| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ImageIcon.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/javax/swing/Icon.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/ImageIcon.AccessibleImageIcon.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/ImageIcon.html)    [**NO FRAMES**](http://docs.google.com/ImageIcon.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: [NESTED](#3znysh7) | [FIELD](#2et92p0) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: [FIELD](#4d34og8) | [CONSTR](#3rdcrjn) | [METHOD](#4i7ojhp) |

## **javax.swing**

Class ImageIcon

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.swing.ImageIcon**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html), [Accessible](http://docs.google.com/javax/accessibility/Accessible.html), [Icon](http://docs.google.com/javax/swing/Icon.html)

public class **ImageIcon**extends [Object](http://docs.google.com/java/lang/Object.html)implements [Icon](http://docs.google.com/javax/swing/Icon.html), [Serializable](http://docs.google.com/java/io/Serializable.html), [Accessible](http://docs.google.com/javax/accessibility/Accessible.html)

An implementation of the Icon interface that paints Icons from Images. Images that are created from a URL, filename or byte array are preloaded using MediaTracker to monitor the loaded state of the image.

For further information and examples of using image icons, see [How to Use Icons](http://java.sun.com/docs/books/tutorial/uiswing/misc/icon.html) in *The Java Tutorial.*

**Warning:** Serialized objects of this class will not be compatible with future Swing releases. The current serialization support is appropriate for short term storage or RMI between applications running the same version of Swing. As of 1.4, support for long term storage of all JavaBeansTM has been added to the java.beans package. Please see [XMLEncoder](http://docs.google.com/java/beans/XMLEncoder.html).

| **Nested Class Summary** | |
| --- | --- |
| protected  class | [**ImageIcon.AccessibleImageIcon**](http://docs.google.com/javax/swing/ImageIcon.AccessibleImageIcon.html)            This class implements accessibility support for the ImageIcon class. |

| **Field Summary** | |
| --- | --- |
| protected static [Component](http://docs.google.com/java/awt/Component.html) | [**component**](http://docs.google.com/javax/swing/ImageIcon.html#component) |
| protected static [MediaTracker](http://docs.google.com/java/awt/MediaTracker.html) | [**tracker**](http://docs.google.com/javax/swing/ImageIcon.html#tracker) |

| **Constructor Summary** | |
| --- | --- |
| [**ImageIcon**](http://docs.google.com/javax/swing/ImageIcon.html#ImageIcon())()            Creates an uninitialized image icon. |
| [**ImageIcon**](http://docs.google.com/javax/swing/ImageIcon.html#ImageIcon(byte%5B%5D))(byte[] imageData)            Creates an ImageIcon from an array of bytes which were read from an image file containing a supported image format, such as GIF, JPEG, or (as of 1.3) PNG. |
| [**ImageIcon**](http://docs.google.com/javax/swing/ImageIcon.html#ImageIcon(byte%5B%5D,%20java.lang.String))(byte[] imageData, [String](http://docs.google.com/java/lang/String.html) description)            Creates an ImageIcon from an array of bytes which were read from an image file containing a supported image format, such as GIF, JPEG, or (as of 1.3) PNG. |
| [**ImageIcon**](http://docs.google.com/javax/swing/ImageIcon.html#ImageIcon(java.awt.Image))([Image](http://docs.google.com/java/awt/Image.html) image)            Creates an ImageIcon from an image object. |
| [**ImageIcon**](http://docs.google.com/javax/swing/ImageIcon.html#ImageIcon(java.awt.Image,%20java.lang.String))([Image](http://docs.google.com/java/awt/Image.html) image, [String](http://docs.google.com/java/lang/String.html) description)            Creates an ImageIcon from the image. |
| [**ImageIcon**](http://docs.google.com/javax/swing/ImageIcon.html#ImageIcon(java.lang.String))([String](http://docs.google.com/java/lang/String.html) filename)            Creates an ImageIcon from the specified file. |
| [**ImageIcon**](http://docs.google.com/javax/swing/ImageIcon.html#ImageIcon(java.lang.String,%20java.lang.String))([String](http://docs.google.com/java/lang/String.html) filename, [String](http://docs.google.com/java/lang/String.html) description)            Creates an ImageIcon from the specified file. |
| [**ImageIcon**](http://docs.google.com/javax/swing/ImageIcon.html#ImageIcon(java.net.URL))([URL](http://docs.google.com/java/net/URL.html) location)            Creates an ImageIcon from the specified URL. |
| [**ImageIcon**](http://docs.google.com/javax/swing/ImageIcon.html#ImageIcon(java.net.URL,%20java.lang.String))([URL](http://docs.google.com/java/net/URL.html) location, [String](http://docs.google.com/java/lang/String.html) description)            Creates an ImageIcon from the specified URL. |

