| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/BMPImageWriteParam.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   NEXT CLASS | [**FRAMES**](http://docs.google.com/index.html?javax/imageio/plugins/bmp/BMPImageWriteParam.html)    [**NO FRAMES**](http://docs.google.com/BMPImageWriteParam.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#3dy6vkm) | [METHOD](#1t3h5sf) | DETAIL: FIELD | [CONSTR](#3rdcrjn) | [METHOD](#35nkun2) |

## **javax.imageio.plugins.bmp**

Class BMPImageWriteParam

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [javax.imageio.IIOParam](http://docs.google.com/javax/imageio/IIOParam.html)  
 [javax.imageio.ImageWriteParam](http://docs.google.com/javax/imageio/ImageWriteParam.html)  
 **javax.imageio.plugins.bmp.BMPImageWriteParam**

public class **BMPImageWriteParam**extends [ImageWriteParam](http://docs.google.com/javax/imageio/ImageWriteParam.html)

A subclass of ImageWriteParam for encoding images in the BMP format.

This class allows for the specification of various parameters while writing a BMP format image file. By default, the data layout is bottom-up, such that the pixels are stored in bottom-up order, the first scanline being stored last.

The particular compression scheme to be used can be specified by using the setCompressionType() method with the appropriate type string. The compression scheme specified will be honored if and only if it is compatible with the type of image being written. If the specified compression scheme is not compatible with the type of image being written then the IOException will be thrown by the BMP image writer. If the compression type is not set explicitly then getCompressionType() will return null. In this case the BMP image writer will select a compression type that supports encoding of the given image without loss of the color resolution.

The compression type strings and the image type(s) each supports are listed in the following table:

**Compression Types**

| Type String | Description | Image Types |
| --- | --- | --- |
| BI\_RGB | Uncompressed RLE | <= 8-bits/sample |
| BI\_RLE8 | 8-bit Run Length Encoding | <= 8-bits/sample |
| BI\_RLE4 | 4-bit Run Length Encoding | <= 4-bits/sample |
| BI\_BITFIELDS | Packed data | 16 or 32 bits/sample |

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

| **Fields inherited from class javax.imageio.**[**ImageWriteParam**](http://docs.google.com/javax/imageio/ImageWriteParam.html) |
| --- |
| [canOffsetTiles](http://docs.google.com/javax/imageio/ImageWriteParam.html#canOffsetTiles), [canWriteCompressed](http://docs.google.com/javax/imageio/ImageWriteParam.html#canWriteCompressed), [canWriteProgressive](http://docs.google.com/javax/imageio/ImageWriteParam.html#canWriteProgressive), [canWriteTiles](http://docs.google.com/javax/imageio/ImageWriteParam.html#canWriteTiles), [compressionMode](http://docs.google.com/javax/imageio/ImageWriteParam.html#compressionMode), [compressionQuality](http://docs.google.com/javax/imageio/ImageWriteParam.html#compressionQuality), [compressionType](http://docs.google.com/javax/imageio/ImageWriteParam.html#compressionType), [compressionTypes](http://docs.google.com/javax/imageio/ImageWriteParam.html#compressionTypes), [locale](http://docs.google.com/javax/imageio/ImageWriteParam.html#locale), [MODE\_COPY\_FROM\_METADATA](http://docs.google.com/javax/imageio/ImageWriteParam.html#MODE_COPY_FROM_METADATA), [MODE\_DEFAULT](http://docs.google.com/javax/imageio/ImageWriteParam.html#MODE_DEFAULT), [MODE\_DISABLED](http://docs.google.com/javax/imageio/ImageWriteParam.html#MODE_DISABLED), [MODE\_EXPLICIT](http://docs.google.com/javax/imageio/ImageWriteParam.html#MODE_EXPLICIT), [preferredTileSizes](http://docs.google.com/javax/imageio/ImageWriteParam.html#preferredTileSizes), [progressiveMode](http://docs.google.com/javax/imageio/ImageWriteParam.html#progressiveMode), [tileGridXOffset](http://docs.google.com/javax/imageio/ImageWriteParam.html#tileGridXOffset), [tileGridYOffset](http://docs.google.com/javax/imageio/ImageWriteParam.html#tileGridYOffset), [tileHeight](http://docs.google.com/javax/imageio/ImageWriteParam.html#tileHeight), [tileWidth](http://docs.google.com/javax/imageio/ImageWriteParam.html#tileWidth), [tilingMode](http://docs.google.com/javax/imageio/ImageWriteParam.html#tilingMode), [tilingSet](http://docs.google.com/javax/imageio/ImageWriteParam.html#tilingSet) |

