| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/Arc2D.Double.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/geom/Arc2D.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/geom/Arc2D.Float.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/geom/Arc2D.Double.html)    [**NO FRAMES**](http://docs.google.com/Arc2D.Double.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: [NESTED](#2et92p0) | [FIELD](#tyjcwt) | [CONSTR](#1t3h5sf) | [METHOD](#4d34og8) | DETAIL: [FIELD](#26in1rg) | [CONSTR](#3j2qqm3) | [METHOD](#3whwml4) |

## **java.awt.geom**

Class Arc2D.Double

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [java.awt.geom.RectangularShape](http://docs.google.com/java/awt/geom/RectangularShape.html)  
 [java.awt.geom.Arc2D](http://docs.google.com/java/awt/geom/Arc2D.html)  
 **java.awt.geom.Arc2D.Double**

**All Implemented Interfaces:** [Shape](http://docs.google.com/java/awt/Shape.html), [Serializable](http://docs.google.com/java/io/Serializable.html), [Cloneable](http://docs.google.com/java/lang/Cloneable.html) **Enclosing class:**[Arc2D](http://docs.google.com/java/awt/geom/Arc2D.html)

public static class **Arc2D.Double**extends [Arc2D](http://docs.google.com/java/awt/geom/Arc2D.html)implements [Serializable](http://docs.google.com/java/io/Serializable.html)

This class defines an arc specified in double precision.

**Since:** 1.2 **See Also:**[Serialized Form](http://docs.google.com/serialized-form.html#java.awt.geom.Arc2D.Double)

| **Nested Class Summary** | |
| --- | --- |

| **Nested classes/interfaces inherited from class java.awt.geom.**[**Arc2D**](http://docs.google.com/java/awt/geom/Arc2D.html) |
| --- |
| [Arc2D.Double](http://docs.google.com/java/awt/geom/Arc2D.Double.html), [Arc2D.Float](http://docs.google.com/java/awt/geom/Arc2D.Float.html) |

| **Field Summary** | |
| --- | --- |
| double | [**extent**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#extent)            The angular extent of the arc in degrees. |
| double | [**height**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#height)            The overall height of the full ellipse of which this arc is a partial section (not considering the angular extents). |
| double | [**start**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#start)            The starting angle of the arc in degrees. |
| double | [**width**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#width)            The overall width of the full ellipse of which this arc is a partial section (not considering the angular extents). |
| double | [**x**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#x)            The X coordinate of the upper-left corner of the framing rectangle of the arc. |
| double | [**y**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#y)            The Y coordinate of the upper-left corner of the framing rectangle of the arc. |

| **Fields inherited from class java.awt.geom.**[**Arc2D**](http://docs.google.com/java/awt/geom/Arc2D.html) |
| --- |
| [CHORD](http://docs.google.com/java/awt/geom/Arc2D.html#CHORD), [OPEN](http://docs.google.com/java/awt/geom/Arc2D.html#OPEN), [PIE](http://docs.google.com/java/awt/geom/Arc2D.html#PIE) |

| **Constructor Summary** | |
| --- | --- |
| [**Arc2D.Double**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#Arc2D.Double())()            Constructs a new OPEN arc, initialized to location (0, 0), size (0, 0), angular extents (start = 0, extent = 0). |
| [**Arc2D.Double**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#Arc2D.Double(double,%20double,%20double,%20double,%20double,%20double,%20int))(double x, double y, double w, double h, double start, double extent, int type)            Constructs a new arc, initialized to the specified location, size, angular extents, and closure type. |
| [**Arc2D.Double**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#Arc2D.Double(int))(int type)            Constructs a new arc, initialized to location (0, 0), size (0, 0), angular extents (start = 0, extent = 0), and the specified closure type. |
| [**Arc2D.Double**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#Arc2D.Double(java.awt.geom.Rectangle2D,%20double,%20double,%20int))([Rectangle2D](http://docs.google.com/java/awt/geom/Rectangle2D.html) ellipseBounds, double start, double extent, int type)            Constructs a new arc, initialized to the specified location, size, angular extents, and closure type. |

