| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/Paint.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/java/awt/PageAttributes.PrintQualityType.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/PaintContext.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/Paint.html)    [**NO FRAMES**](http://docs.google.com/Paint.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | CONSTR | [METHOD](#tyjcwt) | DETAIL: FIELD | CONSTR | [METHOD](#1t3h5sf) |

## **java.awt**

Interface Paint

**All Superinterfaces:** [Transparency](http://docs.google.com/java/awt/Transparency.html) **All Known Implementing Classes:** [Color](http://docs.google.com/java/awt/Color.html), [ColorUIResource](http://docs.google.com/javax/swing/plaf/ColorUIResource.html), [GradientPaint](http://docs.google.com/java/awt/GradientPaint.html), [LinearGradientPaint](http://docs.google.com/java/awt/LinearGradientPaint.html), [MultipleGradientPaint](http://docs.google.com/java/awt/MultipleGradientPaint.html), [RadialGradientPaint](http://docs.google.com/java/awt/RadialGradientPaint.html), [SystemColor](http://docs.google.com/java/awt/SystemColor.html), [TexturePaint](http://docs.google.com/java/awt/TexturePaint.html)

public interface **Paint**extends [Transparency](http://docs.google.com/java/awt/Transparency.html)

This Paint interface defines how color patterns can be generated for [Graphics2D](http://docs.google.com/java/awt/Graphics2D.html) operations. A class implementing the Paint interface is added to the Graphics2D context in order to define the color pattern used by the draw and fill methods.

Instances of classes implementing Paint must be read-only because the Graphics2D does not clone these objects when they are set as an attribute with the setPaint method or when the Graphics2D object is itself cloned.

**See Also:**[PaintContext](http://docs.google.com/java/awt/PaintContext.html), [Color](http://docs.google.com/java/awt/Color.html), [GradientPaint](http://docs.google.com/java/awt/GradientPaint.html), [TexturePaint](http://docs.google.com/java/awt/TexturePaint.html), [Graphics2D.setPaint(java.awt.Paint)](http://docs.google.com/java/awt/Graphics2D.html#setPaint(java.awt.Paint))

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

| **Fields inherited from interface java.awt.**[**Transparency**](http://docs.google.com/java/awt/Transparency.html) |
| --- |
| [BITMASK](http://docs.google.com/java/awt/Transparency.html#BITMASK), [OPAQUE](http://docs.google.com/java/awt/Transparency.html#OPAQUE), [TRANSLUCENT](http://docs.google.com/java/awt/Transparency.html#TRANSLUCENT) |

| **Method Summary** | |
| --- | --- |
| [PaintContext](http://docs.google.com/java/awt/PaintContext.html) | [**createContext**](http://docs.google.com/java/awt/Paint.html#createContext(java.awt.image.ColorModel,%20java.awt.Rectangle,%20java.awt.geom.Rectangle2D,%20java.awt.geom.AffineTransform,%20java.awt.RenderingHints))([ColorModel](http://docs.google.com/java/awt/image/ColorModel.html) cm, [Rectangle](http://docs.google.com/java/awt/Rectangle.html) deviceBounds, [Rectangle2D](http://docs.google.com/java/awt/geom/Rectangle2D.html) userBounds, [AffineTransform](http://docs.google.com/java/awt/geom/AffineTransform.html) xform, [RenderingHints](http://docs.google.com/java/awt/RenderingHints.html) hints)            Creates and returns a [PaintContext](http://docs.google.com/java/awt/PaintContext.html) used to generate the color pattern. |

| **Methods inherited from interface java.awt.**[**Transparency**](http://docs.google.com/java/awt/Transparency.html) |
| --- |
| [getTransparency](http://docs.google.com/java/awt/Transparency.html#getTransparency()) |

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

### createContext

[PaintContext](http://docs.google.com/java/awt/PaintContext.html) **createContext**([ColorModel](http://docs.google.com/java/awt/image/ColorModel.html) cm,  
 [Rectangle](http://docs.google.com/java/awt/Rectangle.html) deviceBounds,  
 [Rectangle2D](http://docs.google.com/java/awt/geom/Rectangle2D.html) userBounds,  
 [AffineTransform](http://docs.google.com/java/awt/geom/AffineTransform.html) xform,  
 [RenderingHints](http://docs.google.com/java/awt/RenderingHints.html) hints)

Creates and returns a [PaintContext](http://docs.google.com/java/awt/PaintContext.html) used to generate the color pattern. Since the ColorModel argument to createContext is only a hint, implementations of Paint should accept a null argument for ColorModel. Note that if the application does not prefer a specific ColorModel, the null ColorModel argument will give the Paint implementation full leeway in using the most efficient ColorModel it prefers for its raster processing.

Since the API documentation was not specific about this in releases before 1.4, there may be implementations of Paint that do not accept a null ColorModel argument. If a developer is writing code which passes a null ColorModel argument to the createContext method of Paint objects from arbitrary sources it would be wise to code defensively by manufacturing a non-null ColorModel for those objects which throw a NullPointerException.

**Parameters:**cm - the [ColorModel](http://docs.google.com/java/awt/image/ColorModel.html) that receives the Paint data. This is used only as a hint.deviceBounds - the device space bounding box of the graphics primitive being rendereduserBounds - the user space bounding box of the graphics primitive being renderedxform - the [AffineTransform](http://docs.google.com/java/awt/geom/AffineTransform.html) from user space into device spacehints - the hint that the context object uses to choose between rendering alternatives **Returns:**the PaintContext for generating color patterns**See Also:**[PaintContext](http://docs.google.com/java/awt/PaintContext.html)

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/Paint.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/java/awt/PageAttributes.PrintQualityType.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/PaintContext.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/Paint.html)    [**NO FRAMES**](http://docs.google.com/Paint.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | CONSTR | [METHOD](#tyjcwt) | DETAIL: FIELD | CONSTR | [METHOD](#1t3h5sf) |

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

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

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