| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/java/awt/Shape.html) | **Use** | [**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   NEXT | [**FRAMES**](http://docs.google.com/index.html?java/awt//class-useShape.html)    [**NO FRAMES**](http://docs.google.com/Shape.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

**Uses of Interface**

**java.awt.Shape**

| Packages that use [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| [**java.awt**](#3znysh7) | Contains all of the classes for creating user interfaces and for painting graphics and images. |
| [**java.awt.font**](#2et92p0) | Provides classes and interface relating to fonts. |
| [**java.awt.geom**](#tyjcwt) | Provides the Java 2D classes for defining and performing operations on objects related to two-dimensional geometry. |
| [**java.awt.image.renderable**](#3dy6vkm) | Provides classes and interfaces for producing rendering-independent images. |
| [**javax.swing**](#1t3h5sf) | Provides a set of "lightweight" (all-Java language) components that, to the maximum degree possible, work the same on all platforms. |
| [**javax.swing.plaf.basic**](#4d34og8) | Provides user interface objects built according to the Basic look and feel. |
| [**javax.swing.text**](#2s8eyo1) | Provides classes and interfaces that deal with editable and noneditable text components. |
| [**javax.swing.text.html**](#17dp8vu) | Provides the class HTMLEditorKit and supporting classes for creating HTML text editors. |

| Uses of [Shape](http://docs.google.com/java/awt/Shape.html) in [java.awt](http://docs.google.com/java/awt/package-summary.html) | |
| --- | --- |

| Classes in [java.awt](http://docs.google.com/java/awt/package-summary.html) that implement [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| class | [**Polygon**](http://docs.google.com/java/awt/Polygon.html)            The Polygon class encapsulates a description of a closed, two-dimensional region within a coordinate space. |
| class | [**Rectangle**](http://docs.google.com/java/awt/Rectangle.html)            A Rectangle specifies an area in a coordinate space that is enclosed by the Rectangle object's upper-left point (x,y) in the coordinate space, its width, and its height. |

| Methods in [java.awt](http://docs.google.com/java/awt/package-summary.html) that return [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **BasicStroke.**[**createStrokedShape**](http://docs.google.com/java/awt/BasicStroke.html#createStrokedShape(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) s)            Returns a Shape whose interior defines the stroked outline of a specified Shape. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **Stroke.**[**createStrokedShape**](http://docs.google.com/java/awt/Stroke.html#createStrokedShape(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) p)            Returns an outline Shape which encloses the area that should be painted when the Shape is stroked according to the rules defined by the object implementing the Stroke interface. |
| abstract  [Shape](http://docs.google.com/java/awt/Shape.html) | **Graphics.**[**getClip**](http://docs.google.com/java/awt/Graphics.html#getClip())()            Gets the current clipping area. |

| Methods in [java.awt](http://docs.google.com/java/awt/package-summary.html) with parameters of type [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| abstract  void | **Graphics2D.**[**clip**](http://docs.google.com/java/awt/Graphics2D.html#clip(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) s)            Intersects the current Clip with the interior of the specified Shape and sets the Clip to the resulting intersection. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **BasicStroke.**[**createStrokedShape**](http://docs.google.com/java/awt/BasicStroke.html#createStrokedShape(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) s)            Returns a Shape whose interior defines the stroked outline of a specified Shape. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **Stroke.**[**createStrokedShape**](http://docs.google.com/java/awt/Stroke.html#createStrokedShape(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) p)            Returns an outline Shape which encloses the area that should be painted when the Shape is stroked according to the rules defined by the object implementing the Stroke interface. |
| abstract  void | **Graphics2D.**[**draw**](http://docs.google.com/java/awt/Graphics2D.html#draw(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) s)            Strokes the outline of a Shape using the settings of the current Graphics2D context. |
| abstract  void | **Graphics2D.**[**fill**](http://docs.google.com/java/awt/Graphics2D.html#fill(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) s)            Fills the interior of a Shape using the settings of the Graphics2D context. |
| abstract  boolean | **Graphics2D.**[**hit**](http://docs.google.com/java/awt/Graphics2D.html#hit(java.awt.Rectangle,%20java.awt.Shape,%20boolean))([Rectangle](http://docs.google.com/java/awt/Rectangle.html) rect, [Shape](http://docs.google.com/java/awt/Shape.html) s, boolean onStroke)            Checks whether or not the specified Shape intersects the specified [Rectangle](http://docs.google.com/java/awt/Rectangle.html), which is in device space. |
| abstract  void | **Graphics.**[**setClip**](http://docs.google.com/java/awt/Graphics.html#setClip(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) clip)            Sets the current clipping area to an arbitrary clip shape. |

| Uses of [Shape](http://docs.google.com/java/awt/Shape.html) in [java.awt.font](http://docs.google.com/java/awt/font/package-summary.html) | |
| --- | --- |

