| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ImageConsumer.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/image/FilteredImageSource.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/image/ImageFilter.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/image/ImageConsumer.html)    [**NO FRAMES**](http://docs.google.com/ImageConsumer.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | CONSTR | [METHOD](#2et92p0) | DETAIL: [FIELD](#tyjcwt) | CONSTR | [METHOD](#1ksv4uv) |

## **java.awt.image**

Interface ImageConsumer

**All Known Implementing Classes:** [AreaAveragingScaleFilter](http://docs.google.com/java/awt/image/AreaAveragingScaleFilter.html), [BufferedImageFilter](http://docs.google.com/java/awt/image/BufferedImageFilter.html), [CropImageFilter](http://docs.google.com/java/awt/image/CropImageFilter.html), [GrayFilter](http://docs.google.com/javax/swing/GrayFilter.html), [ImageFilter](http://docs.google.com/java/awt/image/ImageFilter.html), [PixelGrabber](http://docs.google.com/java/awt/image/PixelGrabber.html), [ReplicateScaleFilter](http://docs.google.com/java/awt/image/ReplicateScaleFilter.html), [RGBImageFilter](http://docs.google.com/java/awt/image/RGBImageFilter.html)

public interface **ImageConsumer**

The interface for objects expressing interest in image data through the ImageProducer interfaces. When a consumer is added to an image producer, the producer delivers all of the data about the image using the method calls defined in this interface.

**See Also:**[ImageProducer](http://docs.google.com/java/awt/image/ImageProducer.html)

| **Field Summary** | |
| --- | --- |
| static int | [**COMPLETESCANLINES**](http://docs.google.com/java/awt/image/ImageConsumer.html#COMPLETESCANLINES)            The pixels will be delivered in (multiples of) complete scanlines at a time. |
| static int | [**IMAGEABORTED**](http://docs.google.com/java/awt/image/ImageConsumer.html#IMAGEABORTED)            The image creation process was deliberately aborted. |
| static int | [**IMAGEERROR**](http://docs.google.com/java/awt/image/ImageConsumer.html#IMAGEERROR)            An error was encountered while producing the image. |
| static int | [**RANDOMPIXELORDER**](http://docs.google.com/java/awt/image/ImageConsumer.html#RANDOMPIXELORDER)            The pixels will be delivered in a random order. |
| static int | [**SINGLEFRAME**](http://docs.google.com/java/awt/image/ImageConsumer.html#SINGLEFRAME)            The image contain a single static image. |
| static int | [**SINGLEFRAMEDONE**](http://docs.google.com/java/awt/image/ImageConsumer.html#SINGLEFRAMEDONE)            One frame of the image is complete but there are more frames to be delivered. |
| static int | [**SINGLEPASS**](http://docs.google.com/java/awt/image/ImageConsumer.html#SINGLEPASS)            The pixels will be delivered in a single pass. |
| static int | [**STATICIMAGEDONE**](http://docs.google.com/java/awt/image/ImageConsumer.html#STATICIMAGEDONE)            The image is complete and there are no more pixels or frames to be delivered. |
| static int | [**TOPDOWNLEFTRIGHT**](http://docs.google.com/java/awt/image/ImageConsumer.html#TOPDOWNLEFTRIGHT)            The pixels will be delivered in top-down, left-to-right order. |

| **Method Summary** | |
| --- | --- |
| void | [**imageComplete**](http://docs.google.com/java/awt/image/ImageConsumer.html#imageComplete(int))(int status)            The imageComplete method is called when the ImageProducer is finished delivering all of the pixels that the source image contains, or when a single frame of a multi-frame animation has been completed, or when an error in loading or producing the image has occured. |
| void | [**setColorModel**](http://docs.google.com/java/awt/image/ImageConsumer.html#setColorModel(java.awt.image.ColorModel))([ColorModel](http://docs.google.com/java/awt/image/ColorModel.html) model)            Sets the ColorModel object used for the majority of the pixels reported using the setPixels method calls. |
| void | [**setDimensions**](http://docs.google.com/java/awt/image/ImageConsumer.html#setDimensions(int,%20int))(int width, int height)            The dimensions of the source image are reported using the setDimensions method call. |
| void | [**setHints**](http://docs.google.com/java/awt/image/ImageConsumer.html#setHints(int))(int hintflags)            Sets the hints that the ImageConsumer uses to process the pixels delivered by the ImageProducer. |
| void | [**setPixels**](http://docs.google.com/java/awt/image/ImageConsumer.html#setPixels(int,%20int,%20int,%20int,%20java.awt.image.ColorModel,%20byte%5B%5D,%20int,%20int))(int x, int y, int w, int h, [ColorModel](http://docs.google.com/java/awt/image/ColorModel.html) model, byte[] pixels, int off, int scansize)            Delivers the pixels of the image with one or more calls to this method. |
| void | [**setPixels**](http://docs.google.com/java/awt/image/ImageConsumer.html#setPixels(int,%20int,%20int,%20int,%20java.awt.image.ColorModel,%20int%5B%5D,%20int,%20int))(int x, int y, int w, int h, [ColorModel](http://docs.google.com/java/awt/image/ColorModel.html) model, int[] pixels, int off, int scansize)            The pixels of the image are delivered using one or more calls to the setPixels method. |
| void | [**setProperties**](http://docs.google.com/java/awt/image/ImageConsumer.html#setProperties(java.util.Hashtable))([Hashtable](http://docs.google.com/java/util/Hashtable.html)<?,?> props)            Sets the extensible list of properties associated with this image. |

