| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/JarURLConnection.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/net/InterfaceAddress.html)   [**NEXT CLASS**](http://docs.google.com/java/net/MalformedURLException.html) | [**FRAMES**](http://docs.google.com/index.html?java/net/JarURLConnection.html)    [**NO FRAMES**](http://docs.google.com/JarURLConnection.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: [FIELD](#2s8eyo1) | [CONSTR](#3rdcrjn) | [METHOD](#lnxbz9) |

## **java.net**

Class JarURLConnection

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [java.net.URLConnection](http://docs.google.com/java/net/URLConnection.html)  
 **java.net.JarURLConnection**

public abstract class **JarURLConnection**extends [URLConnection](http://docs.google.com/java/net/URLConnection.html)

A URL Connection to a Java ARchive (JAR) file or an entry in a JAR file.

The syntax of a JAR URL is:

jar:<url>!/{entry}

for example:

jar:http://www.foo.com/bar/baz.jar!/COM/foo/Quux.class

Jar URLs should be used to refer to a JAR file or entries in a JAR file. The example above is a JAR URL which refers to a JAR entry. If the entry name is omitted, the URL refers to the whole JAR file: jar:http://www.foo.com/bar/baz.jar!/

Users should cast the generic URLConnection to a JarURLConnection when they know that the URL they created is a JAR URL, and they need JAR-specific functionality. For example:

URL url = new URL("jar:file:/home/duke/duke.jar!/");  
 JarURLConnection jarConnection = (JarURLConnection)url.openConnection();  
 Manifest manifest = jarConnection.getManifest();

JarURLConnection instances can only be used to read from JAR files. It is not possible to get a [OutputStream](http://docs.google.com/java/io/OutputStream.html) to modify or write to the underlying JAR file using this class.

Examples:

A Jar entry jar:http://www.foo.com/bar/baz.jar!/COM/foo/Quux.class A Jar file jar:http://www.foo.com/bar/baz.jar!/ A Jar directory jar:http://www.foo.com/bar/baz.jar!/COM/foo/

!/ is refered to as the *separator*.

When constructing a JAR url via new URL(context, spec), the following rules apply:

* if there is no context URL and the specification passed to the URL constructor doesn't contain a separator, the URL is considered to refer to a JarFile.
* if there is a context URL, the context URL is assumed to refer to a JAR file or a Jar directory.
* if the specification begins with a '/', the Jar directory is ignored, and the spec is considered to be at the root of the Jar file.  
  Examples:context: **jar:http://www.foo.com/bar/jar.jar!/**, spec:**baz/entry.txt** url:**jar:http://www.foo.com/bar/jar.jar!/baz/entry.txt** context: **jar:http://www.foo.com/bar/jar.jar!/baz**, spec:**entry.txt** url:**jar:http://www.foo.com/bar/jar.jar!/baz/entry.txt** context: **jar:http://www.foo.com/bar/jar.jar!/baz**, spec:**/entry.txt** url:**jar:http://www.foo.com/bar/jar.jar!/entry.txt**

**Since:** 1.2 **See Also:**[URL](http://docs.google.com/java/net/URL.html), [URLConnection](http://docs.google.com/java/net/URLConnection.html), [JarFile](http://docs.google.com/java/util/jar/JarFile.html), [JarInputStream](http://docs.google.com/java/util/jar/JarInputStream.html), [Manifest](http://docs.google.com/java/util/jar/Manifest.html), [ZipEntry](http://docs.google.com/java/util/zip/ZipEntry.html)

| **Field Summary** | |
| --- | --- |
| protected  [URLConnection](http://docs.google.com/java/net/URLConnection.html) | [**jarFileURLConnection**](http://docs.google.com/java/net/JarURLConnection.html#jarFileURLConnection)            The connection to the JAR file URL, if the connection has been initiated. |

| **Fields inherited from class java.net.**[**URLConnection**](http://docs.google.com/java/net/URLConnection.html) |
| --- |
| [allowUserInteraction](http://docs.google.com/java/net/URLConnection.html#allowUserInteraction), [connected](http://docs.google.com/java/net/URLConnection.html#connected), [doInput](http://docs.google.com/java/net/URLConnection.html#doInput), [doOutput](http://docs.google.com/java/net/URLConnection.html#doOutput), [ifModifiedSince](http://docs.google.com/java/net/URLConnection.html#ifModifiedSince), [url](http://docs.google.com/java/net/URLConnection.html#url), [useCaches](http://docs.google.com/java/net/URLConnection.html#useCaches) |