| Methods in [java.awt.font](http://docs.google.com/java/awt/font/package-summary.html) that return [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **TextLayout.**[**getBlackBoxBounds**](http://docs.google.com/java/awt/font/TextLayout.html#getBlackBoxBounds(int,%20int))(int firstEndpoint, int secondEndpoint)            Returns the black box bounds of the characters in the specified range. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **TextLayout.**[**getCaretShape**](http://docs.google.com/java/awt/font/TextLayout.html#getCaretShape(java.awt.font.TextHitInfo))([TextHitInfo](http://docs.google.com/java/awt/font/TextHitInfo.html) hit)            Returns a Shape representing the caret at the specified hit inside the natural bounds of this TextLayout. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **TextLayout.**[**getCaretShape**](http://docs.google.com/java/awt/font/TextLayout.html#getCaretShape(java.awt.font.TextHitInfo,%20java.awt.geom.Rectangle2D))([TextHitInfo](http://docs.google.com/java/awt/font/TextHitInfo.html) hit, [Rectangle2D](http://docs.google.com/java/awt/geom/Rectangle2D.html) bounds)            Returns a [Shape](http://docs.google.com/java/awt/Shape.html) representing the caret at the specified hit inside the specified bounds. |
| [Shape](http://docs.google.com/java/awt/Shape.html)[] | **TextLayout.**[**getCaretShapes**](http://docs.google.com/java/awt/font/TextLayout.html#getCaretShapes(int))(int offset)            Returns two paths corresponding to the strong and weak caret. |
| [Shape](http://docs.google.com/java/awt/Shape.html)[] | **TextLayout.**[**getCaretShapes**](http://docs.google.com/java/awt/font/TextLayout.html#getCaretShapes(int,%20java.awt.geom.Rectangle2D))(int offset, [Rectangle2D](http://docs.google.com/java/awt/geom/Rectangle2D.html) bounds)            Returns two paths corresponding to the strong and weak caret. |
| [Shape](http://docs.google.com/java/awt/Shape.html)[] | **TextLayout.**[**getCaretShapes**](http://docs.google.com/java/awt/font/TextLayout.html#getCaretShapes(int,%20java.awt.geom.Rectangle2D,%20java.awt.font.TextLayout.CaretPolicy))(int offset, [Rectangle2D](http://docs.google.com/java/awt/geom/Rectangle2D.html) bounds, [TextLayout.CaretPolicy](http://docs.google.com/java/awt/font/TextLayout.CaretPolicy.html) policy)            Returns two paths corresponding to the strong and weak caret. |
| abstract  [Shape](http://docs.google.com/java/awt/Shape.html) | **GlyphVector.**[**getGlyphLogicalBounds**](http://docs.google.com/java/awt/font/GlyphVector.html#getGlyphLogicalBounds(int))(int glyphIndex)            Returns the logical bounds of the specified glyph within this GlyphVector. |
| abstract  [Shape](http://docs.google.com/java/awt/Shape.html) | **GlyphVector.**[**getGlyphOutline**](http://docs.google.com/java/awt/font/GlyphVector.html#getGlyphOutline(int))(int glyphIndex)            Returns a Shape whose interior corresponds to the visual representation of the specified glyph within this GlyphVector. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **GlyphVector.**[**getGlyphOutline**](http://docs.google.com/java/awt/font/GlyphVector.html#getGlyphOutline(int,%20float,%20float))(int glyphIndex, float x, float y)            Returns a Shape whose interior corresponds to the visual representation of the specified glyph within this GlyphVector, offset to x, y. |
| abstract  [Shape](http://docs.google.com/java/awt/Shape.html) | **GlyphVector.**[**getGlyphVisualBounds**](http://docs.google.com/java/awt/font/GlyphVector.html#getGlyphVisualBounds(int))(int glyphIndex)            Returns the visual bounds of the specified glyph within the GlyphVector. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **TextLayout.**[**getLogicalHighlightShape**](http://docs.google.com/java/awt/font/TextLayout.html#getLogicalHighlightShape(int,%20int))(int firstEndpoint, int secondEndpoint)            Returns a Shape enclosing the logical selection in the specified range, extended to the natural bounds of this TextLayout. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **TextLayout.**[**getLogicalHighlightShape**](http://docs.google.com/java/awt/font/TextLayout.html#getLogicalHighlightShape(int,%20int,%20java.awt.geom.Rectangle2D))(int firstEndpoint, int secondEndpoint, [Rectangle2D](http://docs.google.com/java/awt/geom/Rectangle2D.html) bounds)            Returns a Shape enclosing the logical selection in the specified range, extended to the specified bounds. |
| abstract  [Shape](http://docs.google.com/java/awt/Shape.html) | **GlyphVector.**[**getOutline**](http://docs.google.com/java/awt/font/GlyphVector.html#getOutline())()            Returns a Shape whose interior corresponds to the visual representation of this GlyphVector. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **ShapeGraphicAttribute.**[**getOutline**](http://docs.google.com/java/awt/font/ShapeGraphicAttribute.html#getOutline(java.awt.geom.AffineTransform))([AffineTransform](http://docs.google.com/java/awt/geom/AffineTransform.html) tx)            Return a [Shape](http://docs.google.com/java/awt/Shape.html) that represents the region that this ShapeGraphicAttribute renders. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **TextLayout.**[**getOutline**](http://docs.google.com/java/awt/font/TextLayout.html#getOutline(java.awt.geom.AffineTransform))([AffineTransform](http://docs.google.com/java/awt/geom/AffineTransform.html) tx)            Returns a Shape representing the outline of this TextLayout. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **GraphicAttribute.**[**getOutline**](http://docs.google.com/java/awt/font/GraphicAttribute.html#getOutline(java.awt.geom.AffineTransform))([AffineTransform](http://docs.google.com/java/awt/geom/AffineTransform.html) tx)            Return a [Shape](http://docs.google.com/java/awt/Shape.html) that represents the region that this GraphicAttribute renders. |
| abstract  [Shape](http://docs.google.com/java/awt/Shape.html) | **GlyphVector.**[**getOutline**](http://docs.google.com/java/awt/font/GlyphVector.html#getOutline(float,%20float))(float x, float y)            Returns a Shape whose interior corresponds to the visual representation of this GlyphVector when rendered at x, y. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **TextLayout.**[**getVisualHighlightShape**](http://docs.google.com/java/awt/font/TextLayout.html#getVisualHighlightShape(java.awt.font.TextHitInfo,%20java.awt.font.TextHitInfo))([TextHitInfo](http://docs.google.com/java/awt/font/TextHitInfo.html) firstEndpoint, [TextHitInfo](http://docs.google.com/java/awt/font/TextHitInfo.html) secondEndpoint)            Returns a Shape enclosing the visual selection in the specified range, extended to the bounds. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **TextLayout.**[**getVisualHighlightShape**](http://docs.google.com/java/awt/font/TextLayout.html#getVisualHighlightShape(java.awt.font.TextHitInfo,%20java.awt.font.TextHitInfo,%20java.awt.geom.Rectangle2D))([TextHitInfo](http://docs.google.com/java/awt/font/TextHitInfo.html) firstEndpoint, [TextHitInfo](http://docs.google.com/java/awt/font/TextHitInfo.html) secondEndpoint, [Rectangle2D](http://docs.google.com/java/awt/geom/Rectangle2D.html) bounds)            Returns a path enclosing the visual selection in the specified range, extended to bounds. |

| Constructors in [java.awt.font](http://docs.google.com/java/awt/font/package-summary.html) with parameters of type [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| [**ShapeGraphicAttribute**](http://docs.google.com/java/awt/font/ShapeGraphicAttribute.html#ShapeGraphicAttribute(java.awt.Shape,%20int,%20boolean))([Shape](http://docs.google.com/java/awt/Shape.html) shape, int alignment, boolean stroke)            Constructs a ShapeGraphicAttribute for the specified [Shape](http://docs.google.com/java/awt/Shape.html). |

| Uses of [Shape](http://docs.google.com/java/awt/Shape.html) in [java.awt.geom](http://docs.google.com/java/awt/geom/package-summary.html) | |
| --- | --- |

