| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ProxySelector.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/Proxy.Type.html)   [**NEXT CLASS**](http://docs.google.com/java/net/ResponseCache.html) | [**FRAMES**](http://docs.google.com/index.html?java/net/ProxySelector.html)    [**NO FRAMES**](http://docs.google.com/ProxySelector.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

## **java.net**

Class ProxySelector

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

public abstract class **ProxySelector**extends [Object](http://docs.google.com/java/lang/Object.html)

Selects the proxy server to use, if any, when connecting to the network resource referenced by a URL. A proxy selector is a concrete sub-class of this class and is registered by invoking the [setDefault](http://docs.google.com/java/net/ProxySelector.html#setDefault(java.net.ProxySelector)) method. The currently registered proxy selector can be retrieved by calling [getDefault](http://docs.google.com/java/net/ProxySelector.html#getDefault()) method.

When a proxy selector is registered, for instance, a subclass of URLConnection class should call the [select](http://docs.google.com/java/net/ProxySelector.html#select(java.net.URI)) method for each URL request so that the proxy selector can decide if a direct, or proxied connection should be used. The [select](http://docs.google.com/java/net/ProxySelector.html#select(java.net.URI)) method returns an iterator over a collection with the preferred connection approach.

If a connection cannot be established to a proxy (PROXY or SOCKS) servers then the caller should call the proxy selector's [connectFailed](http://docs.google.com/java/net/ProxySelector.html#connectFailed(java.net.URI,%20java.net.SocketAddress,%20java.io.IOException)) method to notify the proxy selector that the proxy server is unavailable.

**Since:** 1.5

| **Constructor Summary** | |
| --- | --- |
| [**ProxySelector**](http://docs.google.com/java/net/ProxySelector.html#ProxySelector())() |

| **Method Summary** | |
| --- | --- |
| abstract  void | [**connectFailed**](http://docs.google.com/java/net/ProxySelector.html#connectFailed(java.net.URI,%20java.net.SocketAddress,%20java.io.IOException))([URI](http://docs.google.com/java/net/URI.html) uri, [SocketAddress](http://docs.google.com/java/net/SocketAddress.html) sa, [IOException](http://docs.google.com/java/io/IOException.html) ioe)            Called to indicate that a connection could not be established to a proxy/socks server. |
| static [ProxySelector](http://docs.google.com/java/net/ProxySelector.html) | [**getDefault**](http://docs.google.com/java/net/ProxySelector.html#getDefault())()            Gets the system-wide proxy selector. |
| abstract  [List](http://docs.google.com/java/util/List.html)<[Proxy](http://docs.google.com/java/net/Proxy.html)> | [**select**](http://docs.google.com/java/net/ProxySelector.html#select(java.net.URI))([URI](http://docs.google.com/java/net/URI.html) uri)            Selects all the applicable proxies based on the protocol to access the resource with and a destination address to access the resource at. |
| static void | [**setDefault**](http://docs.google.com/java/net/ProxySelector.html#setDefault(java.net.ProxySelector))([ProxySelector](http://docs.google.com/java/net/ProxySelector.html) ps)            Sets (or unsets) the system-wide proxy selector. |

| **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** |
| --- |

### ProxySelector

public **ProxySelector**()

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

### getDefault

public static [ProxySelector](http://docs.google.com/java/net/ProxySelector.html) **getDefault**()

Gets the system-wide proxy selector.

**Returns:**the system-wide ProxySelector **Throws:** [SecurityException](http://docs.google.com/java/lang/SecurityException.html) - If a security manager has been installed and it denies [NetPermission](http://docs.google.com/java/net/NetPermission.html)("getProxySelector")**Since:** 1.5 **See Also:**[setDefault(ProxySelector)](http://docs.google.com/java/net/ProxySelector.html#setDefault(java.net.ProxySelector))

### setDefault

public static void **setDefault**([ProxySelector](http://docs.google.com/java/net/ProxySelector.html) ps)

Sets (or unsets) the system-wide proxy selector. Note: non-standard protocol handlers may ignore this setting.

**Parameters:**ps - The HTTP proxy selector, or null to unset the proxy selector. **Throws:** [SecurityException](http://docs.google.com/java/lang/SecurityException.html) - If a security manager has been installed and it denies [NetPermission](http://docs.google.com/java/net/NetPermission.html)("setProxySelector")**Since:** 1.5 **See Also:**[getDefault()](http://docs.google.com/java/net/ProxySelector.html#getDefault())

### select

public abstract [List](http://docs.google.com/java/util/List.html)<[Proxy](http://docs.google.com/java/net/Proxy.html)> **select**([URI](http://docs.google.com/java/net/URI.html) uri)

Selects all the applicable proxies based on the protocol to access the resource with and a destination address to access the resource at. The format of the URI is defined as follow:

* http URI for http connections
* https URI for https connections
* ftp URI for ftp connections
* socket://host:port  
  for tcp client sockets connections

**Parameters:**uri - The URI that a connection is required to **Returns:**a List of Proxies. Each element in the the List is of type [Proxy](http://docs.google.com/java/net/Proxy.html); when no proxy is available, the list will contain one element of type [Proxy](http://docs.google.com/java/net/Proxy.html) that represents a direct connection. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if either argument is null

### connectFailed

public abstract void **connectFailed**([URI](http://docs.google.com/java/net/URI.html) uri,  
 [SocketAddress](http://docs.google.com/java/net/SocketAddress.html) sa,  
 [IOException](http://docs.google.com/java/io/IOException.html) ioe)

Called to indicate that a connection could not be established to a proxy/socks server. An implementation of this method can temporarily remove the proxies or reorder the sequence of proxies returned by select(String, String), using the address and they kind of IOException given.

**Parameters:**uri - The URI that the proxy at sa failed to serve.sa - The socket address of the proxy/SOCKS serverioe - The I/O exception thrown when the connect failed. **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if either argument is null

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ProxySelector.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*** |
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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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