| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/Service.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/xml/ws/ResponseWrapper.html)   [**NEXT CLASS**](http://docs.google.com/javax/xml/ws/Service.Mode.html) | [**FRAMES**](http://docs.google.com/index.html?javax/xml/ws/Service.html)    [**NO FRAMES**](http://docs.google.com/Service.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: [NESTED](#3znysh7) | FIELD | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: FIELD | [CONSTR](#1t3h5sf) | [METHOD](#2s8eyo1) |

## **javax.xml.ws**

Class Service

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.xml.ws.Service**

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

Service objects provide the client view of a Web service.

Service acts as a factory of the following:

* Proxies for a target service endpoint.
* Instances of javax.xml.ws.Dispatch for dynamic message-oriented invocation of a remote operation.

The ports available on a service can be enumerated using the getPorts method. Alternatively, you can pass a service endpoint interface to the unary getPort method and let the runtime select a compatible port.Handler chains for all the objects created by a Service can be set by means of a HandlerResolver.An Executor may be set on the service in order to gain better control over the threads used to dispatch asynchronous callbacks. For instance, thread pooling with certain parameters can be enabled by creating a ThreadPoolExecutor and registering it with the service.**Since:** JAX-WS 2.0 **See Also:**[Provider](http://docs.google.com/javax/xml/ws/spi/Provider.html), [HandlerResolver](http://docs.google.com/javax/xml/ws/handler/HandlerResolver.html), [Executor](http://docs.google.com/java/util/concurrent/Executor.html)

| **Nested Class Summary** | |
| --- | --- |
| static class | [**Service.Mode**](http://docs.google.com/javax/xml/ws/Service.Mode.html)           The orientation of a dynamic client or service. |

| **Constructor Summary** | |
| --- | --- |
| protected | [**Service**](http://docs.google.com/javax/xml/ws/Service.html#Service(java.net.URL,%20javax.xml.namespace.QName))([URL](http://docs.google.com/java/net/URL.html) wsdlDocumentLocation, [QName](http://docs.google.com/javax/xml/namespace/QName.html) serviceName) |