| Classes in [java.awt.geom](http://docs.google.com/java/awt/geom/package-summary.html) that implement [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| class | [**Arc2D**](http://docs.google.com/java/awt/geom/Arc2D.html)            Arc2D is the abstract superclass for all objects that store a 2D arc defined by a framing rectangle, start angle, angular extent (length of the arc), and a closure type (OPEN, CHORD, or PIE). |
| static class | [**Arc2D.Double**](http://docs.google.com/java/awt/geom/Arc2D.Double.html)            This class defines an arc specified in double precision. |
| static class | [**Arc2D.Float**](http://docs.google.com/java/awt/geom/Arc2D.Float.html)            This class defines an arc specified in float precision. |
| class | [**Area**](http://docs.google.com/java/awt/geom/Area.html)            An Area object stores and manipulates a resolution-independent description of an enclosed area of 2-dimensional space. |
| class | [**CubicCurve2D**](http://docs.google.com/java/awt/geom/CubicCurve2D.html)            The CubicCurve2D class defines a cubic parametric curve segment in (x,y) coordinate space. |
| static class | [**CubicCurve2D.Double**](http://docs.google.com/java/awt/geom/CubicCurve2D.Double.html)            A cubic parametric curve segment specified with double coordinates. |
| static class | [**CubicCurve2D.Float**](http://docs.google.com/java/awt/geom/CubicCurve2D.Float.html)            A cubic parametric curve segment specified with float coordinates. |
| class | [**Ellipse2D**](http://docs.google.com/java/awt/geom/Ellipse2D.html)            The Ellipse2D class describes an ellipse that is defined by a framing rectangle. |
| static class | [**Ellipse2D.Double**](http://docs.google.com/java/awt/geom/Ellipse2D.Double.html)            The Double class defines an ellipse specified in double precision. |
| static class | [**Ellipse2D.Float**](http://docs.google.com/java/awt/geom/Ellipse2D.Float.html)            The Float class defines an ellipse specified in float precision. |
| class | [**GeneralPath**](http://docs.google.com/java/awt/geom/GeneralPath.html)            The GeneralPath class represents a geometric path constructed from straight lines, and quadratic and cubic (Bézier) curves. |
| class | [**Line2D**](http://docs.google.com/java/awt/geom/Line2D.html)            This Line2D represents a line segment in (x,y) coordinate space. |
| static class | [**Line2D.Double**](http://docs.google.com/java/awt/geom/Line2D.Double.html)            A line segment specified with double coordinates. |
| static class | [**Line2D.Float**](http://docs.google.com/java/awt/geom/Line2D.Float.html)            A line segment specified with float coordinates. |
| class | [**Path2D**](http://docs.google.com/java/awt/geom/Path2D.html)            The Path2D class provides a simple, yet flexible shape which represents an arbitrary geometric path. |
| static class | [**Path2D.Double**](http://docs.google.com/java/awt/geom/Path2D.Double.html)            The Double class defines a geometric path with coordinates stored in double precision floating point. |
| static class | [**Path2D.Float**](http://docs.google.com/java/awt/geom/Path2D.Float.html)            The Float class defines a geometric path with coordinates stored in single precision floating point. |
| class | [**QuadCurve2D**](http://docs.google.com/java/awt/geom/QuadCurve2D.html)            The QuadCurve2D class defines a quadratic parametric curve segment in (x,y) coordinate space. |
| static class | [**QuadCurve2D.Double**](http://docs.google.com/java/awt/geom/QuadCurve2D.Double.html)            A quadratic parametric curve segment specified with double coordinates. |
| static class | [**QuadCurve2D.Float**](http://docs.google.com/java/awt/geom/QuadCurve2D.Float.html)            A quadratic parametric curve segment specified with float coordinates. |
| class | [**Rectangle2D**](http://docs.google.com/java/awt/geom/Rectangle2D.html)            The Rectangle2D class describes a rectangle defined by a location (x,y) and dimension (w x h). |
| static class | [**Rectangle2D.Double**](http://docs.google.com/java/awt/geom/Rectangle2D.Double.html)            The Double class defines a rectangle specified in double coordinates. |
| static class | [**Rectangle2D.Float**](http://docs.google.com/java/awt/geom/Rectangle2D.Float.html)            The Float class defines a rectangle specified in float coordinates. |
| class | [**RectangularShape**](http://docs.google.com/java/awt/geom/RectangularShape.html)            RectangularShape is the base class for a number of [Shape](http://docs.google.com/java/awt/Shape.html) objects whose geometry is defined by a rectangular frame. |
| class | [**RoundRectangle2D**](http://docs.google.com/java/awt/geom/RoundRectangle2D.html)            The RoundRectangle2D class defines a rectangle with rounded corners defined by a location (x,y), a dimension (w x h), and the width and height of an arc with which to round the corners. |
| static class | [**RoundRectangle2D.Double**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html)            The Double class defines a rectangle with rounded corners all specified in double coordinates. |
| static class | [**RoundRectangle2D.Float**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Float.html)            The Float class defines a rectangle with rounded corners all specified in float coordinates. |

| Methods in [java.awt.geom](http://docs.google.com/java/awt/geom/package-summary.html) that return [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **Path2D.**[**createTransformedShape**](http://docs.google.com/java/awt/geom/Path2D.html#createTransformedShape(java.awt.geom.AffineTransform))([AffineTransform](http://docs.google.com/java/awt/geom/AffineTransform.html) at)            Returns a new Shape representing a transformed version of this Path2D. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **AffineTransform.**[**createTransformedShape**](http://docs.google.com/java/awt/geom/AffineTransform.html#createTransformedShape(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) pSrc)            Returns a new [Shape](http://docs.google.com/java/awt/Shape.html) object defined by the geometry of the specified Shape after it has been transformed by this transform. |

| Methods in [java.awt.geom](http://docs.google.com/java/awt/geom/package-summary.html) with parameters of type [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| void | **Path2D.**[**append**](http://docs.google.com/java/awt/geom/Path2D.html#append(java.awt.Shape,%20boolean))([Shape](http://docs.google.com/java/awt/Shape.html) s, boolean connect)            Appends the geometry of the specified Shape object to the path, possibly connecting the new geometry to the existing path segments with a line segment. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **AffineTransform.**[**createTransformedShape**](http://docs.google.com/java/awt/geom/AffineTransform.html#createTransformedShape(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) pSrc)            Returns a new [Shape](http://docs.google.com/java/awt/Shape.html) object defined by the geometry of the specified Shape after it has been transformed by this transform. |

| Constructors in [java.awt.geom](http://docs.google.com/java/awt/geom/package-summary.html) with parameters of type [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| [**Area**](http://docs.google.com/java/awt/geom/Area.html#Area(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) s)            The Area class creates an area geometry from the specified [Shape](http://docs.google.com/java/awt/Shape.html) object. |
| [**GeneralPath**](http://docs.google.com/java/awt/geom/GeneralPath.html#GeneralPath(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) s)            Constructs a new GeneralPath object from an arbitrary [Shape](http://docs.google.com/java/awt/Shape.html) object. |
| [**Path2D.Double**](http://docs.google.com/java/awt/geom/Path2D.Double.html#Path2D.Double(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) s)            Constructs a new double precision Path2D object from an arbitrary [Shape](http://docs.google.com/java/awt/Shape.html) object. |
| [**Path2D.Double**](http://docs.google.com/java/awt/geom/Path2D.Double.html#Path2D.Double(java.awt.Shape,%20java.awt.geom.AffineTransform))([Shape](http://docs.google.com/java/awt/Shape.html) s, [AffineTransform](http://docs.google.com/java/awt/geom/AffineTransform.html) at)            Constructs a new double precision Path2D object from an arbitrary [Shape](http://docs.google.com/java/awt/Shape.html) object, transformed by an [AffineTransform](http://docs.google.com/java/awt/geom/AffineTransform.html) object. |
| [**Path2D.Float**](http://docs.google.com/java/awt/geom/Path2D.Float.html#Path2D.Float(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) s)            Constructs a new single precision Path2D object from an arbitrary [Shape](http://docs.google.com/java/awt/Shape.html) object. |
| [**Path2D.Float**](http://docs.google.com/java/awt/geom/Path2D.Float.html#Path2D.Float(java.awt.Shape,%20java.awt.geom.AffineTransform))([Shape](http://docs.google.com/java/awt/Shape.html) s, [AffineTransform](http://docs.google.com/java/awt/geom/AffineTransform.html) at)            Constructs a new single precision Path2D object from an arbitrary [Shape](http://docs.google.com/java/awt/Shape.html) object, transformed by an [AffineTransform](http://docs.google.com/java/awt/geom/AffineTransform.html) object. |

| Uses of [Shape](http://docs.google.com/java/awt/Shape.html) in [java.awt.image.renderable](http://docs.google.com/java/awt/image/renderable/package-summary.html) | |
| --- | --- |

| Methods in [java.awt.image.renderable](http://docs.google.com/java/awt/image/renderable/package-summary.html) that return [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **RenderContext.**[**getAreaOfInterest**](http://docs.google.com/java/awt/image/renderable/RenderContext.html#getAreaOfInterest())()            Gets the ares of interest currently contained in the RenderContext. |

