| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/FieldView.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/ElementIterator.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/text/FlowView.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/text/FieldView.html)    [**NO FRAMES**](http://docs.google.com/FieldView.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#1t3h5sf) | [METHOD](#4d34og8) | DETAIL: FIELD | [CONSTR](#26in1rg) | [METHOD](#35nkun2) |

## **javax.swing.text**

Class FieldView

[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.PlainView](http://docs.google.com/javax/swing/text/PlainView.html)  
 **javax.swing.text.FieldView**

**All Implemented Interfaces:** [SwingConstants](http://docs.google.com/javax/swing/SwingConstants.html), [TabExpander](http://docs.google.com/javax/swing/text/TabExpander.html) **Direct Known Subclasses:** [PasswordView](http://docs.google.com/javax/swing/text/PasswordView.html)

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

Extends the multi-line plain text view to be suitable for a single-line editor view. If the view is allocated extra space, the field must adjust for it. If the hosting component is a JTextField, this view will manage the ranges of the associated BoundedRangeModel and will adjust the horizontal allocation to match the current visibility settings of the JTextField.

**See Also:**[View](http://docs.google.com/javax/swing/text/View.html)

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

| **Fields inherited from class javax.swing.text.**[**PlainView**](http://docs.google.com/javax/swing/text/PlainView.html) |
| --- |
| [metrics](http://docs.google.com/javax/swing/text/PlainView.html#metrics) |

| **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** | |
| --- | --- |
| [**FieldView**](http://docs.google.com/javax/swing/text/FieldView.html#FieldView(javax.swing.text.Element))([Element](http://docs.google.com/javax/swing/text/Element.html) elem)            Constructs a new FieldView wrapped on an element. |

| **Method Summary** | |
| --- | --- |
| protected  [Shape](http://docs.google.com/java/awt/Shape.html) | [**adjustAllocation**](http://docs.google.com/javax/swing/text/FieldView.html#adjustAllocation(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) a)            Adjusts the allocation given to the view to be a suitable allocation for a text field. |
| protected  [FontMetrics](http://docs.google.com/java/awt/FontMetrics.html) | [**getFontMetrics**](http://docs.google.com/javax/swing/text/FieldView.html#getFontMetrics())()            Fetches the font metrics associated with the component hosting this view. |
| float | [**getPreferredSpan**](http://docs.google.com/javax/swing/text/FieldView.html#getPreferredSpan(int))(int axis)            Determines the preferred span for this view along an axis. |
| int | [**getResizeWeight**](http://docs.google.com/javax/swing/text/FieldView.html#getResizeWeight(int))(int axis)            Determines the resizability of the view along the given axis. |
| void | [**insertUpdate**](http://docs.google.com/javax/swing/text/FieldView.html#insertUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) changes, [Shape](http://docs.google.com/java/awt/Shape.html) a, [ViewFactory](http://docs.google.com/javax/swing/text/ViewFactory.html) f)            Gives notification that something was inserted into the document in a location that this view is responsible for. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | [**modelToView**](http://docs.google.com/javax/swing/text/FieldView.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/FieldView.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)            Renders using the given rendering surface and area on that surface. |
| void | [**removeUpdate**](http://docs.google.com/javax/swing/text/FieldView.html#removeUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) changes, [Shape](http://docs.google.com/java/awt/Shape.html) a, [ViewFactory](http://docs.google.com/javax/swing/text/ViewFactory.html) f)            Gives notification that something was removed from the document in a location that this view is responsible for. |
| int | [**viewToModel**](http://docs.google.com/javax/swing/text/FieldView.html#viewToModel(float,%20float,%20java.awt.Shape,%20javax.swing.text.Position.Bias%5B%5D))(float fx, float fy, [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.**[**PlainView**](http://docs.google.com/javax/swing/text/PlainView.html) |
| --- |
| [changedUpdate](http://docs.google.com/javax/swing/text/PlainView.html#changedUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory)), [damageLineRange](http://docs.google.com/javax/swing/text/PlainView.html#damageLineRange(int,%20int,%20java.awt.Shape,%20java.awt.Component)), [drawLine](http://docs.google.com/javax/swing/text/PlainView.html#drawLine(int,%20java.awt.Graphics,%20int,%20int)), [drawSelectedText](http://docs.google.com/javax/swing/text/PlainView.html#drawSelectedText(java.awt.Graphics,%20int,%20int,%20int,%20int)), [drawUnselectedText](http://docs.google.com/javax/swing/text/PlainView.html#drawUnselectedText(java.awt.Graphics,%20int,%20int,%20int,%20int)), [getLineBuffer](http://docs.google.com/javax/swing/text/PlainView.html#getLineBuffer()), [getTabSize](http://docs.google.com/javax/swing/text/PlainView.html#getTabSize()), [lineToRect](http://docs.google.com/javax/swing/text/PlainView.html#lineToRect(java.awt.Shape,%20int)), [nextTabStop](http://docs.google.com/javax/swing/text/PlainView.html#nextTabStop(float,%20int)), [setSize](http://docs.google.com/javax/swing/text/PlainView.html#setSize(float,%20float)), [updateDamage](http://docs.google.com/javax/swing/text/PlainView.html#updateDamage(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory)), [updateMetrics](http://docs.google.com/javax/swing/text/PlainView.html#updateMetrics()) |

| **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)), [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)), [getAlignment](http://docs.google.com/javax/swing/text/View.html#getAlignment(int)), [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()), [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)), [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()), [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)), [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** |
| --- |

### FieldView

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

Constructs a new FieldView wrapped on an element.

