| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/IconView.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/javax/swing/text/Highlighter.HighlightPainter.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/text/InternationalFormatter.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/text/IconView.html)    [**NO FRAMES**](http://docs.google.com/IconView.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#3dy6vkm) | [METHOD](#1t3h5sf) | DETAIL: FIELD | [CONSTR](#17dp8vu) | [METHOD](#26in1rg) |

## **javax.swing.text**

Class IconView

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [javax.swing.text.View](http://docs.google.com/javax/swing/text/View.html)  
 **javax.swing.text.IconView**

**All Implemented Interfaces:** [SwingConstants](http://docs.google.com/javax/swing/SwingConstants.html)

public class **IconView**extends [View](http://docs.google.com/javax/swing/text/View.html)

Icon decorator that implements the view interface. The entire element is used to represent the icon. This acts as a gateway from the display-only View implementations to interactive lightweight icons (that is, it allows icons to be embedded into the View hierarchy. The parent of the icon is the container that is handed out by the associated view factory.

| **Field Summary** | |
| --- | --- |

| **Fields inherited from class javax.swing.text.**[**View**](http://docs.google.com/javax/swing/text/View.html) |
| --- |
| [BadBreakWeight](http://docs.google.com/javax/swing/text/View.html#BadBreakWeight), [ExcellentBreakWeight](http://docs.google.com/javax/swing/text/View.html#ExcellentBreakWeight), [ForcedBreakWeight](http://docs.google.com/javax/swing/text/View.html#ForcedBreakWeight), [GoodBreakWeight](http://docs.google.com/javax/swing/text/View.html#GoodBreakWeight), [X\_AXIS](http://docs.google.com/javax/swing/text/View.html#X_AXIS), [Y\_AXIS](http://docs.google.com/javax/swing/text/View.html#Y_AXIS) |

| **Fields inherited from interface javax.swing.**[**SwingConstants**](http://docs.google.com/javax/swing/SwingConstants.html) |
| --- |
| [BOTTOM](http://docs.google.com/javax/swing/SwingConstants.html#BOTTOM), [CENTER](http://docs.google.com/javax/swing/SwingConstants.html#CENTER), [EAST](http://docs.google.com/javax/swing/SwingConstants.html#EAST), [HORIZONTAL](http://docs.google.com/javax/swing/SwingConstants.html#HORIZONTAL), [LEADING](http://docs.google.com/javax/swing/SwingConstants.html#LEADING), [LEFT](http://docs.google.com/javax/swing/SwingConstants.html#LEFT), [NEXT](http://docs.google.com/javax/swing/SwingConstants.html#NEXT), [NORTH](http://docs.google.com/javax/swing/SwingConstants.html#NORTH), [NORTH\_EAST](http://docs.google.com/javax/swing/SwingConstants.html#NORTH_EAST), [NORTH\_WEST](http://docs.google.com/javax/swing/SwingConstants.html#NORTH_WEST), [PREVIOUS](http://docs.google.com/javax/swing/SwingConstants.html#PREVIOUS), [RIGHT](http://docs.google.com/javax/swing/SwingConstants.html#RIGHT), [SOUTH](http://docs.google.com/javax/swing/SwingConstants.html#SOUTH), [SOUTH\_EAST](http://docs.google.com/javax/swing/SwingConstants.html#SOUTH_EAST), [SOUTH\_WEST](http://docs.google.com/javax/swing/SwingConstants.html#SOUTH_WEST), [TOP](http://docs.google.com/javax/swing/SwingConstants.html#TOP), [TRAILING](http://docs.google.com/javax/swing/SwingConstants.html#TRAILING), [VERTICAL](http://docs.google.com/javax/swing/SwingConstants.html#VERTICAL), [WEST](http://docs.google.com/javax/swing/SwingConstants.html#WEST) |

| **Constructor Summary** | |
| --- | --- |
| [**IconView**](http://docs.google.com/javax/swing/text/IconView.html#IconView(javax.swing.text.Element))([Element](http://docs.google.com/javax/swing/text/Element.html) elem)            Creates a new icon view that represents an element. |