| Methods in [java.awt.image.renderable](http://docs.google.com/java/awt/image/renderable/package-summary.html) with parameters of type [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| void | **RenderContext.**[**setAreaOfInterest**](http://docs.google.com/java/awt/image/renderable/RenderContext.html#setAreaOfInterest(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) newAoi)            Sets the current area of interest. |

| Constructors in [java.awt.image.renderable](http://docs.google.com/java/awt/image/renderable/package-summary.html) with parameters of type [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| [**RenderContext**](http://docs.google.com/java/awt/image/renderable/RenderContext.html#RenderContext(java.awt.geom.AffineTransform,%20java.awt.Shape))([AffineTransform](http://docs.google.com/java/awt/geom/AffineTransform.html) usr2dev, [Shape](http://docs.google.com/java/awt/Shape.html) aoi)            Constructs a RenderContext with a given transform and area of interest. |
| [**RenderContext**](http://docs.google.com/java/awt/image/renderable/RenderContext.html#RenderContext(java.awt.geom.AffineTransform,%20java.awt.Shape,%20java.awt.RenderingHints))([AffineTransform](http://docs.google.com/java/awt/geom/AffineTransform.html) usr2dev, [Shape](http://docs.google.com/java/awt/Shape.html) aoi, [RenderingHints](http://docs.google.com/java/awt/RenderingHints.html) hints)            Constructs a RenderContext with a given transform. |

| Uses of [Shape](http://docs.google.com/java/awt/Shape.html) in [javax.swing](http://docs.google.com/javax/swing/package-summary.html) | |
| --- | --- |

| Methods in [javax.swing](http://docs.google.com/javax/swing/package-summary.html) that return [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **DebugGraphics.**[**getClip**](http://docs.google.com/javax/swing/DebugGraphics.html#getClip())()            Overrides Graphics.getClip. |

| Methods in [javax.swing](http://docs.google.com/javax/swing/package-summary.html) with parameters of type [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| void | **DebugGraphics.**[**setClip**](http://docs.google.com/javax/swing/DebugGraphics.html#setClip(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) clip)            Overrides Graphics.setClip. |

| Uses of [Shape](http://docs.google.com/java/awt/Shape.html) in [javax.swing.plaf.basic](http://docs.google.com/javax/swing/plaf/basic/package-summary.html) | |
| --- | --- |

| Classes in [javax.swing.plaf.basic](http://docs.google.com/javax/swing/plaf/basic/package-summary.html) that implement [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| static class | [**BasicTextUI.BasicCaret**](http://docs.google.com/javax/swing/plaf/basic/BasicTextUI.BasicCaret.html) |

| Uses of [Shape](http://docs.google.com/java/awt/Shape.html) in [javax.swing.text](http://docs.google.com/javax/swing/text/package-summary.html) | |
| --- | --- |

| Classes in [javax.swing.text](http://docs.google.com/javax/swing/text/package-summary.html) that implement [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| class | [**DefaultCaret**](http://docs.google.com/javax/swing/text/DefaultCaret.html)            A default implementation of Caret. |

| Methods in [javax.swing.text](http://docs.google.com/javax/swing/text/package-summary.html) that return [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| protected  [Shape](http://docs.google.com/java/awt/Shape.html) | **FieldView.**[**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  [Shape](http://docs.google.com/java/awt/Shape.html) | **AsyncBoxView.ChildLocator.**[**getChildAllocation**](http://docs.google.com/javax/swing/text/AsyncBoxView.ChildLocator.html#getChildAllocation(int))(int index)            Fetch the allocation to use for a child view. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **AsyncBoxView.**[**getChildAllocation**](http://docs.google.com/javax/swing/text/AsyncBoxView.html#getChildAllocation(int,%20java.awt.Shape))(int index, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Fetches the allocation for the given child view. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **AsyncBoxView.ChildLocator.**[**getChildAllocation**](http://docs.google.com/javax/swing/text/AsyncBoxView.ChildLocator.html#getChildAllocation(int,%20java.awt.Shape))(int index, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Fetch the allocation to use for a child view. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **BoxView.**[**getChildAllocation**](http://docs.google.com/javax/swing/text/BoxView.html#getChildAllocation(int,%20java.awt.Shape))(int index, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Fetches the allocation for the given child view. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **CompositeView.**[**getChildAllocation**](http://docs.google.com/javax/swing/text/CompositeView.html#getChildAllocation(int,%20java.awt.Shape))(int index, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Fetches the allocation for the given child view to render into. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **View.**[**getChildAllocation**](http://docs.google.com/javax/swing/text/View.html#getChildAllocation(int,%20java.awt.Shape))(int index, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Fetches the allocation for the given child view. |
| abstract  [Shape](http://docs.google.com/java/awt/Shape.html) | **GlyphView.GlyphPainter.**[**modelToView**](http://docs.google.com/javax/swing/text/GlyphView.GlyphPainter.html#modelToView(javax.swing.text.GlyphView,%20int,%20javax.swing.text.Position.Bias,%20java.awt.Shape))([GlyphView](http://docs.google.com/javax/swing/text/GlyphView.html) v, int pos, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) bias, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Provides a mapping from the document model coordinate space to the coordinate space of the view mapped to it. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **CompositeView.**[**modelToView**](http://docs.google.com/javax/swing/text/CompositeView.html#modelToView(int,%20javax.swing.text.Position.Bias,%20int,%20javax.swing.text.Position.Bias,%20java.awt.Shape))(int p0, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b0, int p1, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b1, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Provides a mapping from the document model coordinate space to the coordinate space of the view mapped to it. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **View.**[**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))(int p0, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b0, int p1, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b1, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Provides a mapping, for a given region, from the document model coordinate space to the view coordinate space. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **View.**[**modelToView**](http://docs.google.com/javax/swing/text/View.html#modelToView(int,%20java.awt.Shape))(int pos, [Shape](http://docs.google.com/java/awt/Shape.html) a)  **Deprecated.** |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **PasswordView.**[**modelToView**](http://docs.google.com/javax/swing/text/PasswordView.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. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **FieldView.**[**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. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **AsyncBoxView.**[**modelToView**](http://docs.google.com/javax/swing/text/AsyncBoxView.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. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **PlainView.**[**modelToView**](http://docs.google.com/javax/swing/text/PlainView.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. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **IconView.**[**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. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **BoxView.**[**modelToView**](http://docs.google.com/javax/swing/text/BoxView.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. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **ComponentView.**[**modelToView**](http://docs.google.com/javax/swing/text/ComponentView.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 coordinate space of the model to that of the view. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **GlyphView.**[**modelToView**](http://docs.google.com/javax/swing/text/GlyphView.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. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **CompositeView.**[**modelToView**](http://docs.google.com/javax/swing/text/CompositeView.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. |
| abstract  [Shape](http://docs.google.com/java/awt/Shape.html) | **View.**[**modelToView**](http://docs.google.com/javax/swing/text/View.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, for a given character, from the document model coordinate space to the view coordinate space. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **DefaultHighlighter.DefaultHighlightPainter.**[**paintLayer**](http://docs.google.com/javax/swing/text/DefaultHighlighter.DefaultHighlightPainter.html#paintLayer(java.awt.Graphics,%20int,%20int,%20java.awt.Shape,%20javax.swing.text.JTextComponent,%20javax.swing.text.View))([Graphics](http://docs.google.com/java/awt/Graphics.html) g, int offs0, int offs1, [Shape](http://docs.google.com/java/awt/Shape.html) bounds, [JTextComponent](http://docs.google.com/javax/swing/text/JTextComponent.html) c, [View](http://docs.google.com/javax/swing/text/View.html) view)            Paints a portion of a highlight. |
| abstract  [Shape](http://docs.google.com/java/awt/Shape.html) | **LayeredHighlighter.LayerPainter.**[**paintLayer**](http://docs.google.com/javax/swing/text/LayeredHighlighter.LayerPainter.html#paintLayer(java.awt.Graphics,%20int,%20int,%20java.awt.Shape,%20javax.swing.text.JTextComponent,%20javax.swing.text.View))([Graphics](http://docs.google.com/java/awt/Graphics.html) g, int p0, int p1, [Shape](http://docs.google.com/java/awt/Shape.html) viewBounds, [JTextComponent](http://docs.google.com/javax/swing/text/JTextComponent.html) editor, [View](http://docs.google.com/javax/swing/text/View.html) view) |