**Parameters:**elem - the element

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

### getFontMetrics

protected [FontMetrics](http://docs.google.com/java/awt/FontMetrics.html) **getFontMetrics**()

Fetches the font metrics associated with the component hosting this view.

**Returns:**the metrics

### adjustAllocation

protected [Shape](http://docs.google.com/java/awt/Shape.html) **adjustAllocation**([Shape](http://docs.google.com/java/awt/Shape.html) a)

Adjusts the allocation given to the view to be a suitable allocation for a text field. If the view has been allocated more than the preferred span vertically, the allocation is changed to be centered vertically. Horizontally the view is adjusted according to the horizontal alignment property set on the associated JTextField (if that is the type of the hosting component).

**Parameters:**a - the allocation given to the view, which may need to be adjusted. **Returns:**the allocation that the superclass should use.

### paint

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

Renders using the given rendering surface and area on that surface. The view may need to do layout and create child views to enable itself to render into the given allocation.

**Overrides:**[paint](http://docs.google.com/javax/swing/text/PlainView.html#paint(java.awt.Graphics,%20java.awt.Shape)) in class [PlainView](http://docs.google.com/javax/swing/text/PlainView.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.

**Overrides:**[getPreferredSpan](http://docs.google.com/javax/swing/text/PlainView.html#getPreferredSpan(int)) in class [PlainView](http://docs.google.com/javax/swing/text/PlainView.html) **Parameters:**axis - may be either View.X\_AXIS or View.Y\_AXIS **Returns:**the span the view would like to be rendered into >= 0. 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.**See Also:**[View.getPreferredSpan(int)](http://docs.google.com/javax/swing/text/View.html#getPreferredSpan(int))

### getResizeWeight

public int **getResizeWeight**(int axis)

Determines the resizability of the view along the given axis. A value of 0 or less is not resizable.

**Overrides:**[getResizeWeight](http://docs.google.com/javax/swing/text/View.html#getResizeWeight(int)) in class [View](http://docs.google.com/javax/swing/text/View.html) **Parameters:**axis - View.X\_AXIS or View.Y\_AXIS **Returns:**the weight -> 1 for View.X\_AXIS, else 0

### 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.

**Overrides:**[modelToView](http://docs.google.com/javax/swing/text/PlainView.html#modelToView(int,%20java.awt.Shape,%20javax.swing.text.Position.Bias)) in class [PlainView](http://docs.google.com/javax/swing/text/PlainView.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 fx,  
 float fy,  
 [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.

**Overrides:**[viewToModel](http://docs.google.com/javax/swing/text/PlainView.html#viewToModel(float,%20float,%20java.awt.Shape,%20javax.swing.text.Position.Bias%5B%5D)) in class [PlainView](http://docs.google.com/javax/swing/text/PlainView.html) **Parameters:**fx - the X coordinate >= 0.0ffy - the Y coordinate >= 0.0fa - the allocated region to render into **Returns:**the location within the model that best represents the given point in the view**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))

### insertUpdate

public void **insertUpdate**([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) changes,  
 [Shape](http://docs.google.com/java/awt/Shape.html) a,  
 [ViewFactory](http://docs.google.com/javax/swing/text/ViewFactory.html) f)

Gives notification that something was inserted into the document in a location that this view is responsible for.

**Overrides:**[insertUpdate](http://docs.google.com/javax/swing/text/PlainView.html#insertUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory)) in class [PlainView](http://docs.google.com/javax/swing/text/PlainView.html) **Parameters:**changes - the change information from the associated documenta - the current allocation of the viewf - the factory to use to rebuild if the view has children**See Also:**[View.insertUpdate(javax.swing.event.DocumentEvent, java.awt.Shape, javax.swing.text.ViewFactory)](http://docs.google.com/javax/swing/text/View.html#insertUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))

### removeUpdate

public void **removeUpdate**([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) changes,  
 [Shape](http://docs.google.com/java/awt/Shape.html) a,  
 [ViewFactory](http://docs.google.com/javax/swing/text/ViewFactory.html) f)

Gives notification that something was removed from the document in a location that this view is responsible for.

**Overrides:**[removeUpdate](http://docs.google.com/javax/swing/text/PlainView.html#removeUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory)) in class [PlainView](http://docs.google.com/javax/swing/text/PlainView.html) **Parameters:**changes - the change information from the associated documenta - the current allocation of the viewf - the factory to use to rebuild if the view has children**See Also:**[View.removeUpdate(javax.swing.event.DocumentEvent, java.awt.Shape, javax.swing.text.ViewFactory)](http://docs.google.com/javax/swing/text/View.html#removeUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/FieldView.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/ElementIterator.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/text/FlowView.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/text/FieldView.html)    [**NO FRAMES**](http://docs.google.com/FieldView.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#1t3h5sf) | [METHOD](#4d34og8) | DETAIL: FIELD | [CONSTR](#26in1rg) | [METHOD](#35nkun2) |

[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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