| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | **Use** | [**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*** |
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| PREV   NEXT | [**FRAMES**](http://docs.google.com/index.html?javax/imageio//class-useImageTypeSpecifier.html)    [**NO FRAMES**](http://docs.google.com/ImageTypeSpecifier.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

**Uses of Class**

**javax.imageio.ImageTypeSpecifier**

| Packages that use [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | |
| --- | --- |
| [**javax.imageio**](#3znysh7) | The main package of the Java Image I/O API. |
| [**javax.imageio.metadata**](#2et92p0) | A package of the Java Image I/O API dealing with reading and writing metadata. |
| [**javax.imageio.spi**](#tyjcwt) | A package of the Java Image I/O API containing the plug-in interfaces for readers, writers, transcoders, and streams, and a runtime registry. |

| Uses of [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) in [javax.imageio](http://docs.google.com/javax/imageio/package-summary.html) | |
| --- | --- |

| Fields in [javax.imageio](http://docs.google.com/javax/imageio/package-summary.html) declared as [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | |
| --- | --- |
| protected  [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | **IIOParam.**[**destinationType**](http://docs.google.com/javax/imageio/IIOParam.html#destinationType)            An ImageTypeSpecifier to be used to generate a destination image when reading, or to set the output color type when writing. |

| Methods in [javax.imageio](http://docs.google.com/javax/imageio/package-summary.html) that return [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | |
| --- | --- |
| static [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | **ImageTypeSpecifier.**[**createBanded**](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html#createBanded(java.awt.color.ColorSpace,%20int%5B%5D,%20int%5B%5D,%20int,%20boolean,%20boolean))([ColorSpace](http://docs.google.com/java/awt/color/ColorSpace.html) colorSpace, int[] bankIndices, int[] bandOffsets, int dataType, boolean hasAlpha, boolean isAlphaPremultiplied)            Returns a specifier for a banded image format that will use a ComponentColorModel and a BandedSampleModel to store each channel in a separate array. |
| static [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | **ImageTypeSpecifier.**[**createFromBufferedImageType**](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html#createFromBufferedImageType(int))(int bufferedImageType)            Returns an ImageTypeSpecifier that encodes one of the standard BufferedImage types (other than TYPE\_CUSTOM). |
| static [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | **ImageTypeSpecifier.**[**createFromRenderedImage**](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html#createFromRenderedImage(java.awt.image.RenderedImage))([RenderedImage](http://docs.google.com/java/awt/image/RenderedImage.html) image)            Returns an ImageTypeSpecifier that encodes the layout of a RenderedImage (which may be a BufferedImage). |
| static [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | **ImageTypeSpecifier.**[**createGrayscale**](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html#createGrayscale(int,%20int,%20boolean))(int bits, int dataType, boolean isSigned)            Returns a specifier for a grayscale image format that will pack pixels of the given bit depth into array elements of the specified data type. |
| static [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | **ImageTypeSpecifier.**[**createGrayscale**](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html#createGrayscale(int,%20int,%20boolean,%20boolean))(int bits, int dataType, boolean isSigned, boolean isAlphaPremultiplied)            Returns a specifier for a grayscale plus alpha image format that will pack pixels of the given bit depth into array elements of the specified data type. |
| static [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | **ImageTypeSpecifier.**[**createIndexed**](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html#createIndexed(byte%5B%5D,%20byte%5B%5D,%20byte%5B%5D,%20byte%5B%5D,%20int,%20int))(byte[] redLUT, byte[] greenLUT, byte[] blueLUT, byte[] alphaLUT, int bits, int dataType)            Returns a specifier for an indexed-color image format that will pack index values of the given bit depth into array elements of the specified data type. |
| static [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | **ImageTypeSpecifier.**[**createInterleaved**](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html#createInterleaved(java.awt.color.ColorSpace,%20int%5B%5D,%20int,%20boolean,%20boolean))([ColorSpace](http://docs.google.com/java/awt/color/ColorSpace.html) colorSpace, int[] bandOffsets, int dataType, boolean hasAlpha, boolean isAlphaPremultiplied)            Returns a specifier for an interleaved image format that will use a ComponentColorModel and a PixelInterleavedSampleModel to store each pixel component in a separate byte, short, or int. |
| static [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | **ImageTypeSpecifier.**[**createPacked**](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html#createPacked(java.awt.color.ColorSpace,%20int,%20int,%20int,%20int,%20int,%20boolean))([ColorSpace](http://docs.google.com/java/awt/color/ColorSpace.html) colorSpace, int redMask, int greenMask, int blueMask, int alphaMask, int transferType, boolean isAlphaPremultiplied)            Returns a specifier for a packed image format that will use a DirectColorModel and a packed SampleModel to store each pixel packed into in a single byte, short, or int. |
| [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | **IIOParam.**[**getDestinationType**](http://docs.google.com/javax/imageio/IIOParam.html#getDestinationType())()            Returns the type of image to be returned by the read, if one was set by a call to setDestination(ImageTypeSpecifier), as an ImageTypeSpecifier. |
| [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | **ImageReader.**[**getRawImageType**](http://docs.google.com/javax/imageio/ImageReader.html#getRawImageType(int))(int imageIndex)            Returns an ImageTypeSpecifier indicating the SampleModel and ColorModel which most closely represents the "raw" internal format of the image. |

