| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/RoundRectangle2D.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/RoundRectangle2D.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Float.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/geom/RoundRectangle2D.Double.html)    [**NO FRAMES**](http://docs.google.com/RoundRectangle2D.Double.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: [NESTED](#2et92p0) | [FIELD](#tyjcwt) | [CONSTR](#3dy6vkm) | [METHOD](#1t3h5sf) | DETAIL: [FIELD](#3rdcrjn) | [CONSTR](#z337ya) | [METHOD](#4i7ojhp) |

## **java.awt.geom**

Class RoundRectangle2D.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.RoundRectangle2D](http://docs.google.com/java/awt/geom/RoundRectangle2D.html)  
 **java.awt.geom.RoundRectangle2D.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:**[RoundRectangle2D](http://docs.google.com/java/awt/geom/RoundRectangle2D.html)

public static class **RoundRectangle2D.Double**extends [RoundRectangle2D](http://docs.google.com/java/awt/geom/RoundRectangle2D.html)implements [Serializable](http://docs.google.com/java/io/Serializable.html)

The Double class defines a rectangle with rounded corners all specified in double coordinates.

**Since:** 1.2 **See Also:**[Serialized Form](http://docs.google.com/serialized-form.html#java.awt.geom.RoundRectangle2D.Double)

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

| **Nested classes/interfaces inherited from class java.awt.geom.**[**RoundRectangle2D**](http://docs.google.com/java/awt/geom/RoundRectangle2D.html) |
| --- |
| [RoundRectangle2D.Double](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html), [RoundRectangle2D.Float](http://docs.google.com/java/awt/geom/RoundRectangle2D.Float.html) |

| **Field Summary** | |
| --- | --- |
| double | [**archeight**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html#archeight)            The height of the arc that rounds off the corners. |
| double | [**arcwidth**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html#arcwidth)            The width of the arc that rounds off the corners. |
| double | [**height**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html#height)            The height of this RoundRectangle2D. |
| double | [**width**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html#width)            The width of this RoundRectangle2D. |
| double | [**x**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html#x)            The X coordinate of this RoundRectangle2D. |
| double | [**y**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html#y)            The Y coordinate of this RoundRectangle2D. |

| **Constructor Summary** | |
| --- | --- |
| [**RoundRectangle2D.Double**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html#RoundRectangle2D.Double())()            Constructs a new RoundRectangle2D, initialized to location (0.0, 0), size (0.0, 0.0), and corner arcs of radius 0.0. |
| [**RoundRectangle2D.Double**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html#RoundRectangle2D.Double(double,%20double,%20double,%20double,%20double,%20double))(double x, double y, double w, double h, double arcw, double arch)            Constructs and initializes a RoundRectangle2D from the specified double coordinates. |

| **Method Summary** | |
| --- | --- |
| double | [**getArcHeight**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html#getArcHeight())()            Gets the height of the arc that rounds off the corners. |
| double | [**getArcWidth**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html#getArcWidth())()            Gets the width of the arc that rounds off the corners. |
| [Rectangle2D](http://docs.google.com/java/awt/geom/Rectangle2D.html) | [**getBounds2D**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html#getBounds2D())()            Returns a high precision and more accurate bounding box of the Shape than the getBounds method. |
| double | [**getHeight**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html#getHeight())()            Returns the height of the framing rectangle in double precision. |
| double | [**getWidth**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html#getWidth())()            Returns the width of the framing rectangle in double precision. |
| double | [**getX**](http://docs.google.com/java/awt/geom/RoundRectangle2D.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/RoundRectangle2D.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/RoundRectangle2D.Double.html#isEmpty())()            Determines whether the RectangularShape is empty. |
| void | [**setRoundRect**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html#setRoundRect(double,%20double,%20double,%20double,%20double,%20double))(double x, double y, double w, double h, double arcw, double arch)            Sets the location, size, and corner radii of this RoundRectangle2D to the specified double values. |
| void | [**setRoundRect**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Double.html#setRoundRect(java.awt.geom.RoundRectangle2D))([RoundRectangle2D](http://docs.google.com/java/awt/geom/RoundRectangle2D.html) rr)            Sets this RoundRectangle2D to be the same as the specified RoundRectangle2D. |

| **Methods inherited from class java.awt.geom.**[**RoundRectangle2D**](http://docs.google.com/java/awt/geom/RoundRectangle2D.html) |
| --- |
| [contains](http://docs.google.com/java/awt/geom/RoundRectangle2D.html#contains(double,%20double)), [contains](http://docs.google.com/java/awt/geom/RoundRectangle2D.html#contains(double,%20double,%20double,%20double)), [equals](http://docs.google.com/java/awt/geom/RoundRectangle2D.html#equals(java.lang.Object)), [getPathIterator](http://docs.google.com/java/awt/geom/RoundRectangle2D.html#getPathIterator(java.awt.geom.AffineTransform)), [hashCode](http://docs.google.com/java/awt/geom/RoundRectangle2D.html#hashCode()), [intersects](http://docs.google.com/java/awt/geom/RoundRectangle2D.html#intersects(double,%20double,%20double,%20double)), [setFrame](http://docs.google.com/java/awt/geom/RoundRectangle2D.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)), [contains](http://docs.google.com/java/awt/geom/RectangularShape.html#contains(java.awt.geom.Rectangle2D)), [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 this RoundRectangle2D.