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

### RANDOMPIXELORDER

static final int **RANDOMPIXELORDER**

The pixels will be delivered in a random order. This tells the ImageConsumer not to use any optimizations that depend on the order of pixel delivery, which should be the default assumption in the absence of any call to the setHints method.

**See Also:**[setHints(int)](http://docs.google.com/java/awt/image/ImageConsumer.html#setHints(int)), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.image.ImageConsumer.RANDOMPIXELORDER)

### TOPDOWNLEFTRIGHT

static final int **TOPDOWNLEFTRIGHT**

The pixels will be delivered in top-down, left-to-right order.

**See Also:**[setHints(int)](http://docs.google.com/java/awt/image/ImageConsumer.html#setHints(int)), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.image.ImageConsumer.TOPDOWNLEFTRIGHT)

### COMPLETESCANLINES

static final int **COMPLETESCANLINES**

The pixels will be delivered in (multiples of) complete scanlines at a time.

**See Also:**[setHints(int)](http://docs.google.com/java/awt/image/ImageConsumer.html#setHints(int)), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.image.ImageConsumer.COMPLETESCANLINES)

### SINGLEPASS

static final int **SINGLEPASS**

The pixels will be delivered in a single pass. Each pixel will appear in only one call to any of the setPixels methods. An example of an image format which does not meet this criterion is a progressive JPEG image which defines pixels in multiple passes, each more refined than the previous.

**See Also:**[setHints(int)](http://docs.google.com/java/awt/image/ImageConsumer.html#setHints(int)), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.image.ImageConsumer.SINGLEPASS)

### SINGLEFRAME

static final int **SINGLEFRAME**

The image contain a single static image. The pixels will be defined in calls to the setPixels methods and then the imageComplete method will be called with the STATICIMAGEDONE flag after which no more image data will be delivered. An example of an image type which would not meet these criteria would be the output of a video feed, or the representation of a 3D rendering being manipulated by the user. The end of each frame in those types of images will be indicated by calling imageComplete with the SINGLEFRAMEDONE flag.

**See Also:**[setHints(int)](http://docs.google.com/java/awt/image/ImageConsumer.html#setHints(int)), [imageComplete(int)](http://docs.google.com/java/awt/image/ImageConsumer.html#imageComplete(int)), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.image.ImageConsumer.SINGLEFRAME)

### IMAGEERROR

static final int **IMAGEERROR**

An error was encountered while producing the image.

**See Also:**[imageComplete(int)](http://docs.google.com/java/awt/image/ImageConsumer.html#imageComplete(int)), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.image.ImageConsumer.IMAGEERROR)

### SINGLEFRAMEDONE

static final int **SINGLEFRAMEDONE**

One frame of the image is complete but there are more frames to be delivered.

**See Also:**[imageComplete(int)](http://docs.google.com/java/awt/image/ImageConsumer.html#imageComplete(int)), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.image.ImageConsumer.SINGLEFRAMEDONE)

### STATICIMAGEDONE

static final int **STATICIMAGEDONE**

The image is complete and there are no more pixels or frames to be delivered.

**See Also:**[imageComplete(int)](http://docs.google.com/java/awt/image/ImageConsumer.html#imageComplete(int)), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.image.ImageConsumer.STATICIMAGEDONE)

### IMAGEABORTED

static final int **IMAGEABORTED**

The image creation process was deliberately aborted.

**See Also:**[imageComplete(int)](http://docs.google.com/java/awt/image/ImageConsumer.html#imageComplete(int)), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.image.ImageConsumer.IMAGEABORTED)

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

### setDimensions

void **setDimensions**(int width,  
 int height)

The dimensions of the source image are reported using the setDimensions method call.