| **Method Summary** | |
| --- | --- |
| float | [**getAlignment**](http://docs.google.com/javax/swing/text/IconView.html#getAlignment(int))(int axis)            Determines the desired alignment for this view along an axis. |
| float | [**getPreferredSpan**](http://docs.google.com/javax/swing/text/IconView.html#getPreferredSpan(int))(int axis)            Determines the preferred span for this view along an axis. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | [**modelToView**](http://docs.google.com/javax/swing/text/IconView.html#modelToView(int,%20java.awt.Shape,%20javax.swing.text.Position.Bias))(int pos, [Shape](http://docs.google.com/java/awt/Shape.html) a, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b)            Provides a mapping from the document model coordinate space to the coordinate space of the view mapped to it. |
| void | [**paint**](http://docs.google.com/javax/swing/text/IconView.html#paint(java.awt.Graphics,%20java.awt.Shape))([Graphics](http://docs.google.com/java/awt/Graphics.html) g, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Paints the icon. |
| int | [**viewToModel**](http://docs.google.com/javax/swing/text/IconView.html#viewToModel(float,%20float,%20java.awt.Shape,%20javax.swing.text.Position.Bias%5B%5D))(float x, float y, [Shape](http://docs.google.com/java/awt/Shape.html) a, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html)[] bias)            Provides a mapping from the view coordinate space to the logical coordinate space of the model. |

