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

## **javax.rmi**

Class PortableRemoteObject

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.rmi.PortableRemoteObject**

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

Server implementation objects may either inherit from javax.rmi.PortableRemoteObject or they may implement a remote interface and then use the exportObject method to register themselves as a server object. The toStub method takes a server implementation and returns a stub that can be used to access that server object. The connect method makes a Remote object ready for remote communication. The unexportObject method is used to deregister a server object, allowing it to become available for garbage collection. The narrow method takes an object reference or abstract interface type and attempts to narrow it to conform to the given interface. If the operation is successful the result will be an object of the specified type, otherwise an exception will be thrown.

| **Constructor Summary** | |
| --- | --- |
| protected | [**PortableRemoteObject**](http://docs.google.com/javax/rmi/PortableRemoteObject.html#PortableRemoteObject())()            Initializes the object by calling exportObject(this). |

| **Method Summary** | |
| --- | --- |
| static void | [**connect**](http://docs.google.com/javax/rmi/PortableRemoteObject.html#connect(java.rmi.Remote,%20java.rmi.Remote))([Remote](http://docs.google.com/java/rmi/Remote.html) target, [Remote](http://docs.google.com/java/rmi/Remote.html) source)            Makes a Remote object ready for remote communication. |
| static void | [**exportObject**](http://docs.google.com/javax/rmi/PortableRemoteObject.html#exportObject(java.rmi.Remote))([Remote](http://docs.google.com/java/rmi/Remote.html) obj)            Makes a server object ready to receive remote calls. |
| static [Object](http://docs.google.com/java/lang/Object.html) | [**narrow**](http://docs.google.com/javax/rmi/PortableRemoteObject.html#narrow(java.lang.Object,%20java.lang.Class))([Object](http://docs.google.com/java/lang/Object.html) narrowFrom, [Class](http://docs.google.com/java/lang/Class.html) narrowTo)            Checks to ensure that an object of a remote or abstract interface type can be cast to a desired type. |
| static [Remote](http://docs.google.com/java/rmi/Remote.html) | [**toStub**](http://docs.google.com/javax/rmi/PortableRemoteObject.html#toStub(java.rmi.Remote))([Remote](http://docs.google.com/java/rmi/Remote.html) obj)            Returns a stub for the given server object. |
| static void | [**unexportObject**](http://docs.google.com/javax/rmi/PortableRemoteObject.html#unexportObject(java.rmi.Remote))([Remote](http://docs.google.com/java/rmi/Remote.html) obj)            Deregisters a server object from the runtime, allowing the object to become available for garbage collection. |

| **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** |
| --- |

### PortableRemoteObject

protected **PortableRemoteObject**()  
 throws [RemoteException](http://docs.google.com/java/rmi/RemoteException.html)

Initializes the object by calling exportObject(this).

**Throws:** [RemoteException](http://docs.google.com/java/rmi/RemoteException.html) - if export fails.

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

### exportObject

public static void **exportObject**([Remote](http://docs.google.com/java/rmi/Remote.html) obj)  
 throws [RemoteException](http://docs.google.com/java/rmi/RemoteException.html)

Makes a server object ready to receive remote calls. Note that subclasses of PortableRemoteObject do not need to call this method, as it is called by the constructor.

**Parameters:**obj - the server object to export. **Throws:** [RemoteException](http://docs.google.com/java/rmi/RemoteException.html) - if export fails.

### toStub

public static [Remote](http://docs.google.com/java/rmi/Remote.html) **toStub**([Remote](http://docs.google.com/java/rmi/Remote.html) obj)  
 throws [NoSuchObjectException](http://docs.google.com/java/rmi/NoSuchObjectException.html)

Returns a stub for the given server object.

**Parameters:**obj - the server object for which a stub is required. Must either be a subclass of PortableRemoteObject or have been previously the target of a call to [exportObject(java.rmi.Remote)](http://docs.google.com/javax/rmi/PortableRemoteObject.html#exportObject(java.rmi.Remote)). **Returns:**the most derived stub for the object. **Throws:** [NoSuchObjectException](http://docs.google.com/java/rmi/NoSuchObjectException.html) - if a stub cannot be located for the given server object.

### unexportObject

public static void **unexportObject**([Remote](http://docs.google.com/java/rmi/Remote.html) obj)  
 throws [NoSuchObjectException](http://docs.google.com/java/rmi/NoSuchObjectException.html)

Deregisters a server object from the runtime, allowing the object to become available for garbage collection.

**Parameters:**obj - the object to unexport. **Throws:** [NoSuchObjectException](http://docs.google.com/java/rmi/NoSuchObjectException.html) - if the remote object is not currently exported.

### narrow

public static [Object](http://docs.google.com/java/lang/Object.html) **narrow**([Object](http://docs.google.com/java/lang/Object.html) narrowFrom,  
 [Class](http://docs.google.com/java/lang/Class.html) narrowTo)  
 throws [ClassCastException](http://docs.google.com/java/lang/ClassCastException.html)

Checks to ensure that an object of a remote or abstract interface type can be cast to a desired type.

**Parameters:**narrowFrom - the object to check.narrowTo - the desired type. **Returns:**an object which can be cast to the desired type. **Throws:** [ClassCastException](http://docs.google.com/java/lang/ClassCastException.html) - if narrowFrom cannot be cast to narrowTo.

### connect

public static void **connect**([Remote](http://docs.google.com/java/rmi/Remote.html) target,  
 [Remote](http://docs.google.com/java/rmi/Remote.html) source)  
 throws [RemoteException](http://docs.google.com/java/rmi/RemoteException.html)

Makes a Remote object ready for remote communication. This normally happens implicitly when the object is sent or received as an argument on a remote method call, but in some circumstances it is useful to perform this action by making an explicit call. See the Stub#connect method for more information.

**Parameters:**target - the object to connect.source - a previously connected object. **Throws:** [RemoteException](http://docs.google.com/java/rmi/RemoteException.html) - if source is not connected or if target is already connected to a different ORB than source.

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

[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).