

Public Constructors

	Name	Description
	ConstrainedVisibility	

Protected Fields

	Name	Description
	d	(Inherited from Representation.)
	s	(Inherited from Representation.)
	t	(Inherited from Representation.)
	X	(Inherited from Representation.)
	Y	(Inherited from Representation.)

Public Methods

	Name	Description
	getDualGraph	(Inherited from Representation.)
	getEdgeSegments	
	getInEdges	(Inherited from Representation.)
	getInMedian	(Inherited from Representation.)
	getOutEdges	(Inherited from Representation.)
	getOutMedian	(Inherited from Representation.)
	getSink	(Inherited from Representation.)
	getSource	(Inherited from Representation.)

	getTopologicalSort	(Inherited from Representation.)
	getVertexSegments	
	leftmostIncoming	(Inherited from Representation.)
	leftmostOutgoing	(Inherited from Representation.)
	rightmostOutgoing	(Inherited from Representation.)

Protected Methods

	Name	Description
	dest	Overloaded. (Inherited from Representation.)
	left	Overloaded. (Inherited from Representation.)
	orig	Overloaded. (Inherited from Representation.)
	right	Overloaded. (Inherited from Representation.)

See Also

ConstrainedVisibility Class
com.mindfusion.graphs Namespace

ConstrainedVisibility Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ConstrainedVisibility (
    Graph stGraph,
    ArrayList<ArrayList<Edge>> vpaths
)
```

Parameters

stGraph

vpaths

See Also

ConstrainedVisibility Class
com.mindfusion.graphs Namespace

ConstrainedVisibility Methods

ConstrainedVisibility.getEdgeSegments Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public HashMap<Edge, VSegment> getEdgeSegments ()
```

Return Value

See Also

ConstrainedVisibility Members
ConstrainedVisibility Class
com.mindfusion.graphs Namespace

ConstrainedVisibility.getVertexSegments Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public HashMap<Vertex, HSegment> getVertexSegments ()
```

Return Value

See Also

ConstrainedVisibility Members
ConstrainedVisibility Class
com.mindfusion.graphs Namespace

DatabaseDrawing Class

Syntax

```
Java
public class DatabaseDrawing
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.DatabaseDrawing

See Also

DatabaseDrawing Members
com.mindfusion.graphs Namespace

DatabaseDrawing Members

The following tables list the members exposed by the DatabaseDrawing type.

Public Constructors

	Name	Description
	DatabaseDrawing	

Protected Fields

	Name	Description
	edgePoints	
	vertexPoints	

Public Methods

	Name	Description
	getEdgePoints	
	getVertexPoints	

See Also

DatabaseDrawing Class
com.mindfusion.graphs Namespace

DatabaseDrawing Fields

DatabaseDrawing.edgePoints Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`protected HashMap<Edge, ArrayList<PointF>> edgePoints`

See Also

DatabaseDrawing Members
DatabaseDrawing Class
com.mindfusion.graphs Namespace

DatabaseDrawing.vertexPoints Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
protected HashMap<Vertex, PointF> vertexPoints
```

See Also

DatabaseDrawing Members
DatabaseDrawing Class
com.mindfusion.graphs Namespace

DatabaseDrawing Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public DatabaseDrawing (
    Graph graph
)
```

Parameters

graph

See Also

DatabaseDrawing Class
com.mindfusion.graphs Namespace

DatabaseDrawing Methods

DatabaseDrawing.getEdgePoints Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Edge, ArrayList<PointF>> getEdgePoints ()
```

Return Value

See Also

DatabaseDrawing Members
DatabaseDrawing Class
com.mindfusion.graphs Namespace

DatabaseDrawing.getVertexPoints Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Vertex, PointF> getVertexPoints ()
```

Return Value

See Also

DatabaseDrawing Members
DatabaseDrawing Class
com.mindfusion.graphs Namespace

DrawingGrid Class

Syntax

Java

```
public class DrawingGrid
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.graphs.DrawingGrid

See Also

DrawingGrid Members
com.mindfusion.graphs Namespace

DrawingGrid Members

The following tables list the members exposed by the DrawingGrid type.

Public Constructors

	Name	Description
	DrawingGrid	Overloaded.

Public Methods

	Name	Description
	countHorizontalEdgesCrossings	
	countVerticalEdgesCrossings	
	get	
	getBounds	
	getColumnWidths	
	getEdgePointPosition	
	getEdgePoints	
	getPosition	
	getRowHeights	
	getVertexPoints	
	refine	
	refineSpace	
	setApartOverlappingEdges	
	setCellDimensions	
	setHorizontalEdgesInRange	
	setVerticalEdgesInRange	

See Also

DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid Constructor

Overload List

Name	Description
DrawingGrid (Graph, HashMap)	

DrawingGrid (Graph, HashMap, HashMap>)	

See Also

DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid Constructor (Graph, HashMap<Vertex, Point>)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public DrawingGrid (
    Graph graph,
    HashMap<Vertex, Point> vertexPoints
)
```

Parameters

graph

vertexPoints

See Also

DrawingGrid Constructor Overload List
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid Constructor (Graph, HashMap<Vertex, Point>, HashMap<Edge, ArrayList<Point>>)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public DrawingGrid (
    Graph graph,
    HashMap<Vertex, Point> vertexPoints,
    HashMap<Edge, ArrayList<Point>> edgePoints
)
```

Parameters

graph

vertexPoints

edgePoints

See Also

DrawingGrid Constructor Overload List
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid Methods

DrawingGrid.countHorizontalEdgesCrossings Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int countHorizontalEdgesCrossings (
    int edges,
    int row,
    int c1,
    int c2,
    int[] permutation
)
```

Parameters

edges

row

c1

c2

permutation

Return Value

See Also

DrawingGrid Members
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid.countVerticalEdgesCrossings Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int countVerticalEdgesCrossings (
    int edges,
    int column,
    int r1,
```

```
    int r2,
    int[] permutation
)
```

Parameters

edges

column

r1

r2

permutation

Return Value

See Also

DrawingGrid Members
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid.get Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public DrawingGrid.Cell get (
    int column,
    int row
)
```

Parameters

column

row

Return Value

See Also

DrawingGrid Members
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid.getBounds Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Rectangle getBounds ()
```

Return Value

See Also

DrawingGrid Members
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid.getColumnWidths Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Integer, Float> getColumnWidths ()
```

Return Value

See Also

DrawingGrid Members
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid.getEdgePointPosition Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public PointF getEdgePointPosition (
    Point point,
    Edge edge,
    float width,
    float height
)
```

Parameters

point

edge

width

height

Return Value

See Also

DrawingGrid Members
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid.getEdgePoints Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Edge, ArrayList<Point>> getEdgePoints ()
```

Return Value

See Also

DrawingGrid Members
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid.getPosition Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public PointF getPosition (
    Point point
)
```

Parameters

point

Return Value

See Also

DrawingGrid Members
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid.getRowHeights Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Integer, Float> getRowHeights ()
```

Return Value

See Also

DrawingGrid Members
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid.getVertexPoints Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Vertex, Point> getVertexPoints ()
```

Return Value

See Also

DrawingGrid Members
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid.refine Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void refine (
    int iterations
)
```

Parameters

iterations

See Also

DrawingGrid Members
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid.refineSpace Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void refineSpace ()
```

See Also

DrawingGrid Members
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid.setApartOverlappingEdges Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setApartOverlappingEdges ()
```

See Also

DrawingGrid Members
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid.setCellDimensions Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setCellDimensions (
    VertexSizeFunction vertexSize,
    float padding,
```

```
    float edgeCellSize
)
```

Parameters

vertexSize

padding

edgeCellSize

See Also

DrawingGrid Members
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid.setHorizontalEdgesInRange Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setHorizontalEdgesInRange (
    int edges,
    int row,
    int c1,
    int c2
)
```

Parameters

edges

row

c1

c2

See Also

DrawingGrid Members
DrawingGrid Class
com.mindfusion.graphs Namespace

DrawingGrid.setVerticalEdgesInRange Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setVerticalEdgesInRange (
    int edges,
    int column,
    int r1,
    int r2
)
```

Parameters

edges

column

r1

r2

See Also

DrawingGrid Members
DrawingGrid Class
com.mindfusion.graphs Namespace

DualGraph Class

Syntax

Java
`public class DualGraph extends Graph`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Graph
    com.mindfusion.graphs.DualGraph

See Also

DualGraph Members
com.mindfusion.graphs Namespace

DualGraph Members

The following tables list the members exposed by the DualGraph type.

Public Constructors

	Name	Description
	DualGraph	Overloaded.

Public Fields

	Name	Description
	edgeCopyToOrigMap	(Inherited from Graph.)
	edgeOrigToCopyMap	(Inherited from Graph.)
	searchOrder	(Inherited from Graph.)
	vertexCopyToOrigMap	(Inherited from Graph.)
	vertexOrigToCopyMap	(Inherited from Graph.)

Protected Fields

	Name	Description
	edges	(Inherited from Graph.)
	vertices	(Inherited from Graph.)

Public Methods

	Name	Description
	addEdge	Overloaded. (Inherited from Graph.)
	addVertex	Overloaded. (Inherited from Graph.)
	addVertexAndOutEdges	(Inherited from Graph.)
	allPairShortestPaths	Overloaded. (Inherited from Graph.)
	assignTreeLevels	(Inherited from Graph.)
	bestTreeRoot	(Inherited from Graph.)
	cacheIncidentFace	
	coarsen	(Inherited from Graph.)
	containsRepeatedEdges	(Inherited from Graph.)
	contractEdge	(Inherited from Graph.)
	convertToStGraph	Overloaded. (Inherited from Graph.)
	convertToStGraphVirtualEnds	The input should be biconnected undirected graph. The output is directed acyclic ST graph. (Inherited from Graph.)
	createReverseMaps	(Inherited from Graph.)
	depthFirstSearch	Overloaded. (Inherited from Graph.)
	eliminateIntermediateSourcesAndSinks	(Inherited from Graph.)
	embedOnSameFace	(Inherited from Graph.)
	father	(Inherited from Graph.)
	findPlanarSubgraph	(Inherited from Graph.)
	findPlanarSubgraphByBookEmbedding	(Inherited from Graph.)

	findPlanarSubgraphBySimpleEdgeInsertion	(Inherited from Graph.)
	findShortestPath	Overloaded. (Inherited from Graph.)
	findShortestWeightedPath	Overloaded. (Inherited from Graph.)
	getBiconnectedComponents	Overloaded. (Inherited from Graph.)
	getCanonicalOrder	(Inherited from Graph.)
	getCommonEdge	
	getCommonEdgeMinWeight	
	getConnectedComponents	(Inherited from Graph.)
	getConnectedComponentsQuickFind	(Inherited from Graph.)
	getConnectedComponentsQuickUnion	(Inherited from Graph.)
	getDualGraph	Overloaded. (Inherited from Graph.)
	getEdgeConnectedComponents	(Inherited from Graph.)
	getEdges	(Inherited from Graph.)
	getEmbedding	
	getFaces	
	getFaceVertices	
	getIncidentFaces	Gets a set of faces whose boundary contains the specified vertex.
	getLayers	(Inherited from Graph.)
	getLevelPlanarEmbedding	Must be called on a proper hierarchical graph. (Inherited from Graph.)
	getOriginalEdge	
	getPlanarEmbedding	(Inherited from Graph.)
	getStNumbering	Overloaded. (Inherited from Graph.)
	getTreeChildren	(Inherited from Graph.)
	getVertices	(Inherited from Graph.)
	getVertices	
	getWeightedTopologicalNumbering	Overloaded. (Inherited from Graph.)
	isAcyclic	(Inherited from Graph.)
	isPlanar	(Inherited from Graph.)
	isProperHierarchical	Must be called on a simple hierarchical graph. (Inherited from Graph.)
	isTree	(Inherited from Graph.)
	load	(Inherited from Graph.)

	loadMappings	(Inherited from Graph.)
	makeAcyclic	Must be called on a simple connected graph. (Inherited from Graph.)
	makeBiconnected	(Inherited from Graph.)
	makeBimodal	(Inherited from Graph.)
	makeProperHierarchical	Replaces long links with a sequence of virtual nodes and links that connect adjacent levels. Must be called on a simple hierarchical graph. (Inherited from Graph.)
	makeStPlanar	(Inherited from Graph.)
	maximalMatching	(Inherited from Graph.)
	maxWeightedCliqueOfTransitiveDAG	Must be called on a transitive DAG. (Inherited from Graph.)
	minCostPathOrNegativeCycle	(Inherited from Graph.)
	optimalTopologicalNumbering	Overloaded. (Inherited from Graph.)
	partition	(Inherited from Graph.)
	partitionTree	(Inherited from Graph.)
	planarize	Overloaded. (Inherited from Graph.)
	planarMakeBiconnected	Must be called on a planar graph. (Inherited from Graph.)
	removeAllEdges	(Inherited from Graph.)
	removeEdge	(Inherited from Graph.)
	removeVertex	(Inherited from Graph.)
	reorderTopologically	(Inherited from Graph.)
S	reverse	(Inherited from Graph.)
	save	(Inherited from Graph.)
	saveMappings	(Inherited from Graph.)
	splitExternalFace	
	splitToMaxDegree	Overloaded. (Inherited from Graph.)
	topologicalSort	(Inherited from Graph.)
	toString	
	triangulate	Overloaded. (Inherited from Graph.)

See Also

DualGraph Class
com.mindfusion.graphs Namespace

DualGraph Constructor

Overload List

Name	Description
DualGraph (Graph, Embedding)	
DualGraph (Graph, Embedding, boolean)	
DualGraph (Graph, Embedding, Vertex, Vertex)	

See Also

DualGraph Class
com.mindfusion.graphs Namespace

DualGraph Constructor (Graph, Embedding)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public DualGraph (
    Graph graph,
    Embedding embedding
)
```

Parameters

graph

embedding

See Also

DualGraph Constructor Overload List
DualGraph Class
com.mindfusion.graphs Namespace

DualGraph Constructor (Graph, Embedding, boolean)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public DualGraph (
    Graph graph,
    Embedding embedding,
    boolean cacheIncidentFaces
)
```

Parameters

graph

embedding

cacheIncidentFaces

See Also

DualGraph Constructor Overload List
DualGraph Class
com.mindfusion.graphs Namespace

DualGraph Constructor (Graph, Embedding, Vertex, Vertex)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public DualGraph (
    Graph graph,
    Embedding embedding,
    Vertex s,
    Vertex t
)
```

Parameters

graph

embedding

s

t

See Also

DualGraph Constructor Overload List
DualGraph Class
com.mindfusion.graphs Namespace

DualGraph Methods

DualGraph.cacheIncidentFace Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public void cacheIncidentFace (
    Vertex v,
    Face f
)
```

Parameters

v

f

See Also

DualGraph Members
DualGraph Class
com.mindfusion.graphs Namespace

DualGraph.getCommonEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Edge getCommonEdge (
    Face f1,
    Face f2
)
```

Parameters

f1

f2

Return Value

See Also

DualGraph Members
DualGraph Class
com.mindfusion.graphs Namespace

DualGraph.getCommonEdgeMinWeight Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge getCommonEdgeMinWeight (
    Face f1,
    Face f2
)
```

Parameters

f1

f2

Return Value

See Also

DualGraph Members
DualGraph Class
com.mindfusion.graphs Namespace

DualGraph.getEmbedding Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Embedding getEmbedding ()
```

Return Value

See Also

DualGraph Members
DualGraph Class
com.mindfusion.graphs Namespace

DualGraph.getFaces Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Face> getFaces ()
```

Return Value

See Also

DualGraph Members
DualGraph Class
com.mindfusion.graphs Namespace

DualGraph.getFaceVertices Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Set<Vertex> getFaceVertices (
    ArrayList<Face> faceList
)
```

Parameters

faceList

Return Value

See Also

DualGraph Members
DualGraph Class
com.mindfusion.graphs Namespace

DualGraph.getIncidentFaces Method

Gets a set of faces whose boundary contains the specified vertex.

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Face> getIncidentFaces (
    Vertex v
)
```

Parameters

v
A vertex in the original graph.

Return Value

A set of faces whose boundary contains v.

See Also

DualGraph Members
DualGraph Class

DualGraph.getOriginalEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge getOriginalEdge (
    Edge e
)
```

Parameters

e

Return Value

See Also

DualGraph Members
DualGraph Class
com.mindfusion.graphs Namespace

DualGraph.getVertices Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Set<Vertex> getVertices (
    Face face
)
```

Parameters

face

Return Value

See Also

DualGraph Members
DualGraph Class
com.mindfusion.graphs Namespace

DualGraph.splitExternalFace Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public void splitExternalFace (
    Vertex s,
    Vertex t
)
```

Parameters

s

t

See Also

DualGraph Members
DualGraph Class
com.mindfusion.graphs Namespace

DualGraph.toString Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public String toString ()
```

Return Value

See Also

DualGraph Members
DualGraph Class
com.mindfusion.graphs Namespace

Edge Class

Syntax

```
Java
public class Edge
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.graphs.Edge

See Also

Edge Members
com.mindfusion.graphs Namespace

Edge Members

The following tables list the members exposed by the Edge type.

Public Constructors

	Name	Description
	Edge	Overloaded.

Public Fields

	Name	Description
	debugId	

Public Methods

	Name	Description
	adjacentTo	
	changeDestination	
	changeEnd	
	changeOrigin	
	createReverseEdge	
	getCapacity	
	getCommonVertex	
	getCost	
	getDestination	
	getEnds	
	getFlow	
	getIsLoop	
	getLowerFlowBound	
	getOrigin	
	getOtherEnd	
	getResidualCapacity	

	getWeight	
	incidentWith	
	joins	
	orientFrom	
	orientTo	
	reverse	
	setCapacity	
	setCost	
	setDestination	
	setFlow	
	setLowerFlowBound	
	setOrigin	
	setWeight	
	toString	

See Also

Edge Class
com.mindfusion.graphs Namespace

Edge Fields

Edge.debugId Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public String debugId`

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge Constructor

Overload List

Name	Description
Edge (Vertex, Vertex)	
Edge (Vertex, Vertex, boolean)	
Edge (Vertex, Vertex, Edge)	

See Also

Edge Class
com.mindfusion.graphs Namespace

Edge Constructor (Vertex, Vertex)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge (
    Vertex origin,
    Vertex destination
)
```

Parameters

origin

destination

See Also

Edge Constructor Overload List
Edge Class
com.mindfusion.graphs Namespace

Edge Constructor (Vertex, Vertex, boolean)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge (
    Vertex origin,
    Vertex destination,
    boolean setEdges
)
```

Parameters

origin

destination

setEdges

See Also

Edge Constructor Overload List
Edge Class
com.mindfusion.graphs Namespace

Edge Constructor (Vertex, Vertex, Edge)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge (
    Vertex origin,
    Vertex destination,
    Edge prototype
)
```

Parameters

origin

destination

prototype

See Also

Edge Constructor Overload List
Edge Class
com.mindfusion.graphs Namespace

Edge Methods

Edge.adjacentTo Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean adjacentTo (
    Edge edge
)
```

Parameters

edge

Return Value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.changeDestination Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void changeDestination (
    Vertex v
)
```

Parameters

v

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.changeEnd Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void changeEnd (
    Vertex oldVertex,
    Vertex newVertex
)
```

Parameters

oldVertex

newVertex

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.changeOrigin Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void changeOrigin (
    Vertex v
)
```

Parameters

v

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.createReverseEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge createReverseEdge ()
```

Return Value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.getCapacity Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int getCapacity ()
```

Return Value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.getCommonVertex Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Vertex getCommonVertex (
    Edge edge
)
```

Parameters

edge

Return Value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.getCost Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int getCost ()
```

Return Value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.getDestination Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Vertex getDestination ()`

Return Value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.getEnds Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Vertex[] getEnds ()`

Return Value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.getFlow Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public int getFlow ()`

Return Value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.getIsLoop Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public boolean getIsLoop ()`

Return Value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.getLowerFlowBound Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public int getLowerFlowBound ()`

Return Value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.getOrigin Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Vertex getOrigin ()
```

Return Value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.getOtherEnd Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Vertex getOtherEnd (
    Vertex vertex
)
```

Parameters

vertex

Return Value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.getResidualCapacity Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int getResidualCapacity ()
```

Return Value

See Also

Edge Members
Edge Class

Edge.getWeight Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public float getWeight ()
```

Return Value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.incidentWith Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean incidentWith (
    Vertex vertex
)
```

Parameters

vertex

Return Value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.joins Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean joins (
    Vertex node1,
    Vertex node2
)
```

Parameters

node1

node2

Return Value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.orientFrom Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void orientFrom (
    Vertex vertex
)
```

Parameters

vertex

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.orientTo Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void orientTo (
    Vertex vertex
)
```

Parameters

vertex

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.reverse Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void reverse ()
```

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.setCapacity Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setCapacity (
    int value
)
```

Parameters

value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.setCost Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setCost (
    int value
)
```

Parameters

value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.setDestination Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setDestination (
    Vertex value
)
```

Parameters

value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.setFlow Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setFlow (
    int value
)
```

Parameters

value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.setLowerFlowBound Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setLowerFlowBound (
    int value
)
```

Parameters

value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.setOrigin Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setOrigin (
    Vertex value
)
```

Parameters

value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.setWeight Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setWeight (
    float value
)
```

Parameters

value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

Edge.toString Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public String toString ()
```

Return Value

See Also

Edge Members
Edge Class
com.mindfusion.graphs Namespace

EdgeShape Class

Syntax

Java

```
public class EdgeShape
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.EdgeShape

See Also

EdgeShape Members
com.mindfusion.graphs Namespace

EdgeShape Members

The following tables list the members exposed by the EdgeShape type.

Public Constructors

	Name	Description
	EdgeShape	

Public Methods

	Name	Description
	getAngle	
	getBends	
	getEdge	
	setAngle	
	setBends	
	setEdge	

See Also

EdgeShape Class
com.mindfusion.graphs Namespace

EdgeShape Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public EdgeShape (
    Edge edge
)
```

Parameters

edge

See Also

EdgeShape Class
com.mindfusion.graphs Namespace

EdgeShape Methods

EdgeShape.getAngle Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int getAngle ()
```

Return Value

See Also

EdgeShape Members
EdgeShape Class
com.mindfusion.graphs Namespace

EdgeShape.getBends Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Integer> getBends ()
```

Return Value

See Also

EdgeShape Members
EdgeShape Class
com.mindfusion.graphs Namespace

EdgeShape.getEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge getEdge ()
```

Return Value

See Also

EdgeShape Members
EdgeShape Class
com.mindfusion.graphs Namespace

EdgeShape.setAngle Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setAngle (
    int value
)
```

Parameters

value

See Also

EdgeShape Members
EdgeShape Class
com.mindfusion.graphs Namespace

EdgeShape.setBends Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setBends (
    ArrayList<Integer> value
)
```

Parameters

value

See Also

EdgeShape Members
EdgeShape Class
com.mindfusion.graphs Namespace

EdgeShape.setEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setEdge (
    Edge value
)
```

Parameters

value

See Also

EdgeShape Members
EdgeShape Class
com.mindfusion.graphs Namespace

Embedding Class

Syntax

Java

```
public class Embedding
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Embedding

See Also

Embedding Members
com.mindfusion.graphs Namespace

Embedding Members

The following tables list the members exposed by the Embedding type.

Public Constructors

	Name	Description
	Embedding	Overloaded.

Public Methods

	Name	Description
	add	
	addBlockEmbedding	
	contractEdge	
	createDirectedEdges	
	edgesBetween	
	get	
	getExternalFace	
	getFaces	
	getNext	
	getNextRightFaceEdge	
	getPrevious	
	getReverse	
	getVertices	
	insertEdge	
	isBimodal	Overloaded.
	load	
	quasiCapacity	
	remove	
	replaceEdge	
	resetFaces	
	save	
	toString	

See Also

Embedding Class
com.mindfusion.graphs Namespace

Embedding Constructor

Overload List

Name	Description
Embedding (Embedding)	
Embedding (Embedding, HashMap, HashMap)	
Embedding (Graph)	

See Also

Embedding Class
com.mindfusion.graphs Namespace

Embedding Constructor (Embedding)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Embedding (
    Embedding copy
)
```

Parameters

copy

See Also

Embedding Constructor Overload List
Embedding Class
com.mindfusion.graphs Namespace

Embedding Constructor (Embedding, HashMap<Vertex, Vertex>, HashMap<Edge, Edge>)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Embedding (
    Embedding copy,
    HashMap<Vertex, Vertex> vertexCopyToOrigMap,
    HashMap<Edge, Edge> edgeCopyToOrigMap
)
```

Parameters

copy

vertexCopyToOrigMap

edgeCopyToOrigMap

See Also

Embedding Constructor Overload List
Embedding Class
com.mindfusion.graphs Namespace

Embedding Constructor (Graph)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Embedding (
    Graph graph
)
```

Parameters

graph

See Also

Embedding Constructor Overload List
Embedding Class
com.mindfusion.graphs Namespace

Embedding Methods

Embedding.add Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void add (
    Vertex v
)
```

Parameters

v

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.addBlockEmbedding Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void addBlockEmbedding (
    Graph block,
    HashMap<Vertex, ArrayList<Edge>> blockEmbedding
)
```

Parameters

block

blockEmbedding

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.contractEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void contractEdge (
    Edge edge,
    Vertex vertex
)
```

Parameters

edge

vertex

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.createDirectedEdges Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void createDirectedEdges ()
```

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.edgesBetween Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Edge> edgesBetween (
    Edge edge1,
    Edge edge2,
    Vertex vertex
)
```

Parameters

edge1

edge2

vertex

Return Value

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.get Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Edge> get (
    Vertex v
)
```

Parameters

v

Return Value

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.getExternalFace Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Face getExternalFace ()
```

Return Value

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.getFaces Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public ArrayList<Face> getFaces ()
```

Return Value

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.getNext Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Edge getNext (
    Vertex v,
    Edge e
)
```

Parameters

v

e

Return Value

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.getNextRightFaceEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Edge getNextRightFaceEdge (
    Edge e
)
```

Parameters

e

Return Value

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.getPrevious Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge getPrevious (
    Vertex v,
    Edge e
)
```

Parameters

v

e

Return Value

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.getReverse Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge getReverse (
    Edge e
)
```

Parameters

e

Return Value

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.getVertices Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Collection<Vertex> getVertices ()
```

Return Value

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.insertEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void insertEdge (
    Edge edge,
    Vertex vertex,
    Face face
)
```

Parameters

edge

vertex

face

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.isBimodal Method

Overload List

Name	Description
Embedding.isBimodal ()	
Embedding.isBimodal (Vertex)	

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.isBimodal Method ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public boolean isBimodal ()`

Return Value

See Also

isBimodal Method Overload List
Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.isBimodal Method (Vertex)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

`public boolean isBimodal (`
`  Vertex v`
`)`

Parameters

v

Return Value

See Also

isBimodal Method Overload List
Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.load Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void load (
    String fileName
)
```

Parameters

fileName

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.quasiCapacity Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int quasiCapacity (
    Face face
)
```

Parameters

face

Return Value

See Also

Embedding Members
Embedding Class

Embedding.remove Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void remove (
    Vertex v
)
```

Parameters

v

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.replaceEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void replaceEdge (
    Edge edge,
    Vertex vertex
)
```

Parameters

edge

vertex

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.resetFaces Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void resetFaces ()
```

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.save Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void save (
    String fileName
)
```

Parameters

fileName

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Embedding.toString Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public String toString ()
```

Return Value

See Also

Embedding Members
Embedding Class
com.mindfusion.graphs Namespace

Face Class

Syntax

Java
`public class Face`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.graphs.Face

See Also

Face Members
com.mindfusion.graphs Namespace

Face Members

The following tables list the members exposed by the Face type.

Public Constructors

	Name	Description
	Face	Overloaded.

Public Methods

	Name	Description
	adjacentTo	
	edgeFromVertex	
	enumVertices	
	getBigAngles	
	getCommonEdge	
	getDegree	
	getEdges	
	getVertices	
	incidentWith	
	isCycle	
	replaceEdge	
	setEdges	

	toString	

See Also

Face Class
com.mindfusion.graphs Namespace

Face Constructor

Overload List

Name	Description
Face ()	
Face (Face)	

See Also

Face Class
com.mindfusion.graphs Namespace

Face Constructor ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Face ()
```

See Also

Face Constructor Overload List
Face Class
com.mindfusion.graphs Namespace

Face Constructor (Face)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Face (
    Face prototype
)
```

Parameters

prototype

See Also

Face Constructor Overload List
Face Class
com.mindfusion.graphs Namespace

Face Methods

Face.adjacentTo Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean adjacentTo (
    Face face
)
```

Parameters

face

Return Value

See Also

Face Members
Face Class
com.mindfusion.graphs Namespace

Face.edgeFromVertex Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge edgeFromVertex (
    Vertex vertex
)
```

Parameters

vertex

Return Value

See Also

Face Members
Face Class
com.mindfusion.graphs Namespace

Face.enumVertices Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public ArrayList<Vertex> enumVertices ()`

Return Value

See Also

Face Members
Face Class
com.mindfusion.graphs Namespace

Face.getBigAngles Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public ArrayList<Vertex> getBigAngles ()`

Return Value

See Also

Face Members
Face Class
com.mindfusion.graphs Namespace

Face.getCommonEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge getCommonEdge (
    Face face
)
```

Parameters

face

Return Value

See Also

Face Members
Face Class
com.mindfusion.graphs Namespace

Face.getDegree Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int getDegree ()
```

Return Value

See Also

Face Members
Face Class
com.mindfusion.graphs Namespace

Face.getEdges Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Edge> getEdges ()
```

Return Value

See Also

Face Members
Face Class

Face.getVertices Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Set<Vertex> getVertices ()
```

Return Value

See Also

Face Members
Face Class
com.mindfusion.graphs Namespace

Face.incidentWith Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean incidentWith (
    Vertex v
)
```

Parameters

v

Return Value

See Also

Face Members
Face Class
com.mindfusion.graphs Namespace

Face.isCycle Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean isCycle ()
```

Return Value

See Also

Face Members
Face Class
com.mindfusion.graphs Namespace

Face.replaceEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void replaceEdge (
    Edge edge,
    ArrayList<Edge> replacement
)
```

Parameters

edge

replacement

See Also

Face Members
Face Class
com.mindfusion.graphs Namespace

Face.setEdges Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setEdges (
    ArrayList<Edge> value
)
```

Parameters

value

See Also

Face Members
Face Class
com.mindfusion.graphs Namespace

Face.toString Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public String toString ()
```

Return Value

See Also

Face Members
Face Class
com.mindfusion.graphs Namespace

FractalDrawing Class

A tree drawing algorithm that places child nodes symmetrically around their parent node. Nodes at the lowest level are arranged directly in a circle around their parent. At the upper level, the already arranged nodes form branches that are arranged in a circle around the new parent node. The algorithm is recursively repeated till the highest level is reached.

Syntax

```
Java
public class FractalDrawing
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.FractalDrawing

See Also

FractalDrawing Members
com.mindfusion.graphs Namespace

FractalDrawing Members

A tree drawing algorithm that places child nodes symmetrically around their parent node. Nodes at the lowest level are arranged directly in a circle around their parent. At the upper level, the already arranged nodes form branches that are arranged in a circle around the new parent node. The algorithm is recursively repeated till the highest level is reached.

The following tables list the members exposed by the FractalDrawing type.

Public Constructors

	Name	Description
	FractalDrawing	

Public Methods

	Name	Description
	getVertexPoints	

See Also

FractalDrawing Class
com.mindfusion.graphs Namespace

FractalDrawing Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public FractalDrawing (
    Graph graph,
    Vertex root
)
```

Parameters

graph

root

See Also

FractalDrawing Class
com.mindfusion.graphs Namespace

FractalDrawing Methods

FractalDrawing.getVertexPoints Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public ExtendedHashMap<Vertex, PointD> getVertexPoints ()`

Return Value

See Also

FractalDrawing Members
FractalDrawing Class
com.mindfusion.graphs Namespace

Graph Class

Syntax

Java
`public class Graph`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Graph
    com.mindfusion.graphs.BlockCutpointGraph
    com.mindfusion.graphs.DualGraph
    com.mindfusion.graphs.IntervalGraph
    com.mindfusion.graphs.Network
    com.mindfusion.graphs.OverlapGraph
    com.mindfusion.graphs.VertexExchangeGraph

See Also

Graph Members
com.mindfusion.graphs Namespace

Graph Members

The following tables list the members exposed by the Graph type.

Public Constructors

	Name	Description
	Graph	Overloaded.

Public Fields

	Name	Description
	edgeCopyToOrigMap	

	edgeOrigToCopyMap	
	searchOrder	
	vertexCopyToOrigMap	
	vertexOrigToCopyMap	

Protected Fields

	Name	Description
	edges	
	vertices	

Public Methods

	Name	Description
	addEdge	Overloaded.
	addVertex	Overloaded.
	addVertexAndOutEdges	
	allPairShortestPaths	Overloaded.
	assignTreeLevels	
	bestTreeRoot	
	coarsen	
	containsRepeatedEdges	
	contractEdge	
	convertToStGraph	Overloaded.
	convertToStGraphVirtualEnds	The input should be biconnected undirected graph. The output is directed acyclic ST graph.
	createReverseMaps	
	depthFirstSearch	Overloaded.
	eliminateIntermediateSourcesAndSinks	
	embedOnSameFace	
	father	
	findPlanarSubgraph	
	findPlanarSubgraphByBookEmbedding	
	findPlanarSubgraphBySimpleEdgeInsertion	
	findShortestPath	Overloaded.
	findShortestWeightedPath	Overloaded.

	getBiconnectedComponents	Overloaded.
	getCanonicalOrder	
	getConnectedComponents	
	getConnectedComponentsQuickFind	
	getConnectedComponentsQuickUnion	
	getDualGraph	Overloaded.
	getEdgeConnectedComponents	
	getEdges	
	getLayers	
	getLevelPlanarEmbedding	Must be called on a proper hierarchical graph.
	getPlanarEmbedding	
	getStNumbering	Overloaded.
	getTreeChildren	
	getVertices	
	getWeightedTopologicalNumbering	Overloaded.
	isAcyclic	
	isPlanar	
	isProperHierarchical	Must be called on a simple hierarchical graph.
	isTree	
	load	
	loadMappings	
	makeAcyclic	Must be called on a simple connected graph.
	makeBiconnected	
	makeBimodal	
	makeProperHierarchical	Replaces long links with a sequence of virtual nodes and links that connect adjacent levels. Must be called on a simple hierarchical graph.
	makeStPlanar	
	maximalMatching	
	maxWeightedCliqueOfTransitiveDAG	Must be called on a transitive DAG.
	minCostPathOrNegativeCycle	
	optimalTopologicalNumbering	Overloaded.
	partition	
	partitionTree	

	planarize	Overloaded.
	planarMakeBiconnected	Must be called on a planar graph.
	removeAllEdges	
	removeEdge	
	removeVertex	
	reorderTopologically	
S	reverse	
	save	
	saveMappings	
	splitToMaxDegree	Overloaded.
	topologicalSort	
	toString	
	triangulate	Overloaded.

See Also

Graph Class
com.mindfusion.graphs Namespace

Graph Fields

Graph.edgeCopyToOrigMap Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Edge, Edge> edgeCopyToOrigMap
```

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.edgeOrigToCopyMap Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Edge, Edge> edgeOrigToCopyMap
```

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.edges Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
protected ArrayList<Edge> edges
```

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.searchOrder Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int[] searchOrder
```

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.vertexCopyToOrigMap Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public HashMap<Vertex, Vertex> vertexCopyToOrigMap`

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.vertexOrigToCopyMap Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public HashMap<Vertex, Vertex> vertexOrigToCopyMap`

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.vertices Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`protected ArrayList<Vertex> vertices`

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph Constructor

Overload List

Name	Description
Graph ()	

Graph (Graph, boolean)	
Graph (Graph, Collection, boolean, boolean)	Create a subgraph copy induced by the specified edge subset.
Graph (Graph, Collection, boolean)	

See Also

Graph Class
com.mindfusion.graphs Namespace

Graph Constructor ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Graph ()
```

See Also

Graph Constructor Overload List
Graph Class
com.mindfusion.graphs Namespace

Graph Constructor (Graph, boolean)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Graph (
    Graph graph,
    boolean saveMapping
)
```

Parameters

graph

saveMapping

See Also

Graph Constructor Overload List
Graph Class
com.mindfusion.graphs Namespace

Graph Constructor (Graph, Collection<Edge>, boolean, boolean)

Create a subgraph copy induced by the specified edge subset.