| Methods in [javax.swing.text](http://docs.google.com/javax/swing/text/package-summary.html) with parameters of type [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| protected  [Shape](http://docs.google.com/java/awt/Shape.html) | **FieldView.**[**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. |
| [View](http://docs.google.com/javax/swing/text/View.html) | **ParagraphView.**[**breakView**](http://docs.google.com/javax/swing/text/ParagraphView.html#breakView(int,%20float,%20java.awt.Shape))(int axis, float len, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Breaks this view on the given axis at the given length. |
| void | **WrappedPlainView.**[**changedUpdate**](http://docs.google.com/javax/swing/text/WrappedPlainView.html#changedUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [Shape](http://docs.google.com/java/awt/Shape.html) a, [ViewFactory](http://docs.google.com/javax/swing/text/ViewFactory.html) f)            Gives notification from the document that attributes were changed in a location that this view is responsible for. |
| void | **PlainView.**[**changedUpdate**](http://docs.google.com/javax/swing/text/PlainView.html#changedUpdate(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 from the document that attributes were changed in a location that this view is responsible for. |
| void | **FlowView.**[**changedUpdate**](http://docs.google.com/javax/swing/text/FlowView.html#changedUpdate(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 from the document that attributes were changed in a location that this view is responsible for. |
| void | **ParagraphView.**[**changedUpdate**](http://docs.google.com/javax/swing/text/ParagraphView.html#changedUpdate(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 from the document that attributes were changed in a location that this view is responsible for. |
| void | **LabelView.**[**changedUpdate**](http://docs.google.com/javax/swing/text/LabelView.html#changedUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [Shape](http://docs.google.com/java/awt/Shape.html) a, [ViewFactory](http://docs.google.com/javax/swing/text/ViewFactory.html) f)            Gives notification from the document that attributes were changed in a location that this view is responsible for. |
| void | **GlyphView.**[**changedUpdate**](http://docs.google.com/javax/swing/text/GlyphView.html#changedUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [Shape](http://docs.google.com/java/awt/Shape.html) a, [ViewFactory](http://docs.google.com/javax/swing/text/ViewFactory.html) f)            Gives notification from the document that attributes were changed in a location that this view is responsible for. |
| void | **View.**[**changedUpdate**](http://docs.google.com/javax/swing/text/View.html#changedUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [Shape](http://docs.google.com/java/awt/Shape.html) a, [ViewFactory](http://docs.google.com/javax/swing/text/ViewFactory.html) f)            Gives notification from the document that attributes were changed in a location that this view is responsible for. |
| protected  void | **PlainView.**[**damageLineRange**](http://docs.google.com/javax/swing/text/PlainView.html#damageLineRange(int,%20int,%20java.awt.Shape,%20java.awt.Component))(int line0, int line1, [Shape](http://docs.google.com/java/awt/Shape.html) a, [Component](http://docs.google.com/java/awt/Component.html) host)            Repaint the given line range. |
| protected  void | **TableView.**[**forwardUpdate**](http://docs.google.com/javax/swing/text/TableView.html#forwardUpdate(javax.swing.event.DocumentEvent.ElementChange,%20javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent.ElementChange](http://docs.google.com/javax/swing/event/DocumentEvent.ElementChange.html) ec, [DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [Shape](http://docs.google.com/java/awt/Shape.html) a, [ViewFactory](http://docs.google.com/javax/swing/text/ViewFactory.html) f) |
| protected  void | **BoxView.**[**forwardUpdate**](http://docs.google.com/javax/swing/text/BoxView.html#forwardUpdate(javax.swing.event.DocumentEvent.ElementChange,%20javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent.ElementChange](http://docs.google.com/javax/swing/event/DocumentEvent.ElementChange.html) ec, [DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [Shape](http://docs.google.com/java/awt/Shape.html) a, [ViewFactory](http://docs.google.com/javax/swing/text/ViewFactory.html) f)            Forwards the given DocumentEvent to the child views that need to be notified of the change to the model. |
| protected  void | **View.**[**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))([DocumentEvent.ElementChange](http://docs.google.com/javax/swing/event/DocumentEvent.ElementChange.html) ec, [DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [Shape](http://docs.google.com/java/awt/Shape.html) a, [ViewFactory](http://docs.google.com/javax/swing/text/ViewFactory.html) f)            Forwards the given DocumentEvent to the child views that need to be notified of the change to the model. |
| protected  void | **View.**[**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))([View](http://docs.google.com/javax/swing/text/View.html) v, [DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [Shape](http://docs.google.com/java/awt/Shape.html) a, [ViewFactory](http://docs.google.com/javax/swing/text/ViewFactory.html) f)            Forwards the DocumentEvent to the give child view. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **AsyncBoxView.**[**getChildAllocation**](http://docs.google.com/javax/swing/text/AsyncBoxView.html#getChildAllocation(int,%20java.awt.Shape))(int index, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Fetches the allocation for the given child view. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **AsyncBoxView.ChildLocator.**[**getChildAllocation**](http://docs.google.com/javax/swing/text/AsyncBoxView.ChildLocator.html#getChildAllocation(int,%20java.awt.Shape))(int index, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Fetch the allocation to use for a child view. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **BoxView.**[**getChildAllocation**](http://docs.google.com/javax/swing/text/BoxView.html#getChildAllocation(int,%20java.awt.Shape))(int index, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Fetches the allocation for the given child view. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **CompositeView.**[**getChildAllocation**](http://docs.google.com/javax/swing/text/CompositeView.html#getChildAllocation(int,%20java.awt.Shape))(int index, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Fetches the allocation for the given child view to render into. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **View.**[**getChildAllocation**](http://docs.google.com/javax/swing/text/View.html#getChildAllocation(int,%20java.awt.Shape))(int index, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Fetches the allocation for the given child view. |
| protected  int | **ParagraphView.**[**getClosestPositionTo**](http://docs.google.com/javax/swing/text/ParagraphView.html#getClosestPositionTo(int,%20javax.swing.text.Position.Bias,%20java.awt.Shape,%20int,%20javax.swing.text.Position.Bias%5B%5D,%20int,%20int))(int pos, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b, [Shape](http://docs.google.com/java/awt/Shape.html) a, int direction, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html)[] biasRet, int rowIndex, int x)            Returns the closest model position to x. |
| protected  [Rectangle](http://docs.google.com/java/awt/Rectangle.html) | **CompositeView.**[**getInsideAllocation**](http://docs.google.com/javax/swing/text/CompositeView.html#getInsideAllocation(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) a)            Translates the immutable allocation given to the view to a mutable allocation that represents the interior allocation (i.e. |
| protected  int | **CompositeView.**[**getNextEastWestVisualPositionFrom**](http://docs.google.com/javax/swing/text/CompositeView.html#getNextEastWestVisualPositionFrom(int,%20javax.swing.text.Position.Bias,%20java.awt.Shape,%20int,%20javax.swing.text.Position.Bias%5B%5D))(int pos, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b, [Shape](http://docs.google.com/java/awt/Shape.html) a, int direction, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html)[] biasRet)            Returns the next visual position for the cursor, in either the east or west direction. |
| protected  int | **ParagraphView.**[**getNextNorthSouthVisualPositionFrom**](http://docs.google.com/javax/swing/text/ParagraphView.html#getNextNorthSouthVisualPositionFrom(int,%20javax.swing.text.Position.Bias,%20java.awt.Shape,%20int,%20javax.swing.text.Position.Bias%5B%5D))(int pos, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b, [Shape](http://docs.google.com/java/awt/Shape.html) a, int direction, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html)[] biasRet)            Returns the next visual position for the cursor, in either the east or west direction. |
| protected  int | **CompositeView.**[**getNextNorthSouthVisualPositionFrom**](http://docs.google.com/javax/swing/text/CompositeView.html#getNextNorthSouthVisualPositionFrom(int,%20javax.swing.text.Position.Bias,%20java.awt.Shape,%20int,%20javax.swing.text.Position.Bias%5B%5D))(int pos, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b, [Shape](http://docs.google.com/java/awt/Shape.html) a, int direction, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html)[] biasRet)            Returns the next visual position for the cursor, in either the north or south direction. |