| **Method Summary** | |
| --- | --- |
| void | [**addPort**](http://docs.google.com/javax/xml/ws/Service.html#addPort(javax.xml.namespace.QName,%20java.lang.String,%20java.lang.String))([QName](http://docs.google.com/javax/xml/namespace/QName.html) portName, [String](http://docs.google.com/java/lang/String.html) bindingId, [String](http://docs.google.com/java/lang/String.html) endpointAddress)           Creates a new port for the service. |
| static [Service](http://docs.google.com/javax/xml/ws/Service.html) | [**create**](http://docs.google.com/javax/xml/ws/Service.html#create(javax.xml.namespace.QName))([QName](http://docs.google.com/javax/xml/namespace/QName.html) serviceName)           Create a Service instance. |
| static [Service](http://docs.google.com/javax/xml/ws/Service.html) | [**create**](http://docs.google.com/javax/xml/ws/Service.html#create(java.net.URL,%20javax.xml.namespace.QName))([URL](http://docs.google.com/java/net/URL.html) wsdlDocumentLocation, [QName](http://docs.google.com/javax/xml/namespace/QName.html) serviceName)           Create a Service instance. |
| | <T> [Dispatch](http://docs.google.com/javax/xml/ws/Dispatch.html)<T> | | --- | | [**createDispatch**](http://docs.google.com/javax/xml/ws/Service.html#createDispatch(javax.xml.namespace.QName,%20java.lang.Class,%20javax.xml.ws.Service.Mode))([QName](http://docs.google.com/javax/xml/namespace/QName.html) portName, [Class](http://docs.google.com/java/lang/Class.html)<T> type, [Service.Mode](http://docs.google.com/javax/xml/ws/Service.Mode.html) mode)           Creates a Dispatch instance for use with objects of the users choosing. |
| [Dispatch](http://docs.google.com/javax/xml/ws/Dispatch.html)<[Object](http://docs.google.com/java/lang/Object.html)> | [**createDispatch**](http://docs.google.com/javax/xml/ws/Service.html#createDispatch(javax.xml.namespace.QName,%20javax.xml.bind.JAXBContext,%20javax.xml.ws.Service.Mode))([QName](http://docs.google.com/javax/xml/namespace/QName.html) portName, [JAXBContext](http://docs.google.com/javax/xml/bind/JAXBContext.html) context, [Service.Mode](http://docs.google.com/javax/xml/ws/Service.Mode.html) mode)           Creates a Dispatch instance for use with JAXB generated objects. |
| [Executor](http://docs.google.com/java/util/concurrent/Executor.html) | [**getExecutor**](http://docs.google.com/javax/xml/ws/Service.html#getExecutor())()           Returns the executor for this Serviceinstance. |
| [HandlerResolver](http://docs.google.com/javax/xml/ws/handler/HandlerResolver.html) | [**getHandlerResolver**](http://docs.google.com/javax/xml/ws/Service.html#getHandlerResolver())()           Returns the configured handler resolver. |
| | <T> T | | --- | | [**getPort**](http://docs.google.com/javax/xml/ws/Service.html#getPort(java.lang.Class))([Class](http://docs.google.com/java/lang/Class.html)<T> serviceEndpointInterface)           The getPort method returns a stub. |
| | <T> T | | --- | | [**getPort**](http://docs.google.com/javax/xml/ws/Service.html#getPort(javax.xml.namespace.QName,%20java.lang.Class))([QName](http://docs.google.com/javax/xml/namespace/QName.html) portName, [Class](http://docs.google.com/java/lang/Class.html)<T> serviceEndpointInterface)           The getPort method returns a stub. |
| [Iterator](http://docs.google.com/java/util/Iterator.html)<[QName](http://docs.google.com/javax/xml/namespace/QName.html)> | [**getPorts**](http://docs.google.com/javax/xml/ws/Service.html#getPorts())()           Returns an Iterator for the list of QNames of service endpoints grouped by this service |
| [QName](http://docs.google.com/javax/xml/namespace/QName.html) | [**getServiceName**](http://docs.google.com/javax/xml/ws/Service.html#getServiceName())()           Gets the name of this service. |
| [URL](http://docs.google.com/java/net/URL.html) | [**getWSDLDocumentLocation**](http://docs.google.com/javax/xml/ws/Service.html#getWSDLDocumentLocation())()           Gets the location of the WSDL document for this Service. |
| void | [**setExecutor**](http://docs.google.com/javax/xml/ws/Service.html#setExecutor(java.util.concurrent.Executor))([Executor](http://docs.google.com/java/util/concurrent/Executor.html) executor)           Sets the executor for this Service instance. |
| void | [**setHandlerResolver**](http://docs.google.com/javax/xml/ws/Service.html#setHandlerResolver(javax.xml.ws.handler.HandlerResolver))([HandlerResolver](http://docs.google.com/javax/xml/ws/handler/HandlerResolver.html) handlerResolver)           Sets the HandlerResolver for this Service instance. |

| **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** |
| --- |

Serviceprotected **Service**([URL](http://docs.google.com/java/net/URL.html) wsdlDocumentLocation,  
 [QName](http://docs.google.com/javax/xml/namespace/QName.html) serviceName)

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

getPortpublic <T> T **getPort**([QName](http://docs.google.com/javax/xml/namespace/QName.html) portName,  
 [Class](http://docs.google.com/java/lang/Class.html)<T> serviceEndpointInterface)The getPort method returns a stub. A service client uses this stub to invoke operations on the target service endpoint. The serviceEndpointInterface specifies the service endpoint interface that is supported by the created dynamic proxy or stub instance.**Parameters:**portName - Qualified name of the service endpoint in the WSDL service descriptionserviceEndpointInterface - Service endpoint interface supported by the dynamic proxy or stub instance **Returns:**Object Proxy instance that supports the specified service endpoint interface **Throws:** [WebServiceException](http://docs.google.com/javax/xml/ws/WebServiceException.html) - This exception is thrown in the following cases:

### If there is an error in creation of the proxy

* + If there is any missing WSDL metadata as required by this method
  + Optionally, if an illegal serviceEndpointInterface or portName is specified