| **Methods inherited from class javax.swing.text.**[**View**](http://docs.google.com/javax/swing/text/View.html) |
| --- |
| [append](http://docs.google.com/javax/swing/text/View.html#append(javax.swing.text.View)), [breakView](http://docs.google.com/javax/swing/text/View.html#breakView(int,%20int,%20float,%20float)), [changedUpdate](http://docs.google.com/javax/swing/text/View.html#changedUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory)), [createFragment](http://docs.google.com/javax/swing/text/View.html#createFragment(int,%20int)), [forwardUpdate](http://docs.google.com/javax/swing/text/View.html#forwardUpdate(javax.swing.event.DocumentEvent.ElementChange,%20javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory)), [forwardUpdateToView](http://docs.google.com/javax/swing/text/View.html#forwardUpdateToView(javax.swing.text.View,%20javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory)), [getAttributes](http://docs.google.com/javax/swing/text/View.html#getAttributes()), [getBreakWeight](http://docs.google.com/javax/swing/text/View.html#getBreakWeight(int,%20float,%20float)), [getChildAllocation](http://docs.google.com/javax/swing/text/View.html#getChildAllocation(int,%20java.awt.Shape)), [getContainer](http://docs.google.com/javax/swing/text/View.html#getContainer()), [getDocument](http://docs.google.com/javax/swing/text/View.html#getDocument()), [getElement](http://docs.google.com/javax/swing/text/View.html#getElement()), [getEndOffset](http://docs.google.com/javax/swing/text/View.html#getEndOffset()), [getGraphics](http://docs.google.com/javax/swing/text/View.html#getGraphics()), [getMaximumSpan](http://docs.google.com/javax/swing/text/View.html#getMaximumSpan(int)), [getMinimumSpan](http://docs.google.com/javax/swing/text/View.html#getMinimumSpan(int)), [getNextVisualPositionFrom](http://docs.google.com/javax/swing/text/View.html#getNextVisualPositionFrom(int,%20javax.swing.text.Position.Bias,%20java.awt.Shape,%20int,%20javax.swing.text.Position.Bias%5B%5D)), [getParent](http://docs.google.com/javax/swing/text/View.html#getParent()), [getResizeWeight](http://docs.google.com/javax/swing/text/View.html#getResizeWeight(int)), [getStartOffset](http://docs.google.com/javax/swing/text/View.html#getStartOffset()), [getToolTipText](http://docs.google.com/javax/swing/text/View.html#getToolTipText(float,%20float,%20java.awt.Shape)), [getView](http://docs.google.com/javax/swing/text/View.html#getView(int)), [getViewCount](http://docs.google.com/javax/swing/text/View.html#getViewCount()), [getViewFactory](http://docs.google.com/javax/swing/text/View.html#getViewFactory()), [getViewIndex](http://docs.google.com/javax/swing/text/View.html#getViewIndex(float,%20float,%20java.awt.Shape)), [getViewIndex](http://docs.google.com/javax/swing/text/View.html#getViewIndex(int,%20javax.swing.text.Position.Bias)), [insert](http://docs.google.com/javax/swing/text/View.html#insert(int,%20javax.swing.text.View)), [insertUpdate](http://docs.google.com/javax/swing/text/View.html#insertUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory)), [isVisible](http://docs.google.com/javax/swing/text/View.html#isVisible()), [modelToView](http://docs.google.com/javax/swing/text/View.html#modelToView(int,%20javax.swing.text.Position.Bias,%20int,%20javax.swing.text.Position.Bias,%20java.awt.Shape)), [modelToView](http://docs.google.com/javax/swing/text/View.html#modelToView(int,%20java.awt.Shape)), [preferenceChanged](http://docs.google.com/javax/swing/text/View.html#preferenceChanged(javax.swing.text.View,%20boolean,%20boolean)), [remove](http://docs.google.com/javax/swing/text/View.html#remove(int)), [removeAll](http://docs.google.com/javax/swing/text/View.html#removeAll()), [removeUpdate](http://docs.google.com/javax/swing/text/View.html#removeUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory)), [replace](http://docs.google.com/javax/swing/text/View.html#replace(int,%20int,%20javax.swing.text.View%5B%5D)), [setParent](http://docs.google.com/javax/swing/text/View.html#setParent(javax.swing.text.View)), [setSize](http://docs.google.com/javax/swing/text/View.html#setSize(float,%20float)), [updateChildren](http://docs.google.com/javax/swing/text/View.html#updateChildren(javax.swing.event.DocumentEvent.ElementChange,%20javax.swing.event.DocumentEvent,%20javax.swing.text.ViewFactory)), [updateLayout](http://docs.google.com/javax/swing/text/View.html#updateLayout(javax.swing.event.DocumentEvent.ElementChange,%20javax.swing.event.DocumentEvent,%20java.awt.Shape)), [viewToModel](http://docs.google.com/javax/swing/text/View.html#viewToModel(float,%20float,%20java.awt.Shape)) |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [toString](http://docs.google.com/java/lang/Object.html#toString()), [wait](http://docs.google.com/java/lang/Object.html#wait()), [wait](http://docs.google.com/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/java/lang/Object.html#wait(long,%20int)) |

| **Constructor Detail** |
| --- |

### IconView

public **IconView**([Element](http://docs.google.com/javax/swing/text/Element.html) elem)

Creates a new icon view that represents an element.

**Parameters:**elem - the element to create a view for

| **Method Detail** |
| --- |

### paint

public void **paint**([Graphics](http://docs.google.com/java/awt/Graphics.html) g,  
 [Shape](http://docs.google.com/java/awt/Shape.html) a)

Paints the icon. The real paint behavior occurs naturally from the association that the icon has with its parent container (the same container hosting this view), so this simply allows us to position the icon properly relative to the view. Since the coordinate system for the view is simply the parent containers, positioning the child icon is easy.

**Specified by:**[paint](http://docs.google.com/javax/swing/text/View.html#paint(java.awt.Graphics,%20java.awt.Shape)) in class [View](http://docs.google.com/javax/swing/text/View.html) **Parameters:**g - the rendering surface to usea - the allocated region to render into**See Also:**[View.paint(java.awt.Graphics, java.awt.Shape)](http://docs.google.com/javax/swing/text/View.html#paint(java.awt.Graphics,%20java.awt.Shape))

### getPreferredSpan

public float **getPreferredSpan**(int axis)

Determines the preferred span for this view along an axis.