**Parameters:**width - the width of the source imageheight - the height of the source image

### setProperties

void **setProperties**([Hashtable](http://docs.google.com/java/util/Hashtable.html)<?,?> props)

Sets the extensible list of properties associated with this image.

**Parameters:**props - the list of properties to be associated with this image

### setColorModel

void **setColorModel**([ColorModel](http://docs.google.com/java/awt/image/ColorModel.html) model)

Sets the ColorModel object used for the majority of the pixels reported using the setPixels method calls. Note that each set of pixels delivered using setPixels contains its own ColorModel object, so no assumption should be made that this model will be the only one used in delivering pixel values. A notable case where multiple ColorModel objects may be seen is a filtered image when for each set of pixels that it filters, the filter determines whether the pixels can be sent on untouched, using the original ColorModel, or whether the pixels should be modified (filtered) and passed on using a ColorModel more convenient for the filtering process.

**Parameters:**model - the specified ColorModel**See Also:**[ColorModel](http://docs.google.com/java/awt/image/ColorModel.html)

### setHints

void **setHints**(int hintflags)

Sets the hints that the ImageConsumer uses to process the pixels delivered by the ImageProducer. The ImageProducer can deliver the pixels in any order, but the ImageConsumer may be able to scale or convert the pixels to the destination ColorModel more efficiently or with higher quality if it knows some information about how the pixels will be delivered up front. The setHints method should be called before any calls to any of the setPixels methods with a bit mask of hints about the manner in which the pixels will be delivered. If the ImageProducer does not follow the guidelines for the indicated hint, the results are undefined.

**Parameters:**hintflags - a set of hints that the ImageConsumer uses to process the pixels

### setPixels

void **setPixels**(int x,  
 int y,  
 int w,  
 int h,  
 [ColorModel](http://docs.google.com/java/awt/image/ColorModel.html) model,  
 byte[] pixels,  
 int off,  
 int scansize)

Delivers the pixels of the image with one or more calls to this method. Each call specifies the location and size of the rectangle of source pixels that are contained in the array of pixels. The specified ColorModel object should be used to convert the pixels into their corresponding color and alpha components. Pixel (m,n) is stored in the pixels array at index (n \* scansize + m + off). The pixels delivered using this method are all stored as bytes.

**Parameters:**x - the X coordinate of the upper-left corner of the area of pixels to be sety - the Y coordinate of the upper-left corner of the area of pixels to be setw - the width of the area of pixelsh - the height of the area of pixelsmodel - the specified ColorModelpixels - the array of pixelsoff - the offset into the pixels arrayscansize - the distance from one row of pixels to the next in the pixels array**See Also:**[ColorModel](http://docs.google.com/java/awt/image/ColorModel.html)

### setPixels

void **setPixels**(int x,  
 int y,  
 int w,  
 int h,  
 [ColorModel](http://docs.google.com/java/awt/image/ColorModel.html) model,  
 int[] pixels,  
 int off,  
 int scansize)

The pixels of the image are delivered using one or more calls to the setPixels method. Each call specifies the location and size of the rectangle of source pixels that are contained in the array of pixels. The specified ColorModel object should be used to convert the pixels into their corresponding color and alpha components. Pixel (m,n) is stored in the pixels array at index (n \* scansize + m + off). The pixels delivered using this method are all stored as ints. this method are all stored as ints.

**Parameters:**x - the X coordinate of the upper-left corner of the area of pixels to be sety - the Y coordinate of the upper-left corner of the area of pixels to be setw - the width of the area of pixelsh - the height of the area of pixelsmodel - the specified ColorModelpixels - the array of pixelsoff - the offset into the pixels arrayscansize - the distance from one row of pixels to the next in the pixels array**See Also:**[ColorModel](http://docs.google.com/java/awt/image/ColorModel.html)

### imageComplete

void **imageComplete**(int status)

The imageComplete method is called when the ImageProducer is finished delivering all of the pixels that the source image contains, or when a single frame of a multi-frame animation has been completed, or when an error in loading or producing the image has occured. The ImageConsumer should remove itself from the list of consumers registered with the ImageProducer at this time, unless it is interested in successive frames.

**Parameters:**status - the status of image loading**See Also:**[ImageProducer.removeConsumer(java.awt.image.ImageConsumer)](http://docs.google.com/java/awt/image/ImageProducer.html#removeConsumer(java.awt.image.ImageConsumer))

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ImageConsumer.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/image/FilteredImageSource.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/image/ImageFilter.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/image/ImageConsumer.html)    [**NO FRAMES**](http://docs.google.com/ImageConsumer.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.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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