javax.imageio.* ImageReader + ImageWriter

```
1mageReader
                                                                                                                                  void checkReadParamBandSettings (ImageReadParam param, int numSrcBands,
                                                                                                                                                                                                                int numDstBands)
                                                                                                                               void computeRegions (ImageReadParam param, int srcWidth, int srcHeight
                                     Bufferedimage image. Rectangle srcRegion, Rectangle destRegion)

Bufferedimage image. Rectangle srcRegion, Rectangle destRegion)

Bufferedimage getDestination (ImageReadParam param, Iterator imageTypes, int width, int height) 
Rectangle getSourceRegion (ImageReadParam param, int srcWidth, int srcHeight)
                                                                                                                               float getAspectRatio (int imageIndex) &
                    Locale[] getAvailableLocales ()
ImageReadParam getDefaultReadParam ()
                                                                  eReadParam getDefaultReadParam ()

String getFormatName () 
int getHeight (int imageIndex) 
IIOMetadata getImageMetadata (int imageIndex) 
IIOMetadata getImageMetadata (int imageIndex, String formatName, Set nodeNames) 
Iterator getImageTypes (int imageIndex, 
Iterator getImageTypes (int imageIndex) 
Iterator getImageTypes
                                                                                                                   Object get / setInput ()
                                                                                                             Locale get / setLocale ()
int getMinIndex ()
  int getMinindex ()
int getNumlmages (boolean allowSearch) &
int getNumThumbnails (int imageIndex) &
ImageReaderSpi getOriginatingProvider ()
ImageTypeSpecifier getRawlmageType (int imageIndex) &
IIOMetadata getStreamMetadata () &
                                                                     IIOMetadata getStreamMetadata (String formatName, Set nodeNames) $
                                                                                                                                       data getstreammetadata (string formatvalme, Set in destreammetadata (string formatvalme, Set in getThumbnailHeight (Int imagelindex, int thumbnailIndex) & int getThumbnailWidth (Int imagelindex) & int getTlieGridXOffset (Int imagelindex) & int getTlieHeight (Int imagelindex) & int getTlieHeight (Int imagelindex) & int getTlieWidth (Int imagel
                                                                                               int getTileWidth (int imageIndex) $\footnote{k}$ int getWidth (fint imageIndex) $\footnote{k}$ boolean isIgnoringMetadata () boolean isImageTiled (int imageIndex) $\footnote{k}$ boolean isRandomAccessEasy (int imageIndex) $\footnote{k}$ boolean isSeekForwardOnly () vidi setInput (Object input, boolean seekForwardOnly) vidi setInput (Object input, boolean seekForwardOnly, booleans seekForwardOnly, booleans
        Event Methods
                                                                                                                                  void add / removelIOReadProgressListener (IIOReadProgressListener listener)
                                                                                                                               void add / removellOReadProgressListener (IIOReadProgressListener listen void add / removellOReadUpdateListener (IIOReadUpdateListener listener) void add / removellOReadWarningListener (IIOReadWarningListener listener) void removeAlIIIOReadProgressListeners () void removeAlIIIOReadWarningListeners () void removeAlIIIOReadWarningListeners ()
        Other Public Methods
                                                                                                                               void abort ()
                                                                                                     boolean canReadRaster ()
                                              boolean canReadRaster ()
void dispose ()
boolean hasThumbnails (int imageIndex) 

BufferedImage read (int imageIndex) 

BufferedImage read (int imageIndex, ImageReadParam param) 

Iterator readAll (Iterator params) 

Iterator ReadAll
                                  Iterator readAll (Iterator params) \ Iterator readAll (Iterator params) \ Iterator readAll (Int imageIndex, ImageReadParam param) \ Iterator readAll (Int imageIndex, ImageReadParam param) \ Iterator Rester readRaster (Int imageIndex, ImageReadParam param) \ Iterator Rester readRaster (Int imageIndex, ImageReadParam param) \ Iterator Rester readThumbnail (Int imageIndex, Int Iterator Int Iterator Rester readTileRaster (Int imageIndex, Int Iterator Iterator \ Iterator Rester readTileRaster (Int imageIndex, Int Iterator Rester readTileRaster r