| **Constructor Summary** | |
| --- | --- |
| protected | [**JarURLConnection**](http://docs.google.com/java/net/JarURLConnection.html#JarURLConnection(java.net.URL))([URL](http://docs.google.com/java/net/URL.html) url)            Creates the new JarURLConnection to the specified URL. |

| **Method Summary** | |
| --- | --- |
| [Attributes](http://docs.google.com/java/util/jar/Attributes.html) | [**getAttributes**](http://docs.google.com/java/net/JarURLConnection.html#getAttributes())()            Return the Attributes object for this connection if the URL for it points to a JAR file entry, null otherwise. |
| [Certificate](http://docs.google.com/java/security/cert/Certificate.html)[] | [**getCertificates**](http://docs.google.com/java/net/JarURLConnection.html#getCertificates())()            Return the Certificate object for this connection if the URL for it points to a JAR file entry, null otherwise. |
| [String](http://docs.google.com/java/lang/String.html) | [**getEntryName**](http://docs.google.com/java/net/JarURLConnection.html#getEntryName())()            Return the entry name for this connection. |
| [JarEntry](http://docs.google.com/java/util/jar/JarEntry.html) | [**getJarEntry**](http://docs.google.com/java/net/JarURLConnection.html#getJarEntry())()            Return the JAR entry object for this connection, if any. |
| abstract  [JarFile](http://docs.google.com/java/util/jar/JarFile.html) | [**getJarFile**](http://docs.google.com/java/net/JarURLConnection.html#getJarFile())()            Return the JAR file for this connection. |
| [URL](http://docs.google.com/java/net/URL.html) | [**getJarFileURL**](http://docs.google.com/java/net/JarURLConnection.html#getJarFileURL())()            Returns the URL for the Jar file for this connection. |
| [Attributes](http://docs.google.com/java/util/jar/Attributes.html) | [**getMainAttributes**](http://docs.google.com/java/net/JarURLConnection.html#getMainAttributes())()            Returns the main Attributes for the JAR file for this connection. |
| [Manifest](http://docs.google.com/java/util/jar/Manifest.html) | [**getManifest**](http://docs.google.com/java/net/JarURLConnection.html#getManifest())()            Returns the Manifest for this connection, or null if none. |