| **Method Summary** | |
| --- | --- |
| double | [**getAngleExtent**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#getAngleExtent())()            Returns the angular extent of the arc. |
| double | [**getAngleStart**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#getAngleStart())()            Returns the starting angle of the arc. |
| double | [**getHeight**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#getHeight())()            Returns the height of the framing rectangle in double precision. |
| double | [**getWidth**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#getWidth())()            Returns the width of the framing rectangle in double precision. |
| double | [**getX**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#getX())()            Returns the X coordinate of the upper-left corner of the framing rectangle in double precision. |
| double | [**getY**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#getY())()            Returns the Y coordinate of the upper-left corner of the framing rectangle in double precision. |
| boolean | [**isEmpty**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#isEmpty())()            Determines whether the RectangularShape is empty. |
| protected  [Rectangle2D](http://docs.google.com/java/awt/geom/Rectangle2D.html) | [**makeBounds**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#makeBounds(double,%20double,%20double,%20double))(double x, double y, double w, double h)            Constructs a Rectangle2D of the appropriate precision to hold the parameters calculated to be the framing rectangle of this arc. |
| void | [**setAngleExtent**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#setAngleExtent(double))(double angExt)            Sets the angular extent of this arc to the specified double value. |
| void | [**setAngleStart**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#setAngleStart(double))(double angSt)            Sets the starting angle of this arc to the specified double value. |
| void | [**setArc**](http://docs.google.com/java/awt/geom/Arc2D.Double.html#setArc(double,%20double,%20double,%20double,%20double,%20double,%20int))(double x, double y, double w, double h, double angSt, double angExt, int closure)            Sets the location, size, angular extents, and closure type of this arc to the specified double values. |

| **Methods inherited from class java.awt.geom.**[**Arc2D**](http://docs.google.com/java/awt/geom/Arc2D.html) |
| --- |
| [contains](http://docs.google.com/java/awt/geom/Arc2D.html#contains(double,%20double)), [contains](http://docs.google.com/java/awt/geom/Arc2D.html#contains(double,%20double,%20double,%20double)), [contains](http://docs.google.com/java/awt/geom/Arc2D.html#contains(java.awt.geom.Rectangle2D)), [containsAngle](http://docs.google.com/java/awt/geom/Arc2D.html#containsAngle(double)), [equals](http://docs.google.com/java/awt/geom/Arc2D.html#equals(java.lang.Object)), [getArcType](http://docs.google.com/java/awt/geom/Arc2D.html#getArcType()), [getBounds2D](http://docs.google.com/java/awt/geom/Arc2D.html#getBounds2D()), [getEndPoint](http://docs.google.com/java/awt/geom/Arc2D.html#getEndPoint()), [getPathIterator](http://docs.google.com/java/awt/geom/Arc2D.html#getPathIterator(java.awt.geom.AffineTransform)), [getStartPoint](http://docs.google.com/java/awt/geom/Arc2D.html#getStartPoint()), [hashCode](http://docs.google.com/java/awt/geom/Arc2D.html#hashCode()), [intersects](http://docs.google.com/java/awt/geom/Arc2D.html#intersects(double,%20double,%20double,%20double)), [setAngles](http://docs.google.com/java/awt/geom/Arc2D.html#setAngles(double,%20double,%20double,%20double)), [setAngles](http://docs.google.com/java/awt/geom/Arc2D.html#setAngles(java.awt.geom.Point2D,%20java.awt.geom.Point2D)), [setAngleStart](http://docs.google.com/java/awt/geom/Arc2D.html#setAngleStart(java.awt.geom.Point2D)), [setArc](http://docs.google.com/java/awt/geom/Arc2D.html#setArc(java.awt.geom.Arc2D)), [setArc](http://docs.google.com/java/awt/geom/Arc2D.html#setArc(java.awt.geom.Point2D,%20java.awt.geom.Dimension2D,%20double,%20double,%20int)), [setArc](http://docs.google.com/java/awt/geom/Arc2D.html#setArc(java.awt.geom.Rectangle2D,%20double,%20double,%20int)), [setArcByCenter](http://docs.google.com/java/awt/geom/Arc2D.html#setArcByCenter(double,%20double,%20double,%20double,%20double,%20int)), [setArcByTangent](http://docs.google.com/java/awt/geom/Arc2D.html#setArcByTangent(java.awt.geom.Point2D,%20java.awt.geom.Point2D,%20java.awt.geom.Point2D,%20double)), [setArcType](http://docs.google.com/java/awt/geom/Arc2D.html#setArcType(int)), [setFrame](http://docs.google.com/java/awt/geom/Arc2D.html#setFrame(double,%20double,%20double,%20double)) |

