| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/MemoryCacheImageInputStream.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**](http://docs.google.com/javax/imageio/stream/ImageOutputStreamImpl.html)   [**NEXT CLASS**](http://docs.google.com/javax/imageio/stream/MemoryCacheImageOutputStream.html) | [**FRAMES**](http://docs.google.com/index.html?javax/imageio/stream/MemoryCacheImageInputStream.html)    [**NO FRAMES**](http://docs.google.com/MemoryCacheImageInputStream.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: FIELD | [CONSTR](#2s8eyo1) | [METHOD](#3rdcrjn) |

## **javax.imageio.stream**

Class MemoryCacheImageInputStream

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [javax.imageio.stream.ImageInputStreamImpl](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html)  
 **javax.imageio.stream.MemoryCacheImageInputStream**

**All Implemented Interfaces:** [DataInput](http://docs.google.com/java/io/DataInput.html), [ImageInputStream](http://docs.google.com/javax/imageio/stream/ImageInputStream.html)

public class **MemoryCacheImageInputStream**extends [ImageInputStreamImpl](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html)

An implementation of ImageInputStream that gets its input from a regular InputStream. A memory buffer is used to cache at least the data between the discard position and the current read position.

In general, it is preferable to use a FileCacheImageInputStream when reading from a regular InputStream. This class is provided for cases where it is not possible to create a writable temporary file.

| **Field Summary** | |
| --- | --- |

| **Fields inherited from class javax.imageio.stream.**[**ImageInputStreamImpl**](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html) |
| --- |
| [bitOffset](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#bitOffset), [byteOrder](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#byteOrder), [flushedPos](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#flushedPos), [streamPos](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#streamPos) |

| **Constructor Summary** | |
| --- | --- |
| [**MemoryCacheImageInputStream**](http://docs.google.com/javax/imageio/stream/MemoryCacheImageInputStream.html#MemoryCacheImageInputStream(java.io.InputStream))([InputStream](http://docs.google.com/java/io/InputStream.html) stream)            Constructs a MemoryCacheImageInputStream that will read from a given InputStream. |

| **Method Summary** | |
| --- | --- |
| void | [**close**](http://docs.google.com/javax/imageio/stream/MemoryCacheImageInputStream.html#close())()            Closes this MemoryCacheImageInputStream, freeing the cache. |
| protected  void | [**finalize**](http://docs.google.com/javax/imageio/stream/MemoryCacheImageInputStream.html#finalize())()            Finalizes this object prior to garbage collection. |
| void | [**flushBefore**](http://docs.google.com/javax/imageio/stream/MemoryCacheImageInputStream.html#flushBefore(long))(long pos)            Discards the initial portion of the stream prior to the indicated postion. |
| boolean | [**isCached**](http://docs.google.com/javax/imageio/stream/MemoryCacheImageInputStream.html#isCached())()            Returns true since this ImageInputStream caches data in order to allow seeking backwards. |
| boolean | [**isCachedFile**](http://docs.google.com/javax/imageio/stream/MemoryCacheImageInputStream.html#isCachedFile())()            Returns false since this ImageInputStream does not maintain a file cache. |
| boolean | [**isCachedMemory**](http://docs.google.com/javax/imageio/stream/MemoryCacheImageInputStream.html#isCachedMemory())()            Returns true since this ImageInputStream maintains a main memory cache. |
| int | [**read**](http://docs.google.com/javax/imageio/stream/MemoryCacheImageInputStream.html#read())()            Reads a single byte from the stream and returns it as an int between 0 and 255. |
| int | [**read**](http://docs.google.com/javax/imageio/stream/MemoryCacheImageInputStream.html#read(byte%5B%5D,%20int,%20int))(byte[] b, int off, int len)            Reads up to len bytes from the stream, and stores them into b starting at index off. |