| Methods in [javax.imageio](http://docs.google.com/javax/imageio/package-summary.html) that return types with arguments of type [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | |
| --- | --- |
| abstract  [Iterator](http://docs.google.com/java/util/Iterator.html)<[ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html)> | **ImageReader.**[**getImageTypes**](http://docs.google.com/javax/imageio/ImageReader.html#getImageTypes(int))(int imageIndex)            Returns an Iterator containing possible image types to which the given image may be decoded, in the form of ImageTypeSpecifierss. |

| Methods in [javax.imageio](http://docs.google.com/javax/imageio/package-summary.html) with parameters of type [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | |
| --- | --- |
| [IIOMetadata](http://docs.google.com/javax/imageio/metadata/IIOMetadata.html) | **ImageTranscoder.**[**convertImageMetadata**](http://docs.google.com/javax/imageio/ImageTranscoder.html#convertImageMetadata(javax.imageio.metadata.IIOMetadata,%20javax.imageio.ImageTypeSpecifier,%20javax.imageio.ImageWriteParam))([IIOMetadata](http://docs.google.com/javax/imageio/metadata/IIOMetadata.html) inData, [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) imageType, [ImageWriteParam](http://docs.google.com/javax/imageio/ImageWriteParam.html) param)            Returns an IIOMetadata object that may be used for encoding and optionally modified using its document interfaces or other interfaces specific to the writer plug-in that will be used for encoding. |
| abstract  [IIOMetadata](http://docs.google.com/javax/imageio/metadata/IIOMetadata.html) | **ImageWriter.**[**convertImageMetadata**](http://docs.google.com/javax/imageio/ImageWriter.html#convertImageMetadata(javax.imageio.metadata.IIOMetadata,%20javax.imageio.ImageTypeSpecifier,%20javax.imageio.ImageWriteParam))([IIOMetadata](http://docs.google.com/javax/imageio/metadata/IIOMetadata.html) inData, [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) imageType, [ImageWriteParam](http://docs.google.com/javax/imageio/ImageWriteParam.html) param) |
| abstract  [IIOMetadata](http://docs.google.com/javax/imageio/metadata/IIOMetadata.html) | **ImageWriter.**[**getDefaultImageMetadata**](http://docs.google.com/javax/imageio/ImageWriter.html#getDefaultImageMetadata(javax.imageio.ImageTypeSpecifier,%20javax.imageio.ImageWriteParam))([ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) imageType, [ImageWriteParam](http://docs.google.com/javax/imageio/ImageWriteParam.html) param)            Returns an IIOMetadata object containing default values for encoding an image of the given type. |
| static [Iterator](http://docs.google.com/java/util/Iterator.html)<[ImageWriter](http://docs.google.com/javax/imageio/ImageWriter.html)> | **ImageIO.**[**getImageWriters**](http://docs.google.com/javax/imageio/ImageIO.html#getImageWriters(javax.imageio.ImageTypeSpecifier,%20java.lang.String))([ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) type, [String](http://docs.google.com/java/lang/String.html) formatName)            Returns an Iterator containing all currently registered ImageWriters that claim to be able to encode images of the given layout (specified using an ImageTypeSpecifier) in the given format. |
| int | **ImageWriter.**[**getNumThumbnailsSupported**](http://docs.google.com/javax/imageio/ImageWriter.html#getNumThumbnailsSupported(javax.imageio.ImageTypeSpecifier,%20javax.imageio.ImageWriteParam,%20javax.imageio.metadata.IIOMetadata,%20javax.imageio.metadata.IIOMetadata))([ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) imageType, [ImageWriteParam](http://docs.google.com/javax/imageio/ImageWriteParam.html) param, [IIOMetadata](http://docs.google.com/javax/imageio/metadata/IIOMetadata.html) streamMetadata, [IIOMetadata](http://docs.google.com/javax/imageio/metadata/IIOMetadata.html) imageMetadata)            Returns the number of thumbnails suported by the format being written, given the image type and any additional write parameters and metadata objects that will be used during encoding. |
| [Dimension](http://docs.google.com/java/awt/Dimension.html)[] | **ImageWriter.**[**getPreferredThumbnailSizes**](http://docs.google.com/javax/imageio/ImageWriter.html#getPreferredThumbnailSizes(javax.imageio.ImageTypeSpecifier,%20javax.imageio.ImageWriteParam,%20javax.imageio.metadata.IIOMetadata,%20javax.imageio.metadata.IIOMetadata))([ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) imageType, [ImageWriteParam](http://docs.google.com/javax/imageio/ImageWriteParam.html) param, [IIOMetadata](http://docs.google.com/javax/imageio/metadata/IIOMetadata.html) streamMetadata, [IIOMetadata](http://docs.google.com/javax/imageio/metadata/IIOMetadata.html) imageMetadata)            Returns an array of Dimensions indicating the legal size ranges for thumbnail images as they will be encoded in the output file or stream. |
| void | **ImageWriter.**[**prepareInsertEmpty**](http://docs.google.com/javax/imageio/ImageWriter.html#prepareInsertEmpty(int,%20javax.imageio.ImageTypeSpecifier,%20int,%20int,%20javax.imageio.metadata.IIOMetadata,%20java.util.List,%20javax.imageio.ImageWriteParam))(int imageIndex, [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) imageType, int width, int height, [IIOMetadata](http://docs.google.com/javax/imageio/metadata/IIOMetadata.html) imageMetadata, [List](http://docs.google.com/java/util/List.html)<? extends [BufferedImage](http://docs.google.com/java/awt/image/BufferedImage.html)> thumbnails, [ImageWriteParam](http://docs.google.com/javax/imageio/ImageWriteParam.html) param)            Begins the insertion of a new image with undefined pixel values into an existing image stream. |
| void | **ImageWriter.**[**prepareWriteEmpty**](http://docs.google.com/javax/imageio/ImageWriter.html#prepareWriteEmpty(javax.imageio.metadata.IIOMetadata,%20javax.imageio.ImageTypeSpecifier,%20int,%20int,%20javax.imageio.metadata.IIOMetadata,%20java.util.List,%20javax.imageio.ImageWriteParam))([IIOMetadata](http://docs.google.com/javax/imageio/metadata/IIOMetadata.html) streamMetadata, [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) imageType, int width, int height, [IIOMetadata](http://docs.google.com/javax/imageio/metadata/IIOMetadata.html) imageMetadata, [List](http://docs.google.com/java/util/List.html)<? extends [BufferedImage](http://docs.google.com/java/awt/image/BufferedImage.html)> thumbnails, [ImageWriteParam](http://docs.google.com/javax/imageio/ImageWriteParam.html) param)            Begins the writing of a complete image stream, consisting of a single image with undefined pixel values and associated metadata and thumbnails, to the output. |
| void | **ImageReadParam.**[**setDestinationType**](http://docs.google.com/javax/imageio/ImageReadParam.html#setDestinationType(javax.imageio.ImageTypeSpecifier))([ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) destinationType) |
| void | **IIOParam.**[**setDestinationType**](http://docs.google.com/javax/imageio/IIOParam.html#setDestinationType(javax.imageio.ImageTypeSpecifier))([ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) destinationType)            Sets the desired image type for the destination image, using an ImageTypeSpecifier. |

