| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/InputStreamReader.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/java/io/InputStream.html)   [**NEXT CLASS**](http://docs.google.com/java/io/InterruptedIOException.html) | [**FRAMES**](http://docs.google.com/index.html?java/io/InputStreamReader.html)    [**NO FRAMES**](http://docs.google.com/InputStreamReader.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: FIELD | [CONSTR](#2s8eyo1) | [METHOD](#35nkun2) |

## **java.io**

Class InputStreamReader

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [java.io.Reader](http://docs.google.com/java/io/Reader.html)  
 **java.io.InputStreamReader**

**All Implemented Interfaces:** [Closeable](http://docs.google.com/java/io/Closeable.html), [Readable](http://docs.google.com/java/lang/Readable.html) **Direct Known Subclasses:** [FileReader](http://docs.google.com/java/io/FileReader.html)

public class **InputStreamReader**extends [Reader](http://docs.google.com/java/io/Reader.html)

An InputStreamReader is a bridge from byte streams to character streams: It reads bytes and decodes them into characters using a specified [charset](http://docs.google.com/java/nio/charset/Charset.html). The charset that it uses may be specified by name or may be given explicitly, or the platform's default charset may be accepted.

Each invocation of one of an InputStreamReader's read() methods may cause one or more bytes to be read from the underlying byte-input stream. To enable the efficient conversion of bytes to characters, more bytes may be read ahead from the underlying stream than are necessary to satisfy the current read operation.

For top efficiency, consider wrapping an InputStreamReader within a BufferedReader. For example:

BufferedReader in  
 = new BufferedReader(new InputStreamReader(System.in));

**Since:** JDK1.1 **See Also:**[BufferedReader](http://docs.google.com/java/io/BufferedReader.html), [InputStream](http://docs.google.com/java/io/InputStream.html), [Charset](http://docs.google.com/java/nio/charset/Charset.html)

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

| **Fields inherited from class java.io.**[**Reader**](http://docs.google.com/java/io/Reader.html) |
| --- |
| [lock](http://docs.google.com/java/io/Reader.html#lock) |

| **Constructor Summary** | |
| --- | --- |
| [**InputStreamReader**](http://docs.google.com/java/io/InputStreamReader.html#InputStreamReader(java.io.InputStream))([InputStream](http://docs.google.com/java/io/InputStream.html) in)            Creates an InputStreamReader that uses the default charset. |
| [**InputStreamReader**](http://docs.google.com/java/io/InputStreamReader.html#InputStreamReader(java.io.InputStream,%20java.nio.charset.Charset))([InputStream](http://docs.google.com/java/io/InputStream.html) in, [Charset](http://docs.google.com/java/nio/charset/Charset.html) cs)            Creates an InputStreamReader that uses the given charset. |
| [**InputStreamReader**](http://docs.google.com/java/io/InputStreamReader.html#InputStreamReader(java.io.InputStream,%20java.nio.charset.CharsetDecoder))([InputStream](http://docs.google.com/java/io/InputStream.html) in, [CharsetDecoder](http://docs.google.com/java/nio/charset/CharsetDecoder.html) dec)            Creates an InputStreamReader that uses the given charset decoder. |
| [**InputStreamReader**](http://docs.google.com/java/io/InputStreamReader.html#InputStreamReader(java.io.InputStream,%20java.lang.String))([InputStream](http://docs.google.com/java/io/InputStream.html) in, [String](http://docs.google.com/java/lang/String.html) charsetName)            Creates an InputStreamReader that uses the named charset. |

| **Method Summary** | |
| --- | --- |
| void | [**close**](http://docs.google.com/java/io/InputStreamReader.html#close())()            Closes the stream and releases any system resources associated with it. |
| [String](http://docs.google.com/java/lang/String.html) | [**getEncoding**](http://docs.google.com/java/io/InputStreamReader.html#getEncoding())()            Returns the name of the character encoding being used by this stream. |
| int | [**read**](http://docs.google.com/java/io/InputStreamReader.html#read())()            Reads a single character. |
| int | [**read**](http://docs.google.com/java/io/InputStreamReader.html#read(char%5B%5D,%20int,%20int))(char[] cbuf, int offset, int length)            Reads characters into a portion of an array. |
| boolean | [**ready**](http://docs.google.com/java/io/InputStreamReader.html#ready())()            Tells whether this stream is ready to be read. |

| **Methods inherited from class java.io.**[**Reader**](http://docs.google.com/java/io/Reader.html) |
| --- |
| [mark](http://docs.google.com/java/io/Reader.html#mark(int)), [markSupported](http://docs.google.com/java/io/Reader.html#markSupported()), [read](http://docs.google.com/java/io/Reader.html#read(char%5B%5D)), [read](http://docs.google.com/java/io/Reader.html#read(java.nio.CharBuffer)), [reset](http://docs.google.com/java/io/Reader.html#reset()), [skip](http://docs.google.com/java/io/Reader.html#skip(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)), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [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** |
| --- |

### InputStreamReader

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

Creates an InputStreamReader that uses the default charset.

