| | [**Overview**](http://docs.google.com/overview-summary.html) | **Package** | Class | [**Use**](http://docs.google.com/package-use.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 PACKAGE**](http://docs.google.com/javax/imageio/event/package-summary.html)   [**NEXT PACKAGE**](http://docs.google.com/javax/imageio/plugins/bmp/package-summary.html) | [**FRAMES**](http://docs.google.com/index.html?javax/imageio/metadata/package-summary.html)    [**NO FRAMES**](http://docs.google.com/package-summary.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

## Package javax.imageio.metadata

A package of the Java Image I/O API dealing with reading and writing metadata.

**See:**

[**Description**](#3znysh7)

| **Interface Summary** | |
| --- | --- |
| [**IIOMetadataController**](http://docs.google.com/javax/imageio/metadata/IIOMetadataController.html) | An interface to be implemented by objects that can determine the settings of an IIOMetadata object, either by putting up a GUI to obtain values from a user, or by other means. |
| [**IIOMetadataFormat**](http://docs.google.com/javax/imageio/metadata/IIOMetadataFormat.html) | An object describing the structure of metadata documents returned from IIOMetadata.getAsTree and passed to IIOMetadata.setFromTree and mergeTree. |

| **Class Summary** | |
| --- | --- |
| [**IIOMetadata**](http://docs.google.com/javax/imageio/metadata/IIOMetadata.html) | An abstract class to be extended by objects that represent metadata (non-image data) associated with images and streams. |
| [**IIOMetadataFormatImpl**](http://docs.google.com/javax/imageio/metadata/IIOMetadataFormatImpl.html) | A concrete class providing a reusable implementation of the IIOMetadataFormat interface. |
| [**IIOMetadataNode**](http://docs.google.com/javax/imageio/metadata/IIOMetadataNode.html) | A class representing a node in a meta-data tree, which implements the  [org.w3c.dom.Element](http://docs.google.com/api/org/w3c/dom/Element.html) interface and additionally allows for the storage of non-textual objects via the getUserObject and setUserObject methods. |

| **Exception Summary** | |
| --- | --- |
| [**IIOInvalidTreeException**](http://docs.google.com/javax/imageio/metadata/IIOInvalidTreeException.html) | An IIOInvalidTreeException is thrown when an attempt by an IIOMetadata object to parse a tree of IIOMetadataNodes fails. |

## Package javax.imageio.metadata Description

A package of the Java Image I/O API dealing with reading and writing metadata.

When reading an image, its per-stream and per-image metadata is made available as an IIOMetadata object. The internals of this object are specific to the plug-in that created it. Its contents may be accessed in the form of an XML Document, which is implemented as a tree of IIOMetadataNode objects.

When writing an image, its metadata may be set by defining or modifying an IIOMetadata object. Such an object may be obtained from an ImageWriter or ImageTranscoder (from the javax.imageio package). Once such an object has been obtained, its contents may be set of modified via a Document consisting of IIOMetadataNodes. The document format may optionally be described using an IIOMetadataFormat object.

The format of the metadata contained in the XML Document is identified by a string which appears as the root node of the tree of IIOMetadataNode objects. This string contains a version number, e.g. "javax\_imageio\_jpeg\_image\_1.0". Readers and writers may support multiple versions of the same basic format and the Image I/O API has methods that allow specifying which version to use by passing the string to the method/constructor used to obtain an IIOMetadata object. In some cases, a more recent version may not be strictly compatible with a program written expecting an older version (for an example, see the Native Metadata Format section of the JPEG Metadata Usage Notes below).

Plug-ins may choose to support a [standard (plug-in neutral) format](http://docs.google.com/doc-files/standard_metadata.html). This format does not provide lossless encoding of metadata, but allows a portion of the metadata to be accessed in a generic manner.

Each of the standard plug-ins supports a so-called "native" metadata format, which encodes its metadata losslessly:

* [GIF metadata](http://docs.google.com/doc-files/gif_metadata.html)
* [JPEG metadata](http://docs.google.com/doc-files/jpeg_metadata.html)
* [PNG metadata](http://docs.google.com/doc-files/png_metadata.html)
* [BMP metadata](http://docs.google.com/doc-files/bmp_metadata.html)
* [WBMP metadata](http://docs.google.com/doc-files/wbmp_metadata.html)

**Since:** 1.4

| | [**Overview**](http://docs.google.com/overview-summary.html) | **Package** | Class | [**Use**](http://docs.google.com/package-use.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 PACKAGE**](http://docs.google.com/javax/imageio/event/package-summary.html)   [**NEXT PACKAGE**](http://docs.google.com/javax/imageio/plugins/bmp/package-summary.html) | [**FRAMES**](http://docs.google.com/index.html?javax/imageio/metadata/package-summary.html)    [**NO FRAMES**](http://docs.google.com/package-summary.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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