| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/BufferedImageFilter.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/BufferedImage.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/image/BufferedImageOp.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/image/BufferedImageFilter.html)    [**NO FRAMES**](http://docs.google.com/BufferedImageFilter.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#3dy6vkm) | [METHOD](#1t3h5sf) | DETAIL: FIELD | [CONSTR](#17dp8vu) | [METHOD](#26in1rg) |

## **java.awt.image**

Class BufferedImageFilter

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [java.awt.image.ImageFilter](http://docs.google.com/java/awt/image/ImageFilter.html)  
 **java.awt.image.BufferedImageFilter**

**All Implemented Interfaces:** [ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html), [Cloneable](http://docs.google.com/java/lang/Cloneable.html)

public class **BufferedImageFilter**extends [ImageFilter](http://docs.google.com/java/awt/image/ImageFilter.html)implements [Cloneable](http://docs.google.com/java/lang/Cloneable.html)

The BufferedImageFilter class subclasses an ImageFilter to provide a simple means of using a single-source/single-destination image operator ([BufferedImageOp](http://docs.google.com/java/awt/image/BufferedImageOp.html)) to filter a BufferedImage in the Image Producer/Consumer/Observer paradigm. Examples of these image operators are: [ConvolveOp](http://docs.google.com/java/awt/image/ConvolveOp.html), [AffineTransformOp](http://docs.google.com/java/awt/image/AffineTransformOp.html) and [LookupOp](http://docs.google.com/java/awt/image/LookupOp.html).

**See Also:**[ImageFilter](http://docs.google.com/java/awt/image/ImageFilter.html), [BufferedImage](http://docs.google.com/java/awt/image/BufferedImage.html), [BufferedImageOp](http://docs.google.com/java/awt/image/BufferedImageOp.html)

| **Field Summary** | |
| --- | --- |

| **Fields inherited from class java.awt.image.**[**ImageFilter**](http://docs.google.com/java/awt/image/ImageFilter.html) |
| --- |
| [consumer](http://docs.google.com/java/awt/image/ImageFilter.html#consumer) |

| **Fields inherited from interface java.awt.image.**[**ImageConsumer**](http://docs.google.com/java/awt/image/ImageConsumer.html) |
| --- |
| [COMPLETESCANLINES](http://docs.google.com/java/awt/image/ImageConsumer.html#COMPLETESCANLINES), [IMAGEABORTED](http://docs.google.com/java/awt/image/ImageConsumer.html#IMAGEABORTED), [IMAGEERROR](http://docs.google.com/java/awt/image/ImageConsumer.html#IMAGEERROR), [RANDOMPIXELORDER](http://docs.google.com/java/awt/image/ImageConsumer.html#RANDOMPIXELORDER), [SINGLEFRAME](http://docs.google.com/java/awt/image/ImageConsumer.html#SINGLEFRAME), [SINGLEFRAMEDONE](http://docs.google.com/java/awt/image/ImageConsumer.html#SINGLEFRAMEDONE), [SINGLEPASS](http://docs.google.com/java/awt/image/ImageConsumer.html#SINGLEPASS), [STATICIMAGEDONE](http://docs.google.com/java/awt/image/ImageConsumer.html#STATICIMAGEDONE), [TOPDOWNLEFTRIGHT](http://docs.google.com/java/awt/image/ImageConsumer.html#TOPDOWNLEFTRIGHT) |

| **Constructor Summary** | |
| --- | --- |
| [**BufferedImageFilter**](http://docs.google.com/java/awt/image/BufferedImageFilter.html#BufferedImageFilter(java.awt.image.BufferedImageOp))([BufferedImageOp](http://docs.google.com/java/awt/image/BufferedImageOp.html) op)            Constructs a BufferedImageFilter with the specified single-source/single-destination operator. |