**See Also:**[Proxy](http://docs.google.com/java/lang/reflect/Proxy.html), [InvocationHandler](http://docs.google.com/java/lang/reflect/InvocationHandler.html)getPortpublic <T> T **getPort**([Class](http://docs.google.com/java/lang/Class.html)<T> serviceEndpointInterface)The getPort method returns a stub. The parameter serviceEndpointInterface specifies the service endpoint interface that is supported by the returned proxy. In the implementation of this method, the JAX-WS runtime system takes the responsibility of selecting a protocol binding (and a port) and configuring the proxy accordingly. The returned proxy should not be reconfigured by the client.**Parameters:**serviceEndpointInterface - Service endpoint interface **Returns:**Object instance that supports the specified service endpoint interface **Throws:** [WebServiceException](http://docs.google.com/javax/xml/ws/WebServiceException.html) -

### If there is an error during creation of the proxy

* + If there is any missing WSDL metadata as required by this method
  + Optionally, if an illegal serviceEndpointInterface is specified

addPortpublic void **addPort**([QName](http://docs.google.com/javax/xml/namespace/QName.html) portName,  
 [String](http://docs.google.com/java/lang/String.html) bindingId,  
 [String](http://docs.google.com/java/lang/String.html) endpointAddress)Creates a new port for the service. Ports created in this way contain no WSDL port type information and can only be used for creating Dispatchinstances.**Parameters:**portName - Qualified name for the target service endpointbindingId - A String identifier of a binding.endpointAddress - Address of the target service endpoint as a URI **Throws:** [WebServiceException](http://docs.google.com/javax/xml/ws/WebServiceException.html) - If any error in the creation of the port**See Also:**[SOAPBinding.SOAP11HTTP\_BINDING](http://docs.google.com/javax/xml/ws/soap/SOAPBinding.html#SOAP11HTTP_BINDING), [SOAPBinding.SOAP12HTTP\_BINDING](http://docs.google.com/javax/xml/ws/soap/SOAPBinding.html#SOAP12HTTP_BINDING), [HTTPBinding.HTTP\_BINDING](http://docs.google.com/javax/xml/ws/http/HTTPBinding.html#HTTP_BINDING)createDispatchpublic <T> [Dispatch](http://docs.google.com/javax/xml/ws/Dispatch.html)<T> **createDispatch**([QName](http://docs.google.com/javax/xml/namespace/QName.html) portName,  
 [Class](http://docs.google.com/java/lang/Class.html)<T> type,  
 [Service.Mode](http://docs.google.com/javax/xml/ws/Service.Mode.html) mode)Creates a Dispatch instance for use with objects of the users choosing.**Parameters:**portName - Qualified name for the target service endpointtype - The class of object used to messages or message payloads. Implementations are required to support javax.xml.transform.Source, javax.xml.soap.SOAPMessage and javax.activation.DataSource, depending on the binding in use.mode - Controls whether the created dispatch instance is message or payload oriented, i.e. whether the user will work with complete protocol messages or message payloads. E.g. when using the SOAP protocol, this parameter controls whether the user will work with SOAP messages or the contents of a SOAP body. Mode must be MESSAGE when type is SOAPMessage. **Returns:**Dispatch instance **Throws:** [WebServiceException](http://docs.google.com/javax/xml/ws/WebServiceException.html) - If any error in the creation of the Dispatch object**See Also:**[Source](http://docs.google.com/javax/xml/transform/Source.html), [SOAPMessage](http://docs.google.com/javax/xml/soap/SOAPMessage.html)createDispatchpublic [Dispatch](http://docs.google.com/javax/xml/ws/Dispatch.html)<[Object](http://docs.google.com/java/lang/Object.html)> **createDispatch**([QName](http://docs.google.com/javax/xml/namespace/QName.html) portName,  
 [JAXBContext](http://docs.google.com/javax/xml/bind/JAXBContext.html) context,  
 [Service.Mode](http://docs.google.com/javax/xml/ws/Service.Mode.html) mode)Creates a Dispatch instance for use with JAXB generated objects.**Parameters:**portName - Qualified name for the target service endpointcontext - The JAXB context used to marshall and unmarshall messages or message payloads.mode - Controls whether the created dispatch instance is message or payload oriented, i.e. whether the user will work with complete protocol messages or message payloads. E.g. when using the SOAP protocol, this parameter controls whether the user will work with SOAP messages or the contents of a SOAP body. **Returns:**Dispatch instance **Throws:** ServiceException - If any error in the creation of the Dispatch object**See Also:**[JAXBContext](http://docs.google.com/javax/xml/bind/JAXBContext.html)getServiceNamepublic [QName](http://docs.google.com/javax/xml/namespace/QName.html) **getServiceName**()Gets the name of this service.