| **Methods inherited from class java.net.**[**URLConnection**](http://docs.google.com/java/net/URLConnection.html) |
| --- |
| [addRequestProperty](http://docs.google.com/java/net/URLConnection.html#addRequestProperty(java.lang.String,%20java.lang.String)), [connect](http://docs.google.com/java/net/URLConnection.html#connect()), [getAllowUserInteraction](http://docs.google.com/java/net/URLConnection.html#getAllowUserInteraction()), [getConnectTimeout](http://docs.google.com/java/net/URLConnection.html#getConnectTimeout()), [getContent](http://docs.google.com/java/net/URLConnection.html#getContent()), [getContent](http://docs.google.com/java/net/URLConnection.html#getContent(java.lang.Class%5B%5D)), [getContentEncoding](http://docs.google.com/java/net/URLConnection.html#getContentEncoding()), [getContentLength](http://docs.google.com/java/net/URLConnection.html#getContentLength()), [getContentType](http://docs.google.com/java/net/URLConnection.html#getContentType()), [getDate](http://docs.google.com/java/net/URLConnection.html#getDate()), [getDefaultAllowUserInteraction](http://docs.google.com/java/net/URLConnection.html#getDefaultAllowUserInteraction()), [getDefaultRequestProperty](http://docs.google.com/java/net/URLConnection.html#getDefaultRequestProperty(java.lang.String)), [getDefaultUseCaches](http://docs.google.com/java/net/URLConnection.html#getDefaultUseCaches()), [getDoInput](http://docs.google.com/java/net/URLConnection.html#getDoInput()), [getDoOutput](http://docs.google.com/java/net/URLConnection.html#getDoOutput()), [getExpiration](http://docs.google.com/java/net/URLConnection.html#getExpiration()), [getFileNameMap](http://docs.google.com/java/net/URLConnection.html#getFileNameMap()), [getHeaderField](http://docs.google.com/java/net/URLConnection.html#getHeaderField(int)), [getHeaderField](http://docs.google.com/java/net/URLConnection.html#getHeaderField(java.lang.String)), [getHeaderFieldDate](http://docs.google.com/java/net/URLConnection.html#getHeaderFieldDate(java.lang.String,%20long)), [getHeaderFieldInt](http://docs.google.com/java/net/URLConnection.html#getHeaderFieldInt(java.lang.String,%20int)), [getHeaderFieldKey](http://docs.google.com/java/net/URLConnection.html#getHeaderFieldKey(int)), [getHeaderFields](http://docs.google.com/java/net/URLConnection.html#getHeaderFields()), [getIfModifiedSince](http://docs.google.com/java/net/URLConnection.html#getIfModifiedSince()), [getInputStream](http://docs.google.com/java/net/URLConnection.html#getInputStream()), [getLastModified](http://docs.google.com/java/net/URLConnection.html#getLastModified()), [getOutputStream](http://docs.google.com/java/net/URLConnection.html#getOutputStream()), [getPermission](http://docs.google.com/java/net/URLConnection.html#getPermission()), [getReadTimeout](http://docs.google.com/java/net/URLConnection.html#getReadTimeout()), [getRequestProperties](http://docs.google.com/java/net/URLConnection.html#getRequestProperties()), [getRequestProperty](http://docs.google.com/java/net/URLConnection.html#getRequestProperty(java.lang.String)), [getURL](http://docs.google.com/java/net/URLConnection.html#getURL()), [getUseCaches](http://docs.google.com/java/net/URLConnection.html#getUseCaches()), [guessContentTypeFromName](http://docs.google.com/java/net/URLConnection.html#guessContentTypeFromName(java.lang.String)), [guessContentTypeFromStream](http://docs.google.com/java/net/URLConnection.html#guessContentTypeFromStream(java.io.InputStream)), [setAllowUserInteraction](http://docs.google.com/java/net/URLConnection.html#setAllowUserInteraction(boolean)), [setConnectTimeout](http://docs.google.com/java/net/URLConnection.html#setConnectTimeout(int)), [setContentHandlerFactory](http://docs.google.com/java/net/URLConnection.html#setContentHandlerFactory(java.net.ContentHandlerFactory)), [setDefaultAllowUserInteraction](http://docs.google.com/java/net/URLConnection.html#setDefaultAllowUserInteraction(boolean)), [setDefaultRequestProperty](http://docs.google.com/java/net/URLConnection.html#setDefaultRequestProperty(java.lang.String,%20java.lang.String)), [setDefaultUseCaches](http://docs.google.com/java/net/URLConnection.html#setDefaultUseCaches(boolean)), [setDoInput](http://docs.google.com/java/net/URLConnection.html#setDoInput(boolean)), [setDoOutput](http://docs.google.com/java/net/URLConnection.html#setDoOutput(boolean)), [setFileNameMap](http://docs.google.com/java/net/URLConnection.html#setFileNameMap(java.net.FileNameMap)), [setIfModifiedSince](http://docs.google.com/java/net/URLConnection.html#setIfModifiedSince(long)), [setReadTimeout](http://docs.google.com/java/net/URLConnection.html#setReadTimeout(int)), [setRequestProperty](http://docs.google.com/java/net/URLConnection.html#setRequestProperty(java.lang.String,%20java.lang.String)), [setUseCaches](http://docs.google.com/java/net/URLConnection.html#setUseCaches(boolean)), [toString](http://docs.google.com/java/net/URLConnection.html#toString()) |

| **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()), [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)) |

| **Field Detail** |
| --- |

### jarFileURLConnection

protected [URLConnection](http://docs.google.com/java/net/URLConnection.html) **jarFileURLConnection**

The connection to the JAR file URL, if the connection has been initiated. This should be set by connect.

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

### JarURLConnection

protected **JarURLConnection**([URL](http://docs.google.com/java/net/URL.html) url)  
 throws [MalformedURLException](http://docs.google.com/java/net/MalformedURLException.html)

Creates the new JarURLConnection to the specified URL.