| **Methods inherited from class java.awt.geom.**[**RectangularShape**](http://docs.google.com/java/awt/geom/RectangularShape.html) |
| --- |
| [clone](http://docs.google.com/java/awt/geom/RectangularShape.html#clone()), [contains](http://docs.google.com/java/awt/geom/RectangularShape.html#contains(java.awt.geom.Point2D)), [getBounds](http://docs.google.com/java/awt/geom/RectangularShape.html#getBounds()), [getCenterX](http://docs.google.com/java/awt/geom/RectangularShape.html#getCenterX()), [getCenterY](http://docs.google.com/java/awt/geom/RectangularShape.html#getCenterY()), [getFrame](http://docs.google.com/java/awt/geom/RectangularShape.html#getFrame()), [getMaxX](http://docs.google.com/java/awt/geom/RectangularShape.html#getMaxX()), [getMaxY](http://docs.google.com/java/awt/geom/RectangularShape.html#getMaxY()), [getMinX](http://docs.google.com/java/awt/geom/RectangularShape.html#getMinX()), [getMinY](http://docs.google.com/java/awt/geom/RectangularShape.html#getMinY()), [getPathIterator](http://docs.google.com/java/awt/geom/RectangularShape.html#getPathIterator(java.awt.geom.AffineTransform,%20double)), [intersects](http://docs.google.com/java/awt/geom/RectangularShape.html#intersects(java.awt.geom.Rectangle2D)), [setFrame](http://docs.google.com/java/awt/geom/RectangularShape.html#setFrame(java.awt.geom.Point2D,%20java.awt.geom.Dimension2D)), [setFrame](http://docs.google.com/java/awt/geom/RectangularShape.html#setFrame(java.awt.geom.Rectangle2D)), [setFrameFromCenter](http://docs.google.com/java/awt/geom/RectangularShape.html#setFrameFromCenter(double,%20double,%20double,%20double)), [setFrameFromCenter](http://docs.google.com/java/awt/geom/RectangularShape.html#setFrameFromCenter(java.awt.geom.Point2D,%20java.awt.geom.Point2D)), [setFrameFromDiagonal](http://docs.google.com/java/awt/geom/RectangularShape.html#setFrameFromDiagonal(double,%20double,%20double,%20double)), [setFrameFromDiagonal](http://docs.google.com/java/awt/geom/RectangularShape.html#setFrameFromDiagonal(java.awt.geom.Point2D,%20java.awt.geom.Point2D)) |

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

| **Field Detail** |
| --- |

### x

public double **x**

The X coordinate of the upper-left corner of the framing rectangle of the arc.

**Since:** 1.2

### y

public double **y**

The Y coordinate of the upper-left corner of the framing rectangle of the arc.

**Since:** 1.2

### width

public double **width**

The overall width of the full ellipse of which this arc is a partial section (not considering the angular extents).

**Since:** 1.2

### height

public double **height**

The overall height of the full ellipse of which this arc is a partial section (not considering the angular extents).

**Since:** 1.2

### start

public double **start**

The starting angle of the arc in degrees.

**Since:** 1.2

### extent

public double **extent**

The angular extent of the arc in degrees.

**Since:** 1.2

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

### Arc2D.Double

public **Arc2D.Double**()

Constructs a new OPEN arc, initialized to location (0, 0), size (0, 0), angular extents (start = 0, extent = 0).

**Since:** 1.2

### Arc2D.Double

public **Arc2D.Double**(int type)

Constructs a new arc, initialized to location (0, 0), size (0, 0), angular extents (start = 0, extent = 0), and the specified closure type.

**Parameters:**type - The closure type for the arc: [Arc2D.OPEN](http://docs.google.com/java/awt/geom/Arc2D.html#OPEN), [Arc2D.CHORD](http://docs.google.com/java/awt/geom/Arc2D.html#CHORD), or [Arc2D.PIE](http://docs.google.com/java/awt/geom/Arc2D.html#PIE).**Since:** 1.2

### Arc2D.Double

public **Arc2D.Double**(double x,  
 double y,  
 double w,  
 double h,  
 double start,  
 double extent,  
 int type)

Constructs a new arc, initialized to the specified location, size, angular extents, and closure type.