| **Methods inherited from class javax.imageio.stream.**[**ImageInputStreamImpl**](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html) |
| --- |
| [checkClosed](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#checkClosed()), [flush](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#flush()), [getBitOffset](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#getBitOffset()), [getByteOrder](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#getByteOrder()), [getFlushedPosition](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#getFlushedPosition()), [getStreamPosition](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#getStreamPosition()), [length](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#length()), [mark](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#mark()), [read](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#read(byte%5B%5D)), [readBit](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readBit()), [readBits](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readBits(int)), [readBoolean](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readBoolean()), [readByte](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readByte()), [readBytes](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readBytes(javax.imageio.stream.IIOByteBuffer,%20int)), [readChar](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readChar()), [readDouble](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readDouble()), [readFloat](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readFloat()), [readFully](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readFully(byte%5B%5D)), [readFully](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readFully(byte%5B%5D,%20int,%20int)), [readFully](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readFully(char%5B%5D,%20int,%20int)), [readFully](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readFully(double%5B%5D,%20int,%20int)), [readFully](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readFully(float%5B%5D,%20int,%20int)), [readFully](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readFully(int%5B%5D,%20int,%20int)), [readFully](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readFully(long%5B%5D,%20int,%20int)), [readFully](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readFully(short%5B%5D,%20int,%20int)), [readInt](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readInt()), [readLine](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readLine()), [readLong](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readLong()), [readShort](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readShort()), [readUnsignedByte](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readUnsignedByte()), [readUnsignedInt](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readUnsignedInt()), [readUnsignedShort](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readUnsignedShort()), [readUTF](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#readUTF()), [reset](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#reset()), [seek](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#seek(long)), [setBitOffset](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#setBitOffset(int)), [setByteOrder](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#setByteOrder(java.nio.ByteOrder)), [skipBytes](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#skipBytes(int)), [skipBytes](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#skipBytes(long)) |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [toString](http://docs.google.com/java/lang/Object.html#toString()), [wait](http://docs.google.com/java/lang/Object.html#wait()), [wait](http://docs.google.com/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/java/lang/Object.html#wait(long,%20int)) |

| **Constructor Detail** |
| --- |

### MemoryCacheImageInputStream

public **MemoryCacheImageInputStream**([InputStream](http://docs.google.com/java/io/InputStream.html) stream)

Constructs a MemoryCacheImageInputStream that will read from a given InputStream.

**Parameters:**stream - an InputStream to read from. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if stream is null.

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

### read

public int **read**()  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

**Description copied from class:** [**ImageInputStreamImpl**](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#read()) Reads a single byte from the stream and returns it as an int between 0 and 255. If EOF is reached, -1 is returned.

Subclasses must provide an implementation for this method. The subclass implementation should update the stream position before exiting.

The bit offset within the stream must be reset to zero before the read occurs.

**Specified by:**[read](http://docs.google.com/javax/imageio/stream/ImageInputStream.html#read()) in interface [ImageInputStream](http://docs.google.com/javax/imageio/stream/ImageInputStream.html)**Specified by:**[read](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#read()) in class [ImageInputStreamImpl](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html) **Returns:**the value of the next byte in the stream, or -1 if EOF is reached. **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - if the stream has been closed.

### read

public int **read**(byte[] b,  
 int off,  
 int len)  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

**Description copied from class:** [**ImageInputStreamImpl**](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#read(byte%5B%5D,%20int,%20int)) Reads up to len bytes from the stream, and stores them into b starting at index off. If no bytes can be read because the end of the stream has been reached, -1 is returned.

The bit offset within the stream must be reset to zero before the read occurs.

Subclasses must provide an implementation for this method. The subclass implementation should update the stream position before exiting.

**Specified by:**[read](http://docs.google.com/javax/imageio/stream/ImageInputStream.html#read(byte%5B%5D,%20int,%20int)) in interface [ImageInputStream](http://docs.google.com/javax/imageio/stream/ImageInputStream.html)**Specified by:**[read](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#read(byte%5B%5D,%20int,%20int)) in class [ImageInputStreamImpl](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html) **Parameters:**b - an array of bytes to be written to.off - the starting position within b to write to.len - the maximum number of bytes to read. **Returns:**the number of bytes actually read, or -1 to indicate EOF. **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - if an I/O error occurs.

### flushBefore

public void **flushBefore**(long pos)  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

**Description copied from interface:** [**ImageInputStream**](http://docs.google.com/javax/imageio/stream/ImageInputStream.html#flushBefore(long)) Discards the initial portion of the stream prior to the indicated postion. Attempting to seek to an offset within the flushed portion of the stream will result in an IndexOutOfBoundsException.

Calling flushBefore may allow classes implementing this interface to free up resources such as memory or disk space that are being used to store data from the stream.