**Parameters:**url - the URL **Throws:** [MalformedURLException](http://docs.google.com/java/net/MalformedURLException.html) - if no legal protocol could be found in a specification string or the string could not be parsed.

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

### getJarFileURL

public [URL](http://docs.google.com/java/net/URL.html) **getJarFileURL**()

Returns the URL for the Jar file for this connection.

**Returns:**the URL for the Jar file for this connection.

### getEntryName

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

Return the entry name for this connection. This method returns null if the JAR file URL corresponding to this connection points to a JAR file and not a JAR file entry.

**Returns:**the entry name for this connection, if any.

### getJarFile

public abstract [JarFile](http://docs.google.com/java/util/jar/JarFile.html) **getJarFile**()  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Return the JAR file for this connection.

**Returns:**the JAR file for this connection. If the connection is a connection to an entry of a JAR file, the JAR file object is returned **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - if an IOException occurs while trying to connect to the JAR file for this connection.**See Also:**[URLConnection.connect()](http://docs.google.com/java/net/URLConnection.html#connect())

### getManifest

public [Manifest](http://docs.google.com/java/util/jar/Manifest.html) **getManifest**()  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Returns the Manifest for this connection, or null if none.

**Returns:**the manifest object corresponding to the JAR file object for this connection. **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - if getting the JAR file for this connection causes an IOException to be trown.**See Also:**[getJarFile()](http://docs.google.com/java/net/JarURLConnection.html#getJarFile())

### getJarEntry

public [JarEntry](http://docs.google.com/java/util/jar/JarEntry.html) **getJarEntry**()  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Return the JAR entry object for this connection, if any. This method returns null if the JAR file URL corresponding to this connection points to a JAR file and not a JAR file entry.

**Returns:**the JAR entry object for this connection, or null if the JAR URL for this connection points to a JAR file. **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - if getting the JAR file for this connection causes an IOException to be trown.**See Also:**[getJarFile()](http://docs.google.com/java/net/JarURLConnection.html#getJarFile()), [getJarEntry()](http://docs.google.com/java/net/JarURLConnection.html#getJarEntry())

### getAttributes

public [Attributes](http://docs.google.com/java/util/jar/Attributes.html) **getAttributes**()  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Return the Attributes object for this connection if the URL for it points to a JAR file entry, null otherwise.

**Returns:**the Attributes object for this connection if the URL for it points to a JAR file entry, null otherwise. **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - if getting the JAR entry causes an IOException to be thrown.**See Also:**[getJarEntry()](http://docs.google.com/java/net/JarURLConnection.html#getJarEntry())

### getMainAttributes

public [Attributes](http://docs.google.com/java/util/jar/Attributes.html) **getMainAttributes**()  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Returns the main Attributes for the JAR file for this connection.

**Returns:**the main Attributes for the JAR file for this connection. **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - if getting the manifest causes an IOException to be thrown.**See Also:**[getJarFile()](http://docs.google.com/java/net/JarURLConnection.html#getJarFile()), [getManifest()](http://docs.google.com/java/net/JarURLConnection.html#getManifest())

### getCertificates

public [Certificate](http://docs.google.com/java/security/cert/Certificate.html)[] **getCertificates**()  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Return the Certificate object for this connection if the URL for it points to a JAR file entry, null otherwise. This method can only be called once the connection has been completely verified by reading from the input stream until the end of the stream has been reached. Otherwise, this method will return null

**Returns:**the Certificate object for this connection if the URL for it points to a JAR file entry, null otherwise. **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - if getting the JAR entry causes an IOException to be thrown.**See Also:**[getJarEntry()](http://docs.google.com/java/net/JarURLConnection.html#getJarEntry())

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/JarURLConnection.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/net/InterfaceAddress.html)   [**NEXT CLASS**](http://docs.google.com/java/net/MalformedURLException.html) | [**FRAMES**](http://docs.google.com/index.html?java/net/JarURLConnection.html)    [**NO FRAMES**](http://docs.google.com/JarURLConnection.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: [FIELD](#2s8eyo1) | [CONSTR](#3rdcrjn) | [METHOD](#lnxbz9) |

[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.

Copyright 2006 Sun Microsystems, Inc. All rights reserved. Use is subject to [license terms](http://docs.google.com/legal/license.html). Also see the [documentation redistribution policy](http://java.sun.com/docs/redist.html).