**Parameters:**x - The X coordinate of the upper-left corner of the arc's framing rectangle.y - The Y coordinate of the upper-left corner of the arc's framing rectangle.w - The overall width of the full ellipse of which this arc is a partial section.h - The overall height of the full ellipse of which this arc is a partial section.start - The starting angle of the arc in degrees.extent - The angular extent of the arc in degrees.type - The closure type for the arc: [Arc2D.OPEN](http://docs.google.com/java/awt/geom/Arc2D.html#OPEN), [Arc2D.CHORD](http://docs.google.com/java/awt/geom/Arc2D.html#CHORD), or [Arc2D.PIE](http://docs.google.com/java/awt/geom/Arc2D.html#PIE).**Since:** 1.2

### Arc2D.Double

public **Arc2D.Double**([Rectangle2D](http://docs.google.com/java/awt/geom/Rectangle2D.html) ellipseBounds,  
 double start,  
 double extent,  
 int type)

Constructs a new arc, initialized to the specified location, size, angular extents, and closure type.

**Parameters:**ellipseBounds - The framing rectangle that defines the outer boundary of the full ellipse of which this arc is a partial section.start - The starting angle of the arc in degrees.extent - The angular extent of the arc in degrees.type - The closure type for the arc: [Arc2D.OPEN](http://docs.google.com/java/awt/geom/Arc2D.html#OPEN), [Arc2D.CHORD](http://docs.google.com/java/awt/geom/Arc2D.html#CHORD), or [Arc2D.PIE](http://docs.google.com/java/awt/geom/Arc2D.html#PIE).**Since:** 1.2

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

### getX

public double **getX**()

Returns the X coordinate of the upper-left corner of the framing rectangle in double precision. Note that the arc [partially inscribes](http://docs.google.com/Arc2D.html#inscribes) the framing rectangle of this RectangularShape.

**Specified by:**[getX](http://docs.google.com/java/awt/geom/RectangularShape.html#getX()) in class [RectangularShape](http://docs.google.com/java/awt/geom/RectangularShape.html) **Returns:**the X coordinate of the upper-left corner of the framing rectangle.**Since:** 1.2

### getY

public double **getY**()

Returns the Y coordinate of the upper-left corner of the framing rectangle in double precision. Note that the arc [partially inscribes](http://docs.google.com/Arc2D.html#inscribes) the framing rectangle of this RectangularShape.

**Specified by:**[getY](http://docs.google.com/java/awt/geom/RectangularShape.html#getY()) in class [RectangularShape](http://docs.google.com/java/awt/geom/RectangularShape.html) **Returns:**the Y coordinate of the upper-left corner of the framing rectangle.**Since:** 1.2

### getWidth

public double **getWidth**()

Returns the width of the framing rectangle in double precision. Note that the arc [partially inscribes](http://docs.google.com/Arc2D.html#inscribes) the framing rectangle of this RectangularShape.

**Specified by:**[getWidth](http://docs.google.com/java/awt/geom/RectangularShape.html#getWidth()) in class [RectangularShape](http://docs.google.com/java/awt/geom/RectangularShape.html) **Returns:**the width of the framing rectangle.**Since:** 1.2

### getHeight

public double **getHeight**()

Returns the height of the framing rectangle in double precision. Note that the arc [partially inscribes](http://docs.google.com/Arc2D.html#inscribes) the framing rectangle of this RectangularShape.

**Specified by:**[getHeight](http://docs.google.com/java/awt/geom/RectangularShape.html#getHeight()) in class [RectangularShape](http://docs.google.com/java/awt/geom/RectangularShape.html) **Returns:**the height of the framing rectangle.**Since:** 1.2

### getAngleStart

public double **getAngleStart**()

Returns the starting angle of the arc.

**Specified by:**[getAngleStart](http://docs.google.com/java/awt/geom/Arc2D.html#getAngleStart()) in class [Arc2D](http://docs.google.com/java/awt/geom/Arc2D.html) **Returns:**A double value that represents the starting angle of the arc in degrees.**Since:** 1.2 **See Also:**[Arc2D.setAngleStart(double)](http://docs.google.com/java/awt/geom/Arc2D.html#setAngleStart(double))

### getAngleExtent

public double **getAngleExtent**()

Returns the angular extent of the arc.