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Graph (
    Graph graph,
    Collection<Edge> edgeSubset,
    boolean allVertices,
    boolean saveMapping
)
```

Parameters

graph

edgeSubset

allVertices

saveMapping

See Also

Graph Constructor Overload List
Graph Class
com.mindfusion.graphs Namespace

Graph Constructor (Graph, Collection<Vertex>, boolean)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Graph (
    Graph graph,
    Collection<Vertex> vertexSubset,
    boolean saveMapping
)
```

Parameters

graph

vertexSubset

saveMapping

See Also

Graph Constructor Overload List
Graph Class
com.mindfusion.graphs Namespace

Graph Methods

Graph.addEdge Method

Overload List

Name	Description
Graph.addEdge (Edge)	
Graph.addEdge (Vertex, Vertex)	
Graph.addEdge (Vertex, Vertex, Edge)	

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.addEdge Method (Edge)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void addEdge (
    Edge edge
)
```

Parameters

edge

See Also

addEdge Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.addEdge Method (Vertex, Vertex)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge addEdge (
    Vertex origin,
    Vertex destination
)
```

Parameters

origin

destination

Return Value

See Also

addEdge Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.addEdge Method (Vertex, Vertex, Edge)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge addEdge (
    Vertex origin,
    Vertex destination,
    Edge prototype
)
```

Parameters

origin

destination

prototype

Return Value

See Also

addEdge Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.addVertex Method

Overload List

Name	Description
Graph.addVertex ()	
Graph.addVertex (String)	

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.addVertex Method ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Vertex addVertex ()`

Return Value

See Also

addVertex Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.addVertex Method (String)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

`public Vertex addVertex (`
`  String debugId`
`)`

Parameters

debugId

Return Value

See Also

addVertex Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.addVertexAndOutEdges Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void addVertexAndOutEdges (
    Vertex vertex
)
```

Parameters

vertex

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.allPairShortestPaths Method

Overload List

Name	Description
Graph.allPairShortestPaths ()	
Graph.allPairShortestPaths (Set)	

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.allPairShortestPaths Method ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int[][] allPairShortestPaths ()
```

Return Value

See Also

allPairShortestPaths Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.allPairShortestPaths Method (Set<Vertex>)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int[][] allPairShortestPaths (
    Set<Vertex> set
)
```

Parameters

set

Return Value

See Also

allPairShortestPaths Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.assignTreeLevels Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<ArrayList<Vertex>> assignTreeLevels (
    Vertex root,
    HashMap<Vertex, Integer> vertexLevelMap,
    HashMap<Vertex, Float> branchWeights
)
```

Parameters

root

vertexLevelMap

branchWeights

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.bestTreeRoot Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Vertex bestTreeRoot ()
```

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.coarsen Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void coarsen (
    int maxSize,
    boolean strict,
    Stack<Graph> graphs,
    Stack<HashMap<Vertex, Edge>> contractionMaps
)
```

Parameters

maxSize

strict

graphs

contractionMaps

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.containsRepeatedEdges Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean containsRepeatedEdges ()
```

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.contractEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Vertex contractEdge (
    Edge edge
)
```

Parameters

edge

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.convertToStGraph Method

Overload List

Name	Description
Graph.convertToStGraph ()	
Graph.convertToStGraph (Vertex)	The input should be biconnected undirected graph. The output is directed acyclic ST graph.

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.convertToStGraph Method ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public ArrayList<Edge> convertToStGraph ()`

Return Value

See Also

convertToStGraph Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.convertToStGraph Method (Vertex)

The input should be biconnected undirected graph. The output is directed acyclic ST graph.

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

`public ArrayList<Edge> convertToStGraph (`
`  Vertex sink`
`)`

Parameters

sink

Return Value

See Also

convertToStGraph Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.convertToStGraphVirtualEnds Method

The input should be biconnected undirected graph. The output is directed acyclic ST graph.

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public StConversion convertToStGraphVirtualEnds ()`

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.createReverseMaps Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public void createReverseMaps ()`

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.depthFirstSearch Method

Overload List

Name	Description
Graph.depthFirstSearch ()	

Graph.depthFirstSearch (Vertex)	

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.depthFirstSearch Method ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void depthFirstSearch ()
```

See Also

depthFirstSearch Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.depthFirstSearch Method (Vertex)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void depthFirstSearch (
    Vertex start
)
```

Parameters

start

See Also

depthFirstSearch Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.eliminateIntermediateSourcesAndSinks Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public void eliminateIntermediateSourcesAndSinks (
    HierarchicalEmbedding embedding,
    Set<Edge> addedEdges
)
```

Parameters

embedding

addedEdges

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.embedOnSameFace Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Embedding embedOnSameFace (
    Collection<Vertex> faceVertices
)
```

Parameters

faceVertices

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.father Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Vertex father (
    Vertex vertex
)
```

Parameters

vertex

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.findPlanarSubgraph Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Graph findPlanarSubgraph (
    Set<Edge> edgesToDelete,
    Collection<Edge> crossingConstrainedEdges
)
```

Parameters

edgesToDelete

crossingConstrainedEdges

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.findPlanarSubgraphByBookEmbedding Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Graph findPlanarSubgraphByBookEmbedding (
    Set<Edge> edgesToDelete,
```

```
    Collection<Edge> crossingConstrainedEdges
)
```

Parameters

edgesToDelete

crossingConstrainedEdges

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.findPlanarSubgraphBySimpleEdgeInsertion Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Graph findPlanarSubgraphBySimpleEdgeInsertion (
    Set<Edge> edgesToDelete
)
```

Parameters

edgesToDelete

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.findShortestPath Method

Overload List

Name	Description
Graph.findShortestPath (Set, Set)	
Graph.findShortestPath (Vertex, Set)	
Graph.findShortestPath (Vertex, Vertex)	

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.findShortestPath Method (Set<Vertex>, Set<Vertex>)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Vertex> findShortestPath (
    Set<Vertex> originSet,
    Set<Vertex> destSet
)
```

Parameters

originSet

destSet

Return Value

See Also

findShortestPath Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.findShortestPath Method (Vertex, Set<Vertex>)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Vertex> findShortestPath (
    Vertex v1,
    Set<Vertex> destSet
)
```

Parameters

v1

destSet

Return Value

See Also

findShortestPath Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.findShortestPath Method (Vertex, Vertex)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Vertex> findShortestPath (
    Vertex v1,
    Vertex v2
)
```

Parameters

v1

v2

Return Value

See Also

findShortestPath Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.findShortestWeightedPath Method

Overload List

Name	Description
Graph.findShortestWeightedPath (Set, Set)	
Graph.findShortestWeightedPath (Vertex, Set, ByRef)	
Graph.findShortestWeightedPath (Vertex, Vertex, ByRef)	

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.findShortestWeightedPath Method (Set<Vertex>, Set<Vertex>)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Vertex> findShortestWeightedPath (
    Set<Vertex> originSet,
    Set<Vertex> destSet
)
```

Parameters

originSet

destSet

Return Value

See Also

findShortestWeightedPath Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.findShortestWeightedPath Method (Vertex, Set<Vertex>, ByRef<Double>)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Vertex> findShortestWeightedPath (
    Vertex origin,
    Set<Vertex> destSet,
    ByRef<Double> minWeigth
)
```

Parameters

origin

destSet

minWeigth

Return Value

See Also

findShortestWeightedPath Method Overload List
Graph Members

Graph Class
com.mindfusion.graphs Namespace

Graph.findShortestWeightedPath Method (Vertex, Vertex, ByRef<Double>)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Vertex> findShortestWeightedPath (
    Vertex origin,
    Vertex destination,
    ByRef<Double> minWeigth
)
```

Parameters

origin

destination

minWeigth

Return Value

See Also

findShortestWeightedPath Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getBiconnectedComponents Method

Overload List

Name	Description
Graph.getBiconnectedComponents ()	
Graph.getBiconnectedComponents (boolean)	
Graph.getBiconnectedComponents (boolean, ComponentBlocksHandler)	

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getBiconnectedComponents Method ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Graph[] getBiconnectedComponents ()
```

Return Value

See Also

getBiconnectedComponents Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getBiconnectedComponents Method (boolean)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Graph[] getBiconnectedComponents (
    boolean saveMapping
)
```

Parameters

saveMapping

Return Value

See Also

getBiconnectedComponents Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getBiconnectedComponents Method (boolean, ComponentBlocksHandler)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Graph[] getBiconnectedComponents (
    boolean saveMapping,
    ComponentBlocksHandler blocksHandler
)
```

Parameters

saveMapping

blocksHandler

Return Value

See Also

getBiconnectedComponents Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getCanonicalOrder Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Vertex> getCanonicalOrder ()
```

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getConnectedComponents Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Graph[] getConnectedComponents ()
```

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getConnectedComponentsQuickFind Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Graph[] getConnectedComponentsQuickFind ()`

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getConnectedComponentsQuickUnion Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Graph[] getConnectedComponentsQuickUnion ()`

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getDualGraph Method

Overload List

Name	Description
Graph.getDualGraph (boolean)	
Graph.getDualGraph (Embedding, Vertex, Vertex)	

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getDualGraph Method (boolean)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public DualGraph getDualGraph (
    boolean cacheIncidentFaces
)
```

Parameters

cacheIncidentFaces

Return Value

See Also

getDualGraph Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getDualGraph Method (Embedding, Vertex, Vertex)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public DualGraph getDualGraph (
    Embedding embedding,
    Vertex s,
    Vertex t
)
```

Parameters

embedding

s

t

Return Value

See Also

getDualGraph Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getEdgeConnectedComponents Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Graph[] getEdgeConnectedComponents ()
```

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getEdges Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Edge> getEdges ()
```

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getLayers Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<ArrayList<Vertex>> getLayers ()
```

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getLevelPlanarEmbedding Method

Must be called on a proper hierarchical graph.

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HierarchicalEmbedding getLevelPlanarEmbedding (
    boolean planarize,
    Set<Edge> removedEdges
)
```

Parameters

planarize

removedEdges

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getPlanarEmbedding Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Embedding getPlanarEmbedding ()
```

Return Value

See Also

Graph.getStNumbering Method

Overload List

Name	Description
Graph.getStNumbering ()	
Graph.getStNumbering (Vertex)	Algorithm from the paper "Computing an st-numbering" by Shimon Even and Robert Endre Tarjan. Running time is O(V + E). This method must be called on a biconnected graph.

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getStNumbering Method ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public ArrayList<Vertex> getStNumbering ()`

Return Value

See Also

getStNumbering Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getStNumbering Method (Vertex)

Algorithm from the paper "Computing an st-numbering" by Shimon Even and Robert Endre Tarjan. Running time is O(V + E). This method must be called on a biconnected graph.

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Vertex> getStNumbering (
    Vertex sink
)
```

Parameters

sink

Return Value

See Also

getStNumbering Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getTreeChildren Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Vertex> getTreeChildren (
    Vertex node,
    HashMap<Vertex, Integer> vertexLevelMap
)
```

Parameters

node

vertexLevelMap

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getVertices Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Vertex> getVertices ()
```

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getWeightedTopologicalNumbering Method

Overload List

Name	Description
Graph.getWeightedTopologicalNumbering ()	
Graph.getWeightedTopologicalNumbering (int[], float)	
Graph.getWeightedTopologicalNumbering (float)	

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getWeightedTopologicalNumbering Method ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public float[] getWeightedTopologicalNumbering ()`

Return Value

See Also

getWeightedTopologicalNumbering Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getWeightedTopologicalNumbering Method (int[], float)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public float[] getWeightedTopologicalNumbering (
    int[] tsort,
    float minNumber
)
```

Parameters

tsort

minNumber

Return Value

See Also

getWeightedTopologicalNumbering Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.getWeightedTopologicalNumbering Method (float)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public float[] getWeightedTopologicalNumbering (
    float minNumber
)
```

Parameters

minNumber

Return Value

See Also

getWeightedTopologicalNumbering Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.isAcyclic Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public boolean isAcyclic ()`

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.isPlanar Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public boolean isPlanar ()`

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.isProperHierarchical Method

Must be called on a simple hierarchical graph.

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public boolean isProperHierarchical ()`

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.isTree Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public boolean isTree ()
```

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.load Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public void load (
    String fileName
)
```

Parameters

fileName

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.loadMappings Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void loadMappings (
    String fileName,
    Graph original
)
```

Parameters

fileName

original

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.makeAcyclic Method

Must be called on a simple connected graph.

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Edge> makeAcyclic ()
```

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.makeBiconnected Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Edge> makeBiconnected ()
```

Return Value

See Also

Graph Members
Graph Class

Graph.makeBimodal Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public BimodalSplit makeBimodal ()
```

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.makeProperHierarchical Method

Replaces long links with a sequence of virtual nodes and links that connect adjacent levels. Must be called on a simple hierarchical graph.

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Edge, ArrayList<Edge>> makeProperHierarchical ()
```

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.makeStPlanar Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public StPlanarization makeStPlanar ()
```

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.maximalMatching Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public ArrayList<Edge> maximalMatching ()`

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.maxWeightedCliqueOfTransitiveDAG Method

Must be called on a transitive DAG.

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public ArrayList<Vertex> maxWeightedCliqueOfTransitiveDAG ()`

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.minCostPathOrNegativeCycle Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

`public ArrayList<Edge> minCostPathOrNegativeCycle (`
`  Vertex start,`
`  Vertex end`
`)`

Parameters

start

end

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.optimalTopologicalNumbering Method

Overload List

Name	Description
Graph.optimalTopologicalNumbering ()	
Graph.optimalTopologicalNumbering (int[])	

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.optimalTopologicalNumbering Method ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public int[] optimalTopologicalNumbering ()`

Return Value

See Also

optimalTopologicalNumbering Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.optimalTopologicalNumbering Method (int[])

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int[] optimalTopologicalNumbering (
    int[] tsort
)
```

Parameters

tsort

Return Value

See Also

optimalTopologicalNumbering Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.partition Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Set<Set<Vertex>> partition (
    int numPartitions,
    int coarseGraphSize,
    double tolerance
)
```

Parameters

numPartitions

coarseGraphSize

tolerance

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.partitionTree Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Set<Set<Vertex>> partitionTree (
    int subsetSize
)
```

Parameters

subsetSize

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.planarize Method

Overload List

Name	Description
Graph.planarize (HashMap>)	
Graph.planarize (HashMap>, Collection)	

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.planarize Method (HashMap<Edge, ArrayList<Edge>>)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Graph planarize (
    HashMap<Edge, ArrayList<Edge>> edgeToDummyEdgesMap
)
```

Parameters

edgeToDummyEdgesMap

Return Value

See Also

planarize Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.planarize Method (HashMap<Edge, ArrayList<Edge>>, Collection<Edge>)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Graph planarize (
    HashMap<Edge, ArrayList<Edge>> edgeToDummyEdgesMap,
    Collection<Edge> crossingConstrainedEdges
)
```

Parameters

edgeToDummyEdgesMap

crossingConstrainedEdges

Return Value

See Also

planarize Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.planarMakeBiconnected Method

Must be called on a planar graph.

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Edge> planarMakeBiconnected ()
```

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.removeAllEdges Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void removeAllEdges ()
```

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.removeEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void removeEdge (
    Edge e
)
```

Parameters

e

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.removeVertex Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void removeVertex (
    Vertex v
)
```

Parameters

v

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.reorderTopologically Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void reorderTopologically ()
```

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.reverse Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public static void reverse (
    int[] b
)
```

Parameters

b

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.save Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void save (
    String fileName
)
```

Parameters

fileName

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.saveMappings Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void saveMappings (
    String fileName,
    Graph original
)
```

Parameters

fileName

original

See Also

Graph.splitToMaxDegree Method

Overload List

Name	Description
Graph.splitToMaxDegree (int)	
Graph.splitToMaxDegree (int, Embedding)	
Graph.splitToMaxDegree (Vertex, int)	
Graph.splitToMaxDegree (Vertex, int, Embedding)	

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.splitToMaxDegree Method (int)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Vertex, Graph> splitToMaxDegree (
    int maxDegree
)
```

Parameters

maxDegree

Return Value

See Also

splitToMaxDegree Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.splitToMaxDegree Method (int, Embedding)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Vertex, Graph> splitToMaxDegree (
    int maxDegree,
    Embedding embedding
)
```

Parameters

maxDegree

embedding

Return Value

See Also

splitToMaxDegree Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.splitToMaxDegree Method (Vertex, int)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Graph splitToMaxDegree (
    Vertex vertex,
    int maxDegree
)
```

Parameters

vertex

maxDegree

Return Value

See Also

splitToMaxDegree Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.splitToMaxDegree Method (Vertex, int, Embedding)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Graph splitToMaxDegree (
    Vertex vertex,
    int maxDegree,
    Embedding embedding
)
```

Parameters

vertex

maxDegree

embedding

Return Value

See Also

splitToMaxDegree Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.topologicalSort Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public int[] topologicalSort ()
```

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.toString Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public String toString ()`

Return Value

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.triangulate Method

Overload List

Name	Description
Graph.triangulate ()	
Graph.triangulate (HierarchicalEmbedding)	

See Also

Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.triangulate Method ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Set<Edge> triangulate ()`

Return Value

See Also

triangulate Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

Graph.triangulate Method (HierarchicalEmbedding)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public boolean triangulate (
    HierarchicalEmbedding embedding
)
```

Parameters

embedding

Return Value

See Also

triangulate Method Overload List
Graph Members
Graph Class
com.mindfusion.graphs Namespace

GridDrawing Class

Straight-line drawing on a grid. The input must be a simple graph. Paper "A linear-time algorithm for drawing a planar graph on a grid" by Chrobak and Payne.

Syntax

```
Java
public class GridDrawing
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.GridDrawing

See Also

GridDrawing Members
com.mindfusion.graphs Namespace

GridDrawing Members

Straight-line drawing on a grid. The input must be a simple graph. Paper "A linear-time algorithm for drawing a planar graph on a grid" by Chrobak and Payne.

The following tables list the members exposed by the GridDrawing type.

Public Constructors

	Name	Description

	GridDrawing	

Public Methods

	Name	Description
	getNonplanarReplacement	
	getVertexPoints	

See Also

GridDrawing Class
com.mindfusion.graphs Namespace

GridDrawing Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public GridDrawing (
    Graph graph,
    boolean horizontal,
    boolean recordVirtualPositions
)
```

Parameters

graph

horizontal

recordVirtualPositions

See Also

GridDrawing Class
com.mindfusion.graphs Namespace

GridDrawing Methods

GridDrawing.getNonplanarReplacement Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Edge, ArrayList<Edge>> getNonplanarReplacement ()
```

Return Value

See Also

GridDrawing Members
GridDrawing Class
com.mindfusion.graphs Namespace

GridDrawing.getVertexPoints Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ExtendedHashMap<Vertex, Point> getVertexPoints ()
```

Return Value

See Also

GridDrawing Members
GridDrawing Class
com.mindfusion.graphs Namespace

HierarchicalDrawing Class

Syntax

Java

```
public class HierarchicalDrawing
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.graphs.HierarchicalDrawing

See Also

HierarchicalDrawing Members
com.mindfusion.graphs Namespace

HierarchicalDrawing Members

The following tables list the members exposed by the HierarchicalDrawing type.

Public Constructors

	Name	Description
	HierarchicalDrawing	Overloaded.

Public Methods

	Name	Description
	getVertexPoints	

See Also

HierarchicalDrawing Class
com.mindfusion.graphs Namespace

HierarchicalDrawing Constructor

Overload List

Name	Description
HierarchicalDrawing (Graph, double)	
HierarchicalDrawing (HierarchicalEmbedding, double, Graph)	

See Also

HierarchicalDrawing Class
com.mindfusion.graphs Namespace

HierarchicalDrawing Constructor (Graph, double)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HierarchicalDrawing (
    Graph graph,
    double levelDistance
)
```

Parameters

graph

levelDistance

See Also

HierarchicalDrawing Constructor Overload List
HierarchicalDrawing Class
com.mindfusion.graphs Namespace

HierarchicalDrawing Constructor (HierarchicalEmbedding, double, Graph)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HierarchicalDrawing (
    HierarchicalEmbedding embedding,
    double levelDistance,
    Graph component
)
```

Parameters

embedding

levelDistance

component

See Also

HierarchicalDrawing Constructor Overload List
HierarchicalDrawing Class
com.mindfusion.graphs Namespace

HierarchicalDrawing Methods

HierarchicalDrawing.getVertexPoints Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ExtendedHashMap<Vertex, PointD> getVertexPoints ()
```

Return Value

See Also

HierarchicalEmbedding Class

Syntax

Java
`public class HierarchicalEmbedding`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.HierarchicalEmbedding

See Also

HierarchicalEmbedding Members
com.mindfusion.graphs Namespace

HierarchicalEmbedding Members

The following tables list the members exposed by the HierarchicalEmbedding type.

Public Constructors

	Name	Description
	HierarchicalEmbedding	

Public Methods

	Name	Description
	edgesCross	
	exchange	
	getLayers	
	getVertexPositions	
	remove	
	sortGraphLinks	
	updatePositions	

See Also

HierarchicalEmbedding Class
com.mindfusion.graphs Namespace

HierarchicalEmbedding Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HierarchicalEmbedding (
    Graph graph
)
```

Parameters

graph

See Also

HierarchicalEmbedding Class
com.mindfusion.graphs Namespace

HierarchicalEmbedding Methods

HierarchicalEmbedding.edgesCross Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean edgesCross (
    Edge e1,
    Edge e2
)
```

Parameters

e1

e2

Return Value

See Also

HierarchicalEmbedding Members
HierarchicalEmbedding Class
com.mindfusion.graphs Namespace

HierarchicalEmbedding.exchange Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void exchange (
    Vertex u,
    Vertex v
)
```

Parameters

u

v

See Also

HierarchicalEmbedding Members
HierarchicalEmbedding Class
com.mindfusion.graphs Namespace

HierarchicalEmbedding.getLayers Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<ArrayList<Vertex>> getLayers ()
```

Return Value

See Also

HierarchicalEmbedding Members
HierarchicalEmbedding Class
com.mindfusion.graphs Namespace

HierarchicalEmbedding.getVertexPositions Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ExtendedArrayList<ExtendedHashMap<Vertex, Integer>> getVertexPositions ()
```

Return Value

See Also

HierarchicalEmbedding Members
HierarchicalEmbedding Class
com.mindfusion.graphs Namespace

HierarchicalEmbedding.remove Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void remove (
    Vertex v
)
```

Parameters

v

See Also

HierarchicalEmbedding Members
HierarchicalEmbedding Class
com.mindfusion.graphs Namespace

HierarchicalEmbedding.sortGraphLinks Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void sortGraphLinks ()
```

See Also

HierarchicalEmbedding Members
HierarchicalEmbedding Class
com.mindfusion.graphs Namespace

HierarchicalEmbedding.updatePositions Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public void updatePositions (
    boolean initLists
)
```

Parameters

initLists

See Also

HierarchicalEmbedding Members
HierarchicalEmbedding Class
com.mindfusion.graphs Namespace

Interval Class

Syntax

```
Java
public class Interval
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Interval

See Also

Interval Members
com.mindfusion.graphs Namespace

Interval Members

The following tables list the members exposed by the Interval type.

Public Constructors

	Name	Description
	Interval	

Public Methods

	Name	Description
	contains	

	getMax	
	getMin	
	intersects	
	overlaps	
	setMax	
	setMin	
	toString	

See Also

Interval Class
com.mindfusion.graphs Namespace

Interval Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Interval (
    double min,
    double max
)
```

Parameters

min

max

See Also

Interval Class
com.mindfusion.graphs Namespace

Interval Methods

Interval.contains Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean contains (
    Interval interval
)
```

Parameters

interval

Return Value

See Also

Interval Members
Interval Class
com.mindfusion.graphs Namespace

Interval.getMax Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public double getMax ()
```

Return Value

See Also

Interval Members
Interval Class
com.mindfusion.graphs Namespace

Interval.getMin Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public double getMin ()
```

Return Value

See Also

Interval Members
Interval Class
com.mindfusion.graphs Namespace

Interval.intersects Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean intersects (
    Interval interval
)
```

Parameters

interval

Return Value

See Also

Interval Members
Interval Class
com.mindfusion.graphs Namespace

Interval.overlaps Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean overlaps (
    Interval interval
)
```

Parameters

interval

Return Value

See Also

Interval Members
Interval Class
com.mindfusion.graphs Namespace

Interval.setMax Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public void setMax (
    double value
)
```

Parameters

value

See Also

Interval Members
Interval Class
com.mindfusion.graphs Namespace

Interval.setMin Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public void setMin (
    double value
)
```

Parameters

value

See Also

Interval Members
Interval Class
com.mindfusion.graphs Namespace

Interval.toString Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public String toString ()
```

Return Value

See Also

Interval Members
Interval Class
com.mindfusion.graphs Namespace

IntervalGraph Class

Syntax

Java
`public class IntervalGraph extends Graph`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Graph
    com.mindfusion.graphs.IntervalGraph

See Also

IntervalGraph Members
com.mindfusion.graphs Namespace

IntervalGraph Members

The following tables list the members exposed by the IntervalGraph type.

Public Constructors

	Name	Description
	IntervalGraph	

Public Fields

	Name	Description
	edgeCopyToOrigMap	(Inherited from Graph.)
	edgeOrigToCopyMap	(Inherited from Graph.)
	searchOrder	(Inherited from Graph.)
	vertexCopyToOrigMap	(Inherited from Graph.)
	vertexOrigToCopyMap	(Inherited from Graph.)

Protected Fields

	Name	Description

	edges	(Inherited from Graph.)
	vertices	(Inherited from Graph.)

Public Methods

	Name	Description
	addEdge	Overloaded. (Inherited from Graph.)
	addVertex	Overloaded. (Inherited from Graph.)
	addVertexAndOutEdges	(Inherited from Graph.)
	allPairShortestPaths	Overloaded. (Inherited from Graph.)
	assignTreeLevels	(Inherited from Graph.)
	bestTreeRoot	(Inherited from Graph.)
	coarsen	(Inherited from Graph.)
	containsRepeatedEdges	(Inherited from Graph.)
	contractEdge	(Inherited from Graph.)
	convertToStGraph	Overloaded. (Inherited from Graph.)
	convertToStGraphVirtualEnds	The input should be biconnected undirected graph. The output is directed acyclic ST graph. (Inherited from Graph.)
	createReverseMaps	(Inherited from Graph.)
	depthFirstSearch	Overloaded. (Inherited from Graph.)
	eliminateIntermediateSourcesAndSinks	(Inherited from Graph.)
	embedOnSameFace	(Inherited from Graph.)
	father	(Inherited from Graph.)
	findPlanarSubgraph	(Inherited from Graph.)
	findPlanarSubgraphByBookEmbedding	(Inherited from Graph.)
	findPlanarSubgraphBySimpleEdgeInsertion	(Inherited from Graph.)
	findShortestPath	Overloaded. (Inherited from Graph.)
	findShortestWeightedPath	Overloaded. (Inherited from Graph.)
	getBiconnectedComponents	Overloaded. (Inherited from Graph.)
	getCanonicalOrder	(Inherited from Graph.)
	getConnectedComponents	(Inherited from Graph.)
	getConnectedComponentsQuickFind	(Inherited from Graph.)
	getConnectedComponentsQuickUnion	(Inherited from Graph.)
	getDualGraph	Overloaded. (Inherited from Graph.)

	getEdgeConnectedComponents	(Inherited from Graph.)
	getEdges	(Inherited from Graph.)
	getIntervals	
	getLayers	(Inherited from Graph.)
	getLevelPlanarEmbedding	Must be called on a proper hierarchical graph. (Inherited from Graph.)
	getPlanarEmbedding	(Inherited from Graph.)
	getStNumbering	Overloaded. (Inherited from Graph.)
	getTreeChildren	(Inherited from Graph.)
	getVertices	(Inherited from Graph.)
	getWeightedTopologicalNumbering	Overloaded. (Inherited from Graph.)
	isAcyclic	(Inherited from Graph.)
	isPlanar	(Inherited from Graph.)
	isProperHierarchical	Must be called on a simple hierarchical graph. (Inherited from Graph.)
	isTree	(Inherited from Graph.)
	load	(Inherited from Graph.)
	loadMappings	(Inherited from Graph.)
	makeAcyclic	Must be called on a simple connected graph. (Inherited from Graph.)
	makeBiconnected	(Inherited from Graph.)
	makeBimodal	(Inherited from Graph.)
	makeProperHierarchical	Replaces long links with a sequence of virtual nodes and links that connect adjacent levels. Must be called on a simple hierarchical graph. (Inherited from Graph.)
	makeStPlanar	(Inherited from Graph.)
	maximalMatching	(Inherited from Graph.)
	maxWeightedCliqueOfTransitiveDAG	Must be called on a transitive DAG. (Inherited from Graph.)
	maxWeightedIndependentSet	
	minCostPathOrNegativeCycle	(Inherited from Graph.)
	optimalTopologicalNumbering	Overloaded. (Inherited from Graph.)
	partition	(Inherited from Graph.)
	partitionTree	(Inherited from Graph.)
	planarize	Overloaded. (Inherited from Graph.)

	planarMakeBiconnected	Must be called on a planar graph. (Inherited from Graph.)
	removeAllEdges	(Inherited from Graph.)
	removeEdge	(Inherited from Graph.)
	removeVertex	(Inherited from Graph.)
	reorderTopologically	(Inherited from Graph.)
S	reverse	(Inherited from Graph.)
	save	(Inherited from Graph.)
	saveMappings	(Inherited from Graph.)
	splitToMaxDegree	Overloaded. (Inherited from Graph.)
	topologicalSort	(Inherited from Graph.)
	toString	(Inherited from Graph.)
	triangulate	Overloaded. (Inherited from Graph.)

See Also

IntervalGraph Class
com.mindfusion.graphs Namespace

IntervalGraph Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public IntervalGraph (
    List<Interval> intervals
)
```

Parameters

intervals

See Also

IntervalGraph Class
com.mindfusion.graphs Namespace

IntervalGraph Methods

IntervalGraph.getIntervals Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public List<Interval> getIntervals ()
```

Return Value

See Also

IntervalGraph Members
IntervalGraph Class
com.mindfusion.graphs Namespace

IntervalGraph.maxWeightedIndependentSet Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public ArrayList<Vertex> maxWeightedIndependentSet ()
```

Return Value

See Also

IntervalGraph Members
IntervalGraph Class
com.mindfusion.graphs Namespace

LayoutTraits Class

Syntax

```
Java
public class LayoutTraits
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.LayoutTraits

See Also

LayoutTraits Members
com.mindfusion.graphs Namespace

LayoutTraits Members

The following tables list the members exposed by the LayoutTraits type.

Public Constructors

	Name	Description
	LayoutTraits	

Public Fields

	Name	Description
	Height	
	Width	

See Also

LayoutTraits Class
com.mindfusion.graphs Namespace

LayoutTraits Fields

LayoutTraits.Height Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public static final int Height`

See Also

LayoutTraits Members
LayoutTraits Class
com.mindfusion.graphs Namespace

LayoutTraits.Width Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public static final int Width
```

See Also

LayoutTraits Members
LayoutTraits Class
com.mindfusion.graphs Namespace

LayoutTraits Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public LayoutTraits ()
```

See Also

LayoutTraits Class
com.mindfusion.graphs Namespace

MinBendOrthogonalDrawing Class

Syntax

```
Java
public class MinBendOrthogonalDrawing extends OrthogonalDrawing
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.OrthogonalDrawing
    com.mindfusion.graphs.MinBendOrthogonalDrawing

See Also

MinBendOrthogonalDrawing Members
com.mindfusion.graphs Namespace

MinBendOrthogonalDrawing Members

The following tables list the members exposed by the MinBendOrthogonalDrawing type.

Public Constructors

	Name	Description
	MinBendOrthogonalDrawing	

Protected Fields

	Name	Description
	drawingGrid	(Inherited from OrthogonalDrawing.)
	edgePoints	(Inherited from OrthogonalDrawing.)
	vertexPoints	(Inherited from OrthogonalDrawing.)

Public Methods

	Name	Description
	getDrawingGrid	(Inherited from OrthogonalDrawing.)
	getEdgePoints	(Inherited from OrthogonalDrawing.)
	getVertexPoints	(Inherited from OrthogonalDrawing.)

Protected Methods

	Name	Description
	mergePaths	(Inherited from OrthogonalDrawing.)

See Also

MinBendOrthogonalDrawing Class
com.mindfusion.graphs Namespace

MinBendOrthogonalDrawing Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public MinBendOrthogonalDrawing (
    Graph graph
)
```

Parameters

graph

See Also

Network Class

Syntax

Java
`public class Network extends Graph`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Graph
    com.mindfusion.graphs.Network

See Also

Network Members
com.mindfusion.graphs Namespace

Network Members

The following tables list the members exposed by the Network type.

Public Constructors

	Name	Description
	Network	Overloaded.

Public Fields

	Name	Description
	edgeCopyToOrigMap	(Inherited from Graph.)
	edgeOrigToCopyMap	(Inherited from Graph.)
	searchOrder	(Inherited from Graph.)
	vertexCopyToOrigMap	(Inherited from Graph.)
	vertexOrigToCopyMap	(Inherited from Graph.)

Protected Fields

	Name	Description
	edges	(Inherited from Graph.)
	vertices	(Inherited from Graph.)

Public Methods

	Name	Description
	addEdge	Overloaded. (Inherited from Graph.)
	addVertex	Overloaded. (Inherited from Graph.)
	addVertexAndOutEdges	(Inherited from Graph.)
	allPairShortestPaths	Overloaded. (Inherited from Graph.)
	assignTreeLevels	(Inherited from Graph.)
	bestTreeRoot	(Inherited from Graph.)
	coarsen	(Inherited from Graph.)
	containsRepeatedEdges	(Inherited from Graph.)
	contractEdge	(Inherited from Graph.)
	convertToStGraph	Overloaded. (Inherited from Graph.)
	convertToStGraphVirtualEnds	The input should be biconnected undirected graph. The output is directed acyclic ST graph. (Inherited from Graph.)
	createResidualNetwork	
	createReverseMaps	(Inherited from Graph.)
	depthFirstSearch	Overloaded. (Inherited from Graph.)
	eliminateIntermediateSourcesAndSinks	(Inherited from Graph.)
	embedOnSameFace	(Inherited from Graph.)
	father	(Inherited from Graph.)
	feasibleSolution	
	findPlanarSubgraph	(Inherited from Graph.)
	findPlanarSubgraphByBookEmbedding	(Inherited from Graph.)
	findPlanarSubgraphBySimpleEdgeInsertion	(Inherited from Graph.)
	findShortestPath	Overloaded. (Inherited from Graph.)
	findShortestWeightedPath	Overloaded. (Inherited from Graph.)
	getBiconnectedComponents	Overloaded. (Inherited from Graph.)
	getCanonicalOrder	(Inherited from Graph.)
	getConnectedComponents	(Inherited from Graph.)
	getConnectedComponentsQuickFind	(Inherited from Graph.)
	getConnectedComponentsQuickUnion	(Inherited from Graph.)
	getDualGraph	Overloaded. (Inherited from Graph.)
	getEdgeConnectedComponents	(Inherited from Graph.)

	getEdges	(Inherited from Graph.)
	getLayers	(Inherited from Graph.)
	getLevelPlanarEmbedding	Must be called on a proper hierarchical graph. (Inherited from Graph.)
	getPlanarEmbedding	(Inherited from Graph.)
	getStNumbering	Overloaded. (Inherited from Graph.)
	getTreeChildren	(Inherited from Graph.)
	getVertices	(Inherited from Graph.)
	getWeightedTopologicalNumbering	Overloaded. (Inherited from Graph.)
	isAcyclic	(Inherited from Graph.)
	isPlanar	(Inherited from Graph.)
	isProperHierarchical	Must be called on a simple hierarchical graph. (Inherited from Graph.)
	isTree	(Inherited from Graph.)
	load	(Inherited from Graph.)
	loadMappings	(Inherited from Graph.)
	makeAcyclic	Must be called on a simple connected graph. (Inherited from Graph.)
	makeBiconnected	(Inherited from Graph.)
	makeBimodal	(Inherited from Graph.)
	makeProperHierarchical	Replaces long links with a sequence of virtual nodes and links that connect adjacent levels. Must be called on a simple hierarchical graph. (Inherited from Graph.)
	makeStPlanar	(Inherited from Graph.)
	maxFlow	
	maximalMatching	(Inherited from Graph.)
	maxWeightedCliqueOfTransitiveDAG	Must be called on a transitive DAG. (Inherited from Graph.)
	minCostFlow	
	minCostPathOrNegativeCycle	(Inherited from Graph.)
	optimalTopologicalNumbering	Overloaded. (Inherited from Graph.)
	partition	(Inherited from Graph.)
	partitionTree	(Inherited from Graph.)
	planarize	Overloaded. (Inherited from Graph.)
	planarMakeBiconnected	Must be called on a planar graph. (Inherited from Graph.)

	removeAllEdges	(Inherited from Graph.)
	removeEdge	(Inherited from Graph.)
	removeVertex	(Inherited from Graph.)
	reorderTopologically	(Inherited from Graph.)
S	reverse	(Inherited from Graph.)
	save	(Inherited from Graph.)
	saveMappings	(Inherited from Graph.)
	splitToMaxDegree	Overloaded. (Inherited from Graph.)
	topologicalSort	(Inherited from Graph.)
	toString	(Inherited from Graph.)
	triangulate	Overloaded. (Inherited from Graph.)

See Also

Network Class
com.mindfusion.graphs Namespace

Network Constructor

Overload List

Name	Description
Network ()	
Network (Network)	

See Also

Network Class
com.mindfusion.graphs Namespace

Network Constructor ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Network ()`

See Also

Network Constructor Overload List
Network Class
com.mindfusion.graphs Namespace

Network Constructor (Network)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Network (
    Network network
)
```

Parameters

network

See Also

Network Constructor Overload List
Network Class
com.mindfusion.graphs Namespace

Network Methods

Network.createResidualNetwork Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Network createResidualNetwork ()
```

Return Value

See Also

Network Members
Network Class
com.mindfusion.graphs Namespace

Network.feasibleSolution Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public boolean feasibleSolution ()
```

Return Value

See Also

Network Members
Network Class
com.mindfusion.graphs Namespace

Network.maxFlow Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public void maxFlow (
    Vertex s,
    Vertex t
)
```

Parameters

s

t

See Also

Network Members
Network Class
com.mindfusion.graphs Namespace

Network.minCostFlow Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public boolean minCostFlow (
    Vertex s,
    Vertex t
)
```

Parameters

s

t

Return Value

See Also

Network Members
Network Class
com.mindfusion.graphs Namespace

Node Class

Syntax

Java
`public class Node`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.BinaryTree.Node

See Also

Node Members
com.mindfusion.graphs Namespace

Node Members

The following tables list the members exposed by the Node type.

Public Constructors

	Name	Description
	Node	

Public Fields

	Name	Description
	item	
	left	
	right	

Public Methods

	Name	Description
	addChildren	
	getLeaves	Overloaded.

See Also

Node Class
com.mindfusion.graphs Namespace

Node Fields

Node.item Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public T item`

See Also

Node Members
Node Class
com.mindfusion.graphs Namespace

Node.left Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public BinaryTree.Node left`

See Also

Node Members
Node Class
com.mindfusion.graphs Namespace

Node.right Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public BinaryTree.Node right
```

See Also

Node Members
Node Class
com.mindfusion.graphs Namespace

Node Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Node (
    T item
)
```

Parameters

item

See Also

Node Class
com.mindfusion.graphs Namespace

Node Methods

Node.addChildren Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public void addChildren (
    T left,
    T right
)
```

Parameters

left

right

See Also

Node Members
Node Class
com.mindfusion.graphs Namespace

Node.getLeaves Method

Overload List

Name	Description
Node.getLeaves ()	
Node.getLeaves (ArrayList)	

See Also

Node Members
Node Class
com.mindfusion.graphs Namespace

Node.getLeaves Method ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public ArrayList<T> getLeaves ()`

Return Value

See Also

getLeaves Method Overload List
Node Members
Node Class
com.mindfusion.graphs Namespace

Node.getLeaves Method (ArrayList<T>)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void getLeaves (
    ArrayList<T> leaves
)
```

Parameters

leaves

See Also

getLeaves Method Overload List
Node Members
Node Class
com.mindfusion.graphs Namespace

NodePair Class

Syntax

Java
`public class NodePair`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.PQTree.NodePair

See Also

NodePair Members
com.mindfusion.graphs Namespace

NodePair Members

The following tables list the members exposed by the NodePair type.

Public Constructors

	Name	Description
	NodePair	Overloaded.

Public Methods

	Name	Description
	add	
	contains	
	get	

	getDirection	
	getOther	
	indexOf	
	remove	
	removeAt	
	replace	
	setDirection	
	size	

See Also

NodePair Class
com.mindfusion.graphs Namespace

NodePair Constructor

Overload List

Name	Description
NodePair ()	
NodePair (int)	

See Also

NodePair Class
com.mindfusion.graphs Namespace

NodePair Constructor ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public NodePair ()`

See Also

NodePair Constructor Overload List
NodePair Class
com.mindfusion.graphs Namespace

NodePair Constructor (int)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public NodePair (
    int directionIndex
)
```

Parameters

directionIndex

See Also

NodePair Constructor Overload List
NodePair Class
com.mindfusion.graphs Namespace

NodePair Methods

NodePair.add Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void add (
    PQTree.Node node
)
```

Parameters

node

See Also

NodePair Members
NodePair Class
com.mindfusion.graphs Namespace

NodePair.contains Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public boolean contains (
    PQTree.Node node
)
```

Parameters

node

Return Value

See Also

NodePair Members
NodePair Class
com.mindfusion.graphs Namespace

NodePair.get Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public PQTree.Node get (
    int index
)
```

Parameters

index

Return Value

See Also

NodePair Members
NodePair Class
com.mindfusion.graphs Namespace

NodePair.getDirection Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public PQTree.Node getDirection ()
```

Return Value

See Also

NodePair Members
NodePair Class
com.mindfusion.graphs Namespace

NodePair.getOther Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public PQTree.Node getOther (
    PQTree.Node node
)
```

Parameters

node

Return Value

See Also

NodePair Members
NodePair Class
com.mindfusion.graphs Namespace

NodePair.indexOf Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int indexOf (
    PQTree.Node node
)
```

Parameters

node

Return Value

See Also

NodePair Members
NodePair Class
com.mindfusion.graphs Namespace

NodePair.remove Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean remove (
    PQTree.Node node
)
```

Parameters

node

Return Value

See Also

NodePair Members
NodePair Class
com.mindfusion.graphs Namespace

NodePair.removeAt Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean removeAt (
    int index
)
```

Parameters

index

Return Value

See Also

NodePair Members
NodePair Class
com.mindfusion.graphs Namespace

NodePair.replace Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void replace (
    PQTree.Node oldNode,
    PQTree.Node newNode
)
```

Parameters

oldNode

newNode

See Also

NodePair Members
NodePair Class
com.mindfusion.graphs Namespace

NodePair.setDirection Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setDirection (
    PQTree.Node value
)
```

Parameters

value

See Also

NodePair Members
NodePair Class
com.mindfusion.graphs Namespace

NodePair.size Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public int size ()`

Return Value

See Also

NodePair Members
NodePair Class
com.mindfusion.graphs Namespace

OrthogonalDrawing Class

Syntax

Java
`public class OrthogonalDrawing`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.OrthogonalDrawing
    com.mindfusion.graphs.MinBendOrthogonalDrawing

See Also

OrthogonalDrawing Members
com.mindfusion.graphs Namespace

OrthogonalDrawing Members

The following tables list the members exposed by the OrthogonalDrawing type.

Protected Constructors

	Name	Description
	OrthogonalDrawing	Overloaded.

Protected Fields

	Name	Description
	drawingGrid	
	edgePoints	
	vertexPoints	

Public Methods

	Name	Description
	getDrawingGrid	
	getEdgePoints	
	getVertexPoints	

Protected Methods

	Name	Description
	mergePaths	

See Also

OrthogonalDrawing Class
com.mindfusion.graphs Namespace

OrthogonalDrawing Fields

OrthogonalDrawing.drawingGrid Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`protected DrawingGrid drawingGrid`

See Also

OrthogonalDrawing Members
OrthogonalDrawing Class
com.mindfusion.graphs Namespace

OrthogonalDrawing.edgePoints Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`protected HashMap<Edge, ArrayList<Point>> edgePoints`

See Also

OrthogonalDrawing Members
OrthogonalDrawing Class

OrthogonalDrawing.vertexPoints Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
protected HashMap<Vertex, Point> vertexPoints
```

See Also

OrthogonalDrawing Members
OrthogonalDrawing Class
com.mindfusion.graphs Namespace

OrthogonalDrawing Constructor

Overload List

Name	Description
OrthogonalDrawing ()	
OrthogonalDrawing (Graph, boolean)	Construct orthogonal drawing of a connected graph.