| **Fields inherited from class javax.imageio.**[**IIOParam**](http://docs.google.com/javax/imageio/IIOParam.html) |
| --- |
| [controller](http://docs.google.com/javax/imageio/IIOParam.html#controller), [defaultController](http://docs.google.com/javax/imageio/IIOParam.html#defaultController), [destinationOffset](http://docs.google.com/javax/imageio/IIOParam.html#destinationOffset), [destinationType](http://docs.google.com/javax/imageio/IIOParam.html#destinationType), [sourceBands](http://docs.google.com/javax/imageio/IIOParam.html#sourceBands), [sourceRegion](http://docs.google.com/javax/imageio/IIOParam.html#sourceRegion), [sourceXSubsampling](http://docs.google.com/javax/imageio/IIOParam.html#sourceXSubsampling), [sourceYSubsampling](http://docs.google.com/javax/imageio/IIOParam.html#sourceYSubsampling), [subsamplingXOffset](http://docs.google.com/javax/imageio/IIOParam.html#subsamplingXOffset), [subsamplingYOffset](http://docs.google.com/javax/imageio/IIOParam.html#subsamplingYOffset) |

| **Constructor Summary** | |
| --- | --- |
| [**BMPImageWriteParam**](http://docs.google.com/javax/imageio/plugins/bmp/BMPImageWriteParam.html#BMPImageWriteParam())()            Constructs an BMPImageWriteParam object with default values for all parameters and a null Locale. |
| [**BMPImageWriteParam**](http://docs.google.com/javax/imageio/plugins/bmp/BMPImageWriteParam.html#BMPImageWriteParam(java.util.Locale))([Locale](http://docs.google.com/java/util/Locale.html) locale)            Constructs a BMPImageWriteParam set to use a given Locale and with default values for all parameters. |

| **Method Summary** | |
| --- | --- |
| boolean | [**isTopDown**](http://docs.google.com/javax/imageio/plugins/bmp/BMPImageWriteParam.html#isTopDown())()            Returns the value of the topDown parameter. |
| void | [**setTopDown**](http://docs.google.com/javax/imageio/plugins/bmp/BMPImageWriteParam.html#setTopDown(boolean))(boolean topDown)            If set, the data will be written out in a top-down manner, the first scanline being written first. |

| **Methods inherited from class javax.imageio.**[**ImageWriteParam**](http://docs.google.com/javax/imageio/ImageWriteParam.html) |
| --- |
| [canOffsetTiles](http://docs.google.com/javax/imageio/ImageWriteParam.html#canOffsetTiles()), [canWriteCompressed](http://docs.google.com/javax/imageio/ImageWriteParam.html#canWriteCompressed()), [canWriteProgressive](http://docs.google.com/javax/imageio/ImageWriteParam.html#canWriteProgressive()), [canWriteTiles](http://docs.google.com/javax/imageio/ImageWriteParam.html#canWriteTiles()), [getBitRate](http://docs.google.com/javax/imageio/ImageWriteParam.html#getBitRate(float)), [getCompressionMode](http://docs.google.com/javax/imageio/ImageWriteParam.html#getCompressionMode()), [getCompressionQuality](http://docs.google.com/javax/imageio/ImageWriteParam.html#getCompressionQuality()), [getCompressionQualityDescriptions](http://docs.google.com/javax/imageio/ImageWriteParam.html#getCompressionQualityDescriptions()), [getCompressionQualityValues](http://docs.google.com/javax/imageio/ImageWriteParam.html#getCompressionQualityValues()), [getCompressionType](http://docs.google.com/javax/imageio/ImageWriteParam.html#getCompressionType()), [getCompressionTypes](http://docs.google.com/javax/imageio/ImageWriteParam.html#getCompressionTypes()), [getLocale](http://docs.google.com/javax/imageio/ImageWriteParam.html#getLocale()), [getLocalizedCompressionTypeName](http://docs.google.com/javax/imageio/ImageWriteParam.html#getLocalizedCompressionTypeName()), [getPreferredTileSizes](http://docs.google.com/javax/imageio/ImageWriteParam.html#getPreferredTileSizes()), [getProgressiveMode](http://docs.google.com/javax/imageio/ImageWriteParam.html#getProgressiveMode()), [getTileGridXOffset](http://docs.google.com/javax/imageio/ImageWriteParam.html#getTileGridXOffset()), [getTileGridYOffset](http://docs.google.com/javax/imageio/ImageWriteParam.html#getTileGridYOffset()), [getTileHeight](http://docs.google.com/javax/imageio/ImageWriteParam.html#getTileHeight()), [getTileWidth](http://docs.google.com/javax/imageio/ImageWriteParam.html#getTileWidth()), [getTilingMode](http://docs.google.com/javax/imageio/ImageWriteParam.html#getTilingMode()), [isCompressionLossless](http://docs.google.com/javax/imageio/ImageWriteParam.html#isCompressionLossless()), [setCompressionMode](http://docs.google.com/javax/imageio/ImageWriteParam.html#setCompressionMode(int)), [setCompressionQuality](http://docs.google.com/javax/imageio/ImageWriteParam.html#setCompressionQuality(float)), [setCompressionType](http://docs.google.com/javax/imageio/ImageWriteParam.html#setCompressionType(java.lang.String)), [setProgressiveMode](http://docs.google.com/javax/imageio/ImageWriteParam.html#setProgressiveMode(int)), [setTiling](http://docs.google.com/javax/imageio/ImageWriteParam.html#setTiling(int,%20int,%20int,%20int)), [setTilingMode](http://docs.google.com/javax/imageio/ImageWriteParam.html#setTilingMode(int)), [unsetCompression](http://docs.google.com/javax/imageio/ImageWriteParam.html#unsetCompression()), [unsetTiling](http://docs.google.com/javax/imageio/ImageWriteParam.html#unsetTiling()) |