**Returns:**Qualified name of this servicegetPortspublic [Iterator](http://docs.google.com/java/util/Iterator.html)<[QName](http://docs.google.com/javax/xml/namespace/QName.html)> **getPorts**()Returns an Iterator for the list of QNames of service endpoints grouped by this service**Returns:**Returns java.util.Iterator with elements of type javax.xml.namespace.QName **Throws:** [WebServiceException](http://docs.google.com/javax/xml/ws/WebServiceException.html) - If this Service class does not have access to the required WSDL metadatagetWSDLDocumentLocationpublic [URL](http://docs.google.com/java/net/URL.html) **getWSDLDocumentLocation**()Gets the location of the WSDL document for this Service.**Returns:**URL for the location of the WSDL document for this servicegetHandlerResolverpublic [HandlerResolver](http://docs.google.com/javax/xml/ws/handler/HandlerResolver.html) **getHandlerResolver**()Returns the configured handler resolver.**Returns:**HandlerResolver The HandlerResolver being used by this Service instance, or null if there isn't one.setHandlerResolverpublic void **setHandlerResolver**([HandlerResolver](http://docs.google.com/javax/xml/ws/handler/HandlerResolver.html) handlerResolver)Sets the HandlerResolver for this Service instance.The handler resolver, if present, will be called once for each proxy or dispatch instance that is created, and the handler chain returned by the resolver will be set on the instance.**Parameters:**handlerResolver - The HandlerResolver to use for all subsequently created proxy/dispatch objects.**See Also:**[HandlerResolver](http://docs.google.com/javax/xml/ws/handler/HandlerResolver.html)getExecutorpublic [Executor](http://docs.google.com/java/util/concurrent/Executor.html) **getExecutor**()Returns the executor for this Serviceinstance. The executor is used for all asynchronous invocations that require callbacks.**Returns:**The java.util.concurrent.Executor to be used to invoke a callback.**See Also:**[Executor](http://docs.google.com/java/util/concurrent/Executor.html)setExecutorpublic void **setExecutor**([Executor](http://docs.google.com/java/util/concurrent/Executor.html) executor)Sets the executor for this Service instance. The executor is used for all asynchronous invocations that require callbacks.**Parameters:**executor - The java.util.concurrent.Executor to be used to invoke a callback. **Throws:** [SecurityException](http://docs.google.com/java/lang/SecurityException.html) - If the instance does not support setting an executor for security reasons (e.g. the necessary permissions are missing).**See Also:**[Executor](http://docs.google.com/java/util/concurrent/Executor.html)createpublic static [Service](http://docs.google.com/javax/xml/ws/Service.html) **create**([URL](http://docs.google.com/java/net/URL.html) wsdlDocumentLocation,  
 [QName](http://docs.google.com/javax/xml/namespace/QName.html) serviceName)Create a Service instance. The specified WSDL document location and service qualified name must uniquely identify a wsdl:service element.**Parameters:**wsdlDocumentLocation - URL for the WSDL document location for the serviceserviceName - QName for the service **Throws:** [WebServiceException](http://docs.google.com/javax/xml/ws/WebServiceException.html) - If any error in creation of the specified servicecreatepublic static [Service](http://docs.google.com/javax/xml/ws/Service.html) **create**([QName](http://docs.google.com/javax/xml/namespace/QName.html) serviceName)Create a Service instance.**Parameters:**serviceName - QName for the service **Throws:** [WebServiceException](http://docs.google.com/javax/xml/ws/WebServiceException.html) - If any error in creation of the specified service

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/Service.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/xml/ws/ResponseWrapper.html)   [**NEXT CLASS**](http://docs.google.com/javax/xml/ws/Service.Mode.html) | [**FRAMES**](http://docs.google.com/index.html?javax/xml/ws/Service.html)    [**NO FRAMES**](http://docs.google.com/Service.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: [NESTED](#3znysh7) | FIELD | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: FIELD | [CONSTR](#1t3h5sf) | [METHOD](#2s8eyo1) |

[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).