See Also

OrthogonalDrawing Class
com.mindfusion.graphs Namespace

OrthogonalDrawing Constructor ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
protected OrthogonalDrawing ()
```

See Also

OrthogonalDrawing Constructor Overload List
OrthogonalDrawing Class
com.mindfusion.graphs Namespace

OrthogonalDrawing Constructor (Graph, boolean)

Construct orthogonal drawing of a connected graph.

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public OrthogonalDrawing (
    Graph graph,
    boolean directed
)
```

Parameters

graph

directed

See Also

OrthogonalDrawing Constructor Overload List
OrthogonalDrawing Class
com.mindfusion.graphs Namespace

OrthogonalDrawing Methods

OrthogonalDrawing.getDrawingGrid Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public DrawingGrid getDrawingGrid ()
```

Return Value

See Also

OrthogonalDrawing Members
OrthogonalDrawing Class
com.mindfusion.graphs Namespace

OrthogonalDrawing.getEdgePoints Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Edge, ArrayList<Point>> getEdgePoints ()
```

Return Value

See Also

OrthogonalDrawing Members
OrthogonalDrawing Class
com.mindfusion.graphs Namespace

OrthogonalDrawing.getVertexPoints Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Vertex, Point> getVertexPoints ()
```

Return Value

See Also

OrthogonalDrawing Members
OrthogonalDrawing Class
com.mindfusion.graphs Namespace

OrthogonalDrawing.mergePaths Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
protected void mergePaths (
    Vertex v,
    Graph c,
    int rs,
    int re,
    int step
)
```

Parameters

v

c

rs

re

step

See Also

OrthogonalDrawing Members
OrthogonalDrawing Class
com.mindfusion.graphs Namespace

OrthogonalRepresentation Class

Syntax

Java
`public class OrthogonalRepresentation`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.graphs.OrthogonalRepresentation

See Also

OrthogonalRepresentation Members
com.mindfusion.graphs Namespace

OrthogonalRepresentation Members

The following tables list the members exposed by the OrthogonalRepresentation type.

Public Constructors

	Name	Description
	OrthogonalRepresentation	

Public Methods

	Name	Description
	edgesFromShape	
	getFaceShapes	
	nextShape	
	setFaceShapes	
	shapeOfEdge	
	splitEdge	

See Also

OrthogonalRepresentation Class
com.mindfusion.graphs Namespace

OrthogonalRepresentation Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public OrthogonalRepresentation ()
```

See Also

OrthogonalRepresentation Class
com.mindfusion.graphs Namespace

OrthogonalRepresentation Methods

OrthogonalRepresentation.edgesFromShape Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Edge> edgesFromShape (
    Face face
)
```

Parameters

face

Return Value

See Also

OrthogonalRepresentation Members
OrthogonalRepresentation Class
com.mindfusion.graphs Namespace

OrthogonalRepresentation.getFaceShapes Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Face, ArrayList<EdgeShape>> getFaceShapes ()
```

Return Value

See Also

OrthogonalRepresentation Members
OrthogonalRepresentation Class
com.mindfusion.graphs Namespace

OrthogonalRepresentation.nextShape Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public EdgeShape nextShape (
    Face face,
    Edge edge
)
```

Parameters

face

edge

Return Value

See Also

OrthogonalRepresentation Members
OrthogonalRepresentation Class
com.mindfusion.graphs Namespace

OrthogonalRepresentation.setFaceShapes Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setFaceShapes (
    HashMap<Face, ArrayList<EdgeShape>> value
)
```

Parameters

value

See Also

OrthogonalRepresentation Members
OrthogonalRepresentation Class
com.mindfusion.graphs Namespace

OrthogonalRepresentation.shapeOfEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public EdgeShape shapeOfEdge (
    Face face,
    Edge edge
)
```

Parameters

face

edge

Return Value

See Also

OrthogonalRepresentation Members
OrthogonalRepresentation Class
com.mindfusion.graphs Namespace

OrthogonalRepresentation.splitEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void splitEdge (
    Face face,
    Edge edge,
    Edge segment1,
    Edge segment2
)
```

Parameters

face

edge

segment1

segment2

See Also

OrthogonalRepresentation Members
OrthogonalRepresentation Class
com.mindfusion.graphs Namespace

OverlapGraph Class

Syntax

Java
`public class OverlapGraph extends Graph`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Graph
    com.mindfusion.graphs.OverlapGraph

See Also

OverlapGraph Members
com.mindfusion.graphs Namespace

OverlapGraph Members

The following tables list the members exposed by the OverlapGraph type.

Public Constructors

	Name	Description
	OverlapGraph	

Public Fields

	Name	Description
	edgeCopyToOrigMap	(Inherited from Graph.)
	edgeOrigToCopyMap	(Inherited from Graph.)
	searchOrder	(Inherited from Graph.)
	vertexCopyToOrigMap	(Inherited from Graph.)
	vertexOrigToCopyMap	(Inherited from Graph.)

Protected Fields

	Name	Description
	edges	(Inherited from Graph.)
	vertices	(Inherited from Graph.)

Public Methods

	Name	Description
	addEdge	Overloaded. (Inherited from Graph.)
	addVertex	Overloaded. (Inherited from Graph.)
	addVertexAndOutEdges	(Inherited from Graph.)
	allPairShortestPaths	Overloaded. (Inherited from Graph.)
	assignTreeLevels	(Inherited from Graph.)
	bestTreeRoot	(Inherited from Graph.)
	coarsen	(Inherited from Graph.)
	containsRepeatedEdges	(Inherited from Graph.)
	contractEdge	(Inherited from Graph.)
	convertToStGraph	Overloaded. (Inherited from Graph.)
	convertToStGraphVirtualEnds	The input should be biconnected undirected graph. The output is directed acyclic ST graph. (Inherited from Graph.)
	createReverseMaps	(Inherited from Graph.)
	depthFirstSearch	Overloaded. (Inherited from Graph.)
	eliminateIntermediateSourcesAndSinks	(Inherited from Graph.)
	embedOnSameFace	(Inherited from Graph.)
	father	(Inherited from Graph.)
	findPlanarSubgraph	(Inherited from Graph.)
	findPlanarSubgraphByBookEmbedding	(Inherited from Graph.)
	findPlanarSubgraphBySimpleEdgeInsertion	(Inherited from Graph.)
	findShortestPath	Overloaded. (Inherited from Graph.)
	findShortestWeightedPath	Overloaded. (Inherited from Graph.)
	getBiconnectedComponents	Overloaded. (Inherited from Graph.)
	getCanonicalOrder	(Inherited from Graph.)
	getConnectedComponents	(Inherited from Graph.)
	getConnectedComponentsQuickFind	(Inherited from Graph.)
	getConnectedComponentsQuickUnion	(Inherited from Graph.)

	getDualGraph	Overloaded. (Inherited from Graph.)
	getEdgeConnectedComponents	(Inherited from Graph.)
	getEdges	(Inherited from Graph.)
	getLayers	(Inherited from Graph.)
	getLevelPlanarEmbedding	Must be called on a proper hierarchical graph. (Inherited from Graph.)
	getPlanarEmbedding	(Inherited from Graph.)
	getStNumbering	Overloaded. (Inherited from Graph.)
	getTreeChildren	(Inherited from Graph.)
	getVertices	(Inherited from Graph.)
	getWeightedTopologicalNumbering	Overloaded. (Inherited from Graph.)
	isAcyclic	(Inherited from Graph.)
	isPlanar	(Inherited from Graph.)
	isProperHierarchical	Must be called on a simple hierarchical graph. (Inherited from Graph.)
	isTree	(Inherited from Graph.)
	load	(Inherited from Graph.)
	loadMappings	(Inherited from Graph.)
	makeAcyclic	Must be called on a simple connected graph. (Inherited from Graph.)
	makeBiconnected	(Inherited from Graph.)
	makeBimodal	(Inherited from Graph.)
	makeProperHierarchical	Replaces long links with a sequence of virtual nodes and links that connect adjacent levels. Must be called on a simple hierarchical graph. (Inherited from Graph.)
	makeStPlanar	(Inherited from Graph.)
	maximalMatching	(Inherited from Graph.)
	maxIndependentSet	
	maxWeightedCliqueOfTransitiveDAG	Must be called on a transitive DAG. (Inherited from Graph.)
	minCostPathOrNegativeCycle	(Inherited from Graph.)
	optimalTopologicalNumbering	Overloaded. (Inherited from Graph.)
	partition	(Inherited from Graph.)
	partitionTree	(Inherited from Graph.)
	planarize	Overloaded. (Inherited from Graph.)

	planarMakeBiconnected	Must be called on a planar graph. (Inherited from Graph.)
	removeAllEdges	(Inherited from Graph.)
	removeEdge	(Inherited from Graph.)
	removeVertex	(Inherited from Graph.)
	reorderTopologically	(Inherited from Graph.)
S	reverse	(Inherited from Graph.)
	save	(Inherited from Graph.)
	saveMappings	(Inherited from Graph.)
	splitToMaxDegree	Overloaded. (Inherited from Graph.)
	topologicalSort	(Inherited from Graph.)
	toString	(Inherited from Graph.)
	triangulate	Overloaded. (Inherited from Graph.)

See Also

OverlapGraph Class
com.mindfusion.graphs Namespace

OverlapGraph Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public OverlapGraph (
    List<Interval> intervals
)
```

Parameters

intervals

See Also

OverlapGraph Class
com.mindfusion.graphs Namespace

OverlapGraph Methods

OverlapGraph.maxIndependentSet Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Set<Vertex> maxIndependentSet ()
```

Return Value

See Also

OverlapGraph Members
OverlapGraph Class
com.mindfusion.graphs Namespace

Point Class

Syntax

```
Java
public class Point implements Cloneable
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Point

See Also

Point Members
com.mindfusion.graphs Namespace

Point Members

The following tables list the members exposed by the Point type.

Public Constructors

	Name	Description
	Point	Overloaded.

Public Fields

	Name	Description
	X	
	Y	

Public Methods

	Name	Description
	clone	
	equals	
	hashCode	
	manhDistance	
	toString	

See Also

Point Class
com.mindfusion.graphs Namespace

Point Fields

Point.X Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public int X`

See Also

Point Members
Point Class
com.mindfusion.graphs Namespace

Point.Y Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public int Y`

See Also

Point Members
Point Class

Point Constructor

Overload List

Name	Description
Point () Point (int, int)	

See Also

Point Class
com.mindfusion.graphs Namespace

Point Constructor ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Point ()`

See Also

Point Constructor Overload List
Point Class
com.mindfusion.graphs Namespace

Point Constructor (int, int)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

`public Point (`
`  int x,`
`  int y`
`)`

Parameters

x

y

See Also

Point Constructor Overload List
Point Class
com.mindfusion.graphs Namespace

Point Methods

Point.clone Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Point clone ()
```

Return Value

See Also

Point Members
Point Class
com.mindfusion.graphs Namespace

Point.equals Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean equals (
    Object obj
)
```

Parameters

obj

Return Value

See Also

Point Members
Point Class
com.mindfusion.graphs Namespace

Point.hashCode Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int hashCode ()
```

Return Value

See Also

Point Members
Point Class
com.mindfusion.graphs Namespace

Point.manhDistance Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int manhDistance (
    Point p
)
```

Parameters

p

Return Value

See Also

Point Members
Point Class
com.mindfusion.graphs Namespace

Point.toString Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public String toString ()
```

Return Value

See Also

Point Members
Point Class
com.mindfusion.graphs Namespace

PointD Class

Syntax

Java
`public class PointD implements Cloneable`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.graphs.PointD

See Also

PointD Members
com.mindfusion.graphs Namespace

PointD Members

The following tables list the members exposed by the PointD type.

Public Constructors

	Name	Description
	PointD	

Public Fields

	Name	Description
	X	
	Y	

Public Methods

	Name	Description
	clone	
	equals	

	hashCode	
	toString	

See Also

PointD Class
com.mindfusion.graphs Namespace

PointD Fields

PointD.X Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public double X
```

See Also

PointD Members
PointD Class
com.mindfusion.graphs Namespace

PointD.Y Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public double Y
```

See Also

PointD Members
PointD Class
com.mindfusion.graphs Namespace

PointD Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public PointD (
    double x,
    double y
)
```

Parameters

x

y

See Also

PointD Class
com.mindfusion.graphs Namespace

PointD Methods

PointD.clone Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public PointD clone ()
```

Return Value

See Also

PointD Members
PointD Class
com.mindfusion.graphs Namespace

PointD.equals Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean equals (
    Object obj
)
```

Parameters

obj

Return Value

See Also

PointD Members
PointD Class
com.mindfusion.graphs Namespace

PointD.hashCode Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public int hashCode ()`

Return Value

See Also

PointD Members
PointD Class
com.mindfusion.graphs Namespace

PointD.toString Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public String toString ()`

Return Value

See Also

PointD Members
PointD Class
com.mindfusion.graphs Namespace

PointF Class

Syntax

Java
`public class PointF implements Cloneable`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.graphs.PointF

See Also

PointF Members
com.mindfusion.graphs Namespace

PointF Members

The following tables list the members exposed by the PointF type.

Public Constructors

	Name	Description
	PointF	Overloaded.

Public Fields

	Name	Description
	X	
	Y	

Public Methods

	Name	Description
	clone	
	equals	
	hashCode	
	toString	

See Also

PointF Class
com.mindfusion.graphs Namespace

PointF Fields

PointF.X Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public float X`

See Also

PointF Members
PointF Class
com.mindfusion.graphs Namespace

PointF.Y Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public float Y`

See Also

PointF Members
PointF Class
com.mindfusion.graphs Namespace

PointF Constructor

Overload List

Name	Description
PointF ()	
PointF (float, float)	

See Also

PointF Class
com.mindfusion.graphs Namespace

PointF Constructor ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public PointF ()
```

See Also

PointF Constructor Overload List
PointF Class
com.mindfusion.graphs Namespace

PointF Constructor (float, float)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public PointF (
    float x,
    float y
)
```

Parameters

x

y

See Also

PointF Constructor Overload List
PointF Class
com.mindfusion.graphs Namespace

PointF Methods

PointF.clone Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public PointF clone ()
```

Return Value

See Also

PointF Members
PointF Class
com.mindfusion.graphs Namespace

PointF.equals Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean equals (
    Object obj
)
```

Parameters

obj

Return Value

See Also

PointF Members
PointF Class
com.mindfusion.graphs Namespace

PointF.hashCode Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int hashCode ()
```

Return Value

See Also

PointF Members
PointF Class
com.mindfusion.graphs Namespace

PointF.toString Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public String toString ()`

Return Value

See Also

PointF Members
PointF Class
com.mindfusion.graphs Namespace

PolylineDrawing Class

Syntax

Java
`public class PolylineDrawing`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.PolylineDrawing

See Also

PolylineDrawing Members
com.mindfusion.graphs Namespace

PolylineDrawing Members

The following tables list the members exposed by the PolylineDrawing type.

Public Constructors

	Name	Description
	PolylineDrawing	Overloaded.

Protected Fields

	Name	Description
	edgePoints	
	vertexPoints	

Public Methods

	Name	Description
	getEdgePoints	
	getVertexPoints	

See Also

PolylineDrawing Class
com.mindfusion.graphs Namespace

PolylineDrawing Fields

PolylineDrawing.edgePoints Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
protected HashMap<Edge, ArrayList<PointF>> edgePoints
```

See Also

PolylineDrawing Members
PolylineDrawing Class
com.mindfusion.graphs Namespace

PolylineDrawing.vertexPoints Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
protected HashMap<Vertex, PointF> vertexPoints
```

See Also

PolylineDrawing Members
PolylineDrawing Class
com.mindfusion.graphs Namespace

PolylineDrawing Constructor

Overload List

Name	Description
PolylineDrawing (Graph)	Construct orthogonal drawing of a connected graph.
PolylineDrawing (Graph, StEmbedding)	Construct orthogonal drawing of a connected graph.

See Also

PolylineDrawing Class
com.mindfusion.graphs Namespace

PolylineDrawing Constructor (Graph)

Construct orthogonal drawing of a connected graph.

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public PolylineDrawing (
    Graph graph
)
```

Parameters

graph
A Graph instance.

See Also

PolylineDrawing Constructor Overload List
PolylineDrawing Class
com.mindfusion.graphs Namespace

PolylineDrawing Constructor (Graph, StEmbedding)

Construct orthogonal drawing of a connected graph.

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public PolylineDrawing (
    Graph stGraph,
    StEmbedding stEmbedding
)
```

Parameters

stGraph

stEmbedding

See Also

PolylineDrawing Constructor Overload List
PolylineDrawing Class
com.mindfusion.graphs Namespace

PolylineDrawing Methods

PolylineDrawing.getEdgePoints Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public HashMap<Edge, ArrayList<PointF>> getEdgePoints ()`

Return Value

See Also

PolylineDrawing Members
PolylineDrawing Class
com.mindfusion.graphs Namespace

PolylineDrawing.getVertexPoints Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public HashMap<Vertex, PointF> getVertexPoints ()`

Return Value

See Also

PolylineDrawing Members
PolylineDrawing Class
com.mindfusion.graphs Namespace

PQTree<T> Class

Syntax

Java
`public class PQTree<T>`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.PQTree(T)

See Also

PQTree(T) Members
com.mindfusion.graphs Namespace

PQTree(T) Members

The following tables list the members exposed by the PQTree(T) type.

Public Constructors

	Name	Description
	PQTree	

Public Methods

	Name	Description
	bubble	
	getRoot	
	print	Overloaded.
	reduce	
	reduction	
	reinit	
	setRoot	
	templateL1	
	templateP1	
	templateP2	
	templateP3	
	templateP4	
	templateP5	
	templateP6	
	templateQ1	
	templateQ2	

	templateQ3	

See Also

PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T) Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public PQTree ()
```

See Also

PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T) Methods

PQTree(T).bubble Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean bubble (
    ArrayList<PQTree.Node> s
)
```

Parameters

s

Return Value

See Also

PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).getRoot Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public PQTree.Node getRoot ()`

Return Value

See Also

PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).print Method

Overload List

Name	Description
PQTree(T).print ()	
PQTree(T).print (String)	

See Also

PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).print Method ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public void print ()`

See Also

print Method Overload List
PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).print Method (String)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void print (
    String prefix
)
```

Parameters

prefix

See Also

print Method Overload List
PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).reduce Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public PQTree.Node reduce (
    ArrayList<PQTree.Node> s
)
```

Parameters

s

Return Value

See Also

PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).reduction Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public PQTree.Node reduction (
    ArrayList<PQTree.Node> s
)
```

Parameters

s

Return Value

See Also

PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).reinit Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void reinit ()
```

See Also

PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).setRoot Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setRoot (
    PQTree.Node value
)
```

Parameters

value

See Also

PQTree(T).templateL1 Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean templateL1 (
    PQTree.Node lNode
)
```

Parameters

lNode

Return Value

See Also

PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).templateP1 Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean templateP1 (
    PQTree.Node pNode
)
```

Parameters

pNode

Return Value

See Also

PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).templateP2 Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean templateP2 (
    PQTree.Node pNode
)
```

Parameters

pNode

Return Value

See Also

PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).templateP3 Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean templateP3 (
    PQTree.Node pNode
)
```

Parameters

pNode

Return Value

See Also

PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).templateP4 Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean templateP4 (
    PQTree.Node pNode
)
```

Parameters

pNode

Return Value

See Also

PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).templateP5 Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean templateP5 (
    PQTree.Node pNode
)
```

Parameters

pNode

Return Value

See Also

PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).templateP6 Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean templateP6 (
    PQTree.Node pNode
)
```

Parameters

pNode

Return Value

See Also

PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).templateQ1 Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean templateQ1 (
    PQTree.Node qNode
)
```

Parameters

qNode

Return Value

See Also

PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).templateQ2 Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean templateQ2 (
    PQTree.Node qNode
)
```

Parameters

qNode

Return Value

See Also

PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

PQTree(T).templateQ3 Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean templateQ3 (
    PQTree.Node qNode
)
```

Parameters

qNode

Return Value

See Also

PQTree(T) Members
PQTree<T> Class
com.mindfusion.graphs Namespace

QuasiUpwardDrawing Class

Creates quasi-upward drawing of a connected graph.

Syntax

Java

```
public class QuasiUpwardDrawing
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.graphs.QuasiUpwardDrawing

See Also

QuasiUpwardDrawing Members

Creates quasi-upward drawing of a connected graph.

The following tables list the members exposed by the QuasiUpwardDrawing type.

Public Constructors

	Name	Description
	QuasiUpwardDrawing	Overloaded.

Protected Fields

	Name	Description
	edgePoints	
	vertexPoints	

Public Methods

	Name	Description
	getEdgePoints	
	getVertexPoints	

See Also

QuasiUpwardDrawing Class
com.mindfusion.graphs Namespace

QuasiUpwardDrawing Fields

QuasiUpwardDrawing.edgePoints Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`protected HashMap<Edge, ArrayList<PointF>> edgePoints`

See Also

QuasiUpwardDrawing Members
QuasiUpwardDrawing Class

QuasiUpwardDrawing.vertexPoints Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`protected HashMap<Vertex, PointF> vertexPoints`

See Also

QuasiUpwardDrawing Members
QuasiUpwardDrawing Class
com.mindfusion.graphs Namespace

QuasiUpwardDrawing Constructor

Overload List

Name	Description
QuasiUpwardDrawing ()	
QuasiUpwardDrawing (Graph)	

See Also

QuasiUpwardDrawing Class
com.mindfusion.graphs Namespace

QuasiUpwardDrawing Constructor ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public QuasiUpwardDrawing ()`

See Also

QuasiUpwardDrawing Constructor Overload List
QuasiUpwardDrawing Class
com.mindfusion.graphs Namespace

QuasiUpwardDrawing Constructor (Graph)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public QuasiUpwardDrawing (
    Graph graph
)
```

Parameters

graph

See Also

QuasiUpwardDrawing Constructor Overload List
QuasiUpwardDrawing Class
com.mindfusion.graphs Namespace

QuasiUpwardDrawing Methods

QuasiUpwardDrawing.getEdgePoints Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Edge, ArrayList<PointF>> getEdgePoints ()
```

Return Value

See Also

QuasiUpwardDrawing Members
QuasiUpwardDrawing Class
com.mindfusion.graphs Namespace

QuasiUpwardDrawing.getVertexPoints Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Vertex, PointF> getVertexPoints ()
```

Return Value

See Also

QuasiUpwardDrawing Members
QuasiUpwardDrawing Class
com.mindfusion.graphs Namespace

Representation Class

Syntax

Java
`public class Representation`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Representation
    com.mindfusion.graphs.ConstrainedVisibility
    com.mindfusion.graphs.Tessellation
    com.mindfusion.graphs.Visibility

See Also

Representation Members
com.mindfusion.graphs Namespace

Representation Members

The following tables list the members exposed by the Representation type.

Public Constructors

	Name	Description
	Representation	Overloaded.

Protected Fields

	Name	Description
	d	
	s	
	t	
	X	

	Y	

Public Methods

	Name	Description
	getDualGraph	
	getInEdges	
	getInMedian	
	getOutEdges	
	getOutMedian	
	getSink	
	getSource	
	getTopologicalSort	
	leftmostIncoming	
	leftmostOutgoing	
	rightmostOutgoing	

Protected Methods

	Name	Description
	dest	Overloaded.
	left	Overloaded.
	orig	Overloaded.
	right	Overloaded.

See Also

Representation Class
com.mindfusion.graphs Namespace

Representation Fields

Representation.d Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`protected DualGraph d`

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.s Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
protected Vertex s
```

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.t Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
protected Vertex t
```

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.X Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
protected float[] X
```

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.Y Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`protected float[] Y`

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation Constructor

Overload List

Name	Description
Representation (Graph, boolean)	
Representation (Graph, boolean, boolean)	
Representation (Graph, boolean, boolean, StEmbedding)	
Representation (Graph, boolean, StEmbedding)	

See Also

Representation Class
com.mindfusion.graphs Namespace

Representation Constructor (Graph, boolean)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Representation (
    Graph stGraph,
    boolean weighted
)
```

Parameters

stGraph

weighted

See Also

Representation Constructor Overload List
Representation Class
com.mindfusion.graphs Namespace

Representation Constructor (Graph, boolean, boolean)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Representation (
    Graph stGraph,
    boolean weighted,
    boolean xOrdering
)
```

Parameters

stGraph

weighted

xOrdering

See Also

Representation Constructor Overload List
Representation Class
com.mindfusion.graphs Namespace

Representation Constructor (Graph, boolean, boolean, StEmbedding)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Representation (
    Graph stGraph,
    boolean weighted,
    boolean xOrdering,
    StEmbedding stEmbedding
)
```

Parameters

stGraph

weighted

xOrdering

stEmbedding

See Also

Representation Constructor Overload List
Representation Class
com.mindfusion.graphs Namespace

Representation Constructor (Graph, boolean, StEmbedding)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Representation (
    Graph stGraph,
    boolean weighted,
    StEmbedding stEmbedding
)
```

Parameters

stGraph

weighted

stEmbedding

See Also

Representation Constructor Overload List
Representation Class
com.mindfusion.graphs Namespace

Representation Methods

Representation.dest Method

Overload List

Name	Description
Representation.dest (Edge)	
Representation.dest (Face)	

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.dest Method (Edge)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
protected Vertex dest (
    Edge e
)
```

Parameters

e

Return Value

See Also

dest Method Overload List
Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.dest Method (Face)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
protected Vertex dest (
    Face f
)
```

Parameters

f

Return Value

See Also

dest Method Overload List
Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.getDualGraph Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public DualGraph getDualGraph ()
```

Return Value

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.getInEdges Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Edge> getInEdges (
    Vertex v
)
```

Parameters

v

Return Value

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.getInMedian Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge getInMedian (
    Vertex v
)
```

Parameters

v

Return Value

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.getOutEdges Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Edge> getOutEdges (
    Vertex v
)
```

Parameters

v

Return Value

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.getOutMedian Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Edge getOutMedian (
    Vertex v
)
```

Parameters

v

Return Value

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.getSink Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Vertex getSink ()
```

Return Value

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.getSource Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Vertex getSource ()
```

Return Value

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.getTopologicalSort Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public int[] getTopologicalSort ()`

Return Value

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.left Method

Overload List

Name	Description
Representation.left (Edge)	
Representation.left (Vertex)	

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.left Method (Edge)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

`protected Face left (`
`  Edge e`
`)`

Parameters

e

Return Value

See Also

left Method Overload List
Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.left Method (Vertex)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
protected Face left (
    Vertex v
)
```

Parameters

v

Return Value

See Also

left Method Overload List
Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.leftmostIncoming Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge leftmostIncoming (
    Vertex v
)
```

Parameters

v

Return Value

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.leftmostOutgoing Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge leftmostOutgoing (
    Vertex v
)
```

Parameters

v

Return Value

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.orig Method

Overload List

Name	Description
Representation.orig (Edge)	
Representation.orig (Face)	

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.orig Method (Edge)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
protected Vertex orig (
    Edge e
)
```

Parameters

e

Return Value

See Also

orig Method Overload List
Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.orig Method (Face)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
protected Vertex orig (
    Face f
)
```

Parameters

f

Return Value

See Also

orig Method Overload List
Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.right Method

Overload List

Name	Description
Representation.right (Edge)	
Representation.right (Vertex)	

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.right Method (Edge)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
protected Face right (
    Edge e
)
```

Parameters

e

Return Value

See Also

right Method Overload List
Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.right Method (Vertex)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
protected Face right (
    Vertex v
)
```

Parameters

v

Return Value

See Also

right Method Overload List
Representation Members
Representation Class
com.mindfusion.graphs Namespace

Representation.rightmostOutgoing Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge rightmostOutgoing (
    Vertex v
)
```

Parameters

v

Return Value

See Also

Representation Members
Representation Class
com.mindfusion.graphs Namespace

Set<T> Class

Syntax

Java

```
public class Set<T> extends HashMap<K, V> implements Iterable<T>, Cloneable
```

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractMap(K, V)
    java.util.HashMap(K, V)
      com.mindfusion.graphs.Set(T)

See Also

Set(T) Members
com.mindfusion.graphs Namespace

Set(T) Members

The following tables list the members exposed by the Set(T) type.

Public Constructors

	Name	Description
	Set	Overloaded.

Public Methods

	Name	Description
	add	Overloaded.
	clone	
	contains	
	containsAll	
	deepClone	
	getFirst	
	iterator	

See Also

Set<T> Class
com.mindfusion.graphs Namespace

Set(T) Constructor

Overload List

Name	Description
Set(T) ()	
Set(T) (Iterable)	

See Also

Set<T> Class
com.mindfusion.graphs Namespace

Set(T) Constructor ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Set ()`

See Also

Set(T) Constructor Overload List
Set<T> Class
com.mindfusion.graphs Namespace

Set(T) Constructor (Iterable<T>)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

`public Set (`
`  Iterable<T> elements`
`)`

Parameters

elements

See Also

Set(T) Constructor Overload List
Set<T> Class
com.mindfusion.graphs Namespace

Set(T) Methods

Set(T).add Method

Overload List

Name	Description
Set(T).add (Collection) Set(T).add (T)	

See Also

Set(T) Members
Set<T> Class
com.mindfusion.graphs Namespace

Set(T).add Method (Collection<T>)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void add (
    Collection<T> subset
)
```

Parameters

subset

See Also

add Method Overload List
Set(T) Members
Set<T> Class
com.mindfusion.graphs Namespace

Set(T).add Method (T)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void add (
    T element
)
```

Parameters

element

See Also

add Method Overload List
Set(T) Members
Set<T> Class
com.mindfusion.graphs Namespace

Set(T).clone Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Object clone ()
```

Return Value

See Also

Set(T) Members
Set<T> Class
com.mindfusion.graphs Namespace

Set(T).contains Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public boolean contains (
    T element
)
```

Parameters

element

Return Value

See Also

Set(T) Members
Set<T> Class
com.mindfusion.graphs Namespace

Set(T).containsAll Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public boolean containsAll (
    Collection<T> elements
)
```

Parameters

elements

Return Value

See Also

Set(T) Members
Set<T> Class
com.mindfusion.graphs Namespace

Set(T).deepClone Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Set<T> deepClone ()`

Return Value

See Also

Set(T) Members
Set<T> Class
com.mindfusion.graphs Namespace

Set(T).getFirst Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public T getFirst ()`

Return Value

See Also

Set(T) Members
Set<T> Class
com.mindfusion.graphs Namespace

Set(T).iterator Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Iterator<T> iterator ()`

Return Value

See Also

Set(T) Members
Set<T> Class
com.mindfusion.graphs Namespace

Size Class

Syntax

Java
`public class Size`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Size

See Also

Size Members
com.mindfusion.graphs Namespace

Size Members

The following tables list the members exposed by the Size type.

Public Constructors

	Name	Description
	Size	

Public Fields

	Name	Description
	Height	
	Width	

See Also

Size Class
com.mindfusion.graphs Namespace

Size Fields

Size.Height Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public float Height
```

See Also

Size Members
Size Class
com.mindfusion.graphs Namespace

Size.Width Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public float Width
```

See Also

Size Members
Size Class
com.mindfusion.graphs Namespace

Size Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Size (
    float width,
```

```
    float height
)
```

Parameters

width

height

See Also

Size Class
com.mindfusion.graphs Namespace

StConversion Class

Syntax

Java
`public class StConversion`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.StConversion

See Also

StConversion Members
com.mindfusion.graphs Namespace

StConversion Members

The following tables list the members exposed by the StConversion type.

Public Methods

	Name	Description
	undo	

See Also

StConversion Class
com.mindfusion.graphs Namespace

StConversion Methods

StConversion.undo Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public void undo ()
```

See Also

StConversion Members
StConversion Class
com.mindfusion.graphs Namespace

StEmbedding Class

Syntax

```
Java
public class StEmbedding
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.StEmbedding

See Also

StEmbedding Members
com.mindfusion.graphs Namespace

StEmbedding Members

The following tables list the members exposed by the StEmbedding type.

Public Constructors

	Name	Description
	StEmbedding	

Public Fields

	Name	Description
	embedding	
	s	
	t	

See Also

StEmbedding Class
com.mindfusion.graphs Namespace

StEmbedding Fields

StEmbedding.embedding Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Embedding embedding
```

See Also

StEmbedding Members
StEmbedding Class
com.mindfusion.graphs Namespace

StEmbedding.s Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Vertex s
```

See Also

StEmbedding Members
StEmbedding Class
com.mindfusion.graphs Namespace

StEmbedding.t Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Vertex t
```

See Also

StEmbedding Members
StEmbedding Class
com.mindfusion.graphs Namespace

StEmbedding Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public StEmbedding ()`

See Also

StEmbedding Class
com.mindfusion.graphs Namespace

StPlanarization Class

Syntax

Java
`public class StPlanarization`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.StPlanarization

See Also

StPlanarization Members
com.mindfusion.graphs Namespace

StPlanarization Members

The following tables list the members exposed by the StPlanarization type.

Public Methods

	Name	Description
	undo	

See Also

StPlanarization Class
com.mindfusion.graphs Namespace

StPlanarization Methods

StPlanarization.undo Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public void undo ()`

See Also

StPlanarization Members
StPlanarization Class
com.mindfusion.graphs Namespace

Table Class

Syntax

Java
`public class Table extends Vertex`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Vertex
    com.mindfusion.graphs.Table

See Also

Table Members
com.mindfusion.graphs Namespace

Table Members

The following tables list the members exposed by the Table type.

Public Constructors

	Name	Description
	Table	

Public Fields

	Name	Description
	debugId	(Inherited from Vertex.)
	index	(Inherited from Vertex.)
	layer	(Inherited from Vertex.)
	traits	(Inherited from Vertex.)

Public Methods

	Name	Description
	adjacentTo	(Inherited from Vertex.)
	edgeTo	(Inherited from Vertex.)
	getAttributes	
	getBalance	(Inherited from Vertex.)
	getCommonEdge	(Inherited from Vertex.)
	getData	(Inherited from Vertex.)
	getDegree	(Inherited from Vertex.)
	getEdges	(Inherited from Vertex.)
	getInEdges	(Inherited from Vertex.)
	getNeighbors	(Inherited from Vertex.)
	getOutEdges	(Inherited from Vertex.)
	getTraits	(Inherited from Vertex.)
	getWeight	(Inherited from Vertex.)
	highestUpEdge	(Inherited from Vertex.)
	incidentWith	(Inherited from Vertex.)
	lowestDownEdge	(Inherited from Vertex.)
	removeEdge	(Inherited from Vertex.)
	removeInEdge	(Inherited from Vertex.)
	setBalance	(Inherited from Vertex.)
	setData	(Inherited from Vertex.)
	setWeight	(Inherited from Vertex.)
	toString	(Inherited from Vertex.)

See Also

Table Class
com.mindfusion.graphs Namespace

Table Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Table ()
```

See Also

Table Class
com.mindfusion.graphs Namespace

Table Methods

Table.getAttributes Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public ArrayList<Attribute> getAttributes ()
```

Return Value

See Also

Table Members
Table Class
com.mindfusion.graphs Namespace

Tessellation Class

Syntax

```
Java
public class Tessellation extends Representation
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Representation
    com.mindfusion.graphs.Tessellation

See Also

Tessellation Members
com.mindfusion.graphs Namespace

Tessellation Members

The following tables list the members exposed by the Tessellation type.

Public Constructors

	Name	Description
	Tessellation	

Protected Fields

	Name	Description
	d	(Inherited from Representation.)
	s	(Inherited from Representation.)
	t	(Inherited from Representation.)
	X	(Inherited from Representation.)
	Y	(Inherited from Representation.)

Public Methods

	Name	Description
	getDualGraph	(Inherited from Representation.)
	getInEdges	(Inherited from Representation.)
	getInMedian	(Inherited from Representation.)
	getOutEdges	(Inherited from Representation.)
	getOutMedian	(Inherited from Representation.)
	getSink	(Inherited from Representation.)
	getSource	(Inherited from Representation.)
	getTopologicalSort	(Inherited from Representation.)
	leftmostIncoming	(Inherited from Representation.)
	leftmostOutgoing	(Inherited from Representation.)

	rightmostOutgoing	(Inherited from Representation.)

Protected Methods

	Name	Description
	dest	Overloaded. (Inherited from Representation.)
	left	Overloaded. (Inherited from Representation.)
	orig	Overloaded. (Inherited from Representation.)
	right	Overloaded. (Inherited from Representation.)

See Also

Tessellation Class
com.mindfusion.graphs Namespace

Tessellation Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Tessellation (
    Graph stGraph,
    boolean weighted
)
```

Parameters

stGraph

weighted

See Also

Tessellation Class
com.mindfusion.graphs Namespace

Utilities Class

Syntax

Java

```
public class Utilities
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.graphs.Utilities

See Also

Utilities Members
com.mindfusion.graphs Namespace

Utilities Members

The following tables list the members exposed by the Utilities type.

Public Constructors

	Name	Description
	Utilities	

Public Methods

	Name	Description
	commonElement	
	mapList	
	readFileAsString	
	writeStringToFile	

See Also

Utilities Class
com.mindfusion.graphs Namespace

Utilities Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Utilities ()`

See Also

Utilities Class
com.mindfusion.graphs Namespace

Utilities Methods

Utilities.commonElement<T> Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public static <T> T commonElement (
    Collection<T> c1,
    Collection<T> c2
)
```

Parameters

c1

c2

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.graphs Namespace

Utilities.mapList<T> Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public static <T> ArrayList<T> mapList (
    Collection<T> source,
    HashMap<T, T> map
)
```

Parameters

source

map

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.graphs Namespace

Utilities.readFileAsString Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public static String readFileAsString (
    String filePath
)
```

Parameters

filePath

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.graphs Namespace

Utilities.writeStringToFile Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public static String writeStringToFile (
    String str,
    String filePath
)
```

Parameters

str

filePath

Return Value

See Also

Utilities Members
Utilities Class
com.mindfusion.graphs Namespace

Vertex Class

Syntax

Java
`public class Vertex`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.graphs.Vertex
com.mindfusion.graphs.Table

See Also

Vertex Members
com.mindfusion.graphs Namespace

Vertex Members

The following tables list the members exposed by the Vertex type.

Public Constructors

	Name	Description
	Vertex	Overloaded.