| int | **GlyphView.GlyphPainter.**[**getNextVisualPositionFrom**](http://docs.google.com/javax/swing/text/GlyphView.GlyphPainter.html#getNextVisualPositionFrom(javax.swing.text.GlyphView,%20int,%20javax.swing.text.Position.Bias,%20java.awt.Shape,%20int,%20javax.swing.text.Position.Bias%5B%5D))([GlyphView](http://docs.google.com/javax/swing/text/GlyphView.html) v, int pos, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b, [Shape](http://docs.google.com/java/awt/Shape.html) a, int direction, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html)[] biasRet)            Provides a way to determine the next visually represented model location that one might place a caret. |
| int | **AsyncBoxView.**[**getNextVisualPositionFrom**](http://docs.google.com/javax/swing/text/AsyncBoxView.html#getNextVisualPositionFrom(int,%20javax.swing.text.Position.Bias,%20java.awt.Shape,%20int,%20javax.swing.text.Position.Bias%5B%5D))(int pos, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b, [Shape](http://docs.google.com/java/awt/Shape.html) a, int direction, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html)[] biasRet)            Provides a way to determine the next visually represented model location that one might place a caret. |
| int | **GlyphView.**[**getNextVisualPositionFrom**](http://docs.google.com/javax/swing/text/GlyphView.html#getNextVisualPositionFrom(int,%20javax.swing.text.Position.Bias,%20java.awt.Shape,%20int,%20javax.swing.text.Position.Bias%5B%5D))(int pos, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b, [Shape](http://docs.google.com/java/awt/Shape.html) a, int direction, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html)[] biasRet)            Provides a way to determine the next visually represented model location that one might place a caret. |
| int | **CompositeView.**[**getNextVisualPositionFrom**](http://docs.google.com/javax/swing/text/CompositeView.html#getNextVisualPositionFrom(int,%20javax.swing.text.Position.Bias,%20java.awt.Shape,%20int,%20javax.swing.text.Position.Bias%5B%5D))(int pos, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b, [Shape](http://docs.google.com/java/awt/Shape.html) a, int direction, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html)[] biasRet)            Provides a way to determine the next visually represented model location that one might place a caret. |
| int | **View.**[**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))(int pos, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b, [Shape](http://docs.google.com/java/awt/Shape.html) a, int direction, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html)[] biasRet)            Provides a way to determine the next visually represented model location at which one might place a caret. |
| [String](http://docs.google.com/java/lang/String.html) | **View.**[**getToolTipText**](http://docs.google.com/javax/swing/text/View.html#getToolTipText(float,%20float,%20java.awt.Shape))(float x, float y, [Shape](http://docs.google.com/java/awt/Shape.html) allocation)            Returns the tooltip text at the specified location. |
| int | **View.**[**getViewIndex**](http://docs.google.com/javax/swing/text/View.html#getViewIndex(float,%20float,%20java.awt.Shape))(float x, float y, [Shape](http://docs.google.com/java/awt/Shape.html) allocation)            Returns the child view index representing the given position in the view. |
| int | **AsyncBoxView.ChildLocator.**[**getViewIndexAtPoint**](http://docs.google.com/javax/swing/text/AsyncBoxView.ChildLocator.html#getViewIndexAtPoint(float,%20float,%20java.awt.Shape))(float x, float y, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Fetches the child view index at the given point. |
| void | **FieldView.**[**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. |
| void | **ZoneView.**[**insertUpdate**](http://docs.google.com/javax/swing/text/ZoneView.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. |
| void | **WrappedPlainView.**[**insertUpdate**](http://docs.google.com/javax/swing/text/WrappedPlainView.html#insertUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [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. |
| void | **PlainView.**[**insertUpdate**](http://docs.google.com/javax/swing/text/PlainView.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. |
| void | **FlowView.**[**insertUpdate**](http://docs.google.com/javax/swing/text/FlowView.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. |
| void | **GlyphView.**[**insertUpdate**](http://docs.google.com/javax/swing/text/GlyphView.html#insertUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [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. |
| void | **View.**[**insertUpdate**](http://docs.google.com/javax/swing/text/View.html#insertUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [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. |
| protected  [Rectangle](http://docs.google.com/java/awt/Rectangle.html) | **PlainView.**[**lineToRect**](http://docs.google.com/javax/swing/text/PlainView.html#lineToRect(java.awt.Shape,%20int))([Shape](http://docs.google.com/java/awt/Shape.html) a, int line)            Determine the rectangle that represents the given line. |
| abstract  [Shape](http://docs.google.com/java/awt/Shape.html) | **GlyphView.GlyphPainter.**[**modelToView**](http://docs.google.com/javax/swing/text/GlyphView.GlyphPainter.html#modelToView(javax.swing.text.GlyphView,%20int,%20javax.swing.text.Position.Bias,%20java.awt.Shape))([GlyphView](http://docs.google.com/javax/swing/text/GlyphView.html) v, int pos, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) bias, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Provides a mapping from the document model coordinate space to the coordinate space of the view mapped to it. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **CompositeView.**[**modelToView**](http://docs.google.com/javax/swing/text/CompositeView.html#modelToView(int,%20javax.swing.text.Position.Bias,%20int,%20javax.swing.text.Position.Bias,%20java.awt.Shape))(int p0, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b0, int p1, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b1, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Provides a mapping from the document model coordinate space to the coordinate space of the view mapped to it. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **View.**[**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))(int p0, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b0, int p1, [Position.Bias](http://docs.google.com/javax/swing/text/Position.Bias.html) b1, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Provides a mapping, for a given region, from the document model coordinate space to the view coordinate space. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **View.**[**modelToView**](http://docs.google.com/javax/swing/text/View.html#modelToView(int,%20java.awt.Shape))(int pos, [Shape](http://docs.google.com/java/awt/Shape.html) a)  **Deprecated.** |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **PasswordView.**[**modelToView**](http://docs.google.com/javax/swing/text/PasswordView.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. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **FieldView.**[**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. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **AsyncBoxView.**[**modelToView**](http://docs.google.com/javax/swing/text/AsyncBoxView.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. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **PlainView.**[**modelToView**](http://docs.google.com/javax/swing/text/PlainView.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. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **IconView.**[**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. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **BoxView.**[**modelToView**](http://docs.google.com/javax/swing/text/BoxView.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. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **ComponentView.**[**modelToView**](http://docs.google.com/javax/swing/text/ComponentView.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 coordinate space of the model to that of the view. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **GlyphView.**[**modelToView**](http://docs.google.com/javax/swing/text/GlyphView.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. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **CompositeView.**[**modelToView**](http://docs.google.com/javax/swing/text/CompositeView.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. |
| abstract  [Shape](http://docs.google.com/java/awt/Shape.html) | **View.**[**modelToView**](http://docs.google.com/javax/swing/text/View.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, for a given character, from the document model coordinate space to the view coordinate space. |
| abstract  void | **GlyphView.GlyphPainter.**[**paint**](http://docs.google.com/javax/swing/text/GlyphView.GlyphPainter.html#paint(javax.swing.text.GlyphView,%20java.awt.Graphics,%20java.awt.Shape,%20int,%20int))([GlyphView](http://docs.google.com/javax/swing/text/GlyphView.html) v, [Graphics](http://docs.google.com/java/awt/Graphics.html) g, [Shape](http://docs.google.com/java/awt/Shape.html) a, int p0, int p1)            Paint the glyphs representing the given range. |
| void | **DefaultHighlighter.DefaultHighlightPainter.**[**paint**](http://docs.google.com/javax/swing/text/DefaultHighlighter.DefaultHighlightPainter.html#paint(java.awt.Graphics,%20int,%20int,%20java.awt.Shape,%20javax.swing.text.JTextComponent))([Graphics](http://docs.google.com/java/awt/Graphics.html) g, int offs0, int offs1, [Shape](http://docs.google.com/java/awt/Shape.html) bounds, [JTextComponent](http://docs.google.com/javax/swing/text/JTextComponent.html) c)            Paints a highlight. |
