| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | Class | Use | **Tree** | [**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**](http://docs.google.com/java/beans/beancontext/package-tree.html)   [**NEXT**](http://docs.google.com/java/lang/package-tree.html) | [**FRAMES**](http://docs.google.com/index.html?java/io/package-tree.html)    [**NO FRAMES**](http://docs.google.com/package-tree.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

Hierarchy For Package java.io

**Package Hierarchies:**[All Packages](http://docs.google.com/overview-tree.html)

## Class Hierarchy

* java.lang.[**Object**](http://docs.google.com/java/lang/Object.html)
  + java.io.[**Console**](http://docs.google.com/java/io/Console.html) (implements java.io.[Flushable](http://docs.google.com/java/io/Flushable.html))
  + java.io.[**File**](http://docs.google.com/java/io/File.html) (implements java.lang.[Comparable](http://docs.google.com/java/lang/Comparable.html)<T>, java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
  + java.io.[**FileDescriptor**](http://docs.google.com/java/io/FileDescriptor.html)
  + java.io.[**InputStream**](http://docs.google.com/java/io/InputStream.html) (implements java.io.[Closeable](http://docs.google.com/java/io/Closeable.html))
    - java.io.[**ByteArrayInputStream**](http://docs.google.com/java/io/ByteArrayInputStream.html)
    - java.io.[**FileInputStream**](http://docs.google.com/java/io/FileInputStream.html)
    - java.io.[**FilterInputStream**](http://docs.google.com/java/io/FilterInputStream.html)
      * java.io.[**BufferedInputStream**](http://docs.google.com/java/io/BufferedInputStream.html)
      * java.io.[**DataInputStream**](http://docs.google.com/java/io/DataInputStream.html) (implements java.io.[DataInput](http://docs.google.com/java/io/DataInput.html))
      * java.io.[**LineNumberInputStream**](http://docs.google.com/java/io/LineNumberInputStream.html)
      * java.io.[**PushbackInputStream**](http://docs.google.com/java/io/PushbackInputStream.html)
    - java.io.[**ObjectInputStream**](http://docs.google.com/java/io/ObjectInputStream.html) (implements java.io.[ObjectInput](http://docs.google.com/java/io/ObjectInput.html), java.io.[ObjectStreamConstants](http://docs.google.com/java/io/ObjectStreamConstants.html))
    - java.io.[**PipedInputStream**](http://docs.google.com/java/io/PipedInputStream.html)
    - java.io.[**SequenceInputStream**](http://docs.google.com/java/io/SequenceInputStream.html)
    - java.io.[**StringBufferInputStream**](http://docs.google.com/java/io/StringBufferInputStream.html)
  + java.io.[**ObjectInputStream.GetField**](http://docs.google.com/java/io/ObjectInputStream.GetField.html)
  + java.io.[**ObjectOutputStream.PutField**](http://docs.google.com/java/io/ObjectOutputStream.PutField.html)
  + java.io.[**ObjectStreamClass**](http://docs.google.com/java/io/ObjectStreamClass.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
  + java.io.[**ObjectStreamField**](http://docs.google.com/java/io/ObjectStreamField.html) (implements java.lang.[Comparable](http://docs.google.com/java/lang/Comparable.html)<T>)
  + java.io.[**OutputStream**](http://docs.google.com/java/io/OutputStream.html) (implements java.io.[Closeable](http://docs.google.com/java/io/Closeable.html), java.io.[Flushable](http://docs.google.com/java/io/Flushable.html))
    - java.io.[**ByteArrayOutputStream**](http://docs.google.com/java/io/ByteArrayOutputStream.html)
    - java.io.[**FileOutputStream**](http://docs.google.com/java/io/FileOutputStream.html)
    - java.io.[**FilterOutputStream**](http://docs.google.com/java/io/FilterOutputStream.html)
      * java.io.[**BufferedOutputStream**](http://docs.google.com/java/io/BufferedOutputStream.html)
      * java.io.[**DataOutputStream**](http://docs.google.com/java/io/DataOutputStream.html) (implements java.io.[DataOutput](http://docs.google.com/java/io/DataOutput.html))
      * java.io.[**PrintStream**](http://docs.google.com/java/io/PrintStream.html) (implements java.lang.[Appendable](http://docs.google.com/java/lang/Appendable.html), java.io.[Closeable](http://docs.google.com/java/io/Closeable.html))
    - java.io.[**ObjectOutputStream**](http://docs.google.com/java/io/ObjectOutputStream.html) (implements java.io.[ObjectOutput](http://docs.google.com/java/io/ObjectOutput.html), java.io.[ObjectStreamConstants](http://docs.google.com/java/io/ObjectStreamConstants.html))
    - java.io.[**PipedOutputStream**](http://docs.google.com/java/io/PipedOutputStream.html)
  + java.security.[**Permission**](http://docs.google.com/java/security/Permission.html) (implements java.security.[Guard](http://docs.google.com/java/security/Guard.html), java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
    - java.security.[**BasicPermission**](http://docs.google.com/java/security/BasicPermission.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
      * java.io.[**SerializablePermission**](http://docs.google.com/java/io/SerializablePermission.html)
    - java.io.[**FilePermission**](http://docs.google.com/java/io/FilePermission.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
  + java.io.[**RandomAccessFile**](http://docs.google.com/java/io/RandomAccessFile.html) (implements java.io.[Closeable](http://docs.google.com/java/io/Closeable.html), java.io.[DataInput](http://docs.google.com/java/io/DataInput.html), java.io.[DataOutput](http://docs.google.com/java/io/DataOutput.html))
  + java.io.[**Reader**](http://docs.google.com/java/io/Reader.html) (implements java.io.[Closeable](http://docs.google.com/java/io/Closeable.html), java.lang.[Readable](http://docs.google.com/java/lang/Readable.html))
    - java.io.[**BufferedReader**](http://docs.google.com/java/io/BufferedReader.html)
      * java.io.[**LineNumberReader**](http://docs.google.com/java/io/LineNumberReader.html)
    - java.io.[**CharArrayReader**](http://docs.google.com/java/io/CharArrayReader.html)
    - java.io.[**FilterReader**](http://docs.google.com/java/io/FilterReader.html)
      * java.io.[**PushbackReader**](http://docs.google.com/java/io/PushbackReader.html)
    - java.io.[**InputStreamReader**](http://docs.google.com/java/io/InputStreamReader.html)
      * java.io.[**FileReader**](http://docs.google.com/java/io/FileReader.html)
    - java.io.[**PipedReader**](http://docs.google.com/java/io/PipedReader.html)
    - java.io.[**StringReader**](http://docs.google.com/java/io/StringReader.html)
  + java.io.[**StreamTokenizer**](http://docs.google.com/java/io/StreamTokenizer.html)
  + java.lang.[**Throwable**](http://docs.google.com/java/lang/Throwable.html) (implements java.io.[Serializable](http://docs.google.com/java/io/Serializable.html))
    - java.lang.[**Error**](http://docs.google.com/java/lang/Error.html)
      * java.io.[**IOError**](http://docs.google.com/java/io/IOError.html)
    - java.lang.[**Exception**](http://docs.google.com/java/lang/Exception.html)
      * java.io.[**IOException**](http://docs.google.com/java/io/IOException.html)
        + java.io.[**CharConversionException**](http://docs.google.com/java/io/CharConversionException.html)
        + java.io.[**EOFException**](http://docs.google.com/java/io/EOFException.html)
        + java.io.[**FileNotFoundException**](http://docs.google.com/java/io/FileNotFoundException.html)
        + java.io.[**InterruptedIOException**](http://docs.google.com/java/io/InterruptedIOException.html)
        + java.io.[**ObjectStreamException**](http://docs.google.com/java/io/ObjectStreamException.html)

