

# Class `java.awt.image.FilteredImageSource`

```
java.lang.Object
|
+----java.awt.image.FilteredImageSource
```

---

```
public class FilteredImageSource
extends Object
implements ImageProducer
```

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 components:

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

**See Also:**  
[ImageProducer](#)

**Version:**  
1.13 10/07/95

**Author:**  
Jim Graham

---

## Constructor Index

- o **[FilteredImageSource](#)**(`ImageProducer`, `ImageFilter`)  
Construct an `ImageProducer` object from an existing `ImageProducer` and a filter object.

## Method Index

- o **[addConsumer](#)**(`ImageConsumer`)  
Add an `ImageConsumer` to the list of consumers interested in data for this image.
- o **[isConsumer](#)**(`ImageConsumer`)

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

o **removeConsumer**(ImageConsumer)

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

o **requestTopDownLeftRightResend**(ImageConsumer)

Request that a given ImageConsumer have the image data delivered one more time in top-down, left-right order.

o **startProduction**(ImageConsumer)

Add an ImageConsumer to the list of consumers interested in data for this image, and immediately start delivery of the image data through the ImageConsumer interface.

## Constructors

o **FilteredImageSource**

```
public FilteredImageSource(ImageProducer orig,  
                           ImageFilter imgf)
```

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

**See Also:**

ImageFilter, createImage

## Methods

o **addConsumer**

```
public synchronized void addConsumer(ImageConsumer ic)
```

Add an ImageConsumer to the list of consumers interested in data for this image.

**See Also:**

ImageConsumer

o **isConsumer**

```
public synchronized boolean isConsumer(ImageConsumer ic)
```

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

**Returns:**

true if the ImageConsumer is on the list; false otherwise

**See Also:**

ImageConsumer

o **removeConsumer**

```
public synchronized void removeConsumer(ImageConsumer ic)
```

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

**See Also:**

[ImageConsumer](#)

#### o **startProduction**

```
public void startProduction(ImageConsumer ic)
```

Add an `ImageConsumer` to the list of consumers interested in data for this image, and immediately start delivery of the image data through the `ImageConsumer` interface.

**See Also:**

[ImageConsumer](#)

#### o **requestTopDownLeftRightResend**

```
public void requestTopDownLeftRightResend(ImageConsumer ic)
```

Request that a given `ImageConsumer` have the image data delivered one more time in top-down, left-right order.

**See Also:**

[ImageConsumer](#)