**Specified by:**[getPreferredSpan](http://docs.google.com/javax/swing/text/View.html#getPreferredSpan(int)) in class [View](http://docs.google.com/javax/swing/text/View.html) **Parameters:**axis - may be either View.X\_AXIS or View.Y\_AXIS **Returns:**the span the view would like to be rendered into Typically the view is told to render into the span that is returned, although there is no guarantee. The parent may choose to resize or break the view. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - for an invalid axis**See Also:**[View.getPreferredSpan(int)](http://docs.google.com/javax/swing/text/View.html#getPreferredSpan(int))

### getAlignment

public float **getAlignment**(int axis)

Determines the desired alignment for this view along an axis. This is implemented to give the alignment to the bottom of the icon along the y axis, and the default along the x axis.

**Overrides:**[getAlignment](http://docs.google.com/javax/swing/text/View.html#getAlignment(int)) in class [View](http://docs.google.com/javax/swing/text/View.html) **Parameters:**axis - may be either View.X\_AXIS or View.Y\_AXIS **Returns:**the desired alignment >= 0.0f && <= 1.0f. This should be a value between 0.0 and 1.0 where 0 indicates alignment at the origin and 1.0 indicates alignment to the full span away from the origin. An alignment of 0.5 would be the center of the view.

### modelToView

public [Shape](http://docs.google.com/java/awt/Shape.html) **modelToView**(int pos,  
 [Shape](http://docs.google.com/java/awt/Shape.html) a,  
 [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b)  
 throws [BadLocationException](http://docs.google.com/javax/swing/text/BadLocationException.html)

Provides a mapping from the document model coordinate space to the coordinate space of the view mapped to it.

**Specified by:**[modelToView](http://docs.google.com/javax/swing/text/View.html#modelToView(int,%20java.awt.Shape,%20javax.swing.text.Position.Bias)) in class [View](http://docs.google.com/javax/swing/text/View.html) **Parameters:**pos - the position to convert >= 0a - the allocated region to render intob - the bias toward the previous character or the next character represented by the offset, in case the position is a boundary of two views; b will have one of these values:

* Position.Bias.Forward
* Position.Bias.Backward

**Returns:**the bounding box of the given position **Throws:** [BadLocationException](http://docs.google.com/javax/swing/text/BadLocationException.html) - if the given position does not represent a valid location in the associated document**See Also:**[View.modelToView(int, java.awt.Shape, javax.swing.text.Position.Bias)](http://docs.google.com/javax/swing/text/View.html#modelToView(int,%20java.awt.Shape,%20javax.swing.text.Position.Bias))

### viewToModel

public int **viewToModel**(float x,  
 float y,  
 [Shape](http://docs.google.com/java/awt/Shape.html) a,  
 [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html)[] bias)

Provides a mapping from the view coordinate space to the logical coordinate space of the model.

**Specified by:**[viewToModel](http://docs.google.com/javax/swing/text/View.html#viewToModel(float,%20float,%20java.awt.Shape,%20javax.swing.text.Position.Bias%5B%5D)) in class [View](http://docs.google.com/javax/swing/text/View.html) **Parameters:**x - the X coordinate >= 0y - the Y coordinate >= 0a - the allocated region to render into **Returns:**the location within the model that best represents the given point of view >= 0**See Also:**[View.viewToModel(float, float, java.awt.Shape, javax.swing.text.Position.Bias[])](http://docs.google.com/javax/swing/text/View.html#viewToModel(float,%20float,%20java.awt.Shape,%20javax.swing.text.Position.Bias%5B%5D))

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/IconView.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/javax/swing/text/Highlighter.HighlightPainter.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/text/InternationalFormatter.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/text/IconView.html)    [**NO FRAMES**](http://docs.google.com/IconView.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#3dy6vkm) | [METHOD](#1t3h5sf) | DETAIL: FIELD | [CONSTR](#17dp8vu) | [METHOD](#26in1rg) |

[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

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