| **Method Summary** | |
| --- | --- |
| [AccessibleContext](http://docs.google.com/javax/accessibility/AccessibleContext.html) | [**getAccessibleContext**](http://docs.google.com/javax/swing/ImageIcon.html#getAccessibleContext())()            Gets the AccessibleContext associated with this ImageIcon. |
| [String](http://docs.google.com/java/lang/String.html) | [**getDescription**](http://docs.google.com/javax/swing/ImageIcon.html#getDescription())()            Gets the description of the image. |
| int | [**getIconHeight**](http://docs.google.com/javax/swing/ImageIcon.html#getIconHeight())()            Gets the height of the icon. |
| int | [**getIconWidth**](http://docs.google.com/javax/swing/ImageIcon.html#getIconWidth())()            Gets the width of the icon. |
| [Image](http://docs.google.com/java/awt/Image.html) | [**getImage**](http://docs.google.com/javax/swing/ImageIcon.html#getImage())()            Returns this icon's Image. |
| int | [**getImageLoadStatus**](http://docs.google.com/javax/swing/ImageIcon.html#getImageLoadStatus())()            Returns the status of the image loading operation. |
| [ImageObserver](http://docs.google.com/java/awt/image/ImageObserver.html) | [**getImageObserver**](http://docs.google.com/javax/swing/ImageIcon.html#getImageObserver())()            Returns the image observer for the image. |
| protected  void | [**loadImage**](http://docs.google.com/javax/swing/ImageIcon.html#loadImage(java.awt.Image))([Image](http://docs.google.com/java/awt/Image.html) image)            Loads the image, returning only when the image is loaded. |
| void | [**paintIcon**](http://docs.google.com/javax/swing/ImageIcon.html#paintIcon(java.awt.Component,%20java.awt.Graphics,%20int,%20int))([Component](http://docs.google.com/java/awt/Component.html) c, [Graphics](http://docs.google.com/java/awt/Graphics.html) g, int x, int y)            Paints the icon. |
| void | [**setDescription**](http://docs.google.com/javax/swing/ImageIcon.html#setDescription(java.lang.String))([String](http://docs.google.com/java/lang/String.html) description)            Sets the description of the image. |
| void | [**setImage**](http://docs.google.com/javax/swing/ImageIcon.html#setImage(java.awt.Image))([Image](http://docs.google.com/java/awt/Image.html) image)            Sets the image displayed by this icon. |
| void | [**setImageObserver**](http://docs.google.com/javax/swing/ImageIcon.html#setImageObserver(java.awt.image.ImageObserver))([ImageObserver](http://docs.google.com/java/awt/image/ImageObserver.html) observer)            Sets the image observer for the image. |
| [String](http://docs.google.com/java/lang/String.html) | [**toString**](http://docs.google.com/javax/swing/ImageIcon.html#toString())()            Returns a string representation of this image. |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [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()), [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** |
| --- |

### component

protected static final [Component](http://docs.google.com/java/awt/Component.html) **component**

### tracker

protected static final [MediaTracker](http://docs.google.com/java/awt/MediaTracker.html) **tracker**

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

### ImageIcon

public **ImageIcon**([String](http://docs.google.com/java/lang/String.html) filename,  
 [String](http://docs.google.com/java/lang/String.html) description)

Creates an ImageIcon from the specified file. The image will be preloaded by using MediaTracker to monitor the loading state of the image.

**Parameters:**filename - the name of the file containing the imagedescription - a brief textual description of the image**See Also:**[ImageIcon(String)](http://docs.google.com/javax/swing/ImageIcon.html#ImageIcon(java.lang.String))

### ImageIcon

public **ImageIcon**([String](http://docs.google.com/java/lang/String.html) filename)

Creates an ImageIcon from the specified file. The image will be preloaded by using MediaTracker to monitor the loading state of the image. The specified String can be a file name or a file path. When specifying a path, use the Internet-standard forward-slash ("/") as a separator. (The string is converted to an URL, so the forward-slash works on all systems.) For example, specify:

new ImageIcon("images/myImage.gif")

The description is initialized to the filename string.

