| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/IIOReadProgressListener.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**](http://docs.google.com/javax/imageio/event/IIOReadUpdateListener.html) | [**FRAMES**](http://docs.google.com/index.html?javax/imageio/event/IIOReadProgressListener.html)    [**NO FRAMES**](http://docs.google.com/IIOReadProgressListener.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | CONSTR | [METHOD](#3znysh7) | DETAIL: FIELD | CONSTR | [METHOD](#2et92p0) |

## **javax.imageio.event**

Interface IIOReadProgressListener

**All Superinterfaces:** [EventListener](http://docs.google.com/java/util/EventListener.html)

public interface **IIOReadProgressListener**extends [EventListener](http://docs.google.com/java/util/EventListener.html)

An interface used by ImageReader implementations to notify callers of their image and thumbnail reading methods of progress.

This interface receives general indications of decoding progress (via the imageProgress and thumbnailProgress methods), and events indicating when an entire image has been updated (via the imageStarted, imageComplete, thumbnailStarted and thumbnailComplete methods). Applications that wish to be informed of pixel updates as they happen (for example, during progressive decoding), should provide an IIOReadUpdateListener.

**See Also:**[IIOReadUpdateListener](http://docs.google.com/javax/imageio/event/IIOReadUpdateListener.html), [ImageReader.addIIOReadProgressListener(javax.imageio.event.IIOReadProgressListener)](http://docs.google.com/javax/imageio/ImageReader.html#addIIOReadProgressListener(javax.imageio.event.IIOReadProgressListener)), [ImageReader.removeIIOReadProgressListener(javax.imageio.event.IIOReadProgressListener)](http://docs.google.com/javax/imageio/ImageReader.html#removeIIOReadProgressListener(javax.imageio.event.IIOReadProgressListener))

| **Method Summary** | |
| --- | --- |
| void | [**imageComplete**](http://docs.google.com/javax/imageio/event/IIOReadProgressListener.html#imageComplete(javax.imageio.ImageReader))([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source)            Reports that the current image read operation has completed. |
| void | [**imageProgress**](http://docs.google.com/javax/imageio/event/IIOReadProgressListener.html#imageProgress(javax.imageio.ImageReader,%20float))([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source, float percentageDone)            Reports the approximate degree of completion of the current read call of the associated ImageReader. |
| void | [**imageStarted**](http://docs.google.com/javax/imageio/event/IIOReadProgressListener.html#imageStarted(javax.imageio.ImageReader,%20int))([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source, int imageIndex)            Reports that an image read operation is beginning. |
| void | [**readAborted**](http://docs.google.com/javax/imageio/event/IIOReadProgressListener.html#readAborted(javax.imageio.ImageReader))([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source)            Reports that a read has been aborted via the reader's abort method. |
| void | [**sequenceComplete**](http://docs.google.com/javax/imageio/event/IIOReadProgressListener.html#sequenceComplete(javax.imageio.ImageReader))([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source)            Reports that a sequence of read operationshas completed. |
| void | [**sequenceStarted**](http://docs.google.com/javax/imageio/event/IIOReadProgressListener.html#sequenceStarted(javax.imageio.ImageReader,%20int))([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source, int minIndex)            Reports that a sequence of read operations is beginning. |
| void | [**thumbnailComplete**](http://docs.google.com/javax/imageio/event/IIOReadProgressListener.html#thumbnailComplete(javax.imageio.ImageReader))([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source)            Reports that a thumbnail read operation has completed. |
| void | [**thumbnailProgress**](http://docs.google.com/javax/imageio/event/IIOReadProgressListener.html#thumbnailProgress(javax.imageio.ImageReader,%20float))([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source, float percentageDone)            Reports the approximate degree of completion of the current getThumbnail call within the associated ImageReader. |
| void | [**thumbnailStarted**](http://docs.google.com/javax/imageio/event/IIOReadProgressListener.html#thumbnailStarted(javax.imageio.ImageReader,%20int,%20int))([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source, int imageIndex, int thumbnailIndex)            Reports that a thumbnail read operation is beginning. |

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

### sequenceStarted

void **sequenceStarted**([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source,  
 int minIndex)

Reports that a sequence of read operations is beginning. ImageReader implementations are required to call this method exactly once from their readAll(Iterator) method.

**Parameters:**source - the ImageReader object calling this method.minIndex - the index of the first image to be read.

### sequenceComplete

void **sequenceComplete**([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source)

Reports that a sequence of read operationshas completed. ImageReader implementations are required to call this method exactly once from their readAll(Iterator) method.

**Parameters:**source - the ImageReader object calling this method.

### imageStarted

void **imageStarted**([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source,  
 int imageIndex)

Reports that an image read operation is beginning. All ImageReader implementations are required to call this method exactly once when beginning an image read operation.

**Parameters:**source - the ImageReader object calling this method.imageIndex - the index of the image being read within its containing input file or stream.

### imageProgress

void **imageProgress**([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source,  
 float percentageDone)

Reports the approximate degree of completion of the current read call of the associated ImageReader.

The degree of completion is expressed as a percentage varying from 0.0F to 100.0F. The percentage should ideally be calculated in terms of the remaining time to completion, but it is usually more practical to use a more well-defined metric such as pixels decoded or portion of input stream consumed. In any case, a sequence of calls to this method during a given read operation should supply a monotonically increasing sequence of percentage values. It is not necessary to supply the exact values 0 and 100, as these may be inferred by the callee from other methods.

Each particular ImageReader implementation may call this method at whatever frequency it desires. A rule of thumb is to call it around each 5 percent mark.

**Parameters:**source - the ImageReader object calling this method.percentageDone - the approximate percentage of decoding that has been completed.

### imageComplete

void **imageComplete**([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source)

Reports that the current image read operation has completed. All ImageReader implementations are required to call this method exactly once upon completion of each image read operation.

**Parameters:**source - the ImageReader object calling this method.

### thumbnailStarted

void **thumbnailStarted**([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source,  
 int imageIndex,  
 int thumbnailIndex)

Reports that a thumbnail read operation is beginning. All ImageReader implementations are required to call this method exactly once when beginning a thumbnail read operation.

**Parameters:**source - the ImageReader object calling this method.imageIndex - the index of the image being read within its containing input file or stream.thumbnailIndex - the index of the thumbnail being read.

### thumbnailProgress

void **thumbnailProgress**([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source,  
 float percentageDone)

Reports the approximate degree of completion of the current getThumbnail call within the associated ImageReader. The semantics are identical to those of imageProgress.

**Parameters:**source - the ImageReader object calling this method.percentageDone - the approximate percentage of decoding that has been completed.

### thumbnailComplete

void **thumbnailComplete**([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source)

Reports that a thumbnail read operation has completed. All ImageReader implementations are required to call this method exactly once upon completion of each thumbnail read operation.

**Parameters:**source - the ImageReader object calling this method.

### readAborted

void **readAborted**([ImageReader](http://docs.google.com/javax/imageio/ImageReader.html) source)

Reports that a read has been aborted via the reader's abort method. No further notifications will be given.

**Parameters:**source - the ImageReader object calling this method.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/IIOReadProgressListener.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*** |
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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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