java.io.[**InvalidClassException**](http://docs.google.com/java/io/InvalidClassException.html)

java.io.[**InvalidObjectException**](http://docs.google.com/java/io/InvalidObjectException.html)

java.io.[**NotActiveException**](http://docs.google.com/java/io/NotActiveException.html)

java.io.[**NotSerializableException**](http://docs.google.com/java/io/NotSerializableException.html)

java.io.[**OptionalDataException**](http://docs.google.com/java/io/OptionalDataException.html)

java.io.[**StreamCorruptedException**](http://docs.google.com/java/io/StreamCorruptedException.html)

java.io.[**WriteAbortedException**](http://docs.google.com/java/io/WriteAbortedException.html)

* + - * + java.io.[**SyncFailedException**](http://docs.google.com/java/io/SyncFailedException.html)
        + java.io.[**UnsupportedEncodingException**](http://docs.google.com/java/io/UnsupportedEncodingException.html)
        + java.io.[**UTFDataFormatException**](http://docs.google.com/java/io/UTFDataFormatException.html)
  + java.io.[**Writer**](http://docs.google.com/java/io/Writer.html) (implements java.lang.[Appendable](http://docs.google.com/java/lang/Appendable.html), java.io.[Closeable](http://docs.google.com/java/io/Closeable.html), java.io.[Flushable](http://docs.google.com/java/io/Flushable.html))
    - java.io.[**BufferedWriter**](http://docs.google.com/java/io/BufferedWriter.html)
    - java.io.[**CharArrayWriter**](http://docs.google.com/java/io/CharArrayWriter.html)
    - java.io.[**FilterWriter**](http://docs.google.com/java/io/FilterWriter.html)
    - java.io.[**OutputStreamWriter**](http://docs.google.com/java/io/OutputStreamWriter.html)
      * java.io.[**FileWriter**](http://docs.google.com/java/io/FileWriter.html)
    - java.io.[**PipedWriter**](http://docs.google.com/java/io/PipedWriter.html)
    - java.io.[**PrintWriter**](http://docs.google.com/java/io/PrintWriter.html)
    - java.io.[**StringWriter**](http://docs.google.com/java/io/StringWriter.html)

## Interface Hierarchy

* java.io.[**Closeable**](http://docs.google.com/java/io/Closeable.html)
* java.io.[**DataInput**](http://docs.google.com/java/io/DataInput.html)
  + java.io.[**ObjectInput**](http://docs.google.com/java/io/ObjectInput.html)
* java.io.[**DataOutput**](http://docs.google.com/java/io/DataOutput.html)
  + java.io.[**ObjectOutput**](http://docs.google.com/java/io/ObjectOutput.html)
* java.io.[**FileFilter**](http://docs.google.com/java/io/FileFilter.html)
* java.io.[**FilenameFilter**](http://docs.google.com/java/io/FilenameFilter.html)
* java.io.[**Flushable**](http://docs.google.com/java/io/Flushable.html)
* java.io.[**ObjectInputValidation**](http://docs.google.com/java/io/ObjectInputValidation.html)
* java.io.[**ObjectStreamConstants**](http://docs.google.com/java/io/ObjectStreamConstants.html)
* java.io.[**Serializable**](http://docs.google.com/java/io/Serializable.html)
  + java.io.[**Externalizable**](http://docs.google.com/java/io/Externalizable.html)

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | Class | Use | **Tree** | [**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**](http://docs.google.com/java/beans/beancontext/package-tree.html)   [**NEXT**](http://docs.google.com/java/lang/package-tree.html) | [**FRAMES**](http://docs.google.com/index.html?java/io/package-tree.html)    [**NO FRAMES**](http://docs.google.com/package-tree.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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