| **Method Summary** | |
| --- | --- |
| [BufferedImageOp](http://docs.google.com/java/awt/image/BufferedImageOp.html) | [**getBufferedImageOp**](http://docs.google.com/java/awt/image/BufferedImageFilter.html#getBufferedImageOp())()            Returns the BufferedImageOp. |
| void | [**imageComplete**](http://docs.google.com/java/awt/image/BufferedImageFilter.html#imageComplete(int))(int status)            Filters the information provided in the imageComplete method of the ImageConsumer interface. |
| void | [**setColorModel**](http://docs.google.com/java/awt/image/BufferedImageFilter.html#setColorModel(java.awt.image.ColorModel))([ColorModel](http://docs.google.com/java/awt/image/ColorModel.html) model)            Filters the information provided in the [setColorModel](http://docs.google.com/java/awt/image/ImageConsumer.html#setColorModel(java.awt.image.ColorModel)) method of the ImageConsumer interface. |
| void | [**setDimensions**](http://docs.google.com/java/awt/image/BufferedImageFilter.html#setDimensions(int,%20int))(int width, int height)            Filters the information provided in the [setDimensions](http://docs.google.com/java/awt/image/ImageConsumer.html#setDimensions(int,%20int))  method of the [ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html) interface. |
| void | [**setPixels**](http://docs.google.com/java/awt/image/BufferedImageFilter.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)            Filters the information provided in the setPixels method of the ImageConsumer interface which takes an array of bytes. |
| void | [**setPixels**](http://docs.google.com/java/awt/image/BufferedImageFilter.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)            Filters the information provided in the setPixels method of the ImageConsumer interface which takes an array of integers. |

| **Methods inherited from class java.awt.image.**[**ImageFilter**](http://docs.google.com/java/awt/image/ImageFilter.html) |
| --- |
| [clone](http://docs.google.com/java/awt/image/ImageFilter.html#clone()), [getFilterInstance](http://docs.google.com/java/awt/image/ImageFilter.html#getFilterInstance(java.awt.image.ImageConsumer)), [resendTopDownLeftRight](http://docs.google.com/java/awt/image/ImageFilter.html#resendTopDownLeftRight(java.awt.image.ImageProducer)), [setHints](http://docs.google.com/java/awt/image/ImageFilter.html#setHints(int)), [setProperties](http://docs.google.com/java/awt/image/ImageFilter.html#setProperties(java.util.Hashtable)) |

| **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** |
| --- |

### BufferedImageFilter

public **BufferedImageFilter**([BufferedImageOp](http://docs.google.com/java/awt/image/BufferedImageOp.html) op)

Constructs a BufferedImageFilter with the specified single-source/single-destination operator.

**Parameters:**op - the specified BufferedImageOp to use to filter a BufferedImage **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if op is null

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

### getBufferedImageOp

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

Returns the BufferedImageOp.

**Returns:**the operator of this BufferedImageFilter.

### setDimensions

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

Filters the information provided in the [setDimensions](http://docs.google.com/java/awt/image/ImageConsumer.html#setDimensions(int,%20int))  method of the [ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html) interface.

Note: This method is intended to be called by the [ImageProducer](http://docs.google.com/java/awt/image/ImageProducer.html) of the Image whose pixels are being filtered. Developers using this class to retrieve pixels from an image should avoid calling this method directly since that operation could result in problems with retrieving the requested pixels.

**Specified by:**[setDimensions](http://docs.google.com/java/awt/image/ImageConsumer.html#setDimensions(int,%20int)) in interface [ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html)**Overrides:**[setDimensions](http://docs.google.com/java/awt/image/ImageFilter.html#setDimensions(int,%20int)) in class [ImageFilter](http://docs.google.com/java/awt/image/ImageFilter.html) **Parameters:**width - the width to which to set the width of this BufferedImageFilterheight - the height to which to set the height of this BufferedImageFilter**See Also:**[ImageConsumer.setDimensions(int, int)](http://docs.google.com/java/awt/image/ImageConsumer.html#setDimensions(int,%20int))

### setColorModel

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

Filters the information provided in the [setColorModel](http://docs.google.com/java/awt/image/ImageConsumer.html#setColorModel(java.awt.image.ColorModel)) method of the ImageConsumer interface.

If model is null, this method clears the current ColorModel of this BufferedImageFilter.

Note: This method is intended to be called by the ImageProducer of the Image whose pixels are being filtered. Developers using this class to retrieve pixels from an image should avoid calling this method directly since that operation could result in problems with retrieving the requested pixels.

**Specified by:**[setColorModel](http://docs.google.com/java/awt/image/ImageConsumer.html#setColorModel(java.awt.image.ColorModel)) in interface [ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html)**Overrides:**[setColorModel](http://docs.google.com/java/awt/image/ImageFilter.html#setColorModel(java.awt.image.ColorModel)) in class [ImageFilter](http://docs.google.com/java/awt/image/ImageFilter.html) **Parameters:**model - the [ColorModel](http://docs.google.com/java/awt/image/ColorModel.html) to which to set the ColorModel of this BufferedImageFilter**See Also:**[ImageConsumer.setColorModel(java.awt.image.ColorModel)](http://docs.google.com/java/awt/image/ImageConsumer.html#setColorModel(java.awt.image.ColorModel))

### setPixels

public 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)

Filters the information provided in the setPixels method of the ImageConsumer interface which takes an array of bytes.