**Specified by:**[getAngleExtent](http://docs.google.com/java/awt/geom/Arc2D.html#getAngleExtent()) in class [Arc2D](http://docs.google.com/java/awt/geom/Arc2D.html) **Returns:**A double value that represents the angular extent of the arc in degrees.**Since:** 1.2 **See Also:**[Arc2D.setAngleExtent(double)](http://docs.google.com/java/awt/geom/Arc2D.html#setAngleExtent(double))

### isEmpty

public boolean **isEmpty**()

Determines whether the RectangularShape is empty. When the RectangularShape is empty, it encloses no area.

**Specified by:**[isEmpty](http://docs.google.com/java/awt/geom/RectangularShape.html#isEmpty()) in class [RectangularShape](http://docs.google.com/java/awt/geom/RectangularShape.html) **Returns:**true if the RectangularShape is empty; false otherwise.**Since:** 1.2

### setArc

public void **setArc**(double x,  
 double y,  
 double w,  
 double h,  
 double angSt,  
 double angExt,  
 int closure)

Sets the location, size, angular extents, and closure type of this arc to the specified double values.

**Specified by:**[setArc](http://docs.google.com/java/awt/geom/Arc2D.html#setArc(double,%20double,%20double,%20double,%20double,%20double,%20int)) in class [Arc2D](http://docs.google.com/java/awt/geom/Arc2D.html) **Parameters:**x - The X coordinate of the upper-left corner of the arc.y - The Y coordinate of the upper-left corner of the arc.w - The overall width of the full ellipse of which this arc is a partial section.h - The overall height of the full ellipse of which this arc is a partial section.angSt - The starting angle of the arc in degrees.angExt - The angular extent of the arc in degrees.closure - The closure type for the arc: [Arc2D.OPEN](http://docs.google.com/java/awt/geom/Arc2D.html#OPEN), [Arc2D.CHORD](http://docs.google.com/java/awt/geom/Arc2D.html#CHORD), or [Arc2D.PIE](http://docs.google.com/java/awt/geom/Arc2D.html#PIE).**Since:** 1.2

### setAngleStart

public void **setAngleStart**(double angSt)

Sets the starting angle of this arc to the specified double value.

**Specified by:**[setAngleStart](http://docs.google.com/java/awt/geom/Arc2D.html#setAngleStart(double)) in class [Arc2D](http://docs.google.com/java/awt/geom/Arc2D.html) **Parameters:**angSt - The starting angle of the arc in degrees.**Since:** 1.2 **See Also:**[Arc2D.getAngleStart()](http://docs.google.com/java/awt/geom/Arc2D.html#getAngleStart())

### setAngleExtent

public void **setAngleExtent**(double angExt)

Sets the angular extent of this arc to the specified double value.

**Specified by:**[setAngleExtent](http://docs.google.com/java/awt/geom/Arc2D.html#setAngleExtent(double)) in class [Arc2D](http://docs.google.com/java/awt/geom/Arc2D.html) **Parameters:**angExt - The angular extent of the arc in degrees.**Since:** 1.2 **See Also:**[Arc2D.getAngleExtent()](http://docs.google.com/java/awt/geom/Arc2D.html#getAngleExtent())

### makeBounds

protected [Rectangle2D](http://docs.google.com/java/awt/geom/Rectangle2D.html) **makeBounds**(double x,  
 double y,  
 double w,  
 double h)

Constructs a Rectangle2D of the appropriate precision to hold the parameters calculated to be the framing rectangle of this arc.

**Specified by:**[makeBounds](http://docs.google.com/java/awt/geom/Arc2D.html#makeBounds(double,%20double,%20double,%20double)) in class [Arc2D](http://docs.google.com/java/awt/geom/Arc2D.html) **Parameters:**x - The X coordinate of the upper-left corner of the framing rectangle.y - The Y coordinate of the upper-left corner of the framing rectangle.w - The width of the framing rectangle.h - The height of the framing rectangle. **Returns:**a Rectangle2D that is the framing rectangle of this arc.**Since:** 1.2

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/Arc2D.Double.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/geom/Arc2D.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/geom/Arc2D.Float.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/geom/Arc2D.Double.html)    [**NO FRAMES**](http://docs.google.com/Arc2D.Double.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: [NESTED](#2et92p0) | [FIELD](#tyjcwt) | [CONSTR](#1t3h5sf) | [METHOD](#4d34og8) | DETAIL: [FIELD](#26in1rg) | [CONSTR](#3j2qqm3) | [METHOD](#3whwml4) |

[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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