**Since:** 1.2

### y

public double **y**

The Y coordinate of this RoundRectangle2D.

**Since:** 1.2

### width

public double **width**

The width of this RoundRectangle2D.

**Since:** 1.2

### height

public double **height**

The height of this RoundRectangle2D.

**Since:** 1.2

### arcwidth

public double **arcwidth**

The width of the arc that rounds off the corners.

**Since:** 1.2

### archeight

public double **archeight**

The height of the arc that rounds off the corners.

**Since:** 1.2

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

### RoundRectangle2D.Double

public **RoundRectangle2D.Double**()

Constructs a new RoundRectangle2D, initialized to location (0.0, 0), size (0.0, 0.0), and corner arcs of radius 0.0.

**Since:** 1.2

### RoundRectangle2D.Double

public **RoundRectangle2D.Double**(double x,  
 double y,  
 double w,  
 double h,  
 double arcw,  
 double arch)

Constructs and initializes a RoundRectangle2D from the specified double coordinates.

**Parameters:**x - the X coordinate of the newly constructed RoundRectangle2Dy - the Y coordinate of the newly constructed RoundRectangle2Dw - the width to which to set the newly constructed RoundRectangle2Dh - the height to which to set the newly constructed RoundRectangle2Darcw - the width of the arc to use to round off the corners of the newly constructed RoundRectangle2Darch - the height of the arc to use to round off the corners of the newly constructed RoundRectangle2D**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.

**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.

**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.

**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.

**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

### getArcWidth

public double **getArcWidth**()

Gets the width of the arc that rounds off the corners.

**Specified by:**[getArcWidth](http://docs.google.com/java/awt/geom/RoundRectangle2D.html#getArcWidth()) in class [RoundRectangle2D](http://docs.google.com/java/awt/geom/RoundRectangle2D.html) **Returns:**the width of the arc that rounds off the corners of this RoundRectangle2D.**Since:** 1.2

### getArcHeight

public double **getArcHeight**()

Gets the height of the arc that rounds off the corners.

**Specified by:**[getArcHeight](http://docs.google.com/java/awt/geom/RoundRectangle2D.html#getArcHeight()) in class [RoundRectangle2D](http://docs.google.com/java/awt/geom/RoundRectangle2D.html) **Returns:**the height of the arc that rounds off the corners of this RoundRectangle2D.**Since:** 1.2

### 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

### setRoundRect

public void **setRoundRect**(double x,  
 double y,  
 double w,  
 double h,  
 double arcw,  
 double arch)

Sets the location, size, and corner radii of this RoundRectangle2D to the specified double values.

**Specified by:**[setRoundRect](http://docs.google.com/java/awt/geom/RoundRectangle2D.html#setRoundRect(double,%20double,%20double,%20double,%20double,%20double)) in class [RoundRectangle2D](http://docs.google.com/java/awt/geom/RoundRectangle2D.html) **Parameters:**x - the X coordinate to which to set the location of this RoundRectangle2Dy - the Y coordinate to which to set the location of this RoundRectangle2Dw - the width to which to set this RoundRectangle2Dh - the height to which to set this RoundRectangle2Darcw - the width to which to set the arc of this RoundRectangle2Darch - the height to which to set the arc of this RoundRectangle2D**Since:** 1.2

### setRoundRect

public void **setRoundRect**([RoundRectangle2D](http://docs.google.com/java/awt/geom/RoundRectangle2D.html) rr)

Sets this RoundRectangle2D to be the same as the specified RoundRectangle2D.

**Overrides:**[setRoundRect](http://docs.google.com/java/awt/geom/RoundRectangle2D.html#setRoundRect(java.awt.geom.RoundRectangle2D)) in class [RoundRectangle2D](http://docs.google.com/java/awt/geom/RoundRectangle2D.html) **Parameters:**rr - the specified RoundRectangle2D**Since:** 1.2

### getBounds2D

public [Rectangle2D](http://docs.google.com/java/awt/geom/Rectangle2D.html) **getBounds2D**()

Returns a high precision and more accurate bounding box of the Shape than the getBounds method. Note that there is no guarantee that the returned [Rectangle2D](http://docs.google.com/java/awt/geom/Rectangle2D.html) is the smallest bounding box that encloses the Shape, only that the Shape lies entirely within the indicated Rectangle2D. The bounding box returned by this method is usually tighter than that returned by the getBounds method and never fails due to overflow problems since the return value can be an instance of the Rectangle2D that uses double precision values to store the dimensions.

**Specified by:**[getBounds2D](http://docs.google.com/java/awt/Shape.html#getBounds2D()) in interface [Shape](http://docs.google.com/java/awt/Shape.html) **Returns:**an instance of Rectangle2D that is a high-precision bounding box of the Shape.**Since:** 1.2 **See Also:**[Shape.getBounds()](http://docs.google.com/java/awt/Shape.html#getBounds())

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/RoundRectangle2D.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/RoundRectangle2D.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/geom/RoundRectangle2D.Float.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/geom/RoundRectangle2D.Double.html)    [**NO FRAMES**](http://docs.google.com/RoundRectangle2D.Double.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: [NESTED](#2et92p0) | [FIELD](#tyjcwt) | [CONSTR](#3dy6vkm) | [METHOD](#1t3h5sf) | DETAIL: [FIELD](#3rdcrjn) | [CONSTR](#z337ya) | [METHOD](#4i7ojhp) |

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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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