**Parameters:**in - An InputStream

### InputStreamReader

public **InputStreamReader**([InputStream](http://docs.google.com/java/io/InputStream.html) in,  
 [String](http://docs.google.com/java/lang/String.html) charsetName)  
 throws [UnsupportedEncodingException](http://docs.google.com/java/io/UnsupportedEncodingException.html)

Creates an InputStreamReader that uses the named charset.

**Parameters:**in - An InputStreamcharsetName - The name of a supported [charset](http://docs.google.com/java/nio/charset/Charset.html) **Throws:** [UnsupportedEncodingException](http://docs.google.com/java/io/UnsupportedEncodingException.html) - If the named charset is not supported

### InputStreamReader

public **InputStreamReader**([InputStream](http://docs.google.com/java/io/InputStream.html) in,  
 [Charset](http://docs.google.com/java/nio/charset/Charset.html) cs)

Creates an InputStreamReader that uses the given charset.

**Parameters:**in - An InputStreamcs - A charset**Since:** 1.4

### InputStreamReader

public **InputStreamReader**([InputStream](http://docs.google.com/java/io/InputStream.html) in,  
 [CharsetDecoder](http://docs.google.com/java/nio/charset/CharsetDecoder.html) dec)

Creates an InputStreamReader that uses the given charset decoder.

**Parameters:**in - An InputStreamdec - A charset decoder**Since:** 1.4

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

### getEncoding

public [String](http://docs.google.com/java/lang/String.html) **getEncoding**()

Returns the name of the character encoding being used by this stream.

If the encoding has an historical name then that name is returned; otherwise the encoding's canonical name is returned.

If this instance was created with the [InputStreamReader(InputStream, String)](http://docs.google.com/java/io/InputStreamReader.html#InputStreamReader(java.io.InputStream,%20java.lang.String)) constructor then the returned name, being unique for the encoding, may differ from the name passed to the constructor. This method will return null if the stream has been closed.

**Returns:**The historical name of this encoding, or null if the stream has been closed**See Also:**[Charset](http://docs.google.com/java/nio/charset/Charset.html)

### read

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

Reads a single character.

**Overrides:**[read](http://docs.google.com/java/io/Reader.html#read()) in class [Reader](http://docs.google.com/java/io/Reader.html) **Returns:**The character read, or -1 if the end of the stream has been reached **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - If an I/O error occurs

### read

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

Reads characters into a portion of an array.

**Specified by:**[read](http://docs.google.com/java/io/Reader.html#read(char%5B%5D,%20int,%20int)) in class [Reader](http://docs.google.com/java/io/Reader.html) **Parameters:**cbuf - Destination bufferoffset - Offset at which to start storing characterslength - Maximum number of characters to read **Returns:**The number of characters read, or -1 if the end of the stream has been reached **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - If an I/O error occurs

### ready

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

Tells whether this stream is ready to be read. An InputStreamReader is ready if its input buffer is not empty, or if bytes are available to be read from the underlying byte stream.

**Overrides:**[ready](http://docs.google.com/java/io/Reader.html#ready()) in class [Reader](http://docs.google.com/java/io/Reader.html) **Returns:**True if the next read() is guaranteed not to block for input, false otherwise. Note that returning false does not guarantee that the next read will block. **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - If an I/O error occurs

### close

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

**Description copied from class:** [**Reader**](http://docs.google.com/java/io/Reader.html#close()) Closes the stream and releases any system resources associated with it. Once the stream has been closed, further read(), ready(), mark(), reset(), or skip() invocations will throw an IOException. Closing a previously closed stream has no effect.

**Specified by:**[close](http://docs.google.com/java/io/Closeable.html#close()) in interface [Closeable](http://docs.google.com/java/io/Closeable.html)**Specified by:**[close](http://docs.google.com/java/io/Reader.html#close()) in class [Reader](http://docs.google.com/java/io/Reader.html) **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - If an I/O error occurs

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/InputStreamReader.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/java/io/InputStream.html)   [**NEXT CLASS**](http://docs.google.com/java/io/InterruptedIOException.html) | [**FRAMES**](http://docs.google.com/index.html?java/io/InputStreamReader.html)    [**NO FRAMES**](http://docs.google.com/InputStreamReader.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
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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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