Public Fields

	Name	Description
	debugId	
	index	
	layer	
	traits	

Public Methods

	Name	Description
	adjacentTo	
	edgeTo	
	getBalance	
	getCommonEdge	
	getData	
	getDegree	
	getEdges	

	getInEdges	
	getNeighbors	
	getOutEdges	
	getTraits	
	getWeight	
	highestUpEdge	
	incidentWith	
	lowestDownEdge	
	removeEdge	
	removeInEdge	
	setBalance	
	setData	
	setWeight	
	toString	

See Also

Vertex Class
com.mindfusion.graphs Namespace

Vertex Fields

Vertex.debugId Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public String debugId
```

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.index Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public int index`

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.layer Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public int layer`

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.traits Field

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Hashtable<Object, Object> traits`

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex Constructor

Overload List

Name	Description
Vertex ()	
Vertex (Vertex)	

See Also

Vertex Class
com.mindfusion.graphs Namespace

Vertex Constructor ()

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Vertex ()
```

See Also

Vertex Constructor Overload List
Vertex Class
com.mindfusion.graphs Namespace

Vertex Constructor (Vertex)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Vertex (
    Vertex prototype
)
```

Parameters

prototype

See Also

Vertex Constructor Overload List
Vertex Class
com.mindfusion.graphs Namespace

Vertex Methods

Vertex.adjacentTo Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean adjacentTo (
    Vertex vertex
)
```

Parameters

vertex

Return Value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.edgeTo Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge edgeTo (
    Vertex vertex
)
```

Parameters

vertex

Return Value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.getBalance Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public int getBalance ()
```

Return Value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.getCommonEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Edge getCommonEdge (
    Vertex vertex
)
```

Parameters

vertex

Return Value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.getData Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public Object getData ()
```

Return Value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.getDegree Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public int getDegree ()`

Return Value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.getEdges Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public ArrayList<Edge> getEdges ()`

Return Value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.getInEdges Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Edge> getInEdges ()
```

Return Value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.getNeighbors Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Vertex> getNeighbors ()
```

Return Value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.getOutEdges Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public ArrayList<Edge> getOutEdges ()
```

Return Value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.getTraits Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Hashtable<Object, Object> getTraits ()`

Return Value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.getWeight Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public float getWeight ()`

Return Value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.highestUpEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public Edge highestUpEdge ()`

Return Value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.incidentWith Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public boolean incidentWith (
    Edge edge
)
```

Parameters

edge

Return Value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.lowestDownEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Edge lowestDownEdge ()
```

Return Value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.removeEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public void removeEdge (
    Edge edge
)
```

Parameters

edge

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.removeInEdge Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public void removeInEdge (
    Edge edge
)
```

Parameters

edge

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.setBalance Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java
public void setBalance (
    int value
)
```

Parameters

value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.setData Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setData (
    Object value
)
```

Parameters

value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.setWeight Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setWeight (
    float value
)
```

Parameters

value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

Vertex.toString Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java
`public String toString ()`

Return Value

See Also

Vertex Members
Vertex Class
com.mindfusion.graphs Namespace

VertexExchangeGraph Class

Syntax

Java
`public class VertexExchangeGraph extends Graph`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Graph
    com.mindfusion.graphs.VertexExchangeGraph

See Also

VertexExchangeGraph Members
com.mindfusion.graphs Namespace

VertexExchangeGraph Members

The following tables list the members exposed by the VertexExchangeGraph type.

Public Constructors

	Name	Description
	VertexExchangeGraph	

Public Fields

	Name	Description

	edgeCopyToOrigMap	(Inherited from Graph.)
	edgeOrigToCopyMap	(Inherited from Graph.)
	searchOrder	(Inherited from Graph.)
	vertexCopyToOrigMap	(Inherited from Graph.)
	vertexOrigToCopyMap	(Inherited from Graph.)

Protected Fields

	Name	Description
	edges	(Inherited from Graph.)
	vertices	(Inherited from Graph.)

Public Methods

	Name	Description
	addEdge	Overloaded. (Inherited from Graph.)
	addVertex	Overloaded. (Inherited from Graph.)
	addVertexAndOutEdges	(Inherited from Graph.)
	allPairShortestPaths	Overloaded. (Inherited from Graph.)
	assignTreeLevels	(Inherited from Graph.)
	bestTreeRoot	(Inherited from Graph.)
	coarsen	(Inherited from Graph.)
	containsRepeatedEdges	(Inherited from Graph.)
	contractEdge	(Inherited from Graph.)
	convertToStGraph	Overloaded. (Inherited from Graph.)
	convertToStGraphVirtualEnds	The input should be biconnected undirected graph. The output is directed acyclic ST graph. (Inherited from Graph.)
	createReverseMaps	(Inherited from Graph.)
	depthFirstSearch	Overloaded. (Inherited from Graph.)
	eliminateIntermediateSourcesAndSinks	(Inherited from Graph.)
	embedOnSameFace	(Inherited from Graph.)
	father	(Inherited from Graph.)
	findPlanarEmbedding	
	findPlanarSubgraph	(Inherited from Graph.)
	findPlanarSubgraphByBookEmbedding	(Inherited from Graph.)

	findPlanarSubgraphBySimpleEdgeInsertion	(Inherited from Graph.)
	findShortestPath	Overloaded. (Inherited from Graph.)
	findShortestWeightedPath	Overloaded. (Inherited from Graph.)
	getBiconnectedComponents	Overloaded. (Inherited from Graph.)
	getCanonicalOrder	(Inherited from Graph.)
	getColumns	
	getConnectedComponents	(Inherited from Graph.)
	getConnectedComponentsQuickFind	(Inherited from Graph.)
	getConnectedComponentsQuickUnion	(Inherited from Graph.)
	getDualGraph	Overloaded. (Inherited from Graph.)
	getEdgeConnectedComponents	(Inherited from Graph.)
	getEdges	(Inherited from Graph.)
	getLayers	(Inherited from Graph.)
	getLevelPlanarEmbedding	Must be called on a proper hierarchical graph. (Inherited from Graph.)
	getPlanarEmbedding	(Inherited from Graph.)
	getRows	
	getStNumbering	Overloaded. (Inherited from Graph.)
	getTreeChildren	(Inherited from Graph.)
	getVertices	(Inherited from Graph.)
	getWeightedTopologicalNumbering	Overloaded. (Inherited from Graph.)
	isAcyclic	(Inherited from Graph.)
	isPlanar	(Inherited from Graph.)
	isProperHierarchical	Must be called on a simple hierarchical graph. (Inherited from Graph.)
	isTree	(Inherited from Graph.)
	load	(Inherited from Graph.)
	loadMappings	(Inherited from Graph.)
	makeAcyclic	Must be called on a simple connected graph. (Inherited from Graph.)
	makeBiconnected	(Inherited from Graph.)
	makeBimodal	(Inherited from Graph.)
	makeProperHierarchical	Replaces long links with a sequence of virtual nodes and links that connect adjacent levels. Must be called on a simple hierarchical graph. (Inherited from Graph.)

	makeStPlanar	(Inherited from Graph.)
	maximalMatching	(Inherited from Graph.)
	maxWeightedCliqueOfTransitiveDAG	Must be called on a transitive DAG. (Inherited from Graph.)
	minCostPathOrNegativeCycle	(Inherited from Graph.)
	optimalTopologicalNumbering	Overloaded. (Inherited from Graph.)
	partition	(Inherited from Graph.)
	partitionTree	(Inherited from Graph.)
	planarize	Overloaded. (Inherited from Graph.)
	planarMakeBiconnected	Must be called on a planar graph. (Inherited from Graph.)
	removeAllEdges	(Inherited from Graph.)
	removeEdge	(Inherited from Graph.)
	removeVertex	(Inherited from Graph.)
	reorderTopologically	(Inherited from Graph.)
S	reverse	(Inherited from Graph.)
	save	(Inherited from Graph.)
	saveMappings	(Inherited from Graph.)
	setLabels	
	splitToMaxDegree	Overloaded. (Inherited from Graph.)
	topologicalSort	(Inherited from Graph.)
	toString	(Inherited from Graph.)
	triangulate	Overloaded. (Inherited from Graph.)
	vertexAt	

See Also

VertexExchangeGraph Class
com.mindfusion.graphs Namespace

VertexExchangeGraph Constructor

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public VertexExchangeGraph (
    Graph graph
)
```

Parameters

graph

See Also

VertexExchangeGraph Class
com.mindfusion.graphs Namespace

VertexExchangeGraph Methods

VertexExchangeGraph.findPlanarEmbedding Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HierarchicalEmbedding findPlanarEmbedding ()
```

Return Value

See Also

VertexExchangeGraph Members
VertexExchangeGraph Class
com.mindfusion.graphs Namespace

VertexExchangeGraph.getColumns Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int getColumns (
    int r
)
```

Parameters

r

Return Value

See Also

VertexExchangeGraph Members
VertexExchangeGraph Class
com.mindfusion.graphs Namespace

VertexExchangeGraph.getRows Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public int getRows ()
```

Return Value

See Also

VertexExchangeGraph Members
VertexExchangeGraph Class
com.mindfusion.graphs Namespace

VertexExchangeGraph.setLabels Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public void setLabels (
    HierarchicalEmbedding embedding
)
```

Parameters

embedding

See Also

VertexExchangeGraph Members
VertexExchangeGraph Class
com.mindfusion.graphs Namespace

VertexExchangeGraph.vertexAt Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Vertex vertexAt (
    int r,
    int c
)
```

Parameters

r

c

Return Value

See Also

VertexExchangeGraph Members
VertexExchangeGraph Class
com.mindfusion.graphs Namespace

VertexSizeFunction Interface

Syntax

Java

```
public interface VertexSizeFunction
```

Inheritors

com.mindfusion.diagramming.jlayout.CascadeLayout

See Also

VertexSizeFunction Members
com.mindfusion.graphs Namespace

VertexSizeFunction Members

The following tables list the members exposed by the VertexSizeFunction type.

Public Methods

	Name	Description
	calc	

See Also

VertexSizeFunction Interface
com.mindfusion.graphs Namespace

VertexSizeFunction Methods

VertexSizeFunction.calc Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

```
Java

Size calc (
    Vertex vertex
)
```

Parameters

vertex

Return Value

See Also

VertexSizeFunction Members
VertexSizeFunction Interface
com.mindfusion.graphs Namespace

Visibility Class

Syntax

```
Java

public class Visibility extends Representation
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.graphs.Representation
    com.mindfusion.graphs.Visibility

See Also

Visibility Members
com.mindfusion.graphs Namespace

Visibility Members

The following tables list the members exposed by the Visibility type.

Public Constructors

	Name	Description
	Visibility	Overloaded.

Protected Fields

	Name	Description
	d	(Inherited from Representation.)
	s	(Inherited from Representation.)
	t	(Inherited from Representation.)
	X	(Inherited from Representation.)
	Y	(Inherited from Representation.)

Public Methods

	Name	Description
	getDualGraph	(Inherited from Representation.)
	getEdgeSegments	
	getInEdges	(Inherited from Representation.)
	getInMedian	(Inherited from Representation.)
	getOutEdges	(Inherited from Representation.)
	getOutMedian	(Inherited from Representation.)
	getSink	(Inherited from Representation.)
	getSource	(Inherited from Representation.)
	getTopologicalSort	(Inherited from Representation.)
	getVertexSegments	
	leftmostIncoming	(Inherited from Representation.)
	leftmostOutgoing	(Inherited from Representation.)
	rightmostOutgoing	(Inherited from Representation.)

Protected Methods

	Name	Description
	dest	Overloaded. (Inherited from Representation.)
	left	Overloaded. (Inherited from Representation.)
	orig	Overloaded. (Inherited from Representation.)
	right	Overloaded. (Inherited from Representation.)

See Also

Visibility Class
com.mindfusion.graphs Namespace

Visibility Constructor

Overload List

Name	Description
Visibility (Graph)	
Visibility (Graph, StEmbedding)	

See Also

Visibility Class
com.mindfusion.graphs Namespace

Visibility Constructor (Graph)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Visibility (
    Graph stGraph
)
```

Parameters

stGraph

See Also

Visibility Constructor Overload List
Visibility Class
com.mindfusion.graphs Namespace

Visibility Constructor (Graph, StEmbedding)

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public Visibility (
    Graph stGraph,
    StEmbedding stEmbedding
)
```

Parameters

stGraph

stEmbedding

See Also

Visibility Constructor Overload List
Visibility Class
com.mindfusion.graphs Namespace

Visibility Methods

Visibility.getEdgeSegments Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Edge, VSegment> getEdgeSegments ()
```

Return Value

See Also

Visibility Members
Visibility Class
com.mindfusion.graphs Namespace

Visibility.getVertexSegments Method

Namespace: com.mindfusion.graphs
Package: com.mindfusion.graphs

Syntax

Java

```
public HashMap<Vertex, HSegment> getVertexSegments ()
```

Return Value

See Also

com.mindfusion.pdf Namespace

AutoScale Enumeration

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public enum AutoScale`

Members

	Member name	Description
	FitToPage	
	FitToPageNoUpScale	
	FitToWidth	
	None	

See Also

com.mindfusion.pdf Namespace

BufferedImageConverter Class

BufferedImageConverter.java -- static class containing a method to convert a java.awt.image.BufferedImage into a java.awt.Image

Syntax

Java
`public class BufferedImageConverter`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.BufferedImageConverter

See Also

BufferedImageConverter Members
com.mindfusion.pdf Namespace

BufferedImageConverter Members

BufferedImageConverter.java -- static class containing a method to convert a java.awt.image.BufferedImage into a java.awt.Image

The following tables list the members exposed by the BufferedImageConverter type.

Public Constructors

	Name	Description
	BufferedImageConverter	

Public Methods

	Name	Description
	createBufferedImage	Overloaded.

See Also

BufferedImageConverter Class
com.mindfusion.pdf Namespace

BufferedImageConverter Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public BufferedImageConverter ()`

See Also

BufferedImageConverter Class
com.mindfusion.pdf Namespace

BufferedImageConverter Methods

BufferedImageConverter.createBufferedImage Method

Overload List

Name	Description

BufferedImageConverter.createBufferedImage (Image, Component)	
BufferedImageConverter.createBufferedImage (Image, int, Component)	

See Also

BufferedImageConverter Members
BufferedImageConverter Class
com.mindfusion.pdf Namespace

BufferedImageConverter.createBufferedImage Method (Image, Component)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static BufferedImage createBufferedImage (
    Image imageIn,
    Component comp
)
```

Parameters

imageIn

comp

Return Value

See Also

createBufferedImage Method Overload List
BufferedImageConverter Members
BufferedImageConverter Class
com.mindfusion.pdf Namespace

BufferedImageConverter.createBufferedImage Method (Image, int, Component)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static BufferedImage createBufferedImage (
    Image imageIn,
    int imageType,
```

```
    Component comp
)
```

Parameters

imageIn

imageType

comp

Return Value

See Also

createBufferedImage Method Overload List
BufferedImageConverter Members
BufferedImageConverter Class
com.mindfusion.pdf Namespace

Flags Class

Syntax

Java
`public class Flags`

Inheritance Hierarchy

java.lang.Object
    com.mindfusion.pdf.Globals.Flags

See Also

Flags Members
com.mindfusion.pdf Namespace

Flags Members

The following tables list the members exposed by the Flags type.

Public Constructors

	Name	Description
	Flags	

Public Fields

	Name	Description
	Jpeg2000Available	

	Jpeg2000FormatName	
	SimpleFonts	
	UseJPEG2000Encoding	

See Also

Flags Class
com.mindfusion.pdf Namespace

Flags Fields

Flags.Jpeg2000Available Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static boolean Jpeg2000Available
```

See Also

Flags Members
Flags Class
com.mindfusion.pdf Namespace

Flags.Jpeg2000FormatName Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static String Jpeg2000FormatName
```

See Also

Flags Members
Flags Class
com.mindfusion.pdf Namespace

Flags.SimpleFonts Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String[] SimpleFonts
```

See Also

Flags Members
Flags Class
com.mindfusion.pdf Namespace

Flags.UseJPEG2000Encoding Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static boolean UseJPEG2000Encoding
```

See Also

Flags Members
Flags Class
com.mindfusion.pdf Namespace

Flags Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public Flags ()
```

See Also

Flags Class
com.mindfusion.pdf Namespace

Globals Class

Syntax

```
Java
```

```
public class Globals
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.Globals

See Also

Globals Members
com.mindfusion.pdf Namespace

Globals Members

The following tables list the members exposed by the Globals type.

Public Constructors

	Name	Description
	Globals	

Public Fields

	Name	Description
	defaultCharset	
	defUnit	
	MAX_BUFFER	

Public Methods

	Name	Description
	getClip	
	getClipStr	
	getDefaultTransform	
	getDefaultTransforml	
	getDocument	
	getDocumentFooter	
	getDocumentHeader	
	getDocumentRect	
	getFont	
	getFontMetrics	
	getFRC	

	getGraphics	
	getId	
	getInitialRect	
	getLayoutRect	
	getLocale	
	getOrigin	
	getPaint	
	getRotationAngle	
	getScale	
	getTextScale	
	getTransform	
	getUnitScale	
	getUserScale	
	initrect	
	isClipped	
	isSimple	
	nextId	Overloaded.
	registerObject	
	resetId	
	setDocument	
	setDocumentRect	
	setGraphics	
	setId	
	setInitialRect	
	setLayoutRect	
	setTextScale	
	setUnitScale	

See Also

Globals Class
com.mindfusion.pdf Namespace

Globals Fields

Globals.defaultCharset Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static String defaultCharset
```

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.defUnit Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static GraphicsUnit defUnit
```

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.MAX_BUFFER Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static int MAX_BUFFER
```

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public Globals ()`

See Also

Globals Class
com.mindfusion.pdf Namespace

Globals Methods

Globals.getClip Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static Shape getClip ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getClipStr Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static String getClipStr ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getDefaultTransform Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static AffineTransform getDefaultTransform ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getDefaultTransformI Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static AffineTransform getDefaultTransformI ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getDocument Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static PdfDocument getDocument ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getDocumentFooter Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static byte[] getDocumentFooter ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getDocumentHeader Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static byte[] getDocumentHeader ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getDocumentRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static Rectangle2D getDocumentRect ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getFont Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static Font getFont ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getFontMetrics Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static FontMetrics getFontMetrics ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getFRC Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static FontRenderContext getFRC ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getGraphics Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static PdfGraphics2D getGraphics ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getId Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static long getId ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getInitialRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static Rectangle2D getInitialRect ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getLayoutRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static Rectangle2D getLayoutRect ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getLocale Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static Locale getLocale ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getOrigin Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static Point2D getOrigin ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getPaint Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static Paint getPaint ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getRotationAngle Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static float getRotationAngle ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getScale Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static float getScale ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getTextScale Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static float getTextScale ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getTransform Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static AffineTransform getTransform ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getUnitScale Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static float getUnitScale ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.getUserScale Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static float getUserScale ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.initrect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static void initrect ()
```

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.isClipped Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static boolean isClipped ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.isSimple Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static boolean isSimple (
    Font font
)
```

Parameters

font

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.nextId Method

Overload List

Name	Description
Globals.nextId ()	
Globals.nextId (int)	

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.nextId Method ()

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static long nextId ()`

Return Value

See Also

nextId Method Overload List
Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.nextId Method (int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static long nextId (
    int type
)
```

Parameters

type

Return Value

See Also

nextId Method Overload List
Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.registerObject Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static void registerObject (
    PdfObject po
)
```

Parameters

po

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.resetId Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static void resetId ()
```

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.setDocument Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static void setDocument (
    PdfDocument document
)
```

Parameters

document

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.setDocumentRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static void setDocumentRect (
    Rectangle2D rect
)
```

Parameters

rect

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.setGraphics Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static void setGraphics (
    PdfGraphics2D graphics
)
```

Parameters

graphics

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.setId Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static void setId (
    long value
)
```

Parameters

value

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.setInitialRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static void setInitialRect (
    Rectangle2D rect
)
```

Parameters

rect

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.setLayoutRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static void setLayoutRect (
    Rectangle2D rect
)
```

Parameters

rect

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.setTextScale Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static void setTextScale (
    float unitScale
)
```

Parameters

unitScale

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

Globals.setUnitScale Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static void setUnitScale (
    float unitScale
)
```

Parameters

unitScale

See Also

Globals Members
Globals Class
com.mindfusion.pdf Namespace

INotify<T> Interface

Syntax

Java

```
public interface INotify<T>
```

Inheritors

com.mindfusion.pdf.PdfObject

See Also

INotify(T) Members
com.mindfusion.pdf Namespace

INotify(T) Members

The following tables list the members exposed by the INotify(T) type.

Public Methods

	Name	Description

	OnAdded	
	OnChanged	

See Also

INotify<T> Interface
com.mindfusion.pdf Namespace

INotify(T) Methods

INotify(T).OnAdded Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
void OnAdded (
    int index
)
```

Parameters

index

See Also

INotify(T) Members
INotify<T> Interface
com.mindfusion.pdf Namespace

INotify(T).OnChanged Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
void OnChanged (
    int index,
    T oldValue,
    T newValue
)
```

Parameters

index

oldValue

newValue

See Also

INotify(T) Members
INotify<T> Interface
com.mindfusion.pdf Namespace

IPdfSaver Interface

Syntax

Java
`public interface IPdfSaver`

Inheritors

com.mindfusion.pdf.PdfObject

See Also

IPdfSaver Members
com.mindfusion.pdf Namespace

IPdfSaver Members

The following tables list the members exposed by the IPdfSaver type.

Public Methods

	Name	Description
	Save	

See Also

IPdfSaver Interface
com.mindfusion.pdf Namespace

IPdfSaver Methods

IPdfSaver.Save Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
void Save (
    PdfWriter writer
)
```

Parameters

writer

See Also

IPdfSaver Members
IPdfSaver Interface
com.mindfusion.pdf Namespace

NotifyableList<T> Class

Syntax

Java
`public class NotifyableList<T> extends AbstractList<E> implements Cloneable`

Inheritance Hierarchy

java.lang.Object
  java.util.AbstractCollection(E)
    java.util.AbstractList(E)
      com.mindfusion.pdf.NotifyableList(T)

See Also

NotifyableList(T) Members
com.mindfusion.pdf Namespace

NotifyableList(T) Members

The following tables list the members exposed by the NotifyableList(T) type.

Public Constructors

	Name	Description
	NotifyableList	

Public Methods

	Name	Description
	add	Overloaded.
	addAll	Overloaded.

	clear	
	contains	
	containsAll	
	equals	
	get	
	getLastElement	
	getLastIndex	
	hashCode	
	indexOf	
	isEmpty	
	iterator	
	lastIndexOf	
	listIterator	Overloaded.
	remove	Overloaded.
	removeAll	
	retainAll	
	set	
	size	
	subList	
	toArray	Overloaded.
	toString	

Protected Methods

	Name	Description
	clone	
	finalize	
	removeRange	

See Also

NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T) Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public NotifyableList ()`

See Also

NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T) Methods

NotifyableList(T).add Method

Overload List

Name	Description
NotifyableList(T).add (int, T)	
NotifyableList(T).add (T)	

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).add Method (int, T)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

`public void add (`
`  int index,`
`  T e`
`)`

Parameters

index

e

See Also

add Method Overload List
NotifyableList(T) Members

NotifyableList(T).add Method (T)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean add (
    T e
)
```

Parameters

e

Return Value

See Also

add Method Overload List
NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).addAll Method

Overload List

Name	Description
NotifyableList(T).addAll (Collection)	
NotifyableList(T).addAll (int, Collection)	

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).addAll Method (Collection<? extends T>)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean addAll (
    Collection<? extends T> c
)
```

Parameters

c

Return Value

See Also

addAll Method Overload List
NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).addAll Method (int, Collection<? extends T>)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean addAll (
    int index,
    Collection<? extends T> c
)
```

Parameters

index

c

Return Value

See Also

addAll Method Overload List
NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).clear Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void clear ()
```

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).clone Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
protected Object clone ()
```

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).contains Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean contains (
    Object o
)
```

Parameters

o

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).containsAll Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean containsAll (
    Collection<?> c
)
```

Parameters

c

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).equals Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean equals (
    Object o
)
```

Parameters

o

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).finalize Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
protected void finalize ()
```

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).get Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public T get (
    int index
)
```

Parameters

index

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).getLastElement Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public T getLastElement ()
```

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class

NotifyableList(T).getLastIndex Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public int getLastIndex ()
```

Return Value

the last added/changed list index

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).hashCode Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public int hashCode ()
```

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).indexOf Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public int indexOf (
    Object o
```

```
)
```

Parameters

o

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).isEmpty Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean isEmpty ()
```

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).iterator Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public Iterator<T> iterator ()
```

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).lastIndexOf Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public int lastIndexOf (
    Object o
)
```

Parameters

o

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).listIterator Method

Overload List

Name	Description
NotifyableList(T).listIterator ()	
NotifyableList(T).listIterator (int)	

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).listIterator Method ()

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public ListIterator<T> listIterator ()
```

Return Value

See Also

listIterator Method Overload List
NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).listIterator Method (int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public ListIterator<T> listIterator (
    int index
)
```

Parameters

index

Return Value

See Also

listIterator Method Overload List
NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).remove Method

Overload List

Name	Description
NotifyableList(T).remove (int)	
NotifyableList(T).remove (Object)	

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).remove Method (int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public T remove (
    int index
)
```

Parameters

index

Return Value

See Also

remove Method Overload List
NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).remove Method (Object)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean remove (
    Object o
)
```

Parameters

o

Return Value

See Also

remove Method Overload List
NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).removeAll Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public boolean removeAll (
    Collection<?> c
)
```

Parameters

c

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).removeRange Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
protected void removeRange (
    int fromIndex,
    int toIndex
)
```

Parameters

fromIndex

toIndex

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).retainAll Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
```

```
public boolean retainAll (
    Collection<?> c
)
```

Parameters

c

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).set Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public T set (
    int index,
    T e
)
```

Parameters

index

e

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).size Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public int size ()
```

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).subList Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public List<T> subList (
    int fromIndex,
    int toIndex
)
```

Parameters

fromIndex

toIndex

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).toArray Method

Overload List

Name	Description
NotifyableList(T).toArray ()	
NotifyableList(T).toArray (E[])	

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).toArray Method ()

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public Object[] toArray ()
```

Return Value

See Also

toArray Method Overload List
NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).toArray<E> Method (E[])

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public <E> E[] toArray (
    E[] a
)
```

Parameters

a

Return Value

See Also

toArray Method Overload List
NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

NotifyableList(T).toString Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public String toString ()
```

Return Value

See Also

NotifyableList(T) Members
NotifyableList<T> Class
com.mindfusion.pdf Namespace

PageOrientation Enumeration

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public enum PageOrientation`

Members

	Member name	Description
	Auto	
	Landscape	
	Portrait	

See Also

com.mindfusion.pdf Namespace

PageSizes Class

Syntax

Java
`public class PageSizes`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PageSizes

See Also

PageSizes Members
com.mindfusion.pdf Namespace

PageSizes Members

The following tables list the members exposed by the PageSizes type.

Public Constructors

	Name	Description
	PageSizes	

Public Fields

	Name	Description
	A0	
	A1	
	A10	
	A2	
	A3	
	A4	
	A5	
	A6	
	A7	
	A8	
	A9	
	ArchA	
	ArchB	
	ArchC	
	ArchD	
	ArchE	
	B0	
	B1	
	B2	
	B3	
	B4	
	B5	
	Flsa	
	HalfLetter	
	Ledger	

	Legal	
	Letter	
	Letter11x17	
	Note	

Public Methods

	Name	Description
	forEnum	

See Also

PageSizes Class
com.mindfusion.pdf Namespace

PageSizes Fields

PageSizes.A0 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension A0
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.A1 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension A1
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.A10 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension A10
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.A2 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension A2
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.A3 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension A3
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.A4 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension A4
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.A5 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension A5
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.A6 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension A6
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.A7 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension A7
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.A8 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension A8
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.A9 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension A9
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.ArchA Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Dimension ArchA
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.ArchB Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Dimension ArchB
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.ArchC Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Dimension ArchC
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.ArchD Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Dimension ArchD
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.ArchE Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Dimension ArchE
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.B0 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Dimension B0
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.B1 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension B1
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.B2 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension B2
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.B3 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension B3
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.B4 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension B4
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.B5 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension B5
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.Flsa Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension Flsa
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.HalfLetter Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Dimension HalfLetter
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.Ledger Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Dimension Ledger
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.Legal Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Dimension Legal
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.Letter Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension Letter
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.Letter11x17 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension Letter11x17
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes.Note Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static Dimension Note
```

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizes Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PageSizes ()
```

See Also

PageSizes Class
com.mindfusion.pdf Namespace

PageSizes Methods

PageSizes.forEnum Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Dimension forEnum (
    PageSizesEnum se,
    PageOrientation orientation
)
```

Parameters

se

orientation

Return Value

See Also

PageSizes Members
PageSizes Class
com.mindfusion.pdf Namespace

PageSizesEnum Enumeration

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public enum PageSizesEnum`

Members

	Member name	Description
	A0	
	A1	
	A10	
	A2	
	A3	
	A4	
	A5	
	A6	
	A7	
	A8	
	A9	
	ArchA	
	ArchB	
	ArchC	
	ArchD	
	ArchE	
	B0	
	B1	
	B2	
	B3	
	B4	
	B5	
	Document	
	Flsa	
	HalfLetter	
	Ledger	

	Legal	
	Letter	
	Letter11x17	
	Note	

See Also

com.mindfusion.pdf Namespace

PaintType Enumeration

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public enum PaintType`

Members

	Member name	Description
	Gradient	
	None	
	Pattern	
	Solid	
	Texture	

See Also

com.mindfusion.pdf Namespace

Patterns Class

Syntax

Java
`public class Patterns`

Inheritance Hierarchy

java.lang.Object
com.mindfusion.pdf.Globals.Patterns

See Also

Patterns Members
com.mindfusion.pdf Namespace

Patterns Members

The following tables list the members exposed by the Patterns type.

Public Constructors

	Name	Description
	Patterns	

Public Fields

	Name	Description
	Alpha	
	AlphaA	
	AnnotsDict	
	AnnotsE	
	ArrayE	
	Catalog	
	Color	
	ContentDict	
	ContentE	
	DashW	
	DictionaryE	
	Font	
	FontDesc	
	FontDict	
	GSStateDict	
	GState	
	GStateName	
	Hyperlink	
	ImageHolder	

	ImageJ	
	ImageJ2K	
	ObjFooter	
	ObjHeader	
	ObjName	
	PageHeader	
	PagesRoot	
	PatA	
	Pattern	
	PatternDict	
	PenW	
	PolyA	
	PolyB	
	PolyC	
	Rect	
	RectI	
	Region	
	SampledFunction	
	Shading	
	StreamFooter	
	StreamHeader	
	TextF	
	TextL	
	Tiling	
	TilingPattern	
	TilingResource	
	Trailer	
	XObjectDict	
	XRef	
	XRefEntry	

See Also

Patterns Class
com.mindfusion.pdf Namespace

Patterns Fields

Patterns.Alpha Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String Alpha
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.AlphaA Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String AlphaA
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.AnnotsDict Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String AnnotsDict
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.AnnotsE Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String AnnotsE
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.ArrayE Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String ArrayE
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.Catalog Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String Catalog
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.Color Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String Color
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.ContentDict Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String ContentDict
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.ContentE Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String ContentE
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.DashW Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String DashW
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.DictionaryE Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String DictionaryE
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.Font Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String Font
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.FontDesc Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String FontDesc
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.FontDict Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String FontDict
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.GSStateDict Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String GSStateDict
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.GState Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String GState
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.GStateName Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String GStateName
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.Hyperlink Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String Hyperlink
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.ImageHolder Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String ImageHolder
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.ImageJ Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String ImageJ
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.ImageJ2K Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String ImageJ2K
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.ObjFooter Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String ObjFooter
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.ObjHeader Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String ObjHeader
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.ObjName Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String ObjName
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.PageHeader Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String PageHeader
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.PagesRoot Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String PagesRoot
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.PatA Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String PatA
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.Pattern Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String Pattern
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.PatternDict Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String PatternDict
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.PenW Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String PenW
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.PolyA Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String PolyA
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.PolyB Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String PolyB
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.PolyC Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String PolyC
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.Rect Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String Rect
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.RectI Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String RectI
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.Region Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String Region
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.SampledFunction Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String SampledFunction
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.Shading Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String Shading
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.StreamFooter Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String StreamFooter
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.StreamHeader Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String StreamHeader
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.TextF Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String TextF
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.TextL Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String TextL
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.Tiling Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String Tiling
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.TilingPattern Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String TilingPattern
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.TilingResource Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String TilingResource
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.Trailer Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String Trailer
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.XObjectDict Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String XObjectDict
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.XRef Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String XRef
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns.XRefEntry Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static String XRefEntry
```

See Also

Patterns Members
Patterns Class
com.mindfusion.pdf Namespace

Patterns Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public Patterns ()
```

See Also

Patterns Class
com.mindfusion.pdf Namespace

PdfCatalog Class

Syntax

Java

```
public class PdfCatalog extends PdfObject
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfObject
    com.mindfusion.pdf.PdfCatalog

See Also

PdfCatalog Members
com.mindfusion.pdf Namespace

PdfCatalog Members

The following tables list the members exposed by the PdfCatalog type.

Public Constructors

	Name	Description
	PdfCatalog	

Protected Fields

	Name	Description
	currentRotation	(Inherited from PdfObject.)
	currentTransform	(Inherited from PdfObject.)
	id	(Inherited from PdfObject.)
	offset	(Inherited from PdfObject.)
	page	(Inherited from PdfObject.)
	parent	(Inherited from PdfObject.)
	pdfType	(Inherited from PdfObject.)
	size	(Inherited from PdfObject.)

Public Methods

	Name	Description
S	compare	(Inherited from PdfObject.)
	compareTo	(Inherited from PdfObject.)
	getCollectionId	(Inherited from PdfObject.)
	getCurrentRotation	(Inherited from PdfObject.)
	getCurrentTransform	(Inherited from PdfObject.)
	getDocument	private PdfDocument document = null; public PdfDocument getDocument() { return isRoot() ? document : page.getDocument(); } (Inherited from PdfObject.)
	getId	(Inherited from PdfObject.)
	getName	(Inherited from PdfObject.)
	getObjectFooter	(Inherited from PdfObject.)

	getObjectHeader	(Inherited from PdfObject.)
	getOffset	(Inherited from PdfObject.)
	getPage	(Inherited from PdfObject.)
	getParent	(Inherited from PdfObject.)
	getPdfType	(Inherited from PdfObject.)
	getSize	(Inherited from PdfObject.)
	isParentless	(Inherited from PdfObject.)
	isRoot	(Inherited from PdfObject.)
	OnAdded	(Inherited from PdfObject.)
	OnChanged	(Inherited from PdfObject.)
	registerObject	(Inherited from PdfObject.)
	Save	(Inherited from PdfObject.)
	setCollectionId	(Inherited from PdfObject.)
	setParent	(Inherited from PdfObject.)

Protected Methods

	Name	Description
	getContent	

See Also

PdfCatalog Class
com.mindfusion.pdf Namespace

PdfCatalog Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfCatalog ()
```

See Also

PdfCatalog Class
com.mindfusion.pdf Namespace

PdfCatalog Methods

PdfCatalog.getContent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`protected byte[] getContent ()`

Return Value

See Also

PdfCatalog Members
PdfCatalog Class
com.mindfusion.pdf Namespace

PdfDocument Class

Syntax

Java
`public class PdfDocument`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfDocument

See Also

PdfDocument Members
com.mindfusion.pdf Namespace

PdfDocument Members

The following tables list the members exposed by the PdfDocument type.

Public Constructors

	Name	Description
	PdfDocument	

Public Methods

	Name	Description
	clearDocument	
	createPage	Overloaded.
	getActivePage	
	getCatalog	
	getObjects	
	getPages	
	getPagesRoot	
	getTrail	
	getXrefPosition	
	getXrefTable	
	isSinglePaged	
	registerObject	
	Save	

See Also

PdfDocument Class
com.mindfusion.pdf Namespace

PdfDocument Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfDocument (
    PdfGraphics2D g
)
```

Parameters

g

See Also

PdfDocument Class
com.mindfusion.pdf Namespace

PdfDocument Methods

PdfDocument.clearDocument Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public void clearDocument ()`

See Also

PdfDocument Members
PdfDocument Class
com.mindfusion.pdf Namespace

PdfDocument.createPage Method

Overload List

Name	Description
PdfDocument.createPage ()	
PdfDocument.createPage (Rectangle2D)	

See Also

PdfDocument Members
PdfDocument Class
com.mindfusion.pdf Namespace

PdfDocument.createPage Method ()

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public void createPage ()`

See Also

createPage Method Overload List
PdfDocument Members
PdfDocument Class
com.mindfusion.pdf Namespace

PdfDocument.createPage Method (Rectangle2D)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void createPage (
    Rectangle2D rect
)
```

Parameters

rect

See Also

createPage Method Overload List
PdfDocument Members
PdfDocument Class
com.mindfusion.pdf Namespace

PdfDocument.getActivePage Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfPage getActivePage ()
```

Return Value

See Also

PdfDocument Members
PdfDocument Class
com.mindfusion.pdf Namespace

PdfDocument.getCatalog Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfCatalog getCatalog ()
```

Return Value

See Also

PdfDocument Members
PdfDocument Class
com.mindfusion.pdf Namespace

PdfDocument.getObjects Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public ConcurrentHashMap<Long, PdfObject> getObjects ()
```

Return Value

See Also

PdfDocument Members
PdfDocument Class
com.mindfusion.pdf Namespace

PdfDocument.getPages Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public NotifyableList<PdfPage> getPages ()
```

Return Value

See Also

PdfDocument Members
PdfDocument Class
com.mindfusion.pdf Namespace

PdfDocument.getPagesRoot Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public PdfPagesRoot getPagesRoot ()
```

Return Value

See Also

PdfDocument Members
PdfDocument Class
com.mindfusion.pdf Namespace

PdfDocument.getTrail Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public String getTrail ()
```

Return Value

See Also

PdfDocument Members
PdfDocument Class
com.mindfusion.pdf Namespace

PdfDocument.getXrefPosition Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public long getXrefPosition ()
```

Return Value

See Also

PdfDocument Members
PdfDocument Class
com.mindfusion.pdf Namespace

PdfDocument.getXrefTable Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public String getXrefTable ()
```

Return Value

See Also

PdfDocument Members
PdfDocument Class
com.mindfusion.pdf Namespace

PdfDocument.isSinglePaged Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public boolean isSinglePaged ()
```

Return Value

See Also

PdfDocument Members
PdfDocument Class
com.mindfusion.pdf Namespace

PdfDocument.registerObject Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void registerObject (
    PdfObject po
)
```

Parameters

po

See Also

PdfDocument Members
PdfDocument Class
com.mindfusion.pdf Namespace

PdfDocument.Save Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void Save (
    String fileName
)
```

Parameters

fileName

See Also

PdfDocument Members
PdfDocument Class
com.mindfusion.pdf Namespace

PdfFont Class

Syntax

Java

```
public class PdfFont extends PdfObject
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfObject
    com.mindfusion.pdf.PdfFont

See Also

PdfFont Members
com.mindfusion.pdf Namespace

PdfFont Members

The following tables list the members exposed by the PdfFont type.

Public Constructors

	Name	Description
	PdfFont	

Public Fields

	Name	Description
	FontInfo	

Protected Fields

	Name	Description
	currentRotation	(Inherited from PdfObject.)
	currentTransform	(Inherited from PdfObject.)
	id	(Inherited from PdfObject.)
	offset	(Inherited from PdfObject.)
	page	(Inherited from PdfObject.)
	parent	(Inherited from PdfObject.)
	pdfType	(Inherited from PdfObject.)
	size	(Inherited from PdfObject.)

