

# SWING - IMAGEICON CLASS

[http://www.tutorialspoint.com/swing/swing\\_imageicon.htm](http://www.tutorialspoint.com/swing/swing_imageicon.htm)

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## Introduction

The class **ImageIcon** is an implementation of the **Icon** interface that paints Icons from Images.

## Class declaration

Following is the declaration for **javax.swing.ImageIcon** class –

```
public class ImageIcon
    extends Object
    implements Icon, Serializable, Accessible
```

## Field

Following are the fields for **javax.swing.ImageIcon** class –

- **protected static Component component**
- **protected static MediaTracker tracker**

## Class constructors

| S.N. | Constructor & Description                                                                                                                                                                                                             |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | <b><code>ImageIcon</code></b><br>Creates an uninitialized image icon.                                                                                                                                                                 |
| 2    | <b><code>ImageIcon(byte[] imageData)</code></b><br>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 <i>asof</i> 1.3 PNG.                     |
| 3    | <b><code>ImageIcon(byte[] imageData, String description)</code></b><br>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 <i>asof</i> 1.3 PNG. |
| 4    | <b><code>ImageIcon(Image image)</code></b><br>Creates an ImageIcon from an image object.                                                                                                                                              |
| 5    | <b><code>ImageIcon(Image image, String description)</code></b><br>Creates an ImageIcon from the image.                                                                                                                                |
| 6    | <b><code>ImageIcon(String filename)</code></b><br>Creates an ImageIcon from the specified file.                                                                                                                                       |
| 7    | <b><code>ImageIcon(String filename, String description)</code></b><br>Creates an ImageIcon from the specified file.                                                                                                                   |

- 8     **ImageIconURLlocation**  
Creates an ImageIcon from the specified URL.
- 9     **ImageIconURLlocation, Stringdescription**  
Creates an ImageIcon from the specified URL.

## Class methods

| S.N. | Method & Description                                                                                        |
|------|-------------------------------------------------------------------------------------------------------------|
| 1    | <b>AccessibleContext getAccessibleContext</b><br>Gets the AccessibleContext associated with this ImageIcon. |
| 2    | <b>String getDescription</b><br>Gets the description of the image.                                          |
| 3    | <b>int getIconHeight</b><br>Gets the height of the icon.                                                    |
| 4    | <b>int getIconWidth</b><br>Gets the width of the icon.                                                      |
| 5    | <b>Image getImage</b><br>Returns this icon's Image.                                                         |
| 6    | <b>int getImageLoadStatus</b><br>Returns the status of the image loading operation.                         |
| 7    | <b>ImageObserver getImageObserver</b><br>Returns the image observer for the image.                          |
| 8    | <b>protected void loadImageImageimage</b><br>Loads the image, returning only when the image is loaded.      |
| 9    | <b>void paintIconComponentc, Graphicsg, intx, inty</b><br>Paints the icon.                                  |
| 10   | <b>void setDescriptionStringdescription</b><br>Sets the description of the image.                           |
| 11   | <b>void setImageImageimage</b><br>Sets the image displayed by this icon.                                    |

12     **void setImageObserverImageObserverobserver**

Sets the image observer for the image.

13     **String toString**

Returns a string representation of this image.

## Methods inherited

This class inherits methods from the following classes:

- java.lang.Object

## ImageIcon Example

Create the following java program using any editor of your choice in say **D:/ > SWING > com > tutorialspoint > gui >**

*SwingControlDemo.java*

```
package com.tutorialspoint.gui;

import java.awt.*;
import java.awt.event.*;
import javax.swing.*;

public class SwingControlDemo {

    private JFrame mainFrame;
    private JLabel headerLabel;
    private JLabel statusLabel;
    private JPanel controlPanel;

    public SwingControlDemo(){
        prepareGUI();
    }

    public static void main(String[] args){
        SwingControlDemo swingControlDemo = new SwingControlDemo();
        swingControlDemo.showImageIconDemo();
    }

    private void prepareGUI(){
        mainFrame = new JFrame("Java Swing Examples");
        mainFrame.setSize(400,400);
        mainFrame.setLayout(new GridLayout(3, 1));
        mainFrame.addWindowListener(new WindowAdapter() {
            public void windowClosing(WindowEvent windowEvent){
                System.exit(0);
            }
        });
        headerLabel = new JLabel("", JLabel.CENTER);
        statusLabel = new JLabel("",JLabel.CENTER);

        statusLabel.setSize(350,100);

        controlPanel = new JPanel();
        controlPanel.setLayout(new FlowLayout());

        mainFrame.add(headerLabel);
        mainFrame.add(controlPanel);
        mainFrame.add(statusLabel);
        mainFrame.setVisible(true);
    }
}
```

```
// Returns an ImageIcon, or null if the path was invalid.
private static ImageIcon createImageIcon(String path,
    String description) {
    java.net.URL imgURL = SwingControlDemo.class.getResource(path);
    if (imgURL != null) {
        return new ImageIcon(imgURL, description);
    } else {
        System.err.println("Couldn't find file: " + path);
        return null;
    }
}

private void showImageIconDemo(){
    headerLabel.setText("Control in action: ImageIcon");

    ImageIcon icon = createImageIcon("/resources/java_icon.png", "Java");

    JLabel commentlabel = new JLabel("", icon, JLabel.CENTER);

    controlPanel.add(commentlabel);

    mainFrame.setVisible(true);
}
}
```

Compile the program using command prompt. Go to **D:/ > SWING** and type the following command.

```
D:\SWING>javac com\tutorialspoint\gui\SwingControlDemo.java
```

If no error comes that means compilation is successful. Run the program using following command.

```
D:\SWING>java com.tutorialspoint.gui.SwingControlDemo
```

Verify the following output