| void | **Highlighter.HighlightPainter.**[**paint**](http://docs.google.com/javax/swing/text/Highlighter.HighlightPainter.html#paint(java.awt.Graphics,%20int,%20int,%20java.awt.Shape,%20javax.swing.text.JTextComponent))([Graphics](http://docs.google.com/java/awt/Graphics.html) g, int p0, int p1, [Shape](http://docs.google.com/java/awt/Shape.html) bounds, [JTextComponent](http://docs.google.com/javax/swing/text/JTextComponent.html) c)            Renders the highlight. |
| void | **FieldView.**[**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 | **AsyncBoxView.**[**paint**](http://docs.google.com/javax/swing/text/AsyncBoxView.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) alloc)            Render the view using the given allocation and rendering surface. |
| void | **WrappedPlainView.**[**paint**](http://docs.google.com/javax/swing/text/WrappedPlainView.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 | **PlainView.**[**paint**](http://docs.google.com/javax/swing/text/PlainView.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 | **IconView.**[**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. |
| void | **BoxView.**[**paint**](http://docs.google.com/javax/swing/text/BoxView.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) allocation)            Renders the BoxView using the given rendering surface and area on that surface. |
| void | **ParagraphView.**[**paint**](http://docs.google.com/javax/swing/text/ParagraphView.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 | **ComponentView.**[**paint**](http://docs.google.com/javax/swing/text/ComponentView.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)            The real paint behavior occurs naturally from the association that the component has with its parent container (the same container hosting this view). |
| void | **GlyphView.**[**paint**](http://docs.google.com/javax/swing/text/GlyphView.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 a portion of a text style run. |
| abstract  void | **View.**[**paint**](http://docs.google.com/javax/swing/text/View.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) allocation)            Renders using the given rendering surface and area on that surface. |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **DefaultHighlighter.DefaultHighlightPainter.**[**paintLayer**](http://docs.google.com/javax/swing/text/DefaultHighlighter.DefaultHighlightPainter.html#paintLayer(java.awt.Graphics,%20int,%20int,%20java.awt.Shape,%20javax.swing.text.JTextComponent,%20javax.swing.text.View))([Graphics](http://docs.google.com/java/awt/Graphics.html) g, int offs0, int offs1, [Shape](http://docs.google.com/java/awt/Shape.html) bounds, [JTextComponent](http://docs.google.com/javax/swing/text/JTextComponent.html) c, [View](http://docs.google.com/javax/swing/text/View.html) view)            Paints a portion of a highlight. |
| abstract  [Shape](http://docs.google.com/java/awt/Shape.html) | **LayeredHighlighter.LayerPainter.**[**paintLayer**](http://docs.google.com/javax/swing/text/LayeredHighlighter.LayerPainter.html#paintLayer(java.awt.Graphics,%20int,%20int,%20java.awt.Shape,%20javax.swing.text.JTextComponent,%20javax.swing.text.View))([Graphics](http://docs.google.com/java/awt/Graphics.html) g, int p0, int p1, [Shape](http://docs.google.com/java/awt/Shape.html) viewBounds, [JTextComponent](http://docs.google.com/javax/swing/text/JTextComponent.html) editor, [View](http://docs.google.com/javax/swing/text/View.html) view) |
| void | **DefaultHighlighter.**[**paintLayeredHighlights**](http://docs.google.com/javax/swing/text/DefaultHighlighter.html#paintLayeredHighlights(java.awt.Graphics,%20int,%20int,%20java.awt.Shape,%20javax.swing.text.JTextComponent,%20javax.swing.text.View))([Graphics](http://docs.google.com/java/awt/Graphics.html) g, int p0, int p1, [Shape](http://docs.google.com/java/awt/Shape.html) viewBounds, [JTextComponent](http://docs.google.com/javax/swing/text/JTextComponent.html) editor, [View](http://docs.google.com/javax/swing/text/View.html) view)            When leaf Views (such as LabelView) are rendering they should call into this method. |
| abstract  void | **LayeredHighlighter.**[**paintLayeredHighlights**](http://docs.google.com/javax/swing/text/LayeredHighlighter.html#paintLayeredHighlights(java.awt.Graphics,%20int,%20int,%20java.awt.Shape,%20javax.swing.text.JTextComponent,%20javax.swing.text.View))([Graphics](http://docs.google.com/java/awt/Graphics.html) g, int p0, int p1, [Shape](http://docs.google.com/java/awt/Shape.html) viewBounds, [JTextComponent](http://docs.google.com/javax/swing/text/JTextComponent.html) editor, [View](http://docs.google.com/javax/swing/text/View.html) view)            When leaf Views (such as LabelView) are rendering they should call into this method. |
| void | **FieldView.**[**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. |
| void | **ZoneView.**[**removeUpdate**](http://docs.google.com/javax/swing/text/ZoneView.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. |
| void | **WrappedPlainView.**[**removeUpdate**](http://docs.google.com/javax/swing/text/WrappedPlainView.html#removeUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [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. |
| void | **PlainView.**[**removeUpdate**](http://docs.google.com/javax/swing/text/PlainView.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. |
| void | **FlowView.**[**removeUpdate**](http://docs.google.com/javax/swing/text/FlowView.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. |
| void | **GlyphView.**[**removeUpdate**](http://docs.google.com/javax/swing/text/GlyphView.html#removeUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [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. |
| void | **View.**[**removeUpdate**](http://docs.google.com/javax/swing/text/View.html#removeUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [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. |
| protected  void | **AsyncBoxView.ChildLocator.**[**setAllocation**](http://docs.google.com/javax/swing/text/AsyncBoxView.ChildLocator.html#setAllocation(java.awt.Shape))([Shape](http://docs.google.com/java/awt/Shape.html) a)            Copy the currently allocated shape into the Rectangle used to store the current allocation. |
| protected  void | **PlainView.**[**updateDamage**](http://docs.google.com/javax/swing/text/PlainView.html#updateDamage(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)            Repaint the region of change covered by the given document event. |
| protected  void | **AsyncBoxView.**[**updateLayout**](http://docs.google.com/javax/swing/text/AsyncBoxView.html#updateLayout(javax.swing.event.DocumentEvent.ElementChange,%20javax.swing.event.DocumentEvent,%20java.awt.Shape))([DocumentEvent.ElementChange](http://docs.google.com/javax/swing/event/DocumentEvent.ElementChange.html) ec, [DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Update the layout in response to receiving notification of change from the model. |
| protected  void | **View.**[**updateLayout**](http://docs.google.com/javax/swing/text/View.html#updateLayout(javax.swing.event.DocumentEvent.ElementChange,%20javax.swing.event.DocumentEvent,%20java.awt.Shape))([DocumentEvent.ElementChange](http://docs.google.com/javax/swing/event/DocumentEvent.ElementChange.html) ec, [DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [Shape](http://docs.google.com/java/awt/Shape.html) a)            Updates the layout in response to receiving notification of change from the model. |
| int | **View.**[**viewToModel**](http://docs.google.com/javax/swing/text/View.html#viewToModel(float,%20float,%20java.awt.Shape))(float x, float y, [Shape](http://docs.google.com/java/awt/Shape.html) a)  **Deprecated.** |
| int | **PasswordView.**[**viewToModel**](http://docs.google.com/javax/swing/text/PasswordView.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. |
| int | **FieldView.**[**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. |
| int | **AsyncBoxView.**[**viewToModel**](http://docs.google.com/javax/swing/text/AsyncBoxView.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)[] biasReturn)            Provides a mapping from the view coordinate space to the logical coordinate space of the model. |
| int | **PlainView.**[**viewToModel**](http://docs.google.com/javax/swing/text/PlainView.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. |
| int | **IconView.**[**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. |
| int | **BoxView.**[**viewToModel**](http://docs.google.com/javax/swing/text/BoxView.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. |
| int | **ComponentView.**[**viewToModel**](http://docs.google.com/javax/swing/text/ComponentView.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. |
| int | **GlyphView.**[**viewToModel**](http://docs.google.com/javax/swing/text/GlyphView.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)[] biasReturn)            Provides a mapping from the view coordinate space to the logical coordinate space of the model. |
| int | **CompositeView.**[**viewToModel**](http://docs.google.com/javax/swing/text/CompositeView.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. |
| abstract  int | **View.**[**viewToModel**](http://docs.google.com/javax/swing/text/View.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)[] biasReturn)            Provides a mapping from the view coordinate space to the logical coordinate space of the model. |
| abstract  int | **GlyphView.GlyphPainter.**[**viewToModel**](http://docs.google.com/javax/swing/text/GlyphView.GlyphPainter.html#viewToModel(javax.swing.text.GlyphView,%20float,%20float,%20java.awt.Shape,%20javax.swing.text.Position.Bias%5B%5D))([GlyphView](http://docs.google.com/javax/swing/text/GlyphView.html) v, 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)[] biasReturn)            Provides a mapping from the view coordinate space to the logical coordinate space of the model. |