Note: This method is intended to be called by the ImageProducer of the Image whose pixels are being filtered. Developers using this class to retrieve pixels from an image should avoid calling this method directly since that operation could result in problems with retrieving the requested pixels.

**Specified by:**[setPixels](http://docs.google.com/java/awt/image/ImageConsumer.html#setPixels(int,%20int,%20int,%20int,%20java.awt.image.ColorModel,%20byte%5B%5D,%20int,%20int)) in interface [ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html)**Overrides:**[setPixels](http://docs.google.com/java/awt/image/ImageFilter.html#setPixels(int,%20int,%20int,%20int,%20java.awt.image.ColorModel,%20byte%5B%5D,%20int,%20int)) in class [ImageFilter](http://docs.google.com/java/awt/image/ImageFilter.html) **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 **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if width or height are less than zero.**See Also:**[ImageConsumer.setPixels(int, int, int, int, ColorModel, byte[], int, int)](http://docs.google.com/java/awt/image/ImageConsumer.html#setPixels(int,%20int,%20int,%20int,%20java.awt.image.ColorModel,%20byte%5B%5D,%20int,%20int))

### setPixels

public 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)

Filters the information provided in the setPixels method of the ImageConsumer interface which takes an array of integers.

Note: This method is intended to be called by the ImageProducer of the Image whose pixels are being filtered. Developers using this class to retrieve pixels from an image should avoid calling this method directly since that operation could result in problems with retrieving the requested pixels.

**Specified by:**[setPixels](http://docs.google.com/java/awt/image/ImageConsumer.html#setPixels(int,%20int,%20int,%20int,%20java.awt.image.ColorModel,%20int%5B%5D,%20int,%20int)) in interface [ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html)**Overrides:**[setPixels](http://docs.google.com/java/awt/image/ImageFilter.html#setPixels(int,%20int,%20int,%20int,%20java.awt.image.ColorModel,%20int%5B%5D,%20int,%20int)) in class [ImageFilter](http://docs.google.com/java/awt/image/ImageFilter.html) **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 **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if width or height are less than zero.**See Also:**[ImageConsumer.setPixels(int, int, int, int, ColorModel, int[], int, int)](http://docs.google.com/java/awt/image/ImageConsumer.html#setPixels(int,%20int,%20int,%20int,%20java.awt.image.ColorModel,%20int%5B%5D,%20int,%20int))

### imageComplete

public void **imageComplete**(int status)

Filters the information provided in the imageComplete method of the ImageConsumer interface.

Note: This method is intended to be called by the ImageProducer of the Image whose pixels are being filtered. Developers using this class to retrieve pixels from an image should avoid calling this method directly since that operation could result in problems with retrieving the requested pixels.

**Specified by:**[imageComplete](http://docs.google.com/java/awt/image/ImageConsumer.html#imageComplete(int)) in interface [ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html)**Overrides:**[imageComplete](http://docs.google.com/java/awt/image/ImageFilter.html#imageComplete(int)) in class [ImageFilter](http://docs.google.com/java/awt/image/ImageFilter.html) **Parameters:**status - the status of image loading **Throws:** [ImagingOpException](http://docs.google.com/java/awt/image/ImagingOpException.html) - if there was a problem calling the filter method of the BufferedImageOp associated with this instance.**See Also:**[ImageConsumer.imageComplete(int)](http://docs.google.com/java/awt/image/ImageConsumer.html#imageComplete(int))

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/BufferedImageFilter.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/BufferedImage.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/image/BufferedImageOp.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/image/BufferedImageFilter.html)    [**NO FRAMES**](http://docs.google.com/BufferedImageFilter.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#3dy6vkm) | [METHOD](#1t3h5sf) | DETAIL: FIELD | [CONSTR](#17dp8vu) | [METHOD](#26in1rg) |

[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.

Copyright 2006 Sun Microsystems, Inc. All rights reserved. Use is subject to [license terms](http://docs.google.com/legal/license.html). Also see the [documentation redistribution policy](http://java.sun.com/docs/redist.html).