**Specified by:**[flushBefore](http://docs.google.com/javax/imageio/stream/ImageInputStream.html#flushBefore(long)) in interface [ImageInputStream](http://docs.google.com/javax/imageio/stream/ImageInputStream.html)**Overrides:**[flushBefore](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#flushBefore(long)) in class [ImageInputStreamImpl](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html) **Parameters:**pos - a long containing the length of the stream prefix that may be flushed. **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - if an I/O error occurs.

### isCached

public boolean **isCached**()

Returns true since this ImageInputStream caches data in order to allow seeking backwards.

**Specified by:**[isCached](http://docs.google.com/javax/imageio/stream/ImageInputStream.html#isCached()) in interface [ImageInputStream](http://docs.google.com/javax/imageio/stream/ImageInputStream.html)**Overrides:**[isCached](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#isCached()) in class [ImageInputStreamImpl](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html) **Returns:**true.**See Also:**[isCachedMemory()](http://docs.google.com/javax/imageio/stream/MemoryCacheImageInputStream.html#isCachedMemory()), [isCachedFile()](http://docs.google.com/javax/imageio/stream/MemoryCacheImageInputStream.html#isCachedFile())

### isCachedFile

public boolean **isCachedFile**()

Returns false since this ImageInputStream does not maintain a file cache.

**Specified by:**[isCachedFile](http://docs.google.com/javax/imageio/stream/ImageInputStream.html#isCachedFile()) in interface [ImageInputStream](http://docs.google.com/javax/imageio/stream/ImageInputStream.html)**Overrides:**[isCachedFile](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#isCachedFile()) in class [ImageInputStreamImpl](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html) **Returns:**false.**See Also:**[isCached()](http://docs.google.com/javax/imageio/stream/MemoryCacheImageInputStream.html#isCached()), [isCachedMemory()](http://docs.google.com/javax/imageio/stream/MemoryCacheImageInputStream.html#isCachedMemory())

### isCachedMemory

public boolean **isCachedMemory**()

Returns true since this ImageInputStream maintains a main memory cache.

**Specified by:**[isCachedMemory](http://docs.google.com/javax/imageio/stream/ImageInputStream.html#isCachedMemory()) in interface [ImageInputStream](http://docs.google.com/javax/imageio/stream/ImageInputStream.html)**Overrides:**[isCachedMemory](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#isCachedMemory()) in class [ImageInputStreamImpl](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html) **Returns:**true.**See Also:**[isCached()](http://docs.google.com/javax/imageio/stream/MemoryCacheImageInputStream.html#isCached()), [isCachedFile()](http://docs.google.com/javax/imageio/stream/MemoryCacheImageInputStream.html#isCachedFile())

### close

public void **close**()  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Closes this MemoryCacheImageInputStream, freeing the cache. The source InputStream is not closed.

**Specified by:**[close](http://docs.google.com/javax/imageio/stream/ImageInputStream.html#close()) in interface [ImageInputStream](http://docs.google.com/javax/imageio/stream/ImageInputStream.html)**Overrides:**[close](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#close()) in class [ImageInputStreamImpl](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html) **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - if an I/O error occurs.

### finalize

protected void **finalize**()  
 throws [Throwable](http://docs.google.com/java/lang/Throwable.html)

Finalizes this object prior to garbage collection. The close method is called to close any open input source. This method should not be called from application code.

**Overrides:**[finalize](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html#finalize()) in class [ImageInputStreamImpl](http://docs.google.com/javax/imageio/stream/ImageInputStreamImpl.html) **Throws:** [Throwable](http://docs.google.com/java/lang/Throwable.html) - if an error occurs during superclass finalization.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/MemoryCacheImageInputStream.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**](http://docs.google.com/javax/imageio/stream/ImageOutputStreamImpl.html)   [**NEXT CLASS**](http://docs.google.com/javax/imageio/stream/MemoryCacheImageOutputStream.html) | [**FRAMES**](http://docs.google.com/index.html?javax/imageio/stream/MemoryCacheImageInputStream.html)    [**NO FRAMES**](http://docs.google.com/MemoryCacheImageInputStream.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: FIELD | [CONSTR](#2s8eyo1) | [METHOD](#3rdcrjn) |

[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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