**Parameters:**filename - a String specifying a filename or path**See Also:**[getDescription()](http://docs.google.com/javax/swing/ImageIcon.html#getDescription())

### ImageIcon

public **ImageIcon**([URL](http://docs.google.com/java/net/URL.html) location,  
 [String](http://docs.google.com/java/lang/String.html) description)

Creates an ImageIcon from the specified URL. The image will be preloaded by using MediaTracker to monitor the loaded state of the image.

**Parameters:**location - the URL for the imagedescription - a brief textual description of the image**See Also:**[ImageIcon(String)](http://docs.google.com/javax/swing/ImageIcon.html#ImageIcon(java.lang.String))

### ImageIcon

public **ImageIcon**([URL](http://docs.google.com/java/net/URL.html) location)

Creates an ImageIcon from the specified URL. The image will be preloaded by using MediaTracker to monitor the loaded state of the image. The icon's description is initialized to be a string representation of the URL.

**Parameters:**location - the URL for the image**See Also:**[getDescription()](http://docs.google.com/javax/swing/ImageIcon.html#getDescription())

### ImageIcon

public **ImageIcon**([Image](http://docs.google.com/java/awt/Image.html) image,  
 [String](http://docs.google.com/java/lang/String.html) description)

Creates an ImageIcon from the image.

**Parameters:**image - the imagedescription - a brief textual description of the image

### ImageIcon

public **ImageIcon**([Image](http://docs.google.com/java/awt/Image.html) image)

Creates an ImageIcon from an image object. If the image has a "comment" property that is a string, then the string is used as the description of this icon.

**Parameters:**image - the image**See Also:**[getDescription()](http://docs.google.com/javax/swing/ImageIcon.html#getDescription()), [Image.getProperty(java.lang.String, java.awt.image.ImageObserver)](http://docs.google.com/java/awt/Image.html#getProperty(java.lang.String,%20java.awt.image.ImageObserver))

### ImageIcon

public **ImageIcon**(byte[] imageData,  
 [String](http://docs.google.com/java/lang/String.html) description)

Creates an ImageIcon from an array of bytes which were read from an image file containing a supported image format, such as GIF, JPEG, or (as of 1.3) PNG. Normally this array is created by reading an image using Class.getResourceAsStream(), but the byte array may also be statically stored in a class.

**Parameters:**imageData - an array of pixels in an image format supported by the AWT Toolkit, such as GIF, JPEG, or (as of 1.3) PNGdescription - a brief textual description of the image**See Also:**[Toolkit.createImage(java.lang.String)](http://docs.google.com/java/awt/Toolkit.html#createImage(java.lang.String))

### ImageIcon

public **ImageIcon**(byte[] imageData)

Creates an ImageIcon from an array of bytes which were read from an image file containing a supported image format, such as GIF, JPEG, or (as of 1.3) PNG. Normally this array is created by reading an image using Class.getResourceAsStream(), but the byte array may also be statically stored in a class. If the resulting image has a "comment" property that is a string, then the string is used as the description of this icon.

**Parameters:**imageData - an array of pixels in an image format supported by the AWT Toolkit, such as GIF, JPEG, or (as of 1.3) PNG**See Also:**[Toolkit.createImage(java.lang.String)](http://docs.google.com/java/awt/Toolkit.html#createImage(java.lang.String)), [getDescription()](http://docs.google.com/javax/swing/ImageIcon.html#getDescription()), [Image.getProperty(java.lang.String, java.awt.image.ImageObserver)](http://docs.google.com/java/awt/Image.html#getProperty(java.lang.String,%20java.awt.image.ImageObserver))

### ImageIcon

public **ImageIcon**()

Creates an uninitialized image icon.

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

### loadImage

protected void **loadImage**([Image](http://docs.google.com/java/awt/Image.html) image)

Loads the image, returning only when the image is loaded.

**Parameters:**image - the image

### getImageLoadStatus

public int **getImageLoadStatus**()

Returns the status of the image loading operation.

