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

Class FilteredImageSource

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

**All Implemented Interfaces:** [ImageProducer](http://docs.google.com/java/awt/image/ImageProducer.html)

public class **FilteredImageSource**extends [Object](http://docs.google.com/java/lang/Object.html)implements [ImageProducer](http://docs.google.com/java/awt/image/ImageProducer.html)

This class is an implementation of the ImageProducer interface which takes an existing image and a filter object and uses them to produce image data for a new filtered version of the original image. Here is an example which filters an image by swapping the red and blue compents:

Image src = getImage("doc:///demo/images/duke/T1.gif");  
 ImageFilter colorfilter = new RedBlueSwapFilter();  
 Image img = createImage(new FilteredImageSource(src.getSource(),  
 colorfilter));

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

| **Constructor Summary** | |
| --- | --- |
| [**FilteredImageSource**](http://docs.google.com/java/awt/image/FilteredImageSource.html#FilteredImageSource(java.awt.image.ImageProducer,%20java.awt.image.ImageFilter))([ImageProducer](http://docs.google.com/java/awt/image/ImageProducer.html) orig, [ImageFilter](http://docs.google.com/java/awt/image/ImageFilter.html) imgf)            Constructs an ImageProducer object from an existing ImageProducer and a filter object. |

| **Method Summary** | |
| --- | --- |
| void | [**addConsumer**](http://docs.google.com/java/awt/image/FilteredImageSource.html#addConsumer(java.awt.image.ImageConsumer))([ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html) ic)            Adds the specified ImageConsumer to the list of consumers interested in data for the filtered image. |
| boolean | [**isConsumer**](http://docs.google.com/java/awt/image/FilteredImageSource.html#isConsumer(java.awt.image.ImageConsumer))([ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html) ic)            Determines whether an ImageConsumer is on the list of consumers currently interested in data for this image. |
| void | [**removeConsumer**](http://docs.google.com/java/awt/image/FilteredImageSource.html#removeConsumer(java.awt.image.ImageConsumer))([ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html) ic)            Removes an ImageConsumer from the list of consumers interested in data for this image. |
| void | [**requestTopDownLeftRightResend**](http://docs.google.com/java/awt/image/FilteredImageSource.html#requestTopDownLeftRightResend(java.awt.image.ImageConsumer))([ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html) ic)            Requests that a given ImageConsumer have the image data delivered one more time in top-down, left-right order. |
| void | [**startProduction**](http://docs.google.com/java/awt/image/FilteredImageSource.html#startProduction(java.awt.image.ImageConsumer))([ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html) ic)            Starts production of the filtered 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()), [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** |
| --- |

### FilteredImageSource

public **FilteredImageSource**([ImageProducer](http://docs.google.com/java/awt/image/ImageProducer.html) orig,  
 [ImageFilter](http://docs.google.com/java/awt/image/ImageFilter.html) imgf)

Constructs an ImageProducer object from an existing ImageProducer and a filter object.

**Parameters:**orig - the specified ImageProducerimgf - the specified ImageFilter**See Also:**[ImageFilter](http://docs.google.com/java/awt/image/ImageFilter.html), [Component.createImage(java.awt.image.ImageProducer)](http://docs.google.com/java/awt/Component.html#createImage(java.awt.image.ImageProducer))

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

### addConsumer

public void **addConsumer**([ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html) ic)

Adds the specified ImageConsumer to the list of consumers interested in data for the filtered image. An instance of the original ImageFilter is created (using the filter's getFilterInstance method) to manipulate the image data for the specified ImageConsumer. The newly created filter instance is then passed to the addConsumer method of the original ImageProducer.

This method is public as a side effect of this class implementing the ImageProducer interface. It should not be called from user code, and its behavior if called from user code is unspecified.

**Specified by:**[addConsumer](http://docs.google.com/java/awt/image/ImageProducer.html#addConsumer(java.awt.image.ImageConsumer)) in interface [ImageProducer](http://docs.google.com/java/awt/image/ImageProducer.html) **Parameters:**ic - the consumer for the filtered image**See Also:**[ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html)

### isConsumer

public boolean **isConsumer**([ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html) ic)

Determines whether an ImageConsumer is on the list of consumers currently interested in data for this image.

This method is public as a side effect of this class implementing the ImageProducer interface. It should not be called from user code, and its behavior if called from user code is unspecified.

**Specified by:**[isConsumer](http://docs.google.com/java/awt/image/ImageProducer.html#isConsumer(java.awt.image.ImageConsumer)) in interface [ImageProducer](http://docs.google.com/java/awt/image/ImageProducer.html) **Parameters:**ic - the specified ImageConsumer **Returns:**true if the ImageConsumer is on the list; false otherwise**See Also:**[ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html)

### removeConsumer

public void **removeConsumer**([ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html) ic)

Removes an ImageConsumer from the list of consumers interested in data for this image.

This method is public as a side effect of this class implementing the ImageProducer interface. It should not be called from user code, and its behavior if called from user code is unspecified.

**Specified by:**[removeConsumer](http://docs.google.com/java/awt/image/ImageProducer.html#removeConsumer(java.awt.image.ImageConsumer)) in interface [ImageProducer](http://docs.google.com/java/awt/image/ImageProducer.html) **Parameters:**ic - the specified ImageConsumer**See Also:**[ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html)

### startProduction

public void **startProduction**([ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html) ic)

Starts production of the filtered image. If the specified ImageConsumer isn't already a consumer of the filtered image, an instance of the original ImageFilter is created (using the filter's getFilterInstance method) to manipulate the image data for the ImageConsumer. The filter instance for the ImageConsumer is then passed to the startProduction method of the original ImageProducer.

This method is public as a side effect of this class implementing the ImageProducer interface. It should not be called from user code, and its behavior if called from user code is unspecified.

**Specified by:**[startProduction](http://docs.google.com/java/awt/image/ImageProducer.html#startProduction(java.awt.image.ImageConsumer)) in interface [ImageProducer](http://docs.google.com/java/awt/image/ImageProducer.html) **Parameters:**ic - the consumer for the filtered image**See Also:**[ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html)

### requestTopDownLeftRightResend

public void **requestTopDownLeftRightResend**([ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html) ic)

Requests that a given ImageConsumer have the image data delivered one more time in top-down, left-right order. The request is handed to the ImageFilter for further processing, since the ability to preserve the pixel ordering depends on the filter.

This method is public as a side effect of this class implementing the ImageProducer interface. It should not be called from user code, and its behavior if called from user code is unspecified.

**Specified by:**[requestTopDownLeftRightResend](http://docs.google.com/java/awt/image/ImageProducer.html#requestTopDownLeftRightResend(java.awt.image.ImageConsumer)) in interface [ImageProducer](http://docs.google.com/java/awt/image/ImageProducer.html) **Parameters:**ic - the specified ImageConsumer**See Also:**[ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html)

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

[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).