| Uses of [Shape](http://docs.google.com/java/awt/Shape.html) in [javax.swing.text.html](http://docs.google.com/javax/swing/text/html/package-summary.html) | |
| --- | --- |

| Methods in [javax.swing.text.html](http://docs.google.com/javax/swing/text/html/package-summary.html) that return [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| [Shape](http://docs.google.com/java/awt/Shape.html) | **ImageView.**[**modelToView**](http://docs.google.com/javax/swing/text/html/ImageView.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. |

| Methods in [javax.swing.text.html](http://docs.google.com/javax/swing/text/html/package-summary.html) with parameters of type [Shape](http://docs.google.com/java/awt/Shape.html) | |
| --- | --- |
| void | **BlockView.**[**changedUpdate**](http://docs.google.com/javax/swing/text/html/BlockView.html#changedUpdate(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) |
| void | **ImageView.**[**changedUpdate**](http://docs.google.com/javax/swing/text/html/ImageView.html#changedUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [Shape](http://docs.google.com/java/awt/Shape.html) a, [ViewFactory](http://docs.google.com/javax/swing/text/ViewFactory.html) f)            Invoked when the Elements attributes have changed. |
| void | **InlineView.**[**changedUpdate**](http://docs.google.com/javax/swing/text/html/InlineView.html#changedUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [Shape](http://docs.google.com/java/awt/Shape.html) a, [ViewFactory](http://docs.google.com/javax/swing/text/ViewFactory.html) f)            Gives notification from the document that attributes were changed in a location that this view is responsible for. |
| [String](http://docs.google.com/java/lang/String.html) | **ImageView.**[**getToolTipText**](http://docs.google.com/javax/swing/text/html/ImageView.html#getToolTipText(float,%20float,%20java.awt.Shape))(float x, float y, [Shape](http://docs.google.com/java/awt/Shape.html) allocation)            For images the tooltip text comes from text specified with the ALT attribute. |
| void | **InlineView.**[**insertUpdate**](http://docs.google.com/javax/swing/text/html/InlineView.html#insertUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [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) | **ImageView.**[**modelToView**](http://docs.google.com/javax/swing/text/html/ImageView.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 | **ListView.**[**paint**](http://docs.google.com/javax/swing/text/html/ListView.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) allocation)            Renders using the given rendering surface and area on that surface. |
| void | **BlockView.**[**paint**](http://docs.google.com/javax/swing/text/html/BlockView.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) allocation)            Renders using the given rendering surface and area on that surface. |
| void | **ImageView.**[**paint**](http://docs.google.com/javax/swing/text/html/ImageView.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 View. |
| void | **ParagraphView.**[**paint**](http://docs.google.com/javax/swing/text/html/ParagraphView.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 | **InlineView.**[**removeUpdate**](http://docs.google.com/javax/swing/text/html/InlineView.html#removeUpdate(javax.swing.event.DocumentEvent,%20java.awt.Shape,%20javax.swing.text.ViewFactory))([DocumentEvent](http://docs.google.com/javax/swing/event/DocumentEvent.html) e, [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 | **ImageView.**[**viewToModel**](http://docs.google.com/javax/swing/text/html/ImageView.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. |

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/java/awt/Shape.html) | **Use** | [**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   NEXT | [**FRAMES**](http://docs.google.com/index.html?java/awt//class-useShape.html)    [**NO FRAMES**](http://docs.google.com/Shape.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

[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.

Copyright 2006 Sun Microsystems, Inc. All rights reserved. Use is subject to [license terms](http://docs.google.com/legal/license.html). Also see the [documentation redistribution policy](http://java.sun.com/docs/redist.html).