Public Methods

	Name	Description
S	compare	(Inherited from PdfObject.)
	compareTo	(Inherited from PdfObject.)
S	getBriefFontName	Overloaded.
	getCollectionId	(Inherited from PdfObject.)
	getCurrentRotation	(Inherited from PdfObject.)
	getCurrentTransform	(Inherited from PdfObject.)
	getDocument	private PdfDocument document = null; public PdfDocument getDocument() { return isRoot() ? document : page.getDocument(); } (Inherited from PdfObject.)
	getFontDesc	
	getFontFamily	
	getFontMetrics	
S	getFontName	Overloaded.
	getFontSize	
	getFontSizeInPixels	

	getFontStretch	
	getFontWeight	
	getId	(Inherited from PdfObject.)
	getName	(Inherited from PdfObject.)
	getObjectFooter	(Inherited from PdfObject.)
	getObjectHeader	(Inherited from PdfObject.)
	getOffset	(Inherited from PdfObject.)
	getPage	(Inherited from PdfObject.)
	getParent	(Inherited from PdfObject.)
	getPdfType	(Inherited from PdfObject.)
	getSize	(Inherited from PdfObject.)
	getSysFont	
	isParentless	(Inherited from PdfObject.)
	isRoot	(Inherited from PdfObject.)
	isSimple	
	OnAdded	(Inherited from PdfObject.)
	OnChanged	(Inherited from PdfObject.)
	registerObject	(Inherited from PdfObject.)
	Save	(Inherited from PdfObject.)
	setCollectionId	(Inherited from PdfObject.)
	setParent	(Inherited from PdfObject.)

Protected Methods

	Name	Description
	getContent	

See Also

PdfFont Class
com.mindfusion.pdf Namespace

PdfFont Fields

PdfFont.FontInfo Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public final PdfFont.tFontInfo FontInfo`

See Also

PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFont Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

`public PdfFont (`
`  Font font,`
`  PdfPage _page`
`)`

Parameters

font

_page

See Also

PdfFont Class
com.mindfusion.pdf Namespace

PdfFont Methods

PdfFont.getBriefFontName Method

Overload List

Name	Description
PdfFont.getBriefFontName ()	
PdfFont.getBriefFontName (Font)	

See Also

PdfFont Members
PdfFont Class

PdfFont.getBriefFontName Method ()

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java

public String getBriefFontName ()
```

Return Value

See Also

getBriefFontName Method Overload List
PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFont.getBriefFontName Method (Font)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java

public static String getBriefFontName (
    Font font
)
```

Parameters

font

Return Value

See Also

getBriefFontName Method Overload List
PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFont.getContent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`protected byte[] getContent ()`

Return Value

See Also

PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFont.getFontDesc Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public PdfFontDescription getFontDesc ()`

Return Value

See Also

PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFont.getFontFamily Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public String getFontFamily ()`

Return Value

See Also

PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFont.getFontMetrics Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public FontMetrics getFontMetrics ()`

Return Value

See Also

PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFont.getFontName Method

Overload List

Name	Description
PdfFont.getFontName ()	
PdfFont.getFontName (Font)	
PdfFont.getFontName (Font, boolean)	

See Also

PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFont.getFontName Method ()

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public String getFontName ()`

Return Value

See Also

getFontName Method Overload List
PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFont.getFontName Method (Font)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static String getFontName (
    Font font
)
```

Parameters

font

Return Value

See Also

getFontName Method Overload List
PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFont.getFontName Method (Font, boolean)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static String getFontName (
    Font font,
    boolean useSize
)
```

Parameters

font

useSize

Return Value

See Also

getFontName Method Overload List
PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFont.getFontSize Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public float getFontSize ()
```

Return Value

See Also

PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFont.getFontSizeInPixels Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public float getFontSizeInPixels ()
```

Return Value

See Also

PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFont.getFontStretch Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public String getFontStretch ()
```

Return Value

See Also

PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFont.getFontWeight Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public int getFontWeight ()
```

Return Value

See Also

PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFont.getSysFont Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public Font getSysFont ()
```

Return Value

See Also

PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFont.isSimple Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public boolean isSimple ()`

Return Value

See Also

PdfFont Members
PdfFont Class
com.mindfusion.pdf Namespace

PdfFontDescription Class

Syntax

Java
`public class PdfFontDescription extends PdfObject`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfObject
    com.mindfusion.pdf.PdfFontDescription

See Also

PdfFontDescription Members
com.mindfusion.pdf Namespace

PdfFontDescription Members

The following tables list the members exposed by the PdfFontDescription type.

Public Constructors

	Name	Description
	PdfFontDescription	

Protected Fields

	Name	Description
	currentRotation	(Inherited from PdfObject.)
	currentTransform	(Inherited from PdfObject.)
	id	(Inherited from PdfObject.)

	offset	(Inherited from PdfObject.)
	page	(Inherited from PdfObject.)
	parent	(Inherited from PdfObject.)
	pdfType	(Inherited from PdfObject.)
	size	(Inherited from PdfObject.)

Public Methods

	Name	Description
	compare	(Inherited from PdfObject.)
	compareTo	(Inherited from PdfObject.)
	getCollectionId	(Inherited from PdfObject.)
	getCurrentRotation	(Inherited from PdfObject.)
	getCurrentTransform	(Inherited from PdfObject.)
	getDocument	private PdfDocument document = null; public PdfDocument getDocument() { return isRoot() ? document : page.getDocument(); } (Inherited from PdfObject.)
	getId	(Inherited from PdfObject.)
	getName	(Inherited from PdfObject.)
	getObjectFooter	(Inherited from PdfObject.)
	getObjectHeader	(Inherited from PdfObject.)
	getOffset	(Inherited from PdfObject.)
	getPage	(Inherited from PdfObject.)
	getParent	(Inherited from PdfObject.)
	getPdfType	(Inherited from PdfObject.)
	getSize	(Inherited from PdfObject.)
	isParentless	(Inherited from PdfObject.)
	isRoot	(Inherited from PdfObject.)
	OnAdded	(Inherited from PdfObject.)
	OnChanged	(Inherited from PdfObject.)
	registerObject	(Inherited from PdfObject.)
	Save	(Inherited from PdfObject.)
	setCollectionId	(Inherited from PdfObject.)
	setParent	(Inherited from PdfObject.)

Protected Methods

	Name	Description
	getContent	

See Also

PdfFontDescription Class
com.mindfusion.pdf Namespace

PdfFontDescription Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfFontDescription (
    PdfFont font,
    PdfPage _page
)
```

Parameters

font

_page

See Also

PdfFontDescription Class
com.mindfusion.pdf Namespace

PdfFontDescription Methods

PdfFontDescription.getContent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
protected byte[] getContent ()
```

Return Value

See Also

PdfFunction Class

Syntax

```
Java
public class PdfFunction extends PdfObject
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfObject
    com.mindfusion.pdf.PdfFunction

See Also

PdfFunction Members
com.mindfusion.pdf Namespace

PdfFunction Members

The following tables list the members exposed by the PdfFunction type.

Public Constructors

	Name	Description
	PdfFunction	

Protected Fields

	Name	Description
	colors	
	currentRotation	(Inherited from PdfObject.)
	currentTransform	(Inherited from PdfObject.)
	id	(Inherited from PdfObject.)
	offset	(Inherited from PdfObject.)
	page	(Inherited from PdfObject.)
	parent	(Inherited from PdfObject.)
	pdfType	(Inherited from PdfObject.)
	size	(Inherited from PdfObject.)

Public Methods

	Name	Description
S	compare	(Inherited from PdfObject.)
	compareTo	(Inherited from PdfObject.)
	getCollectionId	(Inherited from PdfObject.)
	getColors	Overloaded.
	getCurrentRotation	(Inherited from PdfObject.)
	getCurrentTransform	(Inherited from PdfObject.)
	getDocument	private PdfDocument document = null; public PdfDocument getDocument() { return isRoot() ? document : page.getDocument(); } (Inherited from PdfObject.)
	getId	(Inherited from PdfObject.)
	getName	(Inherited from PdfObject.)
	getObjectFooter	(Inherited from PdfObject.)
	getObjectHeader	(Inherited from PdfObject.)
	getOffset	(Inherited from PdfObject.)
	getPage	(Inherited from PdfObject.)
	getParent	(Inherited from PdfObject.)
	getPdfType	(Inherited from PdfObject.)
	getSize	(Inherited from PdfObject.)
	isParentless	(Inherited from PdfObject.)
	isRoot	(Inherited from PdfObject.)
	OnAdded	(Inherited from PdfObject.)
	OnChanged	(Inherited from PdfObject.)
	registerObject	(Inherited from PdfObject.)
	Save	(Inherited from PdfObject.)
	setCollectionId	(Inherited from PdfObject.)
	setParent	(Inherited from PdfObject.)

Protected Methods

	Name	Description
	getContent	

See Also

PdfFunction Class
com.mindfusion.pdf Namespace

PdfFunction Fields

PdfFunction.colors Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
protected Color[] colors
```

See Also

PdfFunction Members
PdfFunction Class
com.mindfusion.pdf Namespace

PdfFunction Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfFunction (
    PdfShading shading
)
```

Parameters

shading

See Also

PdfFunction Class
com.mindfusion.pdf Namespace

PdfFunction Methods

PdfFunction.getColors Method

Overload List

Name	Description
PdfFunction.getColors ()	
PdfFunction.getColors (int)	

See Also

PdfFunction Members
PdfFunction Class
com.mindfusion.pdf Namespace

PdfFunction.getColors Method ()

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public Color[] getColors ()`

Return Value

See Also

getColors Method Overload List
PdfFunction Members
PdfFunction Class
com.mindfusion.pdf Namespace

PdfFunction.getColors Method (int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

`public Color getColors (`
`  int index`
`)`

Parameters

index

Return Value

See Also

getColors Method Overload List
PdfFunction Members

PdfFunction.getContent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`protected byte[] getContent ()`

Return Value

See Also

PdfFunction Members
PdfFunction Class
com.mindfusion.pdf Namespace

PdfGraphics2D Class

Syntax

Java
`public class PdfGraphics2D extends Graphics2D implements GraphicsEx`

Inheritance Hierarchy

java.lang.Object
  java.awt.Graphics
    java.awt.Graphics2D
      com.mindfusion.pdf.PdfGraphics2D

See Also

PdfGraphics2D Members
com.mindfusion.pdf Namespace

PdfGraphics2D Members

The following tables list the members exposed by the PdfGraphics2D type.

Public Constructors

	Name	Description
	PdfGraphics2D	Overloaded.

Public Methods

	Name	Description
	addRenderingHints	
	beginHyperLink	
	clearRect	
	clip	
	clipRect	
	copyArea	
	create	Overloaded.
	createPage	Overloaded.
	dispose	
	draw	
	draw3DRect	
	drawArc	
	drawBytes	
	drawChars	
	drawGlyphVector	
	drawImage	Overloaded.
	drawLine	
	drawOval	
	drawPolygon	Overloaded.
	drawPolyline	
	drawRect	
	drawRenderableImage	
	drawRenderedImage	
	drawRoundRect	
	drawString	Overloaded.
	endHyperLink	
	equals	
	fill	
	fill3DRect	
	fillArc	
	fillOval	

	fillPolygon	Overloaded.
	fillRect	
	fillRoundRect	
	finalize	
	getBackground	
	getClip	
	getClipBounds	Overloaded.
	getClipRect	
	getColor	
	getComposite	
	getDeviceConfiguration	
	getEncodeImagesAsJpeg2000	
	getFont	
	getFontMetrics	Overloaded.
	getFontRenderContext	
	getMarginBottom	
	getMarginLeft	
	getMarginRight	
	getMarginTop	
	getPaint	
	getRenderingHint	
	getRenderingHints	
	getRotationAngle	
	getStroke	
	getTransform	
	getUserScale	
	hashCode	
	hit	
	hitClip	
	isJpeg2000Available	
	rearrange	
	rotate	Overloaded.
	save	Generates a PDF file from the draw calls

	scale	
	setBackground	
	setClip	Overloaded.
	setColor	
	setComposite	
	setEncodeImagesAsJpeg2000	
	setFont	
	setMarginBottom	
	setMarginLeft	
	setMarginRight	
	setMarginTop	
	setPaint	
	setPaintMode	
	setRenderingHint	
	setRenderingHints	
	setStroke	
	setTransform	
	setUserScale	
	setXORMode	
	shear	
	supportsPenWidth0	
	toString	
	transform	
	transformsPenWidth	
	translate	Overloaded.

Protected Methods

	Name	Description
	clone	

See Also

PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D Constructor

Overload List

Name	Description
PdfGraphics2D (Rectangle2D, GraphicsUnit)	Constructs new instance of the PdfGraphics2D object
PdfGraphics2D (Rectangle2D, GraphicsUnit, float)	Constructs new instance of the **PdfGraphics2D** object

See Also

PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D Constructor (Rectangle2D, GraphicsUnit)

Constructs new instance of the PdfGraphics2D object

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfGraphics2D (
    Rectangle2D rect,
    GraphicsUnit gUnit
)
```

Parameters

rect
Drawing area measured in diagram unit

gUnit
Measure unit of the diagram

See Also

PdfGraphics2D Constructor Overload List
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D Constructor (Rectangle2D, GraphicsUnit, float)

Constructs new instance of the PdfGraphics2D object

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfGraphics2D (
    Rectangle2D rect,
    GraphicsUnit gUnit,
    float scale
)
```

Parameters

rect
Drawing area measured in diagram unit

gUnit
Measure unit of the diagram

scale
Scale factor

See Also

PdfGraphics2D Constructor Overload List
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D Methods

PdfGraphics2D.addRenderingHints Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void addRenderingHints (
    Map<?, ?> hints
)
```

Parameters

hints

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.beginHyperLink Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void beginHyperLink (
    String hyperLink,
    String target
)
```

Parameters

hyperLink

target

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.clearRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void clearRect (
    int x,
    int y,
    int width,
    int height
)
```

Parameters

x

y

width

height

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.clip Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void clip (
    Shape s
)
```

Parameters

s

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.clipRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void clipRect (
    int x,
    int y,
    int width,
    int height
)
```

Parameters

x

y

width

height

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.clone Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
protected Object clone ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.copyArea Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void copyArea (
    int x,
    int y,
    int width,
    int height,
    int dx,
    int dy
)
```

Parameters

x

y

width

height

dx

dy

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.create Method

Overload List

Name	Description
PdfGraphics2D.create ()	
PdfGraphics2D.create (int, int, int, int)	

See Also

PdfGraphics2D.create Method ()

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public Graphics create ()
```

Return Value

See Also

create Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.create Method (int, int, int, int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public Graphics create (
    int x,
    int y,
    int width,
    int height
)
```

Parameters

x

y

width

height

Return Value

See Also

create Method Overload List
PdfGraphics2D Members

PdfGraphics2D.createPage Method

Overload List

Name	Description
PdfGraphics2D.createPage ()	Creates new page of the PDF documents
PdfGraphics2D.createPage (Rectangle2D)	Creates new page *specified by the drawing area* of the PDF documents

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.createPage Method ()

Creates new page of the PDF documents

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void createPage ()
```

See Also

createPage Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.createPage Method (Rectangle2D)

Creates new page *specified by the drawing area* of the PDF documents

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void createPage (
    Rectangle2D rect
)
```

Parameters

rect
Must be page's drawing area in diagram measures

See Also

createPage Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.dispose Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void dispose ()
```

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.draw Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void draw (
    Shape s
)
```

Parameters

s

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.draw3DRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void draw3DRect (
    int x,
    int y,
    int width,
    int height,
    boolean raised
)
```

Parameters

x

y

width

height

raised

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawArc Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void drawArc (
    int x,
    int y,
    int width,
    int height,
    int startAngle,
    int arcAngle
)
```

Parameters

x

y

width

height

startAngle

arcAngle

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawBytes Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void drawBytes (
    byte[] data,
    int offset,
    int length,
    int x,
    int y
)
```

Parameters

data

offset

length

x

y

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawChars Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void drawChars (
    Character[] data,
    int offset,
    int length,
    int x,
```

```
    int y
)
```

Parameters

data

offset

length

x

y

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawGlyphVector Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void drawGlyphVector (
    GlyphVector g,
    float x,
    float y
)
```

Parameters

g

x

y

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawImage Method

Overload List

Name	Description

PdfGraphics2D.drawImage (BufferedImage, BufferedImageOp, int, int)	
PdfGraphics2D.drawImage (Image, AffineTransform, ImageObserver)	
PdfGraphics2D.drawImage (Image, int, int, Color, ImageObserver)	
PdfGraphics2D.drawImage (Image, int, int, ImageObserver)	
PdfGraphics2D.drawImage (Image, int, int, int, int, Color, ImageObserver)	
PdfGraphics2D.drawImage (Image, int, int, int, int, ImageObserver)	
PdfGraphics2D.drawImage (Image, int, int, int, int, int, int, int, int, Color, ImageObserver)	
PdfGraphics2D.drawImage (Image, int, int, int, int, int, int, int, int, int, ImageObserver)	

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawImage Method (BufferedImage, BufferedImageOp, int, int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void drawImage (
    BufferedImage img,
    BufferedImageOp op,
    int x,
    int y
)
```

Parameters

img

op

x

y

See Also

drawImage Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawImage Method (Image, AffineTransform, ImageObserver)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean drawImage (
    Image img,
    AffineTransform xform,
    ImageObserver obs
)
```

Parameters

img

xform

obs

Return Value

See Also

drawImage Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawImage Method (Image, int, int, Color, ImageObserver)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean drawImage (
    Image img,
    int x,
    int y,
    Color bgcolor,
    ImageObserver observer
)
```

Parameters

img

x

y

bgcolor

observer

Return Value

See Also

drawImage Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawImage Method (Image, int, int, ImageObserver)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean drawImage (
    Image img,
    int x,
    int y,
    ImageObserver observer
)
```

Parameters

img

x

y

observer

Return Value

See Also

drawImage Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawImage Method (Image, int, int, int, int, Color, ImageObserver)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean drawImage (
    Image img,
    int x,
    int y,
    int width,
    int height,
    Color bgcolor,
    ImageObserver observer
)
```

Parameters

img

x

y

width

height

bgcolor

observer

Return Value

See Also

drawImage Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawImage Method (Image, int, int, int, int, ImageObserver)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean drawImage (
    Image img,
    int x,
    int y,
    int width,
    int height,
    ImageObserver observer
)
```

Parameters

img

x

y

width

height

observer

Return Value

See Also

drawImage Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawImage Method (Image, int, int, int, int, int, int, int, int, Color, ImageObserver)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean drawImage (
    Image img,
    int dx1,
    int dy1,
    int dx2,
    int dy2,
    int sx1,
    int sy1,
    int sx2,
    int sy2,
    Color bgcolor,
    ImageObserver observer
)
```

Parameters

img

dx1

dy1

dx2

dy2

sx1

sy1

sx2

sy2

bgcolor

observer

Return Value

See Also

drawImage Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawImage Method (Image, int, int, int, int, int, int, int, int, ImageObserver)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean drawImage (
    Image img,
    int dx1,
    int dy1,
    int dx2,
    int dy2,
    int sx1,
    int sy1,
    int sx2,
    int sy2,
    ImageObserver observer
)
```

Parameters

img

dx1

dy1

dx2

dy2

sx1

sy1

sx2

sy2

observer

Return Value

See Also

drawImage Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawLine Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void drawLine (
    int x1,
    int y1,
    int x2,
    int y2
)
```

Parameters

x1

y1

x2

y2

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawOval Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void drawOval (
    int x,
    int y,
    int width,
    int height
)
```

Parameters

x

y

width

height

See Also

PdfGraphics2D.drawPolygon Method

Overload List

Name	Description
PdfGraphics2D.drawPolygon (int[], int[], int)	
PdfGraphics2D.drawPolygon (Polygon)	

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawPolygon Method (int[], int[], int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void drawPolygon (
    int[] xPoints,
    int[] yPoints,
    int nPoints
)
```

Parameters

xPoints

yPoints

nPoints

See Also

drawPolygon Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawPolygon Method (Polygon)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void drawPolygon (
    Polygon p
)
```

Parameters

p

See Also

drawPolygon Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawPolyline Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void drawPolyline (
    int[] xPoints,
    int[] yPoints,
    int nPoints
)
```

Parameters

xPoints

yPoints

nPoints

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void drawRect (
    int x,
    int y,
    int width,
    int height
)
```

Parameters

x

y

width

height

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawRenderableImage Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void drawRenderableImage (
    RenderableImage img,
    AffineTransform xform
)
```

Parameters

img

xform

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawRenderedImage Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void drawRenderedImage (
    RenderedImage img,
    AffineTransform xform
)
```

Parameters

img

xform

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawRoundRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void drawRoundRect (
    int x,
    int y,
    int width,
    int height,
    int arcWidth,
    int arcHeight
)
```

Parameters

x

y

width

height

arcWidth

arcHeight

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawString Method

Overload List

Name	Description
PdfGraphics2D.drawString (AttributedCharacterIterator, int, int)	
PdfGraphics2D.drawString (AttributedCharacterIterator, float, float)	
PdfGraphics2D.drawString (String, int, int)	
PdfGraphics2D.drawString (String, float, float)	

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawString Method (AttributedCharacterIterator, int, int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void drawString (
    AttributedCharacterIterator iterator,
    int x,
    int y
)
```

Parameters

iterator

x

y

See Also

drawString Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawString Method (AttributedCharacterIterator, float, float)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void drawString (
    AttributedCharacterIterator iterator,
    float x,
    float y
)
```

Parameters

iterator

x

y

See Also

drawString Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawString Method (String, int, int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void drawString (
    String str,
    int x,
    int y
)
```

Parameters

str

x

y

See Also

drawString Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.drawString Method (String, float, float)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void drawString (
    String str,
    float x,
    float y
)
```

Parameters

str

x

y

See Also

drawString Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.endHyperLink Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void endHyperLink ()
```

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.equals Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean equals (
    Object obj
)
```

Parameters

obj

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.fill Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void fill (
    Shape s
)
```

Parameters

s

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.fill3DRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void fill3DRect (
    int x,
    int y,
    int width,
    int height,
    boolean raised
)
```

Parameters

x

y

width

height

raised

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.fillArc Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void fillArc (
    int x,
    int y,
    int width,
    int height,
    int startAngle,
    int arcAngle
)
```

Parameters

x

y

width

height

startAngle

arcAngle

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.fillOval Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

`public void fillOval (`
`  int x,`
`  int y,`
`  int width,`
`  int height`
`)`

Parameters

x

y

width

height

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.fillPolygon Method

Overload List

Name	Description
PdfGraphics2D.fillPolygon (int[], int[], int)	
PdfGraphics2D.fillPolygon (Polygon)	

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.fillPolygon Method (int[], int[], int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

`public void fillPolygon (`
`  int[] xPoints,`
`  int[] yPoints,`

```
    int nPoints
)
```

Parameters

xPoints

yPoints

nPoints

See Also

fillPolygon Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.fillPolygon Method (Polygon)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void fillPolygon (
    Polygon p
)
```

Parameters

p

See Also

fillPolygon Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.fillRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void fillRect (
    int x,
    int y,
    int width,
    int height
)
```

Parameters

x

y

width

height

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.fillRoundRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void fillRoundRect (
    int x,
    int y,
    int width,
    int height,
    int arcWidth,
    int arcHeight
)
```

Parameters

x

y

width

height

arcWidth

arcHeight

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.finalize Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void finalize ()
```

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getBackground Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public Color getBackground ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getClip Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public Shape getClip ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getClipBounds Method

Overload List

Name	Description
PdfGraphics2D.getClipBounds ()	
PdfGraphics2D.getClipBounds (Rectangle)	

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getClipBounds Method ()

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public Rectangle getClipBounds ()`

Return Value

See Also

getClipBounds Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getClipBounds Method (Rectangle)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

`public Rectangle getClipBounds (`
`  Rectangle r`
`)`

Parameters

r

Return Value

See Also

getClipBounds Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getClipRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public Rectangle getClipRect ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getColor Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public Color getColor ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getComposite Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
```

```
public Composite getComposite ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getDeviceConfiguration Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public GraphicsConfiguration getDeviceConfiguration ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getEncodeImagesAsJpeg2000 Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean getEncodeImagesAsJpeg2000 ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getFont Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public Font getFont ()`

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getFontMetrics Method

Overload List

Name	Description
PdfGraphics2D.getFontMetrics ()	
PdfGraphics2D.getFontMetrics (Font)	

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getFontMetrics Method ()

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public FontMetrics getFontMetrics ()`

Return Value

See Also

getFontMetrics Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getFontMetrics Method (Font)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public FontMetrics getFontMetrics (
    Font f
)
```

Parameters

f

Return Value

See Also

getFontMetrics Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getFontRenderContext Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public FontRenderContext getFontRenderContext ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getMarginBottom Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public float getMarginBottom ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getMarginLeft Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public float getMarginLeft ()`

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getMarginRight Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public float getMarginRight ()`

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getMarginTop Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public float getMarginTop ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getPaint Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public Paint getPaint ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getRenderingHint Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public Object getRenderingHint (
    RenderingHints.Key hintKey
)
```

Parameters

hintKey

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class

PdfGraphics2D.getRenderingHints Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public RenderingHints getRenderingHints ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getRotationAngle Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public double getRotationAngle ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getStroke Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public Stroke getStroke ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getTransform Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public AffineTransform getTransform ()`

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.getUserScale Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public float getUserScale ()`

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.hashCode Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public int hashCode ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.hit Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean hit (
    Rectangle rect,
    Shape s,
    boolean onStroke
)
```

Parameters

rect

s

onStroke

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.hitClip Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean hitClip (
    int x,
    int y,
    int width,
```

```
    int height
)
```

Parameters

x

y

width

height

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.isJpeg2000Available Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public boolean isJpeg2000Available ()
```

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.rearrange Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void rearrange (
    GraphicsUnit gUnit,
    Rectangle2D rect
)
```

Parameters

gUnit

rect

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.rotate Method

Overload List

Name	Description
PdfGraphics2D.rotate (double)	
PdfGraphics2D.rotate (double, double, double)	

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.rotate Method (double)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void rotate (
    double theta
)
```

Parameters

theta

See Also

rotate Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.rotate Method (double, double, double)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void rotate (
    double theta,
    double x,
    double y
)
```

Parameters

theta

x

y

See Also

rotate Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.save Method

Generates a PDF file from the draw calls

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void save (
    String fileName
)
```

Parameters

fileName
Fully qualified path of the *Portable Document Format* file to be generated

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.scale Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

`public void scale (`
`  double sx,`
`  double sy`
`)`

Parameters

sx

sy

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setBackground Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

`public void setBackground (`
`  Color color`
`)`

Parameters

color

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setClip Method

Overload List

Name	Description
PdfGraphics2D.setClip (int, int, int, int)	
PdfGraphics2D.setClip (Shape)	

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setClip Method (int, int, int, int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setClip (
    int x,
    int y,
    int width,
    int height
)
```

Parameters

x

y

width

height

See Also

setClip Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setClip Method (Shape)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setClip (
    Shape clip
)
```

Parameters

clip

See Also

setClip Method Overload List
PdfGraphics2D Members

PdfGraphics2D.setColor Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setColor (
    Color c
)
```

Parameters

c

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setComposite Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setComposite (
    Composite comp
)
```

Parameters

comp

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setEncodeImagesAsJpeg2000 Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void setEncodeImagesAsJpeg2000 (
    boolean encodeImagesAsJpeg2000
)
```

Parameters

encodeImagesAsJpeg2000

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setFont Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void setFont (
    Font font
)
```

Parameters

font

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setMarginBottom Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void setMarginBottom (
    float marginBottom
)
```

Parameters

marginBottom

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setMarginLeft Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setMarginLeft (
    float marginLeft
)
```

Parameters

marginLeft

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setMarginRight Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setMarginRight (
    float marginRight
)
```

Parameters

marginRight

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setMarginTop Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setMarginTop (
    float marginTop
)
```

Parameters

marginTop

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setPaint Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setPaint (
    Paint paint
)
```

Parameters

paint

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setPaintMode Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setPaintMode ()
```

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setRenderingHint Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setRenderingHint (
    RenderingHints.Key hintKey,
    Object hintValue
)
```

Parameters

hintKey

hintValue

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setRenderingHints Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setRenderingHints (
    Map<?, ?> hints
)
```

Parameters

hints

See Also

PdfGraphics2D Members
PdfGraphics2D Class

PdfGraphics2D.setStroke Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setStroke (
    Stroke s
)
```

Parameters

s

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setTransform Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setTransform (
    AffineTransform Tx
)
```

Parameters

Tx

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setUserScale Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void setUserScale (
    float userScale
)
```

Parameters

userScale

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.setXORMode Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void setXORMode (
    Color c1
)
```

Parameters

c1

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.shear Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void shear (
    double shx,
    double shy
)
```

Parameters

shx

shy

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.supportsPenWidth0 Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public boolean supportsPenWidth0 ()`

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.toString Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public String toString ()`

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.transform Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

`public void transform (`
`  AffineTransform Tx`
`)`

Parameters

Tx

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.transformsPenWidth Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public boolean transformsPenWidth ()`

Return Value

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.translate Method

Overload List

Name	Description
PdfGraphics2D.translate (double, double)	
PdfGraphics2D.translate (int, int)	

See Also

PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.translate Method (double, double)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void translate (
    double tx,
    double ty
)
```

Parameters

tx

ty

See Also

translate Method Overload List
PdfGraphics2D Members
PdfGraphics2D Class
com.mindfusion.pdf Namespace

PdfGraphics2D.translate Method (int, int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void translate (
    int x,
    int y
)
```

Parameters

x

y

See Also

translate Method Overload List
PdfGraphics2D Members

PdfGraphicsState Class

Syntax

Java
`public class PdfGraphicsState extends PdfObject`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfObject
    com.mindfusion.pdf.PdfGraphicsState

See Also

PdfGraphicsState Members
com.mindfusion.pdf Namespace

PdfGraphicsState Members

The following tables list the members exposed by the PdfGraphicsState type.

Public Constructors

	Name	Description
	PdfGraphicsState	

Protected Fields

	Name	Description
	currentRotation	(Inherited from PdfObject.)
	currentTransform	(Inherited from PdfObject.)
	id	(Inherited from PdfObject.)
	offset	(Inherited from PdfObject.)
	page	(Inherited from PdfObject.)
	parent	(Inherited from PdfObject.)
	pdfType	(Inherited from PdfObject.)
	size	(Inherited from PdfObject.)

Public Methods

	Name	Description
	compare	(Inherited from PdfObject.)
	compareTo	(Inherited from PdfObject.)
	getCollectionId	(Inherited from PdfObject.)
	getCurrentRotation	(Inherited from PdfObject.)
	getCurrentTransform	(Inherited from PdfObject.)
	getDocument	private PdfDocument document = null; public PdfDocument getDocument() { return isRoot() ? document : page.getDocument(); } (Inherited from PdfObject.)
	getId	(Inherited from PdfObject.)
	getName	(Inherited from PdfObject.)
	getObjectFooter	(Inherited from PdfObject.)
	getObjectHeader	(Inherited from PdfObject.)
	getOffset	(Inherited from PdfObject.)
	getPage	(Inherited from PdfObject.)
	getParent	(Inherited from PdfObject.)
	getParentPath	
	getPdfType	(Inherited from PdfObject.)
	getSize	(Inherited from PdfObject.)
	isParentless	(Inherited from PdfObject.)
	isRoot	(Inherited from PdfObject.)
	OnAdded	(Inherited from PdfObject.)
	OnChanged	(Inherited from PdfObject.)
	registerObject	(Inherited from PdfObject.)
	Save	(Inherited from PdfObject.)
	setCollectionId	(Inherited from PdfObject.)
	setParent	(Inherited from PdfObject.)

Protected Methods

	Name	Description
	getContent	

See Also

PdfGraphicsState Class
com.mindfusion.pdf Namespace

PdfGraphicsState Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfGraphicsState (
    PdfPath parent
)
```

Parameters

parent

See Also

PdfGraphicsState Class
com.mindfusion.pdf Namespace

PdfGraphicsState Methods

PdfGraphicsState.getContent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
protected byte[] getContent ()
```

Return Value

See Also

PdfGraphicsState Members
PdfGraphicsState Class
com.mindfusion.pdf Namespace

PdfGraphicsState.getParentPath Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfPath getParentPath ()
```

Return Value

See Also

PdfGraphicsState Members
PdfGraphicsState Class
com.mindfusion.pdf Namespace

PdfHref Class

Syntax

Java
`public class PdfHref extends PdfObject`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfObject
    com.mindfusion.pdf.PdfHref

See Also

PdfHref Members
com.mindfusion.pdf Namespace

PdfHref Members

The following tables list the members exposed by the PdfHref type.

Public Constructors

	Name	Description
	PdfHref	

Protected Fields

	Name	Description
	currentRotation	(Inherited from PdfObject.)
	currentTransform	(Inherited from PdfObject.)
	id	(Inherited from PdfObject.)
	offset	(Inherited from PdfObject.)
	page	(Inherited from PdfObject.)
	parent	(Inherited from PdfObject.)

	pdfType	(Inherited from PdfObject.)
	size	(Inherited from PdfObject.)

Public Methods

	Name	Description
S	compare	(Inherited from PdfObject.)
	compareTo	(Inherited from PdfObject.)
	getCollectionId	(Inherited from PdfObject.)
	getCurrentRotation	(Inherited from PdfObject.)
	getCurrentTransform	(Inherited from PdfObject.)
	getDocument	private PdfDocument document = null; public PdfDocument getDocument() { return isRoot() ? document : page.getDocument(); } (Inherited from PdfObject.)
	getId	(Inherited from PdfObject.)
	getName	(Inherited from PdfObject.)
	getObjectFooter	(Inherited from PdfObject.)
	getObjectHeader	(Inherited from PdfObject.)
	getOffset	(Inherited from PdfObject.)
	getPage	(Inherited from PdfObject.)
	getParent	(Inherited from PdfObject.)
	getPdfType	(Inherited from PdfObject.)
	getSize	(Inherited from PdfObject.)
	isParentless	(Inherited from PdfObject.)
	isRoot	(Inherited from PdfObject.)
	OnAdded	(Inherited from PdfObject.)
	OnChanged	(Inherited from PdfObject.)
	registerObject	(Inherited from PdfObject.)
	Save	(Inherited from PdfObject.)
	setCollectionId	(Inherited from PdfObject.)
	setParent	(Inherited from PdfObject.)

Protected Methods

	Name	Description
	getContent	

See Also

PdfHref Class
com.mindfusion.pdf Namespace

PdfHref Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfHref (
    PdfObject parent,
    String uri
)
```

Parameters

parent

uri

See Also

PdfHref Class
com.mindfusion.pdf Namespace

PdfHref Methods

PdfHref.getContent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
protected byte[] getContent ()
```

Return Value

See Also

PdfHref Members
PdfHref Class
com.mindfusion.pdf Namespace

PdfImage Class

Syntax

```
Java
public class PdfImage extends PdfObject
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfObject
    com.mindfusion.pdf.PdfImage

See Also

PdfImage Members
com.mindfusion.pdf Namespace

PdfImage Members

The following tables list the members exposed by the PdfImage type.

Public Constructors

	Name	Description
	PdfImage	Overloaded.

Protected Fields

	Name	Description
	currentRotation	(Inherited from PdfObject.)
	currentTransform	(Inherited from PdfObject.)
	id	(Inherited from PdfObject.)
	offset	(Inherited from PdfObject.)
	page	(Inherited from PdfObject.)
	parent	(Inherited from PdfObject.)
	pdfType	(Inherited from PdfObject.)
	size	(Inherited from PdfObject.)

Public Methods

	Name	Description
S	compare	(Inherited from PdfObject.)
	compareTo	(Inherited from PdfObject.)
	getCollectionId	(Inherited from PdfObject.)

	getCurrentRotation	(Inherited from PdfObject.)
	getCurrentTransform	(Inherited from PdfObject.)
	getDocument	private PdfDocument document = null; public PdfDocument getDocument() { return isRoot() ? document : page.getDocument(); } (Inherited from PdfObject.)
	getH	
	getId	(Inherited from PdfObject.)
	getName	(Inherited from PdfObject.)
	getObjectFooter	(Inherited from PdfObject.)
	getObjectHeader	(Inherited from PdfObject.)
	getOffset	(Inherited from PdfObject.)
	getPage	(Inherited from PdfObject.)
	getParent	(Inherited from PdfObject.)
	getPdfType	(Inherited from PdfObject.)
	getSize	(Inherited from PdfObject.)
	getW	
	isMask	
	isMasked	
	isMaskRequired	
	isParentless	(Inherited from PdfObject.)
	isRoot	(Inherited from PdfObject.)
	OnAdded	(Inherited from PdfObject.)
	OnChanged	(Inherited from PdfObject.)
	registerObject	(Inherited from PdfObject.)
	Save	(Inherited from PdfObject.)
	setCollectionId	(Inherited from PdfObject.)
	setParent	(Inherited from PdfObject.)

Protected Methods

	Name	Description
	getContent	

See Also

PdfImage Class
com.mindfusion.pdf Namespace

PdfImage Constructor

Overload List

Name	Description
PdfImage (Image, PdfPage)	
PdfImage (Image, PdfPage, boolean)	
PdfImage (Image, PdfPage, Dimension)	

See Also

PdfImage Class
com.mindfusion.pdf Namespace

PdfImage Constructor (Image, PdfPage)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfImage (
    Image img,
    PdfPage _page
)
```

Parameters

img

_page

See Also

PdfImage Constructor Overload List
PdfImage Class
com.mindfusion.pdf Namespace

PdfImage Constructor (Image, PdfPage, boolean)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfImage (
    Image img,
    PdfPage _page,
```

```
    boolean isMask
)
```

Parameters

img

_page

isMask

See Also

PdfImage Constructor Overload List
PdfImage Class
com.mindfusion.pdf Namespace

PdfImage Constructor (Image, PdfPage, Dimension)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfImage (
    Image img,
    PdfPage _page,
    Dimension dim
)
```

Parameters

img

_page

dim

See Also

PdfImage Constructor Overload List
PdfImage Class
com.mindfusion.pdf Namespace

PdfImage Methods

PdfImage.getContent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
protected byte[] getContent ()
```

Return Value

See Also

PdfImage Members
PdfImage Class
com.mindfusion.pdf Namespace

PdfImage.getH Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public int getH ()
```

Return Value

See Also

PdfImage Members
PdfImage Class
com.mindfusion.pdf Namespace

PdfImage.getW Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public int getW ()
```

Return Value

See Also

PdfImage Members
PdfImage Class
com.mindfusion.pdf Namespace

PdfImage.isMask Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public boolean isMask ()`

Return Value

See Also

PdfImage Members
PdfImage Class
com.mindfusion.pdf Namespace

PdfImage.isMasked Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public boolean isMasked ()`

Return Value

See Also

PdfImage Members
PdfImage Class
com.mindfusion.pdf Namespace

PdfImage.isMaskRequired Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public boolean isMaskRequired ()`

Return Value

See Also

PdfImage Members
PdfImage Class
com.mindfusion.pdf Namespace

PdfImageHolder Class

Syntax

Java
`public class PdfImageHolder extends PdfObject`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfObject
    com.mindfusion.pdf.PdfImageHolder

See Also

PdfImageHolder Members
com.mindfusion.pdf Namespace

PdfImageHolder Members

The following tables list the members exposed by the PdfImageHolder type.

Public Constructors

	Name	Description
	PdfImageHolder	Overloaded.

Protected Fields

	Name	Description
	currentRotation	(Inherited from PdfObject.)
	currentTransform	(Inherited from PdfObject.)
	id	(Inherited from PdfObject.)
	offset	(Inherited from PdfObject.)
	page	(Inherited from PdfObject.)
	parent	(Inherited from PdfObject.)
	pdfType	(Inherited from PdfObject.)
	size	(Inherited from PdfObject.)

Public Methods

	Name	Description
	compare	(Inherited from PdfObject.)

	compareTo	(Inherited from PdfObject.)
	getCollectionId	(Inherited from PdfObject.)
	getCurrentRotation	(Inherited from PdfObject.)
	getCurrentTransform	(Inherited from PdfObject.)
	getDocument	private PdfDocument document = null; public PdfDocument getDocument() { return isRoot() ? document : page.getDocument(); } (Inherited from PdfObject.)
	getId	(Inherited from PdfObject.)
	getName	(Inherited from PdfObject.)
	getObjectFooter	(Inherited from PdfObject.)
	getObjectHeader	(Inherited from PdfObject.)
	getOffset	(Inherited from PdfObject.)
	getPage	(Inherited from PdfObject.)
	getParent	(Inherited from PdfObject.)
	getPdfType	(Inherited from PdfObject.)
	getSize	(Inherited from PdfObject.)
	isParentless	(Inherited from PdfObject.)
	isRoot	(Inherited from PdfObject.)
	OnAdded	(Inherited from PdfObject.)
	OnChanged	(Inherited from PdfObject.)
	registerObject	(Inherited from PdfObject.)
	Save	(Inherited from PdfObject.)
	setCollectionId	(Inherited from PdfObject.)
	setParent	(Inherited from PdfObject.)

Protected Methods

	Name	Description
	getContent	

See Also

PdfImageHolder Class
com.mindfusion.pdf Namespace

PdfImageHolder Constructor

Overload List

Name	Description
PdfImageHolder (Image, Rectangle2D, AffineTransform)	
PdfImageHolder (Image, Rectangle2D, AffineTransform, PdfPage)	

See Also

PdfImageHolder Class
com.mindfusion.pdf Namespace

PdfImageHolder Constructor (Image, Rectangle2D, AffineTransform)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfImageHolder (
    Image _image,
    Rectangle2D _rect,
    AffineTransform at
)
```

