| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ReplicateScaleFilter.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/RenderedImage.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/image/RescaleOp.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/image/ReplicateScaleFilter.html)    [**NO FRAMES**](http://docs.google.com/ReplicateScaleFilter.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#3dy6vkm) | [METHOD](#1t3h5sf) | DETAIL: [FIELD](#17dp8vu) | [CONSTR](#z337ya) | [METHOD](#1y810tw) |

## **java.awt.image**

Class ReplicateScaleFilter

[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.ReplicateScaleFilter**

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

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

An ImageFilter class for scaling images using the simplest algorithm. This class extends the basic ImageFilter Class to scale an existing image and provide a source for a new image containing the resampled image. The pixels in the source image are sampled to produce pixels for an image of the specified size by replicating rows and columns of pixels to scale up or omitting rows and columns of pixels to scale down.

It is meant to be used in conjunction with a FilteredImageSource object to produce scaled versions of existing images. Due to implementation dependencies, there may be differences in pixel values of an image filtered on different platforms.

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

| **Field Summary** | |
| --- | --- |
| protected  int | [**destHeight**](http://docs.google.com/java/awt/image/ReplicateScaleFilter.html#destHeight)            The target height to scale the image. |
| protected  int | [**destWidth**](http://docs.google.com/java/awt/image/ReplicateScaleFilter.html#destWidth)            The target width to scale the image. |
| protected  [Object](http://docs.google.com/java/lang/Object.html) | [**outpixbuf**](http://docs.google.com/java/awt/image/ReplicateScaleFilter.html#outpixbuf)            A byte array initialized with a size of [destWidth](http://docs.google.com/java/awt/image/ReplicateScaleFilter.html#destWidth) and used to deliver a row of pixel data to the [ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html). |
| protected  int[] | [**srccols**](http://docs.google.com/java/awt/image/ReplicateScaleFilter.html#srccols)            An int array containing information about a column of pixels. |
| protected  int | [**srcHeight**](http://docs.google.com/java/awt/image/ReplicateScaleFilter.html#srcHeight)            The height of the source image. |
| protected  int[] | [**srcrows**](http://docs.google.com/java/awt/image/ReplicateScaleFilter.html#srcrows)            An int array containing information about a row of pixels. |
| protected  int | [**srcWidth**](http://docs.google.com/java/awt/image/ReplicateScaleFilter.html#srcWidth)            The width of the source image. |

| **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** | |
| --- | --- |
| [**ReplicateScaleFilter**](http://docs.google.com/java/awt/image/ReplicateScaleFilter.html#ReplicateScaleFilter(int,%20int))(int width, int height)            Constructs a ReplicateScaleFilter that scales the pixels from its source Image as specified by the width and height parameters. |

| **Method Summary** | |
| --- | --- |
| void | [**setDimensions**](http://docs.google.com/java/awt/image/ReplicateScaleFilter.html#setDimensions(int,%20int))(int w, int h)            Override the dimensions of the source image and pass the dimensions of the new scaled size to the ImageConsumer. |
| void | [**setPixels**](http://docs.google.com/java/awt/image/ReplicateScaleFilter.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)            Choose which rows and columns of the delivered byte pixels are needed for the destination scaled image and pass through just those rows and columns that are needed, replicated as necessary. |
| void | [**setPixels**](http://docs.google.com/java/awt/image/ReplicateScaleFilter.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)            Choose which rows and columns of the delivered int pixels are needed for the destination scaled image and pass through just those rows and columns that are needed, replicated as necessary. |
| void | [**setProperties**](http://docs.google.com/java/awt/image/ReplicateScaleFilter.html#setProperties(java.util.Hashtable))([Hashtable](http://docs.google.com/java/util/Hashtable.html)<?,?> props)            Passes along the properties from the source object after adding a property indicating the scale applied. |

| **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)), [imageComplete](http://docs.google.com/java/awt/image/ImageFilter.html#imageComplete(int)), [resendTopDownLeftRight](http://docs.google.com/java/awt/image/ImageFilter.html#resendTopDownLeftRight(java.awt.image.ImageProducer)), [setColorModel](http://docs.google.com/java/awt/image/ImageFilter.html#setColorModel(java.awt.image.ColorModel)), [setHints](http://docs.google.com/java/awt/image/ImageFilter.html#setHints(int)) |

| **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)) |

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

### srcWidth

protected int **srcWidth**

The width of the source image.

### srcHeight

protected int **srcHeight**

The height of the source image.

### destWidth

protected int **destWidth**

The target width to scale the image.

### destHeight

protected int **destHeight**

The target height to scale the image.

### srcrows

protected int[] **srcrows**

An int array containing information about a row of pixels.

### srccols

protected int[] **srccols**

An int array containing information about a column of pixels.

### outpixbuf

protected [Object](http://docs.google.com/java/lang/Object.html) **outpixbuf**

A byte array initialized with a size of [destWidth](http://docs.google.com/java/awt/image/ReplicateScaleFilter.html#destWidth) and used to deliver a row of pixel data to the [ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html).

| **Constructor Detail** |
| --- |

### ReplicateScaleFilter

public **ReplicateScaleFilter**(int width,  
 int height)

Constructs a ReplicateScaleFilter that scales the pixels from its source Image as specified by the width and height parameters.

**Parameters:**width - the target width to scale the imageheight - the target height to scale the image **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if width equals zero or height equals zero

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

### setProperties

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

Passes along the properties from the source object after adding a property indicating the scale applied. This method invokes super.setProperties, which might result in additional properties being added.

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

**Specified by:**[setProperties](http://docs.google.com/java/awt/image/ImageConsumer.html#setProperties(java.util.Hashtable)) in interface [ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html)**Overrides:**[setProperties](http://docs.google.com/java/awt/image/ImageFilter.html#setProperties(java.util.Hashtable)) in class [ImageFilter](http://docs.google.com/java/awt/image/ImageFilter.html) **Parameters:**props - the properties from the source object

### setDimensions

public void **setDimensions**(int w,  
 int h)

Override the dimensions of the source image and pass the dimensions of the new scaled size to the ImageConsumer.

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

**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:**w - the width of the source imageh - the height of the source image**See Also:**[ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html)

### 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)

Choose which rows and columns of the delivered byte pixels are needed for the destination scaled image and pass through just those rows and columns that are needed, replicated as necessary.

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

**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**See Also:**[ImageConsumer.setPixels(int, int, int, int, java.awt.image.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)

Choose which rows and columns of the delivered int pixels are needed for the destination scaled image and pass through just those rows and columns that are needed, replicated as necessary.

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

**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**See Also:**[ImageConsumer.setPixels(int, int, int, int, java.awt.image.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))

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