| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/Dimension2D.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/CubicCurve2D.Float.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/geom/Ellipse2D.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/geom/Dimension2D.html)    [**NO FRAMES**](http://docs.google.com/Dimension2D.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

## **java.awt.geom**

Class Dimension2D

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **java.awt.geom.Dimension2D**

**All Implemented Interfaces:** [Cloneable](http://docs.google.com/java/lang/Cloneable.html) **Direct Known Subclasses:** [Dimension](http://docs.google.com/java/awt/Dimension.html)

public abstract class **Dimension2D**extends [Object](http://docs.google.com/java/lang/Object.html)implements [Cloneable](http://docs.google.com/java/lang/Cloneable.html)

The Dimension2D class is to encapsulate a width and a height dimension.

This class is only the abstract superclass for all objects that store a 2D dimension. The actual storage representation of the sizes is left to the subclass.

**Since:** 1.2

| **Constructor Summary** | |
| --- | --- |
| protected | [**Dimension2D**](http://docs.google.com/java/awt/geom/Dimension2D.html#Dimension2D())()            This is an abstract class that cannot be instantiated directly. |

| **Method Summary** | |
| --- | --- |
| [Object](http://docs.google.com/java/lang/Object.html) | [**clone**](http://docs.google.com/java/awt/geom/Dimension2D.html#clone())()            Creates a new object of the same class as this object. |
| abstract  double | [**getHeight**](http://docs.google.com/java/awt/geom/Dimension2D.html#getHeight())()            Returns the height of this Dimension in double precision. |
| abstract  double | [**getWidth**](http://docs.google.com/java/awt/geom/Dimension2D.html#getWidth())()            Returns the width of this Dimension in double precision. |
| void | [**setSize**](http://docs.google.com/java/awt/geom/Dimension2D.html#setSize(java.awt.geom.Dimension2D))([Dimension2D](http://docs.google.com/java/awt/geom/Dimension2D.html) d)            Sets the size of this Dimension2D object to match the specified size. |
| abstract  void | [**setSize**](http://docs.google.com/java/awt/geom/Dimension2D.html#setSize(double,%20double))(double width, double height)            Sets the size of this Dimension object to the specified width and height. |

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

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

### Dimension2D

protected **Dimension2D**()

This is an abstract class that cannot be instantiated directly. Type-specific implementation subclasses are available for instantiation and provide a number of formats for storing the information necessary to satisfy the various accessor methods below.

**Since:** 1.2 **See Also:**[Dimension](http://docs.google.com/java/awt/Dimension.html)

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

### getWidth

public abstract double **getWidth**()

Returns the width of this Dimension in double precision.

**Returns:**the width of this Dimension.**Since:** 1.2

### getHeight

public abstract double **getHeight**()

Returns the height of this Dimension in double precision.

**Returns:**the height of this Dimension.**Since:** 1.2

### setSize

public abstract void **setSize**(double width,  
 double height)

Sets the size of this Dimension object to the specified width and height. This method is included for completeness, to parallel the [getSize](http://docs.google.com/java/awt/Component.html#getSize()) method of [Component](http://docs.google.com/java/awt/Component.html).

**Parameters:**width - the new width for the Dimension objectheight - the new height for the Dimension object**Since:** 1.2

### setSize

public void **setSize**([Dimension2D](http://docs.google.com/java/awt/geom/Dimension2D.html) d)

Sets the size of this Dimension2D object to match the specified size. This method is included for completeness, to parallel the getSize method of Component.

**Parameters:**d - the new size for the Dimension2D object**Since:** 1.2

### clone

public [Object](http://docs.google.com/java/lang/Object.html) **clone**()

Creates a new object of the same class as this object.

**Overrides:**[clone](http://docs.google.com/java/lang/Object.html#clone()) in class [Object](http://docs.google.com/java/lang/Object.html) **Returns:**a clone of this instance. **Throws:** [OutOfMemoryError](http://docs.google.com/java/lang/OutOfMemoryError.html) - if there is not enough memory.**Since:** 1.2 **See Also:**[Cloneable](http://docs.google.com/java/lang/Cloneable.html)

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[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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