Parameters

_image

_rect

at

See Also

PdfImageHolder Constructor Overload List
PdfImageHolder Class
com.mindfusion.pdf Namespace

PdfImageHolder Constructor (Image, Rectangle2D, AffineTransform, PdfPage)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfImageHolder (
    Image _image,
    Rectangle2D _rect,
    AffineTransform at,
```

```
    PdfPage _page
)
```

Parameters

_image

_rect

at

_page

See Also

PdfImageHolder Constructor Overload List
PdfImageHolder Class
com.mindfusion.pdf Namespace

PdfImageHolder Methods

PdfImageHolder.getContent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
protected byte[] getContent ()
```

Return Value

See Also

PdfImageHolder Members
PdfImageHolder Class
com.mindfusion.pdf Namespace

PdfObject Class

Syntax

Java

```
public class PdfObject implements IPdfSaver, INotify<T>, Comparable<T>
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfObject
    com.mindfusion.pdf.PdfCatalog
    com.mindfusion.pdf.PdfFont

com.mindfusion.pdf.PdfFontDescription
com.mindfusion.pdf.PdfFunction
com.mindfusion.pdf.PdfGraphicsState
com.mindfusion.pdf.PdfHref
com.mindfusion.pdf.PdfImage
com.mindfusion.pdf.PdfImageHolder
com.mindfusion.pdf.PdfPage
com.mindfusion.pdf.PdfPagesRoot
com.mindfusion.pdf.PdfPath
com.mindfusion.pdf.PdfPattern
com.mindfusion.pdf.PdfShading
com.mindfusion.pdf.PdfText

See Also

PdfObject Members
com.mindfusion.pdf Namespace

PdfObject Members

The following tables list the members exposed by the PdfObject type.

Public Constructors

	Name	Description
	PdfObject	Overloaded.

Protected Fields

	Name	Description
	currentRotation	
	currentTransform	
	id	
	offset	
	page	
	parent	
	pdfType	
	size	

Public Methods

	Name	Description
S	compare	
	compareTo	
	getCollectionId	

	getCurrentRotation	
	getCurrentTransform	
	getDocument	private PdfDocument document = null; public PdfDocument getDocument() { return isRoot() ? document : page.getDocument(); }
	getId	
	getName	
	getObjectFooter	
	getObjectHeader	
	getOffset	
	getPage	
	getParent	
	getPdfType	
	getSize	
	isParentless	
	isRoot	
	OnAdded	
	OnChanged	
	registerObject	
	Save	
	setCollectionId	
	setParent	

Protected Methods

	Name	Description
	getContent	

See Also

PdfObject Class
com.mindfusion.pdf Namespace

PdfObject Fields

PdfObject.currentRotation Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
protected float currentRotation
```

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.currentTransform Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
protected AffineTransform currentTransform
```

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.id Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
protected long id
```

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.offset Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
protected long offset
```

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.page Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
protected PdfPage page
```

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.parent Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
protected PdfObject parent
```

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.pdfType Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`protected int pdfType`

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.size Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`protected long size`

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject Constructor

Overload List

Name	Description
PdfObject (int, PdfDocument)	
PdfObject (int, PdfPage)	
PdfObject (int, PdfPage, PdfDocument)	

See Also

PdfObject Class
com.mindfusion.pdf Namespace

PdfObject Constructor (int, PdfDocument)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfObject (
    int _type,
    PdfDocument _doc
)
```

Parameters

_type

_doc

See Also

PdfObject Constructor Overload List
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject Constructor (int, PdfPage)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfObject (
    int _type,
    PdfPage _page
)
```

Parameters

_type

_page

See Also

PdfObject Constructor Overload List
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject Constructor (int, PdfPage, PdfDocument)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfObject (
    int _type,
    PdfPage _page,
    PdfDocument _doc
)
```

Parameters

_type

_page

_doc

See Also

PdfObject Constructor Overload List
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject Methods

PdfObject.compare Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static int compare (
    Object o1,
    Object o2
)
```

Parameters

o1

o2

Return Value

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.compareTo Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public int compareTo (
    PdfObject o
)
```

Parameters

o

Return Value

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.getCollectionId Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public long getCollectionId ()
```

Return Value

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.getContent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
protected byte[] getContent ()
```

Return Value

See Also

PdfObject Members
PdfObject Class

PdfObject.getCurrentRotation Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public float getCurrentRotation ()`

Return Value

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.getCurrentTransform Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public AffineTransform getCurrentTransform ()`

Return Value

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.getDocument Method

private PdfDocument document = null; public PdfDocument getDocument() { return isRoot() ? document : page.getDocument(); }

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public PdfDocument getDocument ()`

Return Value

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.getId Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public long getId ()
```

Return Value

Pdf Object Id

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.getName Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public String getName ()
```

Return Value

Pdf Object name as per format specification: OBJ%'0'3d Format specifications described at: @see http://java.sun.com/javase/6/docs/api/java/util/Formatter.html#syntax

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.getObjectFooter Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public String getObjectFooter ()`

Return Value

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.getObjectHeader Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public String getObjectHeader ()`

Return Value

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.getOffset Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public long getOffset ()`

Return Value

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.getPage Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public PdfPage getPage ()`

Return Value

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.getParent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public PdfObject getParent ()`

Return Value

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.getPdfType Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public int getPdfType ()`

Return Value

Pdf Object Type

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.getSize Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public long getSize ()`

Return Value

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.isParentless Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public boolean isParentless ()`

Return Value

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.isRoot Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public boolean isRoot ()
```

Return Value

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.OnAdded Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void OnAdded (
    int index
)
```

Parameters

index

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.OnChanged Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void OnChanged (
    int index,
    PdfObject oldValue,
    PdfObject newValue
)
```

Parameters

index

oldValue

newValue

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.registerObject Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void registerObject (
    PdfObject po
)
```

Parameters

po

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.Save Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void Save (
    PdfWriter writer
)
```

Parameters

writer

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.setCollectionId Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setCollectionId (
    long collectionIdVal
)
```

Parameters

collectionIdVal

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObject.setParent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setParent (
    PdfObject parentVal
)
```

Parameters

parentVal

See Also

PdfObject Members
PdfObject Class
com.mindfusion.pdf Namespace

PdfObjectComparator Class

Syntax

Java

```
public class PdfObjectComparator implements Comparator<T>
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.pdf.PdfObjectComparator

See Also

PdfObjectComparator Members
com.mindfusion.pdf Namespace

PdfObjectComparator Members

The following tables list the members exposed by the PdfObjectComparator type.

Public Constructors

	Name	Description
	PdfObjectComparator	

Public Methods

	Name	Description
	compare	

See Also

PdfObjectComparator Class
com.mindfusion.pdf Namespace

PdfObjectComparator Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public PdfObjectComparator ()`

See Also

PdfObjectComparator Class
com.mindfusion.pdf Namespace

PdfObjectComparator Methods

PdfObjectComparator.compare Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public int compare (
    Object o1,
    Object o2
)
```

Parameters

o1

o2

Return Value

See Also

PdfObjectComparator Members
PdfObjectComparator Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum Class

Syntax

```
Java
public class PdfObjectTypeEnum
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfObjectTypeEnum

See Also

PdfObjectTypeEnum Members
com.mindfusion.pdf Namespace

PdfObjectTypeEnum Members

The following tables list the members exposed by the PdfObjectTypeEnum type.

Public Constructors

	Name	Description
	PdfObjectTypeEnum	

Public Fields

	Name	Description
	Catalog	
	Font	
	FontDescription	
	GraphicsState	
	Hyperlink	
	Image	
	ImageHolder	
	Object	
	Page	
	PagesRoot	
	Path	
	Pattern	
	SampledFunction	
	Shading	
	Text	

See Also

PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum Fields

PdfObjectTypeEnum.Catalog Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static final int Catalog`

See Also

PdfObjectTypeEnum Members
PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum.Font Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static final int Font
```

See Also

PdfObjectTypeEnum Members
PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum.FontDescription Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static final int FontDescription
```

See Also

PdfObjectTypeEnum Members
PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum.GraphicsState Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static final int GraphicsState
```

See Also

PdfObjectTypeEnum Members
PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum.Hyperlink Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int Hyperlink
```

See Also

PdfObjectTypeEnum Members
PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum.Image Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int Image
```

See Also

PdfObjectTypeEnum Members
PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum.ImageHolder Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int ImageHolder
```

See Also

PdfObjectTypeEnum Members
PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum.Object Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int Object
```

See Also

PdfObjectTypeEnum Members
PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum.Page Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int Page
```

See Also

PdfObjectTypeEnum Members
PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum.PagesRoot Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int PagesRoot
```

See Also

PdfObjectTypeEnum Members
PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum.Path Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int Path
```

See Also

PdfObjectTypeEnum Members
PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum.Pattern Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int Pattern
```

See Also

PdfObjectTypeEnum Members
PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum.SampledFunction Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int SampledFunction
```

See Also

PdfObjectTypeEnum Members
PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum.Shading Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int Shading
```

See Also

PdfObjectTypeEnum Members
PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum.Text Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int Text
```

See Also

PdfObjectTypeEnum Members
PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfObjectTypeEnum Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfObjectTypeEnum ()
```

See Also

PdfObjectTypeEnum Class
com.mindfusion.pdf Namespace

PdfPage Class

Syntax

Java
`public class PdfPage extends PdfObject`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfObject
    com.mindfusion.pdf.PdfPage

See Also

PdfPage Members
com.mindfusion.pdf Namespace

PdfPage Members

The following tables list the members exposed by the PdfPage type.

Public Constructors

	Name	Description
	PdfPage	Overloaded.

Public Fields

	Name	Description
	objectsLock	

Protected Fields

	Name	Description
	currentRotation	(Inherited from PdfObject.)
	currentTransform	(Inherited from PdfObject.)
	id	(Inherited from PdfObject.)
	offset	(Inherited from PdfObject.)
	page	(Inherited from PdfObject.)
	parent	(Inherited from PdfObject.)
	pdfType	(Inherited from PdfObject.)
	size	(Inherited from PdfObject.)

Public Methods

	Name	Description
	AddObject	
S	compare	(Inherited from PdfObject.)
	compareTo	(Inherited from PdfObject.)
	Font	
	getClipStr	
	getCollectionId	(Inherited from PdfObject.)
	getCropRect	
	getCurrentRotation	(Inherited from PdfObject.)
	getCurrentTransform	(Inherited from PdfObject.)
	getDocument	
	getId	(Inherited from PdfObject.)
	getLayoutRect	
	getName	(Inherited from PdfObject.)
	getObjectFooter	(Inherited from PdfObject.)
	getObjectHeader	(Inherited from PdfObject.)
	getOffset	(Inherited from PdfObject.)
	getPage	(Inherited from PdfObject.)
	getPageObjects	
	getPageObjectsC	
	getPageTransform	
	getPageTransformString	
	getParent	(Inherited from PdfObject.)
	getPdfType	(Inherited from PdfObject.)
	getSize	(Inherited from PdfObject.)
	Image	Overloaded.
	isParentless	(Inherited from PdfObject.)
	isRoot	(Inherited from PdfObject.)
	newFont	Overloaded.
	newImage	
	OnAdded	(Inherited from PdfObject.)
	OnChanged	(Inherited from PdfObject.)

	registerObject	(Inherited from PdfObject.)
	Save	
	setCollectionId	(Inherited from PdfObject.)
	setDocument	
	setParent	(Inherited from PdfObject.)
	toString	Overloaded.

Protected Methods

	Name	Description
	getContent	

See Also

PdfPage Class
com.mindfusion.pdf Namespace

PdfPage Fields

PdfPage.objectsLock Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public final Object objectsLock`

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage Constructor

Overload List

Name	Description
PdfPage (PdfDocument)	
PdfPage (PdfDocument, Rectangle2D)	

See Also

PdfPage Class
com.mindfusion.pdf Namespace

PdfPage Constructor (PdfDocument)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfPage (
    PdfDocument _doc
)
```

Parameters

_doc

See Also

PdfPage Constructor Overload List
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage Constructor (PdfDocument, Rectangle2D)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfPage (
    PdfDocument _doc,
    Rectangle2D _rect
)
```

Parameters

_doc

_rect

See Also

PdfPage Constructor Overload List
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage Methods

PdfPage.AddObject Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void AddObject (
    PdfObject o
)
```

Parameters

o

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.Font Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfFont Font (
    Font font
)
```

Parameters

font

Return Value

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.getClipStr Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public String getClipStr ()`

Return Value

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.getContent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`protected byte[] getContent ()`

Return Value

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.getCropRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public Rectangle2D getCropRect ()`

Return Value

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.getDocument Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfDocument getDocument ()
```

Return Value

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.getLayoutRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public Rectangle2D getLayoutRect ()
```

Return Value

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.getPageObjects Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public NotifyableList<PdfObject> getPageObjects ()
```

Return Value

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.getPageObjectsC Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public NotifyableList<PdfObject> getPageObjectsC ()
```

Return Value

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.getPageTransform Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public AffineTransform getPageTransform ()
```

Return Value

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.getPageTransformString Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public String getPageTransformString ()
```

Return Value

the pageTransformString

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.Image Method

Overload List

Name	Description
PdfPage.Image (Image)	
PdfPage.Image (Image, Dimension)	

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.Image Method (Image)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfImage Image (
    Image img
)
```

Parameters

img

Return Value

See Also

Image Method Overload List
PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.Image Method (Image, Dimension)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfImage Image (
    Image img,
    Dimension dim
)
```

Parameters

img

dim

Return Value

See Also

Image Method Overload List
PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.newFont Method

Overload List

Name	Description
PdfPage.newFont (Font) PdfPage.newFont (Font, String)	

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.newFont Method (Font)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfFont newFont (
    Font font
)
```

Parameters

font

Return Value

See Also

newFont Method Overload List
PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.newFont Method (Font, String)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfFont newFont (
    Font font,
    String name
)
```

Parameters

font

name

Return Value

See Also

newFont Method Overload List
PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.newImage Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfImage newImage (
    Image img,
    Dimension dim
)
```

Parameters

img

dim

Return Value

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.Save Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void Save (
    PdfWriter writer
)
```

Parameters

writer

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.setDocument Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setDocument (
    PdfDocument document
)
```

Parameters

document

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.toString Method

Overload List

Name	Description
PdfPage.toString ()	
PdfPage.toString (int)	
PdfPage.toString (int, String, String)	

See Also

PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.toString Method ()

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public String toString ()`

Return Value

See Also

toString Method Overload List
PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.toString Method (int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public String toString (
    int type
)
```

Parameters

type

Return Value

See Also

toString Method Overload List
PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPage.toString Method (int, String, String)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public String toString (
    int type,
    String pattern,
    String element
)
```

Parameters

type

pattern

element

Return Value

See Also

toString Method Overload List
PdfPage Members
PdfPage Class
com.mindfusion.pdf Namespace

PdfPagesRoot Class

Syntax

Java
`public class PdfPagesRoot extends PdfObject`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfObject
    com.mindfusion.pdf.PdfPagesRoot

See Also

PdfPagesRoot Members
com.mindfusion.pdf Namespace

PdfPagesRoot Members

The following tables list the members exposed by the PdfPagesRoot type.

Public Constructors

	Name	Description
	PdfPagesRoot	

Protected Fields

	Name	Description
	currentRotation	(Inherited from PdfObject.)
	currentTransform	(Inherited from PdfObject.)
	id	(Inherited from PdfObject.)
	offset	(Inherited from PdfObject.)
	page	(Inherited from PdfObject.)
	parent	(Inherited from PdfObject.)
	pdfType	(Inherited from PdfObject.)
	size	(Inherited from PdfObject.)

Public Methods

	Name	Description
	compare	(Inherited from PdfObject.)
	compareTo	(Inherited from PdfObject.)
	getCollectionId	(Inherited from PdfObject.)
	getCurrentRotation	(Inherited from PdfObject.)

	getCurrentTransform	(Inherited from PdfObject.)
	getDocument	private PdfDocument document = null; public PdfDocument getDocument() { return isRoot() ? document : page.getDocument(); } (Inherited from PdfObject.)
	getId	(Inherited from PdfObject.)
	getName	(Inherited from PdfObject.)
	getObjectFooter	(Inherited from PdfObject.)
	getObjectHeader	(Inherited from PdfObject.)
	getOffset	(Inherited from PdfObject.)
	getPage	(Inherited from PdfObject.)
	getParent	(Inherited from PdfObject.)
	getPdfType	(Inherited from PdfObject.)
	getSize	(Inherited from PdfObject.)
	isParentless	(Inherited from PdfObject.)
	isRoot	(Inherited from PdfObject.)
	OnAdded	(Inherited from PdfObject.)
	OnChanged	(Inherited from PdfObject.)
	registerObject	(Inherited from PdfObject.)
	Save	(Inherited from PdfObject.)
	setCollectionId	(Inherited from PdfObject.)
	setParent	(Inherited from PdfObject.)

Protected Methods

	Name	Description
	getContent	

See Also

PdfPagesRoot Class
com.mindfusion.pdf Namespace

PdfPagesRoot Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfPagesRoot ()
```

See Also

PdfPagesRoot Class
com.mindfusion.pdf Namespace

PdfPagesRoot Methods

PdfPagesRoot.getContent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`protected byte[] getContent ()`

Return Value

See Also

PdfPagesRoot Members
PdfPagesRoot Class
com.mindfusion.pdf Namespace

PdfPath Class

Syntax

Java
`public class PdfPath extends PdfObject`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfObject
    com.mindfusion.pdf.PdfPath

See Also

PdfPath Members
com.mindfusion.pdf Namespace

PdfPath Members

The following tables list the members exposed by the PdfPath type.

Public Constructors

	Name	Description
	PdfPath	Overloaded.

Protected Fields

	Name	Description
	colors	
	currentRotation	(Inherited from PdfObject.)
	currentTransform	(Inherited from PdfObject.)
	id	(Inherited from PdfObject.)
	offset	(Inherited from PdfObject.)
	page	(Inherited from PdfObject.)
	parent	(Inherited from PdfObject.)
	pdfType	(Inherited from PdfObject.)
	size	(Inherited from PdfObject.)

Public Methods

	Name	Description
S	compare	(Inherited from PdfObject.)
	compareTo	(Inherited from PdfObject.)
	getCollectionId	(Inherited from PdfObject.)
	getColor	
	getColors	Overloaded.
	getCurrentRotation	(Inherited from PdfObject.)
	getCurrentTransform	(Inherited from PdfObject.)
	getDocument	private PdfDocument document = null; public PdfDocument getDocument() { return isRoot() ? document : page.getDocument(); } (Inherited from PdfObject.)
	getGradientEnd	
	getGradientStart	
	getGState	
	getId	(Inherited from PdfObject.)
	getInitialPath	
	getName	(Inherited from PdfObject.)

	getObjectFooter	(Inherited from PdfObject.)
	getObjectHeader	(Inherited from PdfObject.)
	getOffset	(Inherited from PdfObject.)
	getPage	(Inherited from PdfObject.)
	getPaint	
	getPaintType	
	getParent	(Inherited from PdfObject.)
	getPathContent	
	getPattern	
	getPdfType	(Inherited from PdfObject.)
	getPenWidth	
	getSize	(Inherited from PdfObject.)
	getStroke	
	getTranslatedPath	
	getTranslatedPoints	
	isAlpha	
	isEvenOdd	
	isFilled	
	isGradient	
	isParentless	(Inherited from PdfObject.)
	isRoot	(Inherited from PdfObject.)
	OnAdded	(Inherited from PdfObject.)
	OnChanged	(Inherited from PdfObject.)
	registerObject	(Inherited from PdfObject.)
	Save	(Inherited from PdfObject.)
	setCollectionId	(Inherited from PdfObject.)
	setParent	(Inherited from PdfObject.)

Protected Methods

	Name	Description
	getContent	

See Also

PdfPath Fields

PdfPath.colors Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`protected Color[] colors`

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath Constructor

Overload List

Name	Description
PdfPath (GeneralPath, boolean)	
PdfPath (GeneralPath, Paint, Stroke, PdfPage, boolean)	
PdfPath (Shape, boolean)	

See Also

PdfPath Class
com.mindfusion.pdf Namespace

PdfPath Constructor (GeneralPath, boolean)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public PdfPath (` `  GeneralPath path,`

```
    boolean isFill
)
```

Parameters

path

isFill

See Also

PdfPath Constructor Overload List
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath Constructor (GeneralPath, Paint, Stroke, PdfPage, boolean)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfPath (
    GeneralPath path,
    Paint paint,
    Stroke stroke,
    PdfPage page,
    boolean isFill
)
```

Parameters

path

paint

stroke

page

isFill

See Also

PdfPath Constructor Overload List
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath Constructor (Shape, boolean)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfPath (
    Shape shape,
    boolean isFill
)
```

Parameters

shape

isFill

See Also

PdfPath Constructor Overload List
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath Methods

PdfPath.getColor Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public Color getColor ()`

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.getColors Method

Overload List

Name	Description
PdfPath.getColors ()	
PdfPath.getColors (int)	

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.getColors Method ()

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public Color[] getColors ()
```

Return Value

See Also

getColors Method Overload List
PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.getColors Method (int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public Color getColors (
    int index
)
```

Parameters

index

Return Value

See Also

getColors Method Overload List
PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.getContent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
protected byte[] getContent ()
```

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.getGradientEnd Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public Point2D getGradientEnd ()
```

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.getGradientStart Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public Point2D getGradientStart ()
```

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.getGState Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public PdfGraphicsState getGState ()`

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.getInitialPath Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public GeneralPath getInitialPath ()`

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.getPaint Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public Paint getPaint ()`

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.getPaintType Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public PaintType getPaintType ()`

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.getPathContent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public byte[] getPathContent ()`

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.getPattern Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public PdfPattern getPattern ()`

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.getPenWidth Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public float getPenWidth ()`

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.getStroke Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public BasicStroke getStroke ()`

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.getTranslatedPath Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public GeneralPath getTranslatedPath ()`

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.getTranslatedPoints Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public Point2D[] getTranslatedPoints ()`

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.isAlpha Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public boolean isAlpha ()`

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.isEvenOdd Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public boolean isEvenOdd ()
```

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.isFilled Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public boolean isFilled ()
```

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPath.isGradient Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public boolean isGradient ()
```

Return Value

See Also

PdfPath Members
PdfPath Class
com.mindfusion.pdf Namespace

PdfPattern Class

Syntax

Java
`public class PdfPattern extends PdfObject`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfObject
    com.mindfusion.pdf.PdfPattern

See Also

PdfPattern Members
com.mindfusion.pdf Namespace

PdfPattern Members

The following tables list the members exposed by the PdfPattern type.

Public Constructors

	Name	Description
	PdfPattern	

Protected Fields

	Name	Description
	currentRotation	(Inherited from PdfObject.)
	currentTransform	(Inherited from PdfObject.)
	id	(Inherited from PdfObject.)
	offset	(Inherited from PdfObject.)
	page	(Inherited from PdfObject.)
	parent	(Inherited from PdfObject.)
	pdfType	(Inherited from PdfObject.)
	size	(Inherited from PdfObject.)

Public Methods

	Name	Description
S	compare	(Inherited from PdfObject.)
	compareTo	(Inherited from PdfObject.)
	getCollectionId	(Inherited from PdfObject.)

	getCurrentRotation	(Inherited from PdfObject.)
	getCurrentTransform	(Inherited from PdfObject.)
	getDocument	private PdfDocument document = null; public PdfDocument getDocument() { return isRoot() ? document : page.getDocument(); } (Inherited from PdfObject.)
	getId	(Inherited from PdfObject.)
	getName	(Inherited from PdfObject.)
	getObjectFooter	(Inherited from PdfObject.)
	getObjectHeader	(Inherited from PdfObject.)
	getOffset	(Inherited from PdfObject.)
	getPage	(Inherited from PdfObject.)
	getParent	(Inherited from PdfObject.)
	getPdfType	(Inherited from PdfObject.)
	getShading	
	getSize	(Inherited from PdfObject.)
	getTilingImage	
	getTilingPattern	
	getTilingRect	
	getTilingResourcs	
	isParentless	(Inherited from PdfObject.)
	isRoot	(Inherited from PdfObject.)
	OnAdded	(Inherited from PdfObject.)
	OnChanged	(Inherited from PdfObject.)
	registerObject	(Inherited from PdfObject.)
	Save	(Inherited from PdfObject.)
	setCollectionId	(Inherited from PdfObject.)
	setParent	(Inherited from PdfObject.)

Protected Methods

	Name	Description
	getContent	

See Also

PdfPattern Class
com.mindfusion.pdf Namespace

PdfPattern Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfPattern (
    PdfPath parent
)
```

Parameters

parent

See Also

PdfPattern Class
com.mindfusion.pdf Namespace

PdfPattern Methods

PdfPattern.getContent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
protected byte[] getContent ()
```

Return Value

See Also

PdfPattern Members
PdfPattern Class
com.mindfusion.pdf Namespace

PdfPattern.getShading Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfShading getShading ()
```

Return Value

See Also

PdfPattern Members
PdfPattern Class
com.mindfusion.pdf Namespace

PdfPattern.getTilingImage Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public PdfImage getTilingImage ()`

Return Value

See Also

PdfPattern Members
PdfPattern Class
com.mindfusion.pdf Namespace

PdfPattern.getTilingPattern Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public String getTilingPattern ()`

Return Value

See Also

PdfPattern Members
PdfPattern Class
com.mindfusion.pdf Namespace

PdfPattern.getTilingRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public Rectangle2D getTilingRect ()
```

Return Value

See Also

PdfPattern Members
PdfPattern Class
com.mindfusion.pdf Namespace

PdfPattern.getTilingResourcs Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public String getTilingResourcs ()
```

Return Value

See Also

PdfPattern Members
PdfPattern Class
com.mindfusion.pdf Namespace

PdfShading Class

Syntax

```
Java
public class PdfShading extends PdfObject
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfObject
    com.mindfusion.pdf.PdfShading

See Also

PdfShading Members
com.mindfusion.pdf Namespace

PdfShading Members

The following tables list the members exposed by the PdfShading type.

Public Constructors

	Name	Description
	PdfShading	

Protected Fields

	Name	Description
	currentRotation	(Inherited from PdfObject.)
	currentTransform	(Inherited from PdfObject.)
	id	(Inherited from PdfObject.)
	offset	(Inherited from PdfObject.)
	page	(Inherited from PdfObject.)
	parent	(Inherited from PdfObject.)
	pdfType	(Inherited from PdfObject.)
	size	(Inherited from PdfObject.)

Public Methods

	Name	Description
S	compare	(Inherited from PdfObject.)
	compareTo	(Inherited from PdfObject.)
	getCollectionId	(Inherited from PdfObject.)
	getColors	Overloaded.
	getCurrentRotation	(Inherited from PdfObject.)
	getCurrentTransform	(Inherited from PdfObject.)
	getDocument	private PdfDocument document = null; public PdfDocument getDocument() { return isRoot() ? document : page.getDocument(); } (Inherited from PdfObject.)
	getFunction	
	getGradientPositions	Overloaded.
	getId	(Inherited from PdfObject.)
	getName	(Inherited from PdfObject.)
	getObjectFooter	(Inherited from PdfObject.)
	getObjectHeader	(Inherited from PdfObject.)

	getOffset	(Inherited from PdfObject.)
	getPage	(Inherited from PdfObject.)
	getParent	(Inherited from PdfObject.)
	getPdfType	(Inherited from PdfObject.)
	getSize	(Inherited from PdfObject.)
	isParentless	(Inherited from PdfObject.)
	isRoot	(Inherited from PdfObject.)
	OnAdded	(Inherited from PdfObject.)
	OnChanged	(Inherited from PdfObject.)
	registerObject	(Inherited from PdfObject.)
	Save	(Inherited from PdfObject.)
	setCollectionId	(Inherited from PdfObject.)
	setParent	(Inherited from PdfObject.)

Protected Methods

	Name	Description
	getContent	

See Also

PdfShading Class
com.mindfusion.pdf Namespace

PdfShading Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfShading (
    PdfPattern pattern
)
```

Parameters

pattern

See Also

PdfShading Methods

PdfShading.getColors Method

Overload List

Name	Description
PdfShading.getColors ()	
PdfShading.getColors (int)	

See Also

PdfShading Members
PdfShading Class
com.mindfusion.pdf Namespace

PdfShading.getColors Method ()

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public Color[] getColors ()`

Return Value

See Also

getColors Method Overload List
PdfShading Members
PdfShading Class
com.mindfusion.pdf Namespace

PdfShading.getColors Method (int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public Color getColors (
    int index
)
```

Parameters

index

Return Value

See Also

getColors Method Overload List
PdfShading Members
PdfShading Class
com.mindfusion.pdf Namespace

PdfShading.getContent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
protected byte[] getContent ()
```

Return Value

See Also

PdfShading Members
PdfShading Class
com.mindfusion.pdf Namespace

PdfShading.getFunction Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfFunction getFunction ()
```

Return Value

See Also

PdfShading.getGradientPositions Method

Overload List

Name	Description
PdfShading.getGradientPositions ()	
PdfShading.getGradientPositions (int)	

See Also

PdfShading Members
PdfShading Class
com.mindfusion.pdf Namespace

PdfShading.getGradientPositions Method ()

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public Point2D[] getGradientPositions ()
```

Return Value

See Also

getGradientPositions Method Overload List
PdfShading Members
PdfShading Class
com.mindfusion.pdf Namespace

PdfShading.getGradientPositions Method (int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public Point2D getGradientPositions (
    int index
)
```

Parameters

index

Return Value

See Also

getGradientPositions Method Overload List
PdfShading Members
PdfShading Class
com.mindfusion.pdf Namespace

PdfSize Class

Syntax

Java
`public class PdfSize`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfSize

See Also

PdfSize Members
com.mindfusion.pdf Namespace

PdfSize Members

The following tables list the members exposed by the PdfSize type.

Public Constructors

	Name	Description
	PdfSize	

Public Fields

	Name	Description
	A0	
	A1	
	A2	
	A3	

	A4	
	A5	
	A6	
	B0	
	B1	
	B2	
	B3	
	B4	
	B5	
	DiagramSize	
	Legal	
	Letter	
	Note	

See Also

PdfSize Class
com.mindfusion.pdf Namespace

PdfSize Fields

PdfSize.A0 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int A0
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize.A1 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int A1
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize.A2 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int A2
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize.A3 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int A3
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize.A4 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int A4
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize.A5 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int A5
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize.A6 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int A6
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize.B0 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int B0
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize.B1 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int B1
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize.B2 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int B2
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize.B3 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int B3
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize.B4 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int B4
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize.B5 Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int B5
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize.DiagramSize Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int DiagramSize
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize.Legal Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int Legal
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize.Letter Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static final int Letter
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize.Note Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static final int Note
```

See Also

PdfSize Members
PdfSize Class
com.mindfusion.pdf Namespace

PdfSize Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public PdfSize ()
```

See Also

PdfSize Class
com.mindfusion.pdf Namespace

PdfText Class

Syntax

```
Java
public class PdfText extends PdfObject
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfObject
    com.mindfusion.pdf.PdfText

See Also

PdfText Members
com.mindfusion.pdf Namespace

PdfText Members

The following tables list the members exposed by the PdfText type.

Public Constructors

	Name	Description
	PdfText	

Public Fields

	Name	Description
S	DisableClip	

Protected Fields

	Name	Description
	currentRotation	(Inherited from PdfObject.)
	currentTransform	(Inherited from PdfObject.)
	id	(Inherited from PdfObject.)
	offset	(Inherited from PdfObject.)
	page	(Inherited from PdfObject.)
	parent	(Inherited from PdfObject.)
	pdfType	(Inherited from PdfObject.)
	size	(Inherited from PdfObject.)

Public Methods

	Name	Description
S	compare	(Inherited from PdfObject.)
	compareTo	(Inherited from PdfObject.)
	getCollectionId	(Inherited from PdfObject.)
	getCurrentRotation	(Inherited from PdfObject.)
	getCurrentTransform	(Inherited from PdfObject.)
	getDocument	private PdfDocument document = null; public PdfDocument getDocument() { return isRoot() ? document : page.getDocument(); } (Inherited from PdfObject.)
	getId	(Inherited from PdfObject.)
	getName	(Inherited from PdfObject.)
	getObjectFooter	(Inherited from PdfObject.)
	getObjectHeader	(Inherited from PdfObject.)
	getOffset	(Inherited from PdfObject.)
	getPage	(Inherited from PdfObject.)
	getParent	(Inherited from PdfObject.)

	getPdfType	(Inherited from PdfObject.)
	getSize	(Inherited from PdfObject.)
	isParentless	(Inherited from PdfObject.)
	isRoot	(Inherited from PdfObject.)
	OnAdded	(Inherited from PdfObject.)
	OnChanged	(Inherited from PdfObject.)
	registerObject	(Inherited from PdfObject.)
	Save	(Inherited from PdfObject.)
	setCollectionId	(Inherited from PdfObject.)
	setParent	(Inherited from PdfObject.)

Protected Methods

	Name	Description
	getContent	

See Also

PdfText Class
com.mindfusion.pdf Namespace

PdfText Fields

PdfText.DisableClip Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public static boolean DisableClip`

See Also

PdfText Members
PdfText Class
com.mindfusion.pdf Namespace

PdfText Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfText (
    String text,
    float x,
    float y,
    PdfPage _page
)
```

Parameters

text

x

y

_page

See Also

PdfText Class
com.mindfusion.pdf Namespace

PdfText Methods

PdfText.getContent Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
protected byte[] getContent ()
```

Return Value

See Also

PdfText Members
PdfText Class
com.mindfusion.pdf Namespace

PdfWriter Class

Syntax

Java

```
public class PdfWriter extends Writer
```

Inheritance Hierarchy

java.lang.Object
  java.io.Writer
    com.mindfusion.pdf.PdfWriter

See Also

PdfWriter Members
com.mindfusion.pdf Namespace

PdfWriter Members

The following tables list the members exposed by the PdfWriter type.

Public Constructors

	Name	Description
	PdfWriter	

Public Methods

	Name	Description
	close	
	flush	
	getLock	
	getPosition	Get the value of Position
	setLock	
	setPosition	Set the value of Position
	write	Overloaded.

See Also

PdfWriter Class
com.mindfusion.pdf Namespace

PdfWriter Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public PdfWriter (
    String FilePath
```

```
)
```

Parameters

FilePath

See Also

PdfWriter Class
com.mindfusion.pdf Namespace

PdfWriter Methods

PdfWriter.close Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void close ()
```

See Also

PdfWriter Members
PdfWriter Class
com.mindfusion.pdf Namespace

PdfWriter.flush Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void flush ()
```

See Also

PdfWriter Members
PdfWriter Class
com.mindfusion.pdf Namespace

PdfWriter.getLock Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public Object getLock ()
```

Return Value

See Also

PdfWriter Members
PdfWriter Class
com.mindfusion.pdf Namespace

PdfWriter.getPosition Method

Get the value of Position

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public long getPosition ()
```

Return Value

the value of Position

See Also

PdfWriter Members
PdfWriter Class
com.mindfusion.pdf Namespace

PdfWriter.setLock Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void setLock (
    Object lock
)
```

Parameters

lock

See Also

PdfWriter Members
PdfWriter Class
com.mindfusion.pdf Namespace

PdfWriter.setPosition Method

Set the value of Position

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void setPosition (
    long Position
)
```

Parameters

Position
new value of Position

See Also

PdfWriter Members
PdfWriter Class
com.mindfusion.pdf Namespace

PdfWriter.write Method

Overload List

Name	Description
PdfWriter.write (byte[])	
PdfWriter.write (Character[], int, int)	
PdfWriter.write (IPdfSaver)	
PdfWriter.write (String)	

See Also

PdfWriter Members
PdfWriter Class
com.mindfusion.pdf Namespace

PdfWriter.write Method (byte[])

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void write (
    byte[] data
)
```

Parameters

data

See Also

write Method Overload List
PdfWriter Members
PdfWriter Class
com.mindfusion.pdf Namespace

PdfWriter.write Method (Character[], int, int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public void write (
    Character[] cbuf,
    int off,
    int len
)
```

Parameters

cbuf

off

len

See Also

write Method Overload List
PdfWriter Members
PdfWriter Class
com.mindfusion.pdf Namespace

PdfWriter.write Method (IPdfSaver)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void write (
    IPdfSaver value
)
```

Parameters

value

See Also

write Method Overload List
PdfWriter Members
PdfWriter Class
com.mindfusion.pdf Namespace

PdfWriter.write Method (String)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public void write (
    String data
)
```

Parameters

data

See Also

write Method Overload List
PdfWriter Members
PdfWriter Class
com.mindfusion.pdf Namespace

tFontInfo Class

Syntax

Java

```
public class tFontInfo
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.PdfFont.tFontInfo

See Also

tFontInfo Members
com.mindfusion.pdf Namespace

tFontInfo Members

The following tables list the members exposed by the tFontInfo type.