| **Methods inherited from class javax.imageio.**[**IIOParam**](http://docs.google.com/javax/imageio/IIOParam.html) |
| --- |
| [activateController](http://docs.google.com/javax/imageio/IIOParam.html#activateController()), [getController](http://docs.google.com/javax/imageio/IIOParam.html#getController()), [getDefaultController](http://docs.google.com/javax/imageio/IIOParam.html#getDefaultController()), [getDestinationOffset](http://docs.google.com/javax/imageio/IIOParam.html#getDestinationOffset()), [getDestinationType](http://docs.google.com/javax/imageio/IIOParam.html#getDestinationType()), [getSourceBands](http://docs.google.com/javax/imageio/IIOParam.html#getSourceBands()), [getSourceRegion](http://docs.google.com/javax/imageio/IIOParam.html#getSourceRegion()), [getSourceXSubsampling](http://docs.google.com/javax/imageio/IIOParam.html#getSourceXSubsampling()), [getSourceYSubsampling](http://docs.google.com/javax/imageio/IIOParam.html#getSourceYSubsampling()), [getSubsamplingXOffset](http://docs.google.com/javax/imageio/IIOParam.html#getSubsamplingXOffset()), [getSubsamplingYOffset](http://docs.google.com/javax/imageio/IIOParam.html#getSubsamplingYOffset()), [hasController](http://docs.google.com/javax/imageio/IIOParam.html#hasController()), [setController](http://docs.google.com/javax/imageio/IIOParam.html#setController(javax.imageio.IIOParamController)), [setDestinationOffset](http://docs.google.com/javax/imageio/IIOParam.html#setDestinationOffset(java.awt.Point)), [setDestinationType](http://docs.google.com/javax/imageio/IIOParam.html#setDestinationType(javax.imageio.ImageTypeSpecifier)), [setSourceBands](http://docs.google.com/javax/imageio/IIOParam.html#setSourceBands(int%5B%5D)), [setSourceRegion](http://docs.google.com/javax/imageio/IIOParam.html#setSourceRegion(java.awt.Rectangle)), [setSourceSubsampling](http://docs.google.com/javax/imageio/IIOParam.html#setSourceSubsampling(int,%20int,%20int,%20int)) |

| **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** |
| --- |

### BMPImageWriteParam

public **BMPImageWriteParam**([Locale](http://docs.google.com/java/util/Locale.html) locale)

Constructs a BMPImageWriteParam set to use a given Locale and with default values for all parameters.

**Parameters:**locale - a Locale to be used to localize compression type names and quality descriptions, or null.

### BMPImageWriteParam

public **BMPImageWriteParam**()

Constructs an BMPImageWriteParam object with default values for all parameters and a null Locale.

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

### setTopDown

public void **setTopDown**(boolean topDown)

If set, the data will be written out in a top-down manner, the first scanline being written first.

**Parameters:**topDown - whether the data are written in top-down order.

### isTopDown

public boolean **isTopDown**()

Returns the value of the topDown parameter. The default is false.

**Returns:**whether the data are written in top-down order.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/BMPImageWriteParam.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   NEXT CLASS | [**FRAMES**](http://docs.google.com/index.html?javax/imageio/plugins/bmp/BMPImageWriteParam.html)    [**NO FRAMES**](http://docs.google.com/BMPImageWriteParam.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#3dy6vkm) | [METHOD](#1t3h5sf) | DETAIL: FIELD | [CONSTR](#3rdcrjn) | [METHOD](#35nkun2) |

[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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