**Returns:**the loading status as defined by java.awt.MediaTracker**See Also:**[MediaTracker.ABORTED](http://docs.google.com/java/awt/MediaTracker.html#ABORTED), [MediaTracker.ERRORED](http://docs.google.com/java/awt/MediaTracker.html#ERRORED), [MediaTracker.COMPLETE](http://docs.google.com/java/awt/MediaTracker.html#COMPLETE)

### getImage

public [Image](http://docs.google.com/java/awt/Image.html) **getImage**()

Returns this icon's Image.

**Returns:**the Image object for this ImageIcon

### setImage

public void **setImage**([Image](http://docs.google.com/java/awt/Image.html) image)

Sets the image displayed by this icon.

**Parameters:**image - the image

### getDescription

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

Gets the description of the image. This is meant to be a brief textual description of the object. For example, it might be presented to a blind user to give an indication of the purpose of the image. The description may be null.

**Returns:**a brief textual description of the image

### setDescription

public void **setDescription**([String](http://docs.google.com/java/lang/String.html) description)

Sets the description of the image. This is meant to be a brief textual description of the object. For example, it might be presented to a blind user to give an indication of the purpose of the image.

**Parameters:**description - a brief textual description of the image

### paintIcon

public void **paintIcon**([Component](http://docs.google.com/java/awt/Component.html) c,  
 [Graphics](http://docs.google.com/java/awt/Graphics.html) g,  
 int x,  
 int y)

Paints the icon. The top-left corner of the icon is drawn at the point (x, y) in the coordinate space of the graphics context g. If this icon has no image observer, this method uses the c component as the observer.

**Specified by:**[paintIcon](http://docs.google.com/javax/swing/Icon.html#paintIcon(java.awt.Component,%20java.awt.Graphics,%20int,%20int)) in interface [Icon](http://docs.google.com/javax/swing/Icon.html) **Parameters:**c - the component to be used as the observer if this icon has no image observerg - the graphics contextx - the X coordinate of the icon's top-left cornery - the Y coordinate of the icon's top-left corner

### getIconWidth

public int **getIconWidth**()

Gets the width of the icon.

**Specified by:**[getIconWidth](http://docs.google.com/javax/swing/Icon.html#getIconWidth()) in interface [Icon](http://docs.google.com/javax/swing/Icon.html) **Returns:**the width in pixels of this icon

### getIconHeight

public int **getIconHeight**()

Gets the height of the icon.

**Specified by:**[getIconHeight](http://docs.google.com/javax/swing/Icon.html#getIconHeight()) in interface [Icon](http://docs.google.com/javax/swing/Icon.html) **Returns:**the height in pixels of this icon

### setImageObserver

public void **setImageObserver**([ImageObserver](http://docs.google.com/java/awt/image/ImageObserver.html) observer)

Sets the image observer for the image. Set this property if the ImageIcon contains an animated GIF, so the observer is notified to update its display. For example:

icon = new ImageIcon(...)  
 button.setIcon(icon);  
 icon.setImageObserver(button);

**Parameters:**observer - the image observer

### getImageObserver

public [ImageObserver](http://docs.google.com/java/awt/image/ImageObserver.html) **getImageObserver**()

Returns the image observer for the image.

**Returns:**the image observer, which may be null

### toString

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

Returns a string representation of this image.

**Overrides:**[toString](http://docs.google.com/java/lang/Object.html#toString()) in class [Object](http://docs.google.com/java/lang/Object.html) **Returns:**a string representing this image

### getAccessibleContext

public [AccessibleContext](http://docs.google.com/javax/accessibility/AccessibleContext.html) **getAccessibleContext**()

Gets the AccessibleContext associated with this ImageIcon. For image icons, the AccessibleContext takes the form of an AccessibleImageIcon. A new AccessibleImageIcon instance is created if necessary.

**Specified by:**[getAccessibleContext](http://docs.google.com/javax/accessibility/Accessible.html#getAccessibleContext()) in interface [Accessible](http://docs.google.com/javax/accessibility/Accessible.html) **Returns:**an AccessibleImageIcon that serves as the AccessibleContext of this ImageIcon**Since:** 1.3

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ImageIcon.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/javax/swing/Icon.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/ImageIcon.AccessibleImageIcon.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/ImageIcon.html)    [**NO FRAMES**](http://docs.google.com/ImageIcon.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: [NESTED](#3znysh7) | [FIELD](#2et92p0) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: [FIELD](#4d34og8) | [CONSTR](#3rdcrjn) | [METHOD](#4i7ojhp) |

[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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