Public Constructors

	Name	Description
	tFontInfo	

Public Fields

	Name	Description
	Ascent	
	AvgWidth	
	BBox	
	BriefName	
	CapHeight	
	Descent	
	FirstChar	
	Flags	
	ItalicAngle	
	LastChar	
	Leading	
	MaxWidth	
	MissingWidth	
	SteamH	
	SteamV	
	Widths	
	XHeight	
	XWidth	

See Also

tFontInfo Fields

tFontInfo.Ascent Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public int Ascent
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.AvgWidth Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public int AvgWidth
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.BBox Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public Rectangle BBox
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.BriefName Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public String BriefName
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.CapHeight Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public int CapHeight
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.Descent Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public int Descent
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.FirstChar Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public int FirstChar
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.Flags Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public int Flags
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.ItalicAngle Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public int ItalicAngle
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.LastChar Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public int LastChar
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.Leading Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public int Leading
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.MaxWidth Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public int MaxWidth
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.MissingWidth Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public int MissingWidth
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.SteamH Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public int SteamH
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.SteamV Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public int SteamV
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.Widths Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public int[] Widths
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.XHeight Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public int XHeight
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo.XWidth Field

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public int XWidth
```

See Also

tFontInfo Members
tFontInfo Class
com.mindfusion.pdf Namespace

tFontInfo Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public tFontInfo ()`

See Also

tFontInfo Class
com.mindfusion.pdf Namespace

Tools Class

Syntax

Java
`public class Tools`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.pdf.Tools

See Also

Tools Members
com.mindfusion.pdf Namespace

Tools Members

The following tables list the members exposed by the Tools type.

Public Constructors

	Name	Description
	Tools	

Public Methods

	Name	Description
	Arc2Path	Overloaded.
	ClonePath	Overloaded.
	Color2Gray	
	ComposeStream	
	EscapeString	
	fromInches	Overloaded.
	getCompatibleImg	
	GetDocumentScale	
	getMethod	
	GetPaintType	
	Image2Bytes	
	isAlphaApplicable	
	isClosed	
	isEven	
	IsNumber	
	IsUnicodeString	
	Line2Path	Overloaded.
	Lines2Path	
	Path2Points	
	scaleRect	Overloaded.
	StreamToBytes	
	StringToBytes	
	toARGB	
	toBBox	
	toBI	
	toBytes	Overloaded.
	toCM	
	toColor	
	toCS	
	toFlags	
	toMask	Overloaded.
	toRect	

	toRect1	
	toRect2	
	toRect3	
	toRect4	
	toSnapshot	
	toString	Overloaded.

See Also

Tools Class
com.mindfusion.pdf Namespace

Tools Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public Tools ()`

See Also

Tools Class
com.mindfusion.pdf Namespace

Tools Methods

Tools.Arc2Path Method

Overload List

Name	Description
Tools.Arc2Path (int, int, int, int, float, float)	
Tools.Arc2Path (Rectangle, float, float)	
Tools.Arc2Path (Rectangle2D, float, float)	
Tools.Arc2Path (float, float, float, float, float, float)	
Tools.Arc2Path (float, float, float, float, float, float, boolean)	

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.Arc2Path Method (int, int, int, int, float, float)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static GeneralPath Arc2Path (
    int x,
    int y,
    int width,
    int heigth,
    float startAngle,
    float sweepAngle
)
```

Parameters

x

y

width

heigth

startAngle

sweepAngle

Return Value

See Also

Arc2Path Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.Arc2Path Method (Rectangle, float, float)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static GeneralPath Arc2Path (
    Rectangle rect,
    float startAngle,
```

```
    float sweepAngle
)
```

Parameters

rect

startAngle

sweepAngle

Return Value

See Also

Arc2Path Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.Arc2Path Method (Rectangle2D, float, float)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static GeneralPath Arc2Path (
    Rectangle2D rect,
    float startAngle,
    float sweepAngle
)
```

Parameters

rect

startAngle

sweepAngle

Return Value

See Also

Arc2Path Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.Arc2Path Method (float, float, float, float, float, float)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static GeneralPath Arc2Path (
    float x,
    float y,
    float width,
    float heigth,
    float startAngle,
    float sweepAngle
)
```

Parameters

x

y

width

heigth

startAngle

sweepAngle

Return Value

See Also

Arc2Path Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.Arc2Path Method (float, float, float, float, float, float, boolean)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static GeneralPath Arc2Path (
    float x,
    float y,
    float width,
    float heigth,
    float startAngle,
    float sweepAngle,
    boolean isPie
)
```

Parameters

x

y

width

heigth

startAngle

sweepAngle

isPie

Return Value

See Also

Arc2Path Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.ClonePath Method

Overload List

Name	Description
Tools.ClonePath (GeneralPath)	
Tools.ClonePath (GeneralPath, boolean)	

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.ClonePath Method (GeneralPath)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static GeneralPath ClonePath (
    GeneralPath path
)
```

Parameters

path

Return Value

See Also

ClonePath Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.ClonePath Method (GeneralPath, boolean)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static GeneralPath ClonePath (
    GeneralPath path,
    boolean doFlatten
)
```

Parameters

path

doFlatten

Return Value

See Also

ClonePath Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.Color2Gray Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static float Color2Gray (
    Color color
)
```

Parameters

color

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.ComposeStream Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static byte[] ComposeStream (
    byte[] content
)
```

Parameters

content

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.EscapeString Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static String EscapeString (
    String str
)
```

Parameters

str

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.fromInches Method

Overload List

Name	Description

Tools.fromInches (double, GraphicsUnit)	
Tools.fromInches (float, GraphicsUnit)	

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.fromInches Method (double, GraphicsUnit)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static double fromInches (
    double value,
    GraphicsUnit unitTo
)
```

Parameters

value

unitTo

Return Value

See Also

fromInches Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.fromInches Method (float, GraphicsUnit)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static float fromInches (
    float value,
    GraphicsUnit unitTo
)
```

Parameters

value

unitTo

Return Value

See Also

fromInches Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.getCompatibleImg Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static BufferedImage getCompatibleImg (
    BufferedImage source
)
```

Parameters

source

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.GetDocumentScale Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static double GetDocumentScale (
    Rectangle2D rectExt,
    double width,
    double height,
    float scale,
    AutoScale autoscale
)
```

Parameters

rectExt

width

height

scale

autoscale

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.getMethod Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static String getMethod ()
```

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.GetPaintType Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static PaintType GetPaintType (
    Paint p
)
```

Parameters

p

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.Image2Bytes Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static byte[] Image2Bytes (
    Image img
)
```

Parameters

img

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.isAlphaApplicable Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static boolean isAlphaApplicable (
    Image img
)
```

Parameters

img

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.isClosed Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static boolean isClosed (
    GeneralPath p
)
```

Parameters

p

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.isEven Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static boolean isEven (
    int x
)
```

Parameters

x

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.IsNumber Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static boolean IsNumber (
    Object value
)
```

Parameters

value

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.IsUnicodeString Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

```
Java
public static boolean IsUnicodeString (
    String value
)
```

Parameters

value

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.Line2Path Method

Overload List

Name	Description
Tools.Line2Path (int, int, int, int)	
Tools.Line2Path (Point2D, Point2D)	

Tools.Line2Path (float, float, float, float)	

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.Line2Path Method (int, int, int, int)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static GeneralPath Line2Path (
    int x1,
    int y1,
    int x2,
    int y2
)
```

Parameters

x1

y1

x2

y2

Return Value

See Also

Line2Path Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.Line2Path Method (Point2D, Point2D)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static GeneralPath Line2Path (
    Point2D pt1,
    Point2D pt2
)
```

Parameters

pt1

pt2

Return Value

See Also

Line2Path Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.Line2Path Method (float, float, float, float)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static GeneralPath Line2Path (
    float x1,
    float y1,
    float x2,
    float y2
)
```

Parameters

x1

y1

x2

y2

Return Value

See Also

Line2Path Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.Lines2Path Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static GeneralPath Lines2Path (
    Point2D[] points
)
```

Parameters

points

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.Path2Points Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Point2D[] Path2Points (
    GeneralPath path
)
```

Parameters

path

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.scaleRect Method

Overload List

Name	Description
Tools.scaleRect (Rectangle2D, GraphicsUnit, GraphicsUnit)	
Tools.scaleRect (Rectangle2D, float)	

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.scaleRect Method (Rectangle2D, GraphicsUnit, GraphicsUnit)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Rectangle2D scaleRect (
    Rectangle2D rect,
    GraphicsUnit uFrom,
    GraphicsUnit uTo
)
```

Parameters

rect

uFrom

uTo

Return Value

See Also

scaleRect Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.scaleRect Method (Rectangle2D, float)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Rectangle2D scaleRect (
    Rectangle2D rect,
    float scaleFactor
)
```

Parameters

rect

scaleFactor

Return Value

See Also

scaleRect Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.StreamToBytes Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static byte[] StreamToBytes (
    InputStream stream
)
```

Parameters

stream

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.StringToBytes Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static byte[] StringToBytes (
    String value
)
```

Parameters

value

Return Value

See Also

Tools Members
Tools Class

Tools.toARGB Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static void toARGB (
    int rgb,
    int[] argb
)
```

Parameters

rgb

argb

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toBBox Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Rectangle2D toBBox (
    Font systemfont,
    float scale
)
```

Parameters

systemfont

scale

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toBI Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

`public static BufferedImage toBI (`
`  Image source`
`)`

Parameters

source

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toBytes Method

Overload List

Name	Description
Tools.toBytes (Color[])	
Tools.toBytes (Image)	
Tools.toBytes (Image, boolean)	
Tools.toBytes (Object[])	

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toBytes Method (Color[])

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static byte[] toBytes (
    Color[] colors
)
```

Parameters

colors

Return Value

See Also

toBytes Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toBytes Method (Image)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static byte[] toBytes (
    Image source
)
```

Parameters

source

Return Value

See Also

toBytes Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toBytes Method (Image, boolean)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static byte[] toBytes (
    Image source,
    boolean isMask
)
```

Parameters

source

isMask

Return Value

See Also

toBytes Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toBytes Method (Object[])

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static byte[] toBytes (
    Object[] objects
)
```

Parameters

objects

Return Value

See Also

toBytes Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toCM Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static BufferedImage toCM (
    BufferedImage source,
    ColorModel cm
)
```

Parameters

source

cm

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toColor Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Color toColor (
    Paint paint
)
```

Parameters

paint

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toCS Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static BufferedImage toCS (
    BufferedImage source,
    int colorspace
)
```

Parameters

source

colorspace

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toFlags Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static int toFlags (
    Font font,
    int[] widths
)
```

Parameters

font

widths

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toMask Method

Overload List

Name	Description
Tools.toMask (BufferedImage)	
Tools.toMask (Image)	

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toMask Method (BufferedImage)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Image toMask (
    BufferedImage source
)
```

Parameters

source

Return Value

See Also

toMask Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toMask Method (Image)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Image toMask (
    Image source
)
```

Parameters

source

Return Value

See Also

toMask Method Overload List
Tools Members

Tools.toRect Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Rectangle2D toRect (
    Image img,
    AffineTransform at
)
```

Parameters

img

at

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toRect1 Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Rectangle2D toRect1 (
    String text,
    float x,
    float y
)
```

Parameters

text

x

y

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toRect2 Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Rectangle2D toRect2 (
    String text,
    float x,
    float y
)
```

Parameters

text

x

y

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toRect3 Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Rectangle2D toRect3 (
    String text,
    float x,
    float y
)
```

Parameters

text

x

y

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toRect4 Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static Rectangle2D toRect4 (
    String text,
    float x,
    float y
)
```

Parameters

text

x

y

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toSnapshot Method

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static void toSnapshot (
    Image source
)
```

Parameters

source

See Also

Tools.toString Method

Overload List

Name	Description
Tools.toString (AffineTransform)	
Tools.toString (Color, boolean)	
Tools.toString (GeneralPath)	
Tools.toString (int[])	
Tools.toString (Point2D[])	
Tools.toString (Rectangle)	
Tools.toString (Rectangle2D)	
Tools.toString (float[])	
Tools.toString (Stroke)	

See Also

Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toString Method (AffineTransform)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static String toString (
    AffineTransform t
)
```

Parameters

t

Return Value

See Also

toString Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toString Method (Color, boolean)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static String toString (
    Color color,
    boolean isStroke
)
```

Parameters

color

isStroke

Return Value

See Also

toString Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toString Method (GeneralPath)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static String toString (
    GeneralPath p
)
```

Parameters

p

Return Value

See Also

toString Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toString Method (int[])

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static String toString (
    int[] a
)
```

Parameters

a

Return Value

See Also

toString Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toString Method (Point2D[])

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static String toString (
    Point2D[] points
)
```

Parameters

points

Return Value

See Also

toString Method Overload List
Tools Members

Tools.toString Method (Rectangle)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static String toString (
    Rectangle rect
)
```

Parameters

rect

Return Value

See Also

toString Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toString Method (Rectangle2D)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static String toString (
    Rectangle2D rect
)
```

Parameters

rect

Return Value

See Also

toString Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toString Method (float[])

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static String toString (
    float[] a
)
```

Parameters

a

Return Value

See Also

toString Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

Tools.toString Method (Stroke)

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java

```
public static String toString (
    Stroke stroke
)
```

Parameters

stroke

Return Value

See Also

toString Method Overload List
Tools Members
Tools Class
com.mindfusion.pdf Namespace

UnsupportedDataTypeException Class

Syntax

Java
`public class UnsupportedDataTypeException extends IOException`

Inheritance Hierarchy

java.lang.Object
  java.lang.Throwable
    java.lang.Exception
      java.io.IOException
        com.mindfusion.pdf.UnsupportedDataTypeException

See Also

UnsupportedDataTypeException Members
com.mindfusion.pdf Namespace

UnsupportedDataTypeException Members

The following tables list the members exposed by the UnsupportedDataTypeException type.

Public Constructors

	Name	Description
	UnsupportedDataTypeException	

See Also

UnsupportedDataTypeException Class
com.mindfusion.pdf Namespace

UnsupportedDataTypeException Constructor

Namespace: com.mindfusion.pdf
Package: com.mindfusion.pdf

Syntax

Java
`public UnsupportedDataTypeException ()`

See Also

UnsupportedDataTypeException Class
com.mindfusion.pdf Namespace

com.mindfusion.scripting Namespace

ByteCode Class

Syntax

Java
`public class ByteCode`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.scripting.ByteCode

See Also

ByteCode Members
com.mindfusion.scripting Namespace

ByteCode Members

The following tables list the members exposed by the ByteCode type.

Public Constructors

	Name	Description
	ByteCode	Initializes a new instance of the **ByteCode** class from the specified parse tree root.

Public Methods

	Name	Description
	evaluate	Evaluates the byte code in the specified context.
	get	Gets the element at the specified position within the code.
	getIdentifiers	Gets the list with all identifiers within the code. There is no guarantee that this list will contain unique entries, thus, if an identifier is encountered several times in the initial sequence, it will appear several times in the returned list.
	getLength	Gets the number of elements in the code.

See Also

ByteCode Class
com.mindfusion.scripting Namespace

ByteCode Constructor

Initializes a new instance of the ByteCode class from the specified parse tree root.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public ByteCode (
    ParseTreeNode root
)
```

Parameters

root

See Also

ByteCode Class
com.mindfusion.scripting Namespace

ByteCode Methods

ByteCode.evaluate Method

Evaluates the byte code in the specified context.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public Object evaluate (
    EvaluationContext context
)
```

Parameters

context

Return Value

See Also

ByteCode Members
ByteCode Class
com.mindfusion.scripting Namespace

ByteCode.get Method

Gets the element at the specified position within the code.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

```
Java
public Object get (
    int index
)
```

Parameters

index

Return Value

See Also

ByteCode Members
ByteCode Class
com.mindfusion.scripting Namespace

ByteCode.getIdentifiers Method

Gets the list with all identifiers within the code. There is no guarantee that this list will contain unique entries, thus, if an identifier is encountered several times in the initial sequence, it will appear several times in the returned list.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

```
Java
public String[] getIdentifiers ()
```

Return Value

See Also

ByteCode Members
ByteCode Class
com.mindfusion.scripting Namespace

ByteCode.getLength Method

Gets the number of elements in the code.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

```
Java
```

```
public int getLength ()
```

Return Value

See Also

ByteCode Members
ByteCode Class
com.mindfusion.scripting Namespace

Compiler Class

Syntax

Java
`public class Compiler`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.scripting.Compiler

See Also

Compiler Members
com.mindfusion.scripting Namespace

Compiler Members

The following tables list the members exposed by the Compiler type.

Public Constructors

	Name	Description
	Compiler	

Public Methods

	Name	Description
	compile	Overloaded.

See Also

Compiler Class
com.mindfusion.scripting Namespace

Compiler Constructor

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public Compiler ()
```

See Also

Compiler Class
com.mindfusion.scripting Namespace

Compiler Methods

Compiler.compile Method

Overload List

Name	Description
Compiler.compile (String)	Returns a ByteCode object corresponding to the specified source code. The returned byte code can be subsequently evaluated by calling its ByteCode.evaluate method.
Compiler.compile (String, boolean)	Returns a **ByteCode** object corresponding to the specified source code. The returned byte code can be subsequently evaluated by calling its **ByteCode.evaluate** method.

See Also

Compiler Members
Compiler Class
com.mindfusion.scripting Namespace

Compiler.compile Method (String)

Returns a ByteCode object corresponding to the specified source code. The returned byte code can be subsequently evaluated by calling its ByteCode.evaluate method.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public static ByteCode compile (
    String source
)
```

Parameters

source
The script to compile.

Return Value

The compiled script.

See Also

compile Method Overload List
Compiler Members
Compiler Class
com.mindfusion.scripting Namespace

Compiler.compile Method (String, boolean)

Returns a ByteCode object corresponding to the specified source code. The returned byte code can be subsequently evaluated by calling its ByteCode.evaluate method.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public static ByteCode compile (
    String source,
    boolean normalize
)
```

Parameters

source
The script to compile.

normalize
true to encase source in square brackets if it is not encased already; otherwise, false.

Return Value

The compiled script.

See Also

compile Method Overload List
Compiler Members
Compiler Class
com.mindfusion.scripting Namespace

EvaluateFunctionEventObject Class

Raised when a function cannot be resolved by the EvaluationContext to allow clients to evaluate it.

Syntax

Java
`public class EvaluateFunctionEventObject extends EventObject`

Inheritance Hierarchy

java.lang.Object
  java.util.EventObject
    com.mindfusion.scripting.EvaluateFunctionEventObject

See Also

EvaluateFunctionEventObject Members
com.mindfusion.scripting Namespace

EvaluateFunctionEventObject Members

Raised when a function cannot be resolved by the EvaluationContext to allow clients to evaluate it.

The following tables list the members exposed by the EvaluateFunctionEventObject type.

Public Constructors

	Name	Description
	EvaluateFunctionEventObject	Initializes a new instance of the **EvaluateFunctionEventObject** class.

Public Methods

	Name	Description
	getArguments	Gets the list of the function's arguments.
	getIsEvaluated	Gets a value indicating whether the function has been evaluated.
	getName	Gets the name of the function to evaluate.
	getParam	Gets the user-defined object set to the SimpleEvaluationContext.getDispatchFunctionParam.
	getResult	Gets the result of the function evaluation. An attempt to get this value before it was set results in an exception.
	setResult	Gets the result of the function evaluation.

See Also

EvaluateFunctionEventObject Class
com.mindfusion.scripting Namespace

EvaluateFunctionEventObject Constructor

Initializes a new instance of the EvaluateFunctionEventObject class.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

```
Java
public EvaluateFunctionEventObject (
    Object source,
    String name,
    Object[] arguments,
    Object param
)
```

Parameters

source
The object on which the Event initially occurred.

name
The name of the function.

arguments
The list of arguments to pass to the function.

param
A reference to a user-defined object, related to the event.

See Also

EvaluateFunctionEventObject Class
com.mindfusion.scripting Namespace

EvaluateFunctionEventObject Methods

EvaluateFunctionEventObject.getArguments Method

Gets the list of the function's arguments.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

```
Java
public Object[] getArguments ()
```

Return Value

See Also

EvaluateFunctionEventObject Members
EvaluateFunctionEventObject Class
com.mindfusion.scripting Namespace

EvaluateFunctionEventObject.getIsEvaluated Method

Gets a value indicating whether the function has been evaluated.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java
`public boolean getIsEvaluated ()`

Return Value

See Also

EvaluateFunctionEventObject Members
EvaluateFunctionEventObject Class
com.mindfusion.scripting Namespace

EvaluateFunctionEventObject.getName Method

Gets the name of the function to evaluate.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java
`public String getName ()`

Return Value

See Also

EvaluateFunctionEventObject Members
EvaluateFunctionEventObject Class
com.mindfusion.scripting Namespace

EvaluateFunctionEventObject.getParam Method

Gets the user-defined object set to the SimpleEvaluationContext.getDispatchFunctionParam.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java
`public Object getParam ()`

Return Value

See Also

EvaluateFunctionEventObject Members
EvaluateFunctionEventObject Class
com.mindfusion.scripting Namespace

EvaluateFunctionEventObject.getResult Method

Gets the result of the function evaluation. An attempt to get this value before it was set results in an exception.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public Object getResult ()
```

Return Value

See Also

EvaluateFunctionEventObject Members
EvaluateFunctionEventObject Class
com.mindfusion.scripting Namespace

EvaluateFunctionEventObject.setResult Method

Gets the result of the function evaluation.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public void setResult (
    Object value
)
```

Parameters

value

See Also

EvaluateFunctionEventObject Members
EvaluateFunctionEventObject Class
com.mindfusion.scripting Namespace

EvaluationContext Interface

Syntax

Java
`public interface EvaluationContext`

Inheritors

com.mindfusion.scripting.SimpleEvaluationContext

See Also

EvaluationContext Members
com.mindfusion.scripting Namespace

EvaluationContext Members

The following tables list the members exposed by the EvaluationContext type.

Public Methods

	Name	Description
	assignIdentifier	Assigns a value to the identifier with the specified name. If the identifier is not defined it is automatically defined.
	assignValue	Assigns the specified value to the property represented by the specified descriptor.
	createMemberInfo	Overloaded.
	evaluateIdentifier	Evaluates the identifier with the specified name.
	format	Formats the specified value according to the specified format.
	invokeFunction	Invokes the function with the specified name.
	isTargetProperty	Returns whether the underlying object exposes a public property with the specified name.

See Also

EvaluationContext Interface
com.mindfusion.scripting Namespace

EvaluationContext Methods

EvaluationContext.assignIdentifier Method

Assigns a value to the identifier with the specified name. If the identifier is not defined it is automatically defined.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

```
Java
void assignIdentifier (
    String name,
    Object value
)
```

Parameters

name
The identifier to assign.

value
The new value.

See Also

EvaluationContext Members
EvaluationContext Interface
com.mindfusion.scripting Namespace

EvaluationContext.assignValue Method

Assigns the specified value to the property represented by the specified descriptor.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

```
Java
Object assignValue (
    MemberInfo info,
    Object value
)
```

Parameters

info

value

Return Value

See Also

EvaluationContext Members
EvaluationContext Interface
com.mindfusion.scripting Namespace

EvaluationContext.createMemberInfo Method

Overload List

Name	Description
EvaluationContext.createMemberInfo (MemberInfo, String)	Creates a MemberInfo object representing a property with the specified name on the object represented by the specified **MemberInfo**.
EvaluationContext.createMemberInfo (String, String)	Creates a **MemberInfo** object representing a property with the specified name on the specified object.

See Also

EvaluationContext Members
EvaluationContext Interface
com.mindfusion.scripting Namespace

EvaluationContext.createMemberInfo Method (MemberInfo, String)

Creates a MemberInfo object representing a property with the specified name on the object represented by the specified **MemberInfo**.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
MemberInfo createMemberInfo (
    MemberInfo info,
    String propertyName
)
```

Parameters

info

propertyName

Return Value

See Also

createMemberInfo Method Overload List
EvaluationContext Members
EvaluationContext Interface
com.mindfusion.scripting Namespace

EvaluationContext.createMemberInfo Method (String, String)

Creates a MemberInfo object representing a property with the specified name on the specified object.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
MemberInfo createMemberInfo (
    String objectName,
    String propertyName
)
```

Parameters

objectName

propertyName

Return Value

See Also

createMemberInfo Method Overload List
EvaluationContext Members
EvaluationContext Interface
com.mindfusion.scripting Namespace

EvaluationContext.evaluateIdentifier Method

Evaluates the identifier with the specified name.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
Object evaluateIdentifier (
    String name
)
```

Parameters

name
The identifier to evaluate.

Return Value

The result of the evaluation.

See Also

EvaluationContext Members
EvaluationContext Interface
com.mindfusion.scripting Namespace

EvaluationContext.format Method

Formats the specified value according to the specified format.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
String format (
    Object value,
    NumberFormat format
)
```

Parameters

value
The value to format.

format
The **NumberFormat** to use when performing the formatting.

Return Value

The string representing the value formatted according to the specified format.

See Also

EvaluationContext Members
EvaluationContext Interface
com.mindfusion.scripting Namespace

EvaluationContext.invokeFunction Method

Invokes the function with the specified name.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
Object invokeFunction (
    String name,
    Object[] p
)
```

Parameters

name
The name of the function to invoke.

p
The list of arguments of the function.

Return Value

The result of the invocation.

See Also

EvaluationContext Members
EvaluationContext Interface
com.mindfusion.scripting Namespace

EvaluationContext.isTargetProperty Method

Returns whether the underlying object exposes a public property with the specified name.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
boolean isTargetProperty (
    String propertyName
)
```

Parameters

propertyName

Return Value

See Also

EvaluationContext Members
EvaluationContext Interface
com.mindfusion.scripting Namespace

MemberInfo Class

Encapsulates the information required to identify a specific member of a particular object.

Syntax

Java

```
public class MemberInfo
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.scripting.MemberInfo

See Also

MemberInfo Members
com.mindfusion.scripting Namespace

MemberInfo Members

Encapsulates the information required to identify a specific member of a particular object.

The following tables list the members exposed by the MemberInfo type.

Public Constructors

	Name	Description
	MemberInfo	Overloaded.

Public Methods

	Name	Description
	getValue	Gets the value of the represented property.
	setValue	Sets the value of the represented property.

See Also

MemberInfo Class
com.mindfusion.scripting Namespace

MemberInfo Constructor

Overload List

Name	Description
MemberInfo (MemberInfo, String)	Initializes a new instance of the MemberInfo class with the object identified by the property defined by the specified MemberInfo and the property with the specified name.
MemberInfo (Object, String)	Initializes a new instance of the **MemberInfo** class for the specified object and the property with the specified name.

See Also

MemberInfo Class
com.mindfusion.scripting Namespace

MemberInfo Constructor (MemberInfo, String)

Initializes a new instance of the MemberInfo class with the object identified by the property defined by the specified MemberInfo and the property with the specified name.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public MemberInfo (
    MemberInfo info,
    String propertyName
)
```

Parameters

info

propertyName

See Also

MemberInfo Constructor Overload List
MemberInfo Class
com.mindfusion.scripting Namespace

MemberInfo Constructor (Object, String)

Initializes a new instance of the MemberInfo class for the specified object and the property with the specified name.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public MemberInfo (
    Object o,
    String propertyName
)
```

Parameters

o

propertyName

See Also

MemberInfo Constructor Overload List
MemberInfo Class
com.mindfusion.scripting Namespace

MemberInfo Methods

MemberInfo.getValue Method

Gets the value of the represented property.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public Object getValue ()
```

Return Value

See Also

MemberInfo Members
MemberInfo Class
com.mindfusion.scripting Namespace

MemberInfo.setValue Method

Sets the value of the represented property.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public void setValue (
    Object value
)
```

Parameters

value

See Also

MemberInfo Members
MemberInfo Class
com.mindfusion.scripting Namespace

SimpleEvaluationContext Class

Provides a basic implementation of the EvaluationContext interface.

Syntax

Java

```
public class SimpleEvaluationContext implements EvaluationContext
```

Inheritance Hierarchy

java.lang.Object
com.mindfusion.scripting.SimpleEvaluationContext

See Also

SimpleEvaluationContext Members
com.mindfusion.scripting Namespace

SimpleEvaluationContext Members

Provides a basic implementation of the EvaluationContext interface.

The following tables list the members exposed by the SimpleEvaluationContext type.

Public Constructors

	Name	Description
	SimpleEvaluationContext	Initializes a new instance of the **SimpleEvaluationContext** class for the specified object.

Public Methods

	Name	Description
	addListener	Registers listener so that it will receive events from the context.
	assignIdentifier	EvaluationContext.assignIdentifier implementation.
	assignValue	Assigns the specified value to the property represented by the specified descriptor.
	createMemberInfo	Overloaded.
	evaluateIdentifier	EvaluationContext.evaluateIdentifier implementation.
	format	EvaluationContext.format implementation.
	getDispatchFunctionParam	Gets a user-defined object passed to the DispatchFunctionCall event.
	getLocalVars	
	invokeFunction	EvaluationContext.invokeFunction implementation.
	isTargetProperty	Returns whether the underlying object exposes a public property with the specified name.
	removeListener	Unregisters listener so that it will no longer receive events from the context.
	setDispatchFunctionParam	Sets a user-defined object passed to the DispatchFunctionCall event.

See Also

SimpleEvaluationContext Class
com.mindfusion.scripting Namespace

SimpleEvaluationContext Constructor

Initializes a new instance of the SimpleEvaluationContext class for the specified object.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public SimpleEvaluationContext (
    Object target
)
```

Parameters

target

See Also

SimpleEvaluationContext Class
com.mindfusion.scripting Namespace

SimpleEvaluationContext Methods

SimpleEvaluationContext.addListener Method

Registers listener so that it will receive events from the context.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public void addListener (
    SimpleEvaluationContextListener listener
)
```

Parameters

listener

See Also

SimpleEvaluationContext Members
SimpleEvaluationContext Class
com.mindfusion.scripting Namespace

SimpleEvaluationContext.assignIdentifier Method

EvaluationContext.assignIdentifier implementation.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public void assignIdentifier (
    String name,
    Object value
)
```

Parameters

name

value

See Also

SimpleEvaluationContext Members
SimpleEvaluationContext Class
com.mindfusion.scripting Namespace

SimpleEvaluationContext.assignValue Method

Assigns the specified value to the property represented by the specified descriptor.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public Object assignValue (
    MemberInfo info,
    Object value
)
```

Parameters

info

value

Return Value

See Also

SimpleEvaluationContext Members
SimpleEvaluationContext Class
com.mindfusion.scripting Namespace

SimpleEvaluationContext.createMemberInfo Method

Overload List

Name	Description
SimpleEvaluationContext.createMemberInfo (MemberInfo, String)	Creates a MemberInfo object representing a property with the specified name on the object represented by the specified **MemberInfo**.
SimpleEvaluationContext.createMemberInfo (String, String)	Creates a **MemberInfo** object representing a property with the specified name on the specified object.

See Also

SimpleEvaluationContext Members
SimpleEvaluationContext Class

com.mindfusion.scripting Namespace

SimpleEvaluationContext.createMemberInfo Method (MemberInfo, String)

Creates a MemberInfo object representing a property with the specified name on the object represented by the specified **MemberInfo**.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public MemberInfo createMemberInfo (
    MemberInfo info,
    String propertyName
)
```

Parameters

info

propertyName

Return Value

See Also

createMemberInfo Method Overload List
SimpleEvaluationContext Members
SimpleEvaluationContext Class
com.mindfusion.scripting Namespace

SimpleEvaluationContext.createMemberInfo Method (String, String)

Creates a MemberInfo object representing a property with the specified name on the specified object.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public MemberInfo createMemberInfo (
    String objectName,
    String propertyName
)
```

Parameters

objectName

propertyName

Return Value

See Also

createMemberInfo Method Overload List
SimpleEvaluationContext Members
SimpleEvaluationContext Class
com.mindfusion.scripting Namespace

SimpleEvaluationContext.evaluateIdentifier Method

EvaluationContext.evaluateIdentifier implementation.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public Object evaluateIdentifier (
    String name
)
```

Parameters

name

Return Value

See Also

SimpleEvaluationContext Members
SimpleEvaluationContext Class
com.mindfusion.scripting Namespace

SimpleEvaluationContext.format Method

EvaluationContext.format implementation.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public String format (
    Object value,
    NumberFormat format
)
```

Parameters

value

format

Return Value

See Also

SimpleEvaluationContext Members
SimpleEvaluationContext Class
com.mindfusion.scripting Namespace

SimpleEvaluationContext.getDispatchFunctionParam Method

Gets a user-defined object passed to the DispatchFunctionCall event.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public Object getDispatchFunctionParam ()
```

Return Value

See Also

SimpleEvaluationContext Members
SimpleEvaluationContext Class
com.mindfusion.scripting Namespace

SimpleEvaluationContext.getLocalVars Method

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public HashMap<String, Object> getLocalVars ()
```

Return Value

See Also

SimpleEvaluationContext Members
SimpleEvaluationContext Class
com.mindfusion.scripting Namespace

SimpleEvaluationContext.invokeFunction Method

EvaluationContext.invokeFunction implementation.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public Object invokeFunction (
    String name,
    Object[] p
)
```

Parameters

name

p

Return Value

See Also

SimpleEvaluationContext Members
SimpleEvaluationContext Class
com.mindfusion.scripting Namespace

SimpleEvaluationContext.isTargetProperty Method

Returns whether the underlying object exposes a public property with the specified name.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public boolean isTargetProperty (
    String propertyName
)
```

Parameters

propertyName

Return Value

See Also

SimpleEvaluationContext Members
SimpleEvaluationContext Class
com.mindfusion.scripting Namespace

SimpleEvaluationContext.removeListener Method

Unregisters listener so that it will no longer receive events from the context.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public void removeListener (
    SimpleEvaluationContextListener listener
)
```

Parameters

listener

See Also

SimpleEvaluationContext Members
SimpleEvaluationContext Class
com.mindfusion.scripting Namespace

SimpleEvaluationContext.setDispatchFunctionParam Method

Sets a user-defined object passed to the DispatchFunctionCall event.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
public void setDispatchFunctionParam (
    Object value
)
```

Parameters

value

See Also

SimpleEvaluationContext Members
SimpleEvaluationContext Class
com.mindfusion.scripting Namespace

SimpleEvaluationContextListener Interface

Defines events raised by the SimpleEvaluationContext class.

Syntax

Java

```
public interface SimpleEvaluationContextListener extends EventListener
```

See Also

SimpleEvaluationContextListener Members
com.mindfusion.scripting Namespace

SimpleEvaluationContextListener Members

Defines events raised by the SimpleEvaluationContext class.

The following tables list the members exposed by the SimpleEvaluationContextListener type.

Public Methods

	Name	Description
	dispatchFunctionCall	Raised when a function name cannot be recognized one of the built-in functions, to allow clients to evaluate the function call.

See Also

SimpleEvaluationContextListener Interface
com.mindfusion.scripting Namespace

SimpleEvaluationContextListener Methods

SimpleEvaluationContextListener.dispatchFunctionCall Method

Raised when a function name cannot be recognized one of the built-in functions, to allow clients to evaluate the function call.

Namespace: com.mindfusion.scripting
Package: com.mindfusion.scripting

Syntax

Java

```
void dispatchFunctionCall (
    EvaluateFunctionEventObject e
)
```

Parameters

e

See Also

SimpleEvaluationContextListener Members
SimpleEvaluationContextListener Interface
com.mindfusion.scripting Namespace

com.mindfusion.svg Namespace

Config Class

Syntax

Java
`public class Config`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.svg.Globals.Config

See Also

Config Members
com.mindfusion.svg Namespace

Config Members

The following tables list the members exposed by the Config type.

Public Constructors

	Name	Description
	Config	

Public Fields

	Name	Description
	DefaultLocale	
	DefaultNS	
	LinkNS	

See Also

Config Class
com.mindfusion.svg Namespace

Config Fields

Config.DefaultLocale Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public static Locale DefaultLocale`

See Also

Config Members
Config Class
com.mindfusion.svg Namespace

Config.DefaultNS Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String DefaultNS
```

See Also

Config Members
Config Class
com.mindfusion.svg Namespace

Config.LinkNS Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String LinkNS
```

See Also

Config Members
Config Class
com.mindfusion.svg Namespace

Config Constructor

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public Config ()
```

See Also

Globals Class

Syntax

Java
`public class Globals`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.svg.Globals

See Also

Globals Members
com.mindfusion.svg Namespace

Globals Members

The following tables list the members exposed by the Globals type.

Public Constructors

	Name	Description
	Globals	

Public Fields

	Name	Description
	Defa	
	DefT	
	Doc	
	FontScale	
	Gra	
	UnitCSS	
	UnitFormat	
	UnitScale	

Public Methods

	Name	Description
	clearImages	
	getClip	
	getColor	
	getFont	
	getFontMetrics	Overloaded.
	getFRC	
	getId	
	getLineCap	
	getLineJoin	
	getPaint	
	getStroke	
	getSW	
	getSWS	
	getTransform	
	isCustomStroke	
	isReady	
	isTransformed	
	newImage	
	nextId	
	resetId	
	setId	

See Also

Globals Class
com.mindfusion.svg Namespace

Globals Fields

Globals.Defa Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static final Graphics2D Defa
```

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.DefT Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static AffineTransform DefT
```

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.Doc Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static SvgDocument Doc
```

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.FontScale Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static double FontScale
```

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.Gra Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static SvgGraphics2D Gra
```

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.UnitCSS Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static String UnitCSS
```

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.UnitFormat Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static final DecimalFormat UnitFormat
```

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.UnitScale Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static double UnitScale
```

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals Constructor

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public Globals ()
```

See Also

Globals Class
com.mindfusion.svg Namespace

Globals Methods

Globals.clearImages Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static void clearImages ()
```

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.getClip Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static Shape getClip ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.getColor Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static Color getColor ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.getFont Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public static Font getFont ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.getFontMetrics Method

Overload List

Name	Description
Globals.getFontMetrics ()	
Globals.getFontMetrics (Font)	

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.getFontMetrics Method ()

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public static FontMetrics getFontMetrics ()`

Return Value

See Also

getFontMetrics Method Overload List
Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.getFontMetrics Method (Font)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static FontMetrics getFontMetrics (
    Font f
)
```

Parameters

f

Return Value

See Also

getFontMetrics Method Overload List
Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.getFRC Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static FontRenderContext getFRC ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.getId Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static long getId ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.getLineCap Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public static String getLineCap ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.getLineJoin Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public static String getLineJoin ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.getPaint Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static Paint getPaint ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.getStroke Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static Stroke getStroke ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.getSW Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static double getSW ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.getSWS Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public static String getSWS ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.getTransform Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public static AffineTransform getTransform ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.isCustomStroke Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public static boolean isCustomStroke ()`

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.isReady Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static boolean isReady ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.isTransformed Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static boolean isTransformed ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.newImage Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String newImage (
    Image img
```

```
)
```

Parameters

img

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.nextId Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static long nextId ()
```

Return Value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.resetId Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static void resetId ()
```

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Globals.setId Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static void setId (
    long value
)
```

Parameters

value

See Also

Globals Members
Globals Class
com.mindfusion.svg Namespace

Nodes Class

Syntax

```
Java
public class Nodes
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.svg.SvgDocument.Nodes

See Also

Nodes Members
com.mindfusion.svg Namespace

Nodes Members

The following tables list the members exposed by the Nodes type.

Public Constructors

	Name	Description
	Nodes	

Public Fields

	Name	Description

	Defs	
	Last	
	Root	
	RootE	

See Also

Nodes Class
com.mindfusion.svg Namespace

Nodes Fields

Nodes.Defs Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static Node Defs
```

See Also

Nodes Members
Nodes Class
com.mindfusion.svg Namespace

Nodes.Last Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static Node Last
```

See Also

Nodes Members
Nodes Class
com.mindfusion.svg Namespace

Nodes.Root Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public static Node Root`

See Also

Nodes Members
Nodes Class
com.mindfusion.svg Namespace

Nodes.RootE Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public static Element RootE`

See Also

Nodes Members
Nodes Class
com.mindfusion.svg Namespace

Nodes Constructor

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public Nodes ()`

See Also

Nodes Class
com.mindfusion.svg Namespace

Pattern Class

Syntax

Java
`public class Pattern`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.svg.Globals.Config.Pattern

See Also

Pattern Members
com.mindfusion.svg Namespace

Pattern Members

The following tables list the members exposed by the Pattern type.

Public Constructors

	Name	Description
	Pattern	

Public Fields

	Name	Description
	ClipName	
	Color	
	CubicSeg	
	Float4	
	FontSize	
	GradientName	
	ImageBody	
	ImageName	
	ImageNameFile	
	ImageNamePrefix	
	LineSeg	
	Matrix	
	MoveSeg	
	PatternName	

	QuadraticSeg	
	Rect	
	UrlLink	

See Also

Pattern Class
com.mindfusion.svg Namespace

Pattern Fields

Pattern.ClipName Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public static String ClipName`

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern.Color Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public static String Color`

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern.CubicSeg Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String CubicSeg
```

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern.Float4 Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String Float4
```

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern.FontSize Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String FontSize
```

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern.GradientName Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String GradientName
```

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern.ImageBody Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String ImageBody
```

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern.ImageName Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String ImageName
```

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern.ImageNameFile Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String ImageNameFile
```

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern.ImageNamePrefix Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String ImageNamePrefix
```

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern.LineSeg Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String LineSeg
```

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern.Matrix Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String Matrix
```

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern.MoveSeg Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String MoveSeg
```

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern.PatternName Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String PatternName
```

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern.QuadraticSeg Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String QuadraticSeg
```

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern.Rect Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String Rect
```

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern.UrlLink Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String UrlLink
```

See Also

Pattern Members
Pattern Class
com.mindfusion.svg Namespace

Pattern Constructor

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public Pattern ()`

See Also

Pattern Class
com.mindfusion.svg Namespace

SvgContent Class

Represents the content of an SVG drawing.

Syntax

Java
`public class SvgContent`

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.svg.SvgContent

See Also

SvgContent Members
com.mindfusion.svg Namespace

SvgContent Members

Represents the content of an SVG drawing.

The following tables list the members exposed by the SvgContent type.

Public Constructors

	Name	Description
	SvgContent	Initializes a new instance of the SvgContent class.

Public Methods

	Name	Description
	draw	Draws the SVG content on specified Graphics2D.
S	fromFile	Loads SVG from the specified file.
S	fromStream	Loads SVG from the specified stream.
	getBounds	Gets the bounding rectangle that fits SVG elements.

	getConcaveHull	Gets the concave hull of SVG elements' coordinates.
	getConvexHull	Gets the convex hull of SVG elements' coordinates.
	getFileUrl	Gets the URI of SVG file this object was loaded from.
	getSvgElement	Returns the root XML Element. Intended to be used only for reading.
	loadImage	Overloaded.
	parse	Overloaded.

See Also

SvgContent Class
com.mindfusion.svg Namespace

SvgContent Constructor

Initializes a new instance of the SvgContent class.

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public SvgContent ()
```

See Also

SvgContent Class
com.mindfusion.svg Namespace

SvgContent Methods

SvgContent.draw Method

Draws the SVG content on specified Graphics2D.