                                                                                                                                  void reset ()
        Other Protected Methods
                                                                                                  boolean abortRequested ()
                                                                                                                            olean abortRequestd ()
void clearAbortRequest ()
void processImageComplete ()
void processImageProgress (float percentageDone)
void processImageStarted (int imageIndex)
void processImageStarted (int imageIndex)
void processImageUpdate (BufferedImage, int minX, int minY, int width, int height,
int periodX, int periodY, int[] bands)
                                                                                                                               int periodX, int periodY, int[] bands)
void processPassComplete (BufferedImage thelmage)
void processPassStarted (BufferedImage thelmage, int minY, int periodX, int periodY, int[] bands)
void processReadAborted ()
void processSequenceComplete ()
void processSequenceStarted (int minIndex)
void processSequenceStarted (int minIndex)
void processTevenberi(Complete())
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            int pass, int minPass, int maxPass, int minX,
                                                                                                                                    void processThumbnailComplete()
                                                                                                                               void processThumbnailComplete()
void processThumbnailPassComplete(BufferedImage theThumbnail)
void processThumbnailPassStarted(BufferedImage theThumbnail, int pass, int minPass,
int maxPass, int minX, int minY, int periodX, int periodY, int[] bands)
void processThumbnailProgress(float percentageDone)
void processThumbnailStarted (int imageIndex, int thumbnailIndex)
void processThumbnailUpdate(BufferedImage theThumbnail, int minX, int minY, int width,
the thirt is profession.
                                                                                                                                  int height, int periodX, int periodY, int[] bands)
void processWarningOccurred(String warning)
void processWarningOccurred(String baseName, String keyword)
```

™ ImageTranscoder

IIOMetadata convertImageMetadata (IIOMetadata inData, ImageTypeSpecifier imageType, ImageWriteParamparam) IIOMetadata convertStreamMetadata (IIOMetadata inData, ImageWriteParamparam)

```
# ImageWriter
# ImageWriter (ImageWriterSploriginatingProvider)

Accessors + Collectors
Locale[] getAvailableLocales ()
IIOMetadata getDefaultImageMetadata (ImageTypeSpecifier imageType, ImageWriteParamparam)
IIOMetadata getDefaultIvriteParam ()
Locale get / setLocale ()
Indeparam getDefaultWriteParam ()
Locale get / setLocale ()
Indeparam getDefaultWriteParam ()
Locale get / setLocale ()
IIOMetadata streamMetadata, IIOMetadata imageMetadata (ImageWriteParamparam, IIOMetadata streamMetadata (ImageWriteParamparam, IIOMetadata streamMetadata, IIOMetadata imageMetadata)
ImageWriteSpi getOriginatingProvider ()
Dimension[] getPreferredThumbnailSizes (ImageTypeSpecifier imageType, ImageWriteParamparam, IIOMetadata streamMetadata, IIOMetadata imageMetadata)
void removeImage (int imageIndex) 
**Levent Methods**
void add / removeIlOWriteProgressListener(IIOWriteProgressListeneristener)
void add / removeIlOWriteProgressListeners)
void removeAIIIOWriteProgressListeners()
void removeAIIIOWriteProgressListeners()
void removeAIIIOWriteProgressListeners()
void removeAIIIOWriteProgressListeners()

Other Public Methods
void abort ()
boolean caninsertEmpty (int imageIndex) 
boolean caninsertEmpty (int imageIndex) 
boolean caninsertEmpty (int imageIndex) 
boolean canReplacePixes (int imageIndex) 
boolean canReplacePixes (int imageIndex) 
boolean canReplacePixes (int imageIndex) 
boolean canWriteSequence ()
void dispose ()
void endReplacePixes (int imageIndex, ImageTypeSpecifier imageType, int width, int height, IIOMetadata imageMetadata, List thumbnails, ImageWriteParamparam) 
void preparaWriteEquence () 
void endReplacePixes (int imageIndex, ImageTypeSpecifier imageType, int width, int height, IIOMetadata imageMetadata, List thumbnails, ImageWriteParamparam) 
void replacePixes (Raster raster, ImageWriteParamparam) 
void preparaWriteEquence ((IoMetadata streamMetadata) 
void replacePixes (Raster raster, ImageWriteParamparam) 
void replacePixes (Raster raster, ImageWriteParamparam) 
void vried (IoMetadata streamMetadata) 
void vri
```