| Method parameters in [javax.imageio](http://docs.google.com/javax/imageio/package-summary.html) with type arguments of type [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | |
| --- | --- |
| protected static [BufferedImage](http://docs.google.com/java/awt/image/BufferedImage.html) | **ImageReader.**[**getDestination**](http://docs.google.com/javax/imageio/ImageReader.html#getDestination(javax.imageio.ImageReadParam,%20java.util.Iterator,%20int,%20int))([ImageReadParam](http://docs.google.com/javax/imageio/ImageReadParam.html) param, [Iterator](http://docs.google.com/java/util/Iterator.html)<[ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html)> imageTypes, int width, int height)            Returns the BufferedImage to which decoded pixel data should be written. |

| Uses of [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) in [javax.imageio.metadata](http://docs.google.com/javax/imageio/metadata/package-summary.html) | |
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| Methods in [javax.imageio.metadata](http://docs.google.com/javax/imageio/metadata/package-summary.html) with parameters of type [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | |
| --- | --- |
| abstract  boolean | **IIOMetadataFormatImpl.**[**canNodeAppear**](http://docs.google.com/javax/imageio/metadata/IIOMetadataFormatImpl.html#canNodeAppear(java.lang.String,%20javax.imageio.ImageTypeSpecifier))([String](http://docs.google.com/java/lang/String.html) elementName, [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) imageType) |
| boolean | **IIOMetadataFormat.**[**canNodeAppear**](http://docs.google.com/javax/imageio/metadata/IIOMetadataFormat.html#canNodeAppear(java.lang.String,%20javax.imageio.ImageTypeSpecifier))([String](http://docs.google.com/java/lang/String.html) elementName, [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) imageType)            Returns true if the element (and the subtree below it) is allowed to appear in a metadata document for an image of the given type, defined by an ImageTypeSpecifier. |

| Uses of [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) in [javax.imageio.spi](http://docs.google.com/javax/imageio/spi/package-summary.html) | |
| --- | --- |

| Methods in [javax.imageio.spi](http://docs.google.com/javax/imageio/spi/package-summary.html) with parameters of type [ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | |
| --- | --- |
| abstract  boolean | **ImageWriterSpi.**[**canEncodeImage**](http://docs.google.com/javax/imageio/spi/ImageWriterSpi.html#canEncodeImage(javax.imageio.ImageTypeSpecifier))([ImageTypeSpecifier](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) type)            Returns true if the ImageWriter implementation associated with this service provider is able to encode an image with the given layout. |

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/javax/imageio/ImageTypeSpecifier.html) | **Use** | [**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   NEXT | [**FRAMES**](http://docs.google.com/index.html?javax/imageio//class-useImageTypeSpecifier.html)    [**NO FRAMES**](http://docs.google.com/ImageTypeSpecifier.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

[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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