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void draw (
    Graphics2D graphics,
    Rectangle2D bounds
)
```

Parameters

graphics

A Graphics2D instance.

bounds
The target rectangle.

See Also

SvgContent Members
SvgContent Class
com.mindfusion.svg Namespace

SvgContent.fromFile Method

Loads SVG from the specified file.

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static SvgContent fromFile (
    String fileName
)
```

Parameters

fileName
A string containing file path.

Return Value

An SvgContent instance representing the SVG drawing, or **null** if I/O or parsing errors occurred.

See Also

SvgContent Members
SvgContent Class
com.mindfusion.svg Namespace

SvgContent.fromStream Method

Loads SVG from the specified stream.

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static SvgContent fromStream (
    InputStream stream
)
```

Parameters

stream
A **java.io.InputStream** instance.

Return Value

An SvgContent instance representing the SVG drawing, or **null** if I/O or parsing errors occurred.

See Also

SvgContent Members
SvgContent Class
com.mindfusion.svg Namespace

SvgContent.getBounds Method

Gets the bounding rectangle that fits SVG elements.

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public Rectangle2D getBounds ()
```

Return Value

A Rectangle2D instance.

See Also

SvgContent Members
SvgContent Class
com.mindfusion.svg Namespace

SvgContent.getConcaveHull Method

Gets the concave hull of SVG elements' coordinates.

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public Point2D[] getConcaveHull ()
```

Return Value

An array of Point2D objects representing the concave hull.

See Also

SvgContent Members
SvgContent Class

SvgContent.getConvexHull Method

Gets the convex hull of SVG elements' coordinates.

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public Point2D[] getConvexHull ()
```

Return Value

An array of Point2D objects representing the convex hull.

See Also

SvgContent Members
SvgContent Class
com.mindfusion.svg Namespace

SvgContent.getFileUrl Method

Gets the URI of SVG file this object was loaded from.

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public String getFileUrl ()
```

Return Value

A string containing the file URI.

See Also

SvgContent Members
SvgContent Class
com.mindfusion.svg Namespace

SvgContent.getSvgElement Method

Returns the root XML Element. Intended to be used only for reading.

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public Element getSvgElement ()`

Return Value

An XML Element.

See Also

SvgContent Members
SvgContent Class
com.mindfusion.svg Namespace

SvgContent.loadImage Method

Overload List

Name	Description
SvgContent.loadImage (Document, Rectangle2D)	Returns a java.awt.Image representation of the SVG drawing.
SvgContent.loadImage (String, Rectangle2D)	Returns a java.awt.Image representation of the SVG drawing.

See Also

SvgContent Members
SvgContent Class
com.mindfusion.svg Namespace

SvgContent.loadImage Method (Document, Rectangle2D)

Returns a java.awt.Image representation of the SVG drawing.

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public Image loadImage (
    Document document,
    Rectangle2D bounds
)
```

Parameters

document
An XML Document containing SVG markup.

bounds
A Rectangle2D specifying the image size.

Return Value

A java.awt.Image instance.

See Also

loadImage Method Overload List
SvgContent Members
SvgContent Class
com.mindfusion.svg Namespace

SvgContent.loadImage Method (String, Rectangle2D)

Returns a java.awt.Image representation of the SVG drawing.

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public Image loadImage (
    String fileName,
    Rectangle2D bounds
)
```

Parameters

fileName
A string containing the path of an SVG file.

bounds
A Rectangle2D specifying the image size.

Return Value

A java.awt.Image instance.

See Also

loadImage Method Overload List
SvgContent Members
SvgContent Class
com.mindfusion.svg Namespace

SvgContent.parse Method

Overload List

Name	Description
SvgContent.parse (Document)	Parses the content of specified XML document.
SvgContent.parse (Document, boolean)	Parses the content of specified XML document.
SvgContent.parse (NodeList)	Parses the content of specified XML elements.

SvgContent.parse (String)	Parses the content of specified SVG file.
SvgContent.parse (String, boolean)	Parses the content of specified SVG file.

See Also

SvgContent Members
SvgContent Class
com.mindfusion.svg Namespace

SvgContent.parse Method (Document)

Parses the content of specified XML document.

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void parse (
    Document document
)
```

Parameters

document
An org.w3c.dom.Document instance.

See Also

parse Method Overload List
SvgContent Members
SvgContent Class
com.mindfusion.svg Namespace

SvgContent.parse Method (Document, boolean)

Parses the content of specified XML document.

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void parse (
    Document document,
    boolean splitGroups
)
```

Parameters

document
An org.w3c.dom.Document instance.

splitGroups
true to treat top-level group elements as pages, or false otherwise.

See Also

parse Method Overload List
SvgContent Members
SvgContent Class
com.mindfusion.svg Namespace

SvgContent.parse Method (NodeList)

Parses the content of specified XML elements.

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void parse (
    NodeList xmlElements
)
```

Parameters

xmlElements
An org.w3c.dom.NodeList instance.

See Also

parse Method Overload List
SvgContent Members
SvgContent Class
com.mindfusion.svg Namespace

SvgContent.parse Method (String)

Parses the content of specified SVG file.

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void parse (
    String fileName
)
```

Parameters

fileName
A string containing the path of an SVG file.

See Also

parse Method Overload List
SvgContent Members
SvgContent Class
com.mindfusion.svg Namespace

SvgContent.parse Method (String, boolean)

Parses the content of specified SVG file.

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void parse (
    String fileName,
    boolean splitGroups
)
```

Parameters

fileName
A string containing the path of an SVG file.

splitGroups
true to treat top-level group elements as pages, or false otherwise.

See Also

parse Method Overload List
SvgContent Members
SvgContent Class
com.mindfusion.svg Namespace

SvgDocument Class

Syntax

Java

```
public class SvgDocument
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.svg.SvgDocument

See Also

SvgDocument Members

The following tables list the members exposed by the SvgDocument type.

Public Constructors

	Name	Description
	SvgDocument	

Public Fields

	Name	Description
	fileDir	
	fileTitle	

Public Methods

	Name	Description
	addClip	
	addGradient	Overloaded.
	addImage	Overloaded.
	addShape	
	addText	Overloaded.
	addTexture	
	addTransform	Overloaded.
	Save	
S	toString	

Protected Methods

	Name	Description
	finalize	

See Also

SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument Fields

SvgDocument.fileDir Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public String fileDir
```

See Also

SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.fileTitle Field

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public String fileTitle
```

See Also

SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument Constructor

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public SvgDocument (
    String fileName,
    Rectangle2D rectangle
)
```

Parameters

fileName

rectangle

See Also

SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument Methods

SvgDocument.addClip Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

`public boolean addClip (`
`  Node parent`
`)`

Parameters

parent

Return Value

See Also

SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.addGradient Method

Overload List

Name	Description
SvgDocument.addGradient ()	
SvgDocument.addGradient (Node)	

See Also

SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.addGradient Method ()

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public void addGradient ()
```

See Also

addGradient Method Overload List
SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.addGradient Method (Node)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public void addGradient (
    Node parent
)
```

Parameters

parent

See Also

addGradient Method Overload List
SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.addImage Method

Overload List

Name	Description
SvgDocument.addImage (Image, AffineTransform)	
SvgDocument.addImage (Image, double, double)	
SvgDocument.addImage (Image, double, double, double, double)	

SvgDocument.addImage (Image, Rectangle2D)	

See Also

SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.addImage Method (Image, AffineTransform)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public Node addImage (
    Image img,
    AffineTransform at
)
```

Parameters

img

at

Return Value

See Also

addImage Method Overload List
SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.addImage Method (Image, double, double)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public Node addImage (
    Image img,
    double x,
    double y
)
```

Parameters

img

x

y

Return Value

See Also

addImage Method Overload List
SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.addImage Method (Image, double, double, double, double)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public Node addImage (
    Image img,
    double x,
    double y,
    double w,
    double h
)
```

Parameters

img

x

y

w

h

Return Value

See Also

addImage Method Overload List
SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.addImage Method (Image, Rectangle2D)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public Node addImage (
    Image img,
    Rectangle2D r
)
```

Parameters

img

r

Return Value

See Also

addImage Method Overload List
SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.addShape Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public Node addShape (
    Shape shape,
    boolean isFilled
)
```

Parameters

shape

isFilled

Return Value

See Also

SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.addText Method

Overload List

Name	Description

SvgDocument.addText (String, double, double)	
SvgDocument.addText (String, Rectangle2D)	

See Also

SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.addText Method (String, double, double)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public Node addText (
    String text,
    double x,
    double y
)
```

Parameters

text

x

y

Return Value

See Also

addText Method Overload List
SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.addText Method (String, Rectangle2D)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public Node addText (
    String text,
    Rectangle2D rect
)
```

Parameters

text

rect

Return Value

See Also

addText Method Overload List
SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.addTexture Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

`public void addTexture (`
`  Node parent`
`)`

Parameters

parent

See Also

SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.addTransform Method

Overload List

Name	Description
SvgDocument.addTransform (Node)	
SvgDocument.addTransform (Node, AffineTransform)	

See Also

SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.addTransform Method (Node)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public boolean addTransform (
    Node parent
)
```

Parameters

parent

Return Value

See Also

addTransform Method Overload List
SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.addTransform Method (Node, AffineTransform)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public boolean addTransform (
    Node parent,
    AffineTransform newT
)
```

Parameters

parent

newT

Return Value

See Also

addTransform Method Overload List
SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.finalize Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
protected void finalize ()
```

See Also

SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.Save Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void Save ()
```

See Also

SvgDocument Members
SvgDocument Class
com.mindfusion.svg Namespace

SvgDocument.toString Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static String toString (
    double value
)
```

Parameters

value

Return Value

See Also

SvgGraphics2D Class

Syntax

Java
`public class SvgGraphics2D extends Graphics2D implements GraphicsEx`

Inheritance Hierarchy

java.lang.Object
  java.awt.Graphics
    java.awt.Graphics2D
      com.mindfusion.svg.SvgGraphics2D

See Also

SvgGraphics2D Members
com.mindfusion.svg Namespace

SvgGraphics2D Members

The following tables list the members exposed by the SvgGraphics2D type.

Public Constructors

	Name	Description
	SvgGraphics2D	Constructs new instance of the **SvgGraphics2D** object

Public Methods

	Name	Description
	addRenderingHints	
	beginHyperLink	
	clearRect	
	clip	
	clipRect	
	copyArea	
	create	
	dispose	

	draw	
	drawArc	
	drawGlyphVector	
	drawImage	Overloaded.
	drawLine	
	drawOval	
	drawPolygon	
	drawPolyline	
	drawRenderableImage	
	drawRenderedImage	
	drawRoundRect	
	drawString	Overloaded.
	endHyperLink	
	fill	
	fillArc	
	fillOval	
	fillPolygon	
	fillRect	
	fillRoundRect	
	getBackground	
	getClip	
	getClipBounds	
	getColor	
	getComposite	
	getDeviceConfiguration	
	getFont	
	getFontMetrics	
	getFontRenderContext	
	getPaint	
	getRenderingHint	
	getRenderingHints	
	getStroke	
	getTransform	

	hit	
	isGZipOutput	
	isInlineImages	
	isUseImageHash	
	rotate	Overloaded.
	scale	
	setBackground	
	setClip	Overloaded.
	setColor	
	setComposite	
	setFont	
	setGZipOutput	
	setInlineImages	
	setPaint	
	setPaintMode	
	setRenderingHint	
	setRenderingHints	
	setStroke	
	setTransform	
	setUseImageHash	
	setXORMode	
	shear	
	supportsPenWidth0	
	transform	
	transformsPenWidth	
	translate	Overloaded.

See Also

SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D Constructor

Constructs new instance of the SvgGraphics2D object

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public SvgGraphics2D (
    Rectangle2D rect,
    String FileName,
    GraphicsUnit gUnit
)
```

Parameters

rect
Drawing area measured in diagram unit

FileName
Fully qualified path of the *Portable Document Format* file to be generated

gUnit
Measure unit of the diagram

See Also

SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D Methods

SvgGraphics2D.addRenderingHints Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void addRenderingHints (
    Map<?, ?> hints
)
```

Parameters

hints

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.beginHyperLink Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public void beginHyperLink (
    String hyperLink,
    String target
)
```

Parameters

hyperLink

target

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.clearRect Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public void clearRect (
    int x,
    int y,
    int width,
    int height
)
```

Parameters

x

y

width

height

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.clip Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public void clip (
    Shape s
)
```

Parameters

s

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.clipRect Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public void clipRect (
    int x,
    int y,
    int width,
    int height
)
```

Parameters

x

y

width

height

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.copyArea Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void copyArea (
    int x,
    int y,
    int width,
    int height,
    int dx,
    int dy
)
```

Parameters

x

y

width

height

dx

dy

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.create Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public Graphics create ()
```

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.dispose Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void dispose ()
```

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.draw Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void draw (
    Shape s
)
```

Parameters

s

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawArc Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void drawArc (
    int x,
    int y,
    int width,
    int height,
    int startAngle,
    int arcAngle
)
```

Parameters

x

y

width

height

startAngle

arcAngle

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawGlyphVector Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void drawGlyphVector (
    GlyphVector g,
    float x,
    float y
)
```

Parameters

g

x

y

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawImage Method

Overload List

Name	Description
SvgGraphics2D.drawImage (BufferedImage, BufferedImageOp, int, int)	
SvgGraphics2D.drawImage (Image, AffineTransform, ImageObserver)	
SvgGraphics2D.drawImage (Image, int, int, Color, ImageObserver)	

SvgGraphics2D.drawImage (Image, int, int, ImageObserver)	
SvgGraphics2D.drawImage (Image, int, int, int, int, Color, ImageObserver)	
SvgGraphics2D.drawImage (Image, int, int, int, int, ImageObserver)	
SvgGraphics2D.drawImage (Image, int, int, int, int, int, int, int, int, Color, ImageObserver)	
SvgGraphics2D.drawImage (Image, int, int, int, int, int, int, int, int, ImageObserver)	

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawImage Method (BufferedImage, BufferedImageOp, int, int)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void drawImage (
    BufferedImage img,
    BufferedImageOp op,
    int x,
    int y
)
```

Parameters

img

op

x

y

See Also

drawImage Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawImage Method (Image, AffineTransform, ImageObserver)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public boolean drawImage (
    Image img,
    AffineTransform xform,
    ImageObserver obs
)
```

Parameters

img

xform

obs

Return Value

See Also

drawImage Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawImage Method (Image, int, int, Color, ImageObserver)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public boolean drawImage (
    Image img,
    int x,
    int y,
    Color bgcolor,
    ImageObserver observer
)
```

Parameters

img

x

y

bgcolor

observer

Return Value

See Also

drawImage Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawImage Method (Image, int, int, ImageObserver)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public boolean drawImage (
    Image img,
    int x,
    int y,
    ImageObserver observer
)
```

Parameters

img

x

y

observer

Return Value

See Also

drawImage Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawImage Method (Image, int, int, int, int, Color, ImageObserver)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public boolean drawImage (
    Image img,
    int x,
    int y,
```

```
    int width,
    int height,
    Color bgcolor,
    ImageObserver observer
)
```

Parameters

img

x

y

width

height

bgcolor

observer

Return Value

See Also

drawImage Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawImage Method (Image, int, int, int, int, ImageObserver)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public boolean drawImage (
    Image img,
    int x,
    int y,
    int width,
    int height,
    ImageObserver observer
)
```

Parameters

img

x

y

width

height

observer

Return Value

See Also

drawImage Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawImage Method (Image, int, int, int, int, int, int, int, int, Color, ImageObserver)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public boolean drawImage (
    Image img,
    int dx1,
    int dy1,
    int dx2,
    int dy2,
    int sx1,
    int sy1,
    int sx2,
    int sy2,
    Color bgcolor,
    ImageObserver observer
)
```

Parameters

img

dx1

dy1

dx2

dy2

sx1

sy1

sx2

sy2

bgcolor

observer

Return Value

See Also

drawImage Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawImage Method (Image, int, int, int, int, int, int, int, int, ImageObserver)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public boolean drawImage (
    Image img,
    int dx1,
    int dy1,
    int dx2,
    int dy2,
    int sx1,
    int sy1,
    int sx2,
    int sy2,
    ImageObserver observer
)
```

Parameters

img

dx1

dy1

dx2

dy2

sx1

sy1

sx2

sy2

observer

Return Value

See Also

drawImage Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawLine Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void drawLine (
    int x1,
    int y1,
    int x2,
    int y2
)
```

Parameters

x1

y1

x2

y2

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawOval Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void drawOval (
    int x,
    int y,
    int width,
    int height
)
```

Parameters

x

y

width

height

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawPolygon Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public void drawPolygon (
    int[] xPoints,
    int[] yPoints,
    int nPoints
)
```

Parameters

xPoints

yPoints

nPoints

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawPolyline Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public void drawPolyline (
    int[] xPoints,
    int[] yPoints,
    int nPoints
)
```

Parameters

xPoints

yPoints

nPoints

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawRenderableImage Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public void drawRenderableImage (
    RenderableImage img,
    AffineTransform xform
)
```

Parameters

img

xform

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawRenderedImage Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public void drawRenderedImage (
    RenderedImage img,
    AffineTransform xform
)
```

Parameters

img

xform

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawRoundRect Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
```

```
public void drawRoundRect (
    int x,
    int y,
    int width,
    int height,
    int arcWidth,
    int arcHeight
)
```

Parameters

x

y

width

height

arcWidth

arcHeight

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawString Method

Overload List

Name	Description
SvgGraphics2D.drawString (AttributedCharacterIterator, int, int)	
SvgGraphics2D.drawString (AttributedCharacterIterator, float, float)	
SvgGraphics2D.drawString (String, int, int)	
SvgGraphics2D.drawString (String, float, float)	

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawString Method (AttributedCharacterIterator, int, int)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public void drawString (
    AttributedCharacterIterator iterator,
    int x,
    int y
)
```

Parameters

iterator

x

y

See Also

drawString Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawString Method (AttributedCharacterIterator, float, float)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public void drawString (
    AttributedCharacterIterator iterator,
    float x,
    float y
)
```

Parameters

iterator

x

y

See Also

drawString Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawString Method (String, int, int)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void drawString (
    String str,
    int x,
    int y
)
```

Parameters

str

x

y

See Also

drawString Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.drawString Method (String, float, float)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void drawString (
    String str,
    float x,
    float y
)
```

Parameters

str

x

y

See Also

drawString Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.endHyperLink Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void endHyperLink ()
```

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.fill Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void fill (
    Shape s
)
```

Parameters

s

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.fillArc Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void fillArc (
    int x,
    int y,
    int width,
    int height,
    int startAngle,
```

```
    int arcAngle
)
```

Parameters

x

y

width

height

startAngle

arcAngle

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.fillOval Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void fillOval (
    int x,
    int y,
    int width,
    int height
)
```

Parameters

x

y

width

height

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.fillPolygon Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void fillPolygon (
    int[] xPoints,
    int[] yPoints,
    int nPoints
)
```

Parameters

xPoints

yPoints

nPoints

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.fillRect Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void fillRect (
    int x,
    int y,
    int width,
    int height
)
```

Parameters

x

y

width

height

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.fillRoundRect Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void fillRoundRect (
    int x,
    int y,
    int width,
    int height,
    int arcWidth,
    int arcHeight
)
```

Parameters

x

y

width

height

arcWidth

arcHeight

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.getBackground Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public Color getBackground ()
```

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.getClip Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public Shape getClip ()`

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.getClipBounds Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public Rectangle getClipBounds ()`

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.getColor Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public Color getColor ()`

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.getComposite Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public Composite getComposite ()
```

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.getDeviceConfiguration Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public GraphicsConfiguration getDeviceConfiguration ()
```

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.getFont Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public Font getFont ()
```

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.getFontMetrics Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public FontMetrics getFontMetrics (
    Font f
)
```

Parameters

f

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.getFontRenderContext Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public FontRenderContext getFontRenderContext ()
```

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.getPaint Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public Paint getPaint ()
```

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.getRenderingHint Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public Object getRenderingHint (
    RenderingHints.Key hintKey
)
```

Parameters

hintKey

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.getRenderingHints Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public RenderingHints getRenderingHints ()
```

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.getStroke Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public Stroke getStroke ()
```

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.getTransform Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public AffineTransform getTransform ()
```

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.hit Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public boolean hit (
    Rectangle rect,
```

```
    Shape s,
    boolean onStroke
)
```

Parameters

rect

s

onStroke

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.isGZipOutput Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public boolean isGZipOutput ()
```

Return Value

'true' if gzipped output is **allowed** otherwise 'false'. Default: true

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.isInlineImages Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public boolean isInlineImages ()
```

Return Value

'true' if the images reused in the svg produced as embedded **base64** strings. 'false' if the images are produced as external files. Default: false

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.isUseImageHash Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public boolean isUseImageHash ()`

Return Value

'true' if internal image hash is activated 'false' otherwise. Default: true

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.rotate Method

Overload List

Name	Description
SvgGraphics2D.rotate (double)	
SvgGraphics2D.rotate (double, double, double)	

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.rotate Method (double)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void rotate (
    double theta
)
```

Parameters

theta

See Also

rotate Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.rotate Method (double, double, double)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void rotate (
    double theta,
    double x,
    double y
)
```

Parameters

theta

x

y

See Also

rotate Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.scale Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void scale (
    double sx,
    double sy
)
```

Parameters

sx

sy

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.setBackground Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void setBackground (
    Color color
)
```

Parameters

color

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.setClip Method

Overload List

Name	Description
SvgGraphics2D.setClip (int, int, int, int)	
SvgGraphics2D.setClip (Shape)	

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.setClip Method (int, int, int, int)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void setClip (
    int x,
    int y,
    int width,
    int height
)
```

Parameters

x

y

width

height

See Also

setClip Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.setClip Method (Shape)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void setClip (
    Shape clip
)
```

Parameters

clip

See Also

setClip Method Overload List
SvgGraphics2D Members

SvgGraphics2D.setColor Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void setColor (
    Color c
)
```

Parameters

c

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.setComposite Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void setComposite (
    Composite comp
)
```

Parameters

comp

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.setFont Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public void setFont (
    Font font
)
```

Parameters

font

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.setGZipOutput Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public void setGZipOutput (
    boolean GZipOutput
)
```

Parameters

GZipOutput
must be 'true' if gzipped output **(.svgz)** is allowed. Default: true

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.setInlineImages Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public void setInlineImages (
    boolean inlineImages
)
```

Parameters

inlineImages
'true' if the images reused in the svg produced as embedded **base64** strings. 'false' if the images are produced as external files. Default: false

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.setPaint Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void setPaint (
    Paint paint
)
```

Parameters

paint

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.setPaintMode Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void setPaintMode ()
```

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.setRenderingHint Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void setRenderingHint (
    RenderingHints.Key hintKey,
    Object hintValue
)
```

Parameters

hintKey

hintValue

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.setRenderingHints Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void setRenderingHints (
    Map<?, ?> hints
)
```

Parameters

hints

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.setStroke Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void setStroke (
    Stroke s
)
```

Parameters

s

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.setTransform Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void setTransform (
    AffineTransform Tx
)
```

Parameters

Tx

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.setUseImageHash Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void setUseImageHash (
    boolean useImageHash
)
```

Parameters

useImageHash
'true' if internal image hash is activated 'false' otherwise. Default: true

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.setXORMode Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void setXORMode (
    Color c1
)
```

Parameters

c1

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.shear Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void shear (
    double shx,
    double shy
)
```

Parameters

shx

shy

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.supportsPenWidth0 Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public boolean supportsPenWidth0 ()
```

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.transform Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void transform (
    AffineTransform Tx
)
```

Parameters

Tx

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.transformsPenWidth Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public boolean transformsPenWidth ()
```

Return Value

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.translate Method

Overload List

Name	Description
SvgGraphics2D.translate (double, double)	
SvgGraphics2D.translate (int, int)	

See Also

SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.translate Method (double, double)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public void translate (
    double tx,
    double ty
)
```

Parameters

tx

ty

See Also

translate Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

SvgGraphics2D.translate Method (int, int)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public void translate (
    int x,
    int y
)
```

Parameters

x

y

See Also

translate Method Overload List
SvgGraphics2D Members
SvgGraphics2D Class
com.mindfusion.svg Namespace

Tools Class

Syntax

```
Java
public class Tools
```

Inheritance Hierarchy

java.lang.Object
  com.mindfusion.svg.Tools

See Also

Tools Members
com.mindfusion.svg Namespace

Tools Members

The following tables list the members exposed by the Tools type.

Public Constructors

	Name	Description
	Tools	

Public Methods

	Name	Description
	ExtractFileName	
	ExtractPathName	
	getRotationAngle	
	isTransparent	
	processShape	
	toColor	
	toFile	
	toString	Overloaded.
	Unit2CSS	

See Also

Tools Class
com.mindfusion.svg Namespace

Tools Constructor

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java
`public Tools ()`

See Also

Tools Class
com.mindfusion.svg Namespace

Tools Methods

Tools.ExtractFileName Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static String ExtractFileName (
    String fullPath
)
```

Parameters

fullPath

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.svg Namespace

Tools.ExtractPathName Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static String ExtractPathName (
    String fullPath
)
```

Parameters

fullPath

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.svg Namespace

Tools.getRotationAngle Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static double getRotationAngle (
    AffineTransform inTransform
)
```

Parameters

inTransform

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.svg Namespace

Tools.isTransparent Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static boolean isTransparent (
    Color color
)
```

Parameters

color

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.svg Namespace

Tools.processShape Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static Shape processShape (
    Shape s
)
```

Parameters

s

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.svg Namespace

Tools.toColor Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static Color toColor (
    Paint paint
)
```

Parameters

paint

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.svg Namespace

Tools.toFile Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static void toFile (
    Image img,
    String filepath
)
```

Parameters

img

filepath

See Also

Tools Members
Tools Class
com.mindfusion.svg Namespace

Tools.toString Method

Overload List

Name	Description
Tools.toString (AffineTransform)	
Tools.toString (AttributedCharacterIterator)	
Tools.toString (Color)	
Tools.toString (double)	
Tools.toString (Image)	
Tools.toString (Rectangle2D)	
Tools.toString (Shape, boolean)	
Tools.toString (Stroke)	

See Also

Tools Members
Tools Class
com.mindfusion.svg Namespace

Tools.toString Method (AffineTransform)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static String toString (
    AffineTransform at
)
```

Parameters

at

Return Value

See Also

toString Method Overload List
Tools Members
Tools Class
com.mindfusion.svg Namespace

Tools.toString Method (AttributedCharacterIterator)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static String toString (
    AttributedCharacterIterator iterator
)
```

Parameters

iterator

Return Value

See Also

toString Method Overload List
Tools Members
Tools Class
com.mindfusion.svg Namespace

Tools.toString Method (Color)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static String toString (
    Color color
)
```

Parameters

color

Return Value

See Also

toString Method Overload List
Tools Members
Tools Class
com.mindfusion.svg Namespace

Tools.toString Method (double)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String toString (
    double value
)
```

Parameters

value

Return Value

See Also

toString Method Overload List
Tools Members
Tools Class
com.mindfusion.svg Namespace

Tools.toString Method (Image)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String toString (
    Image img
)
```

Parameters

img

Return Value

See Also

toString Method Overload List
Tools Members
Tools Class
com.mindfusion.svg Namespace

Tools.toString Method (Rectangle2D)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String toString (
    Rectangle2D rect
)
```

Parameters

rect

Return Value

See Also

toString Method Overload List
Tools Members
Tools Class
com.mindfusion.svg Namespace

Tools.toString Method (Shape, boolean)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

```
Java
public static String toString (
    Shape s,
    boolean isFilled
)
```

Parameters

s

isFilled

Return Value

See Also

toString Method Overload List
Tools Members
Tools Class
com.mindfusion.svg Namespace

Tools.toString Method (Stroke)

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static String toString (
    Stroke stroke
)
```

Parameters

stroke

Return Value

See Also

toString Method Overload List
Tools Members
Tools Class
com.mindfusion.svg Namespace

Tools.Unit2CSS Method

Namespace: com.mindfusion.svg
Package: com.mindfusion.svg

Syntax

Java

```
public static String Unit2CSS (
    GraphicsUnit unit
)
```

Parameters

unit

Return Value

See Also

Tools Members
Tools Class
com.mindfusion.svg Namespace

Table of Predefined Shapes

Shape	Identifier	Common Uses
	Actor	A user An actor in use case model
	Alternative	An alternative in SDL An extraction in flowcharts Storage in quality management

	Arrow1	Use as desired
	Arrow2	Use as desired
	Arrow3	Transportation in quality management A reference point
	Arrow4	Use as desired
	Arrow5	Use as desired
	Arrow6	Use as desired
	Arrow7	A signal Electronic transmission of data
	Arrow8	Use as desired
	Arrow9	Use as desired
	BeginLoop	Begin of a loop
	BpmnComplex	BPMN Gateways: Complex Decision/Merge
	BpmnDataBasedXor	BPMN Gateways: Data-Based Exclusive Decision/Merge (XOR)
	BpmnEndCancel	BPMN Events: Cancel (End)
	BpmnEndCompensation	BPMN Events: Compensation (End)
	BpmnEndError	BPMN Events: Error (End)
	BpmnEndLink	BPMN Events: Link (End)

	BpmnEndMessage	BPMN Events: Message (End)
	BpmnEndMultiple	BPMN Events: Multiple (End)
	BpmnEndTerminate	BPMN Events: Terminate (End)
	BpmnEventBasedXor	BPMN Gateways: Event-Based Exclusive Decision/Merge (XOR)
	BpmnInclusive	BPMN Gateways: Inclusive Decision/Merge (OR)
	BpmnIntermediateCancel	BPMN Events: Cancel (Intermediate)
	BpmnIntermediateCompensation	BPMN Events: Compensation (Intermediate)
	BpmnIntermediateError	BPMN Events: Error (Intermediate)
	BpmnIntermediateLink	BPMN Events: Link (Intermediate)
	BpmnIntermediateMessage	BPMN Events: Message (Intermediate)
	BpmnIntermediateMultiple	BPMN Events: Multiple (Intermediate)
	BpmnIntermediateRule	BPMN Events: Rule (Intermediate)
	BpmnIntermediateTimer	BPMN Events: Timer (Intermediate)
	BpmnParallelFork	BPMN Gateways: Parallel Fork/Join (AND)
	BpmnStartLink	BPMN Events: Link (Start)

	BpmnStartMessage	BPMN Events: Message (Start)
	BpmnStartMultiple	BPMN Events: Multiple (Start)
	BpmnStartRule	BPMN Events: Rule (Start)
	BpmnStartTimer	BPMN Events: Timer (Start)
	Cloud	Object instance in data flow diagrams
	Collate	A collation in flowcharts
	ConeDown	Use as desired
	ConeUp	Use as desired
	ConnectedIssues	Connected issues in quality management
	CreateRequest	Request to create in SDL
	Cross	Use as desired
	Cube	Use as desired
	Cylinder	Use as desired
	Database	A database in flowcharts
	DataTransmition	Electronic transmission of data
	DDelay	Use as desired

	Decagon	Use as desired
	Decision	Decision in flowcharts A comparison in flowcharts Relationship in data flow diagrams
	Decision2	A decision in SDL
	Delay	A delay in process diagrams
	DInDelay	Use as desired
	DirectAccessStorage	A direct access storage
	DiskStorage	Data stored on disk in flowcharts
	Display	Data that is displayed for human use
	DividedEvent	An event
	DividedProcess	A process or document in flowcharts Entity in data flow diagrams
	Document	A document
	Donut	Use as desired
	DOutDelay	Use as desired
	Ellipse	A cross-reference within the same page of a flowchart Process in data flow diagrams State in data flow diagrams A continuation of the flowchart in SDL An use case Operation in quality management
	EndLoop	End of a loop
	ExternalOrganization	An external organization

	ExternalProcess	An external process
	File	A file
	FramedRectangle	Use as desired
	Gate	A gateway
	Heart	Use as desired
	Heptagon	Use as desired
	Hourglass	Use as desired
	Input	Data that is input by manual means
	InternalStorage	An internal storage
	Interrupt	An interrupt
	Interrupt2	An interrupt
	IsoProcess	Iso9000 process
	Junction	A summing junction A return in SDL
	Lightning	Use as desired
	LinedDocument	A document in flowcharts
	ManualOperation	Operation performed by a human

	Merge	A merger in flowcharts Inbound goods in quality management Non-electronic file Stop state in data flow diagrams
	MessageFromUser	A message from user side in SDL
	MessageToUser	A message to user side in SDL
	Microform	A microform
	MicroformProcessing	A microform processing
	MicroformRecording	A microform recording
	MultiDocument	A multiple document in flowcharts
	MultiProc	A multiple process or document in flowcharts
	Octagon	Use as desired
	OfflineStorage	An offline storage
	OffpageConnection	A cross-reference to another page of a flowchart
	OffpageReference	A cross-reference to another page of a flowchart A foreign module
	Or	An 'or' statement
	Pentagon	Use as desired
	Plaque	Use as desired
	PrimitiveFromCall	A primitive from call control in SDL

	PrimitiveToCall	A primitive to call control in SDL
	Procedure	Procedure in SDL
	Process	A process or document in flowcharts A file or data storage
	Prysm	Use as desired
	PunchedCard	A punched card
	PyramidDown	Use as desired
	PyramidUp	Use as desired
	Rectangle	A metric operation 'External interactor' in data flow diagrams Inspection in quality management
	RightTriangle	Use as desired
	RoundRect	A process or item in flowcharts An event An issue in quality management
	RSave	Input or output data in flowcharts
	Save	A save in SDL Input or output data in flowcharts
	Sort	A sort operation
	Sphere	Use as desired
	Star	Use as desired
	Star4Pointed	Use as desired
	Star5Pointed	Use as desired

	Star6Pointed	Use as desired
	Star7Pointed	Use as desired
	Star16Pointed	Use as desired
	Star24Pointed	Use as desired
	Star32Pointed	Use as desired
	Start	Start of a program flow A starting point in SDL
	Tape	Sequentially accessible data
	Terminator	Start or end of a program flow
	TransmittalTape	A transmittal tape
	Trapezoid	Use as desired

Licensing

There are no separate trial and licensed builds of JAR archives for MindFusion components. When you purchase a license, you can find the license key for this component listed on the Keys & Downloads page at MindFusion's customer portal. Pass this license key to the DiagramView.setLicenseKey method to disable the component's evaluation mode and stop displaying trial messages. **setLicenseKey** is a static method and you need to call it just once from application's initialization code.

Online Resources

Video Tutorials

- Database Schema with the Java Diagram Library

Blog Posts

- Database Schema with the Java Diagram Library - Part I
- Database Schema with the Java Diagram Library - Part II
- A Class Diagram Tool with the Flowchart Library

Using AI Assistants

Modern software development is increasingly assisted by Large Language Model (LLM) agents. To help these tools understand MindFusion API and generate accurate code, we provide a unified LLM-friendly documentation index, following https://llmstxt.org/ proposal. The llms.txt for MindFusion Diagramming Toolkit for Java Swing is located here:

https://mindfusion.dev/docs/java-swing/diagramming/llms.txt

How to use with your AI Assistant

Point your agent to https://mindfusion.dev/docs/java-swing/diagramming/llms.txt, or download a local copy for it to read from the project's repository. If you are working with smaller context-window size, you might have to split the file into sections or copy portions from it into individual prompts.

For initial integration of the toolkit into your project, loading the MinApp, Controls, and/or Tutorial sample projects into the assistant's context should help too.

The llms.txt structure

We have divided llms.txt into two main sections, corresponding to the Overview and Reference parts of this documentation:

- High-Level Guides and Overviews (Inlined) - Contains the full content of all conceptual overviews, tutorials, and architectural guidelines in a single, continuous stream. This allows the AI to gain a coherent mental model of the library without needing to crawl separate files.
- API Class Reference (Linked) - Lists the consolidated class/type reference documents in the *Markdown* folder. This enables the agent to dynamically lazy-load individual class references on demand only when you ask about specific classes.

Context-Window performance

For a complete export of this library's documentation at the time of writing this, the primary index file is approximately 500 KB (equivalent to 120,000 to 130,000 tokens). Here is how this scales across popular AI architectures:

- Large-Context Models with 2M tokens: The entire index takes up less than 6% of the context window. The agent can ingest and retain the entire high-level documentation suite for long-duration conversations with virtually zero context decay.
- Standard-Context Models with 200k tokens: Ingesting the index could take up approximately 65% of the context window. For these models, we recommend using individual sections from the inlined Guides / Overview topics for architectural orientation, copy-pasting them on-demand to preserve space for your active code.

Technical Support

Detailed information about everything connected with software products offered by MindFusion - online documentation, demos, information about forthcoming products can be found at https://mindfusion.dev. The site is updated every day, so make sure you visit it regularly to catch up with the newest from us.

Apart from that, MindFusion employs a dedicated and technically proficient support team. This guarantees that all your questions and inquiries will be answered in quick and professional manner. They can be reached by e-mail at mailto:support@mindfusion.eu or by phone at +359 889 199 729.

You can post a question on the JDiagram discussion board here:

https://mindfusion.dev/Forum/YaBB.pl?board=jdiag_disc

or visit our help desk site:

https://mindfusion.dev/HelpDesk/index.php

We will be happy to hear any suggestions and recommendations you might have regarding JDiagram. We take in account the opinion of every single person who has shown interest in our products.

MindFusion Products

MindFusion offers various programming components for different platforms. Below is a list of our products with links to their sections on our website as well link to download a trial version. Clients that have already purchased a product use an increasing discount for each subsequent one.

Diagramming	Links
Diagramming for **WPF**	Product Information Download
Diagramming for **WinForms**	Product Information Download
Diagramming for **Java Swing**	Product Information Download
Diagramming for **JavaScript**	Product Information Download
Diagramming for **ASP.NET**	Product Information Download
Diagramming for **ASP.NET MVC**	Product Information Download
Diagramming for **Xamarin**	Product Information Download
Diagramming for **UWP**	Product Information Download
Diagramming for **Android**	Product Information Download
DiagramViewer for **iOS/Cocoa Touch**	Product Information Download
Diagramming for **ActiveX**	Product Information Download
Diagramming for **Silverlight**	Product Information Download

Charting	Links
Charting for **WPF**	Product Information Download
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Charting for **Java Swing**	Product Information Download
Charting for **JavaScript**	Product Information Download

Charting for **ASP.NET**	Product Information Download
Charting for **Xamarin**	Product Information Download
Charting for **Android**	Product Information Download
Charting for **Silverlight**	Product Information Download

Scheduling	Links
Scheduling for **WPF**	Product Information Download
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Scheduling for **ASP.NET**	Product Information Download
Scheduling for **Xamarin**	Product Information Download
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Spreadsheet	Links
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Spreadsheet for **WinForms**	Product Information Download
Spreadsheet for **Java Swing**	Product Information Download

Reporting	Links
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Reporting for **WinForms**	Product Information Download
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Mapping for **Silverlight**	Product Information Download

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