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

## **javax.xml.soap**

Class SOAPFactory

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

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

SOAPFactory is a factory for creating various objects that exist in the SOAP XML tree. SOAPFactory can be used to create XML fragments that will eventually end up in the SOAP part. These fragments can be inserted as children of the [SOAPHeaderElement](http://docs.google.com/javax/xml/soap/SOAPHeaderElement.html) or [SOAPBodyElement](http://docs.google.com/javax/xml/soap/SOAPBodyElement.html) or [SOAPEnvelope](http://docs.google.com/javax/xml/soap/SOAPEnvelope.html) or other [SOAPElement](http://docs.google.com/javax/xml/soap/SOAPElement.html) objects. SOAPFactory also has methods to create javax.xml.soap.Detail objects as well as java.xml.soap.Name objects.

| **Constructor Summary** | |
| --- | --- |
| [**SOAPFactory**](http://docs.google.com/javax/xml/soap/SOAPFactory.html#SOAPFactory())() |

| **Method Summary** | |
| --- | --- |
| abstract  [Detail](http://docs.google.com/javax/xml/soap/Detail.html) | [**createDetail**](http://docs.google.com/javax/xml/soap/SOAPFactory.html#createDetail())()            Creates a new Detail object which serves as a container for DetailEntry objects. |
| [SOAPElement](http://docs.google.com/javax/xml/soap/SOAPElement.html) | [**createElement**](http://docs.google.com/javax/xml/soap/SOAPFactory.html#createElement(org.w3c.dom.Element))([Element](http://docs.google.com/org/w3c/dom/Element.html) domElement)            Creates a SOAPElement object from an existing DOM Element. |
| abstract  [SOAPElement](http://docs.google.com/javax/xml/soap/SOAPElement.html) | [**createElement**](http://docs.google.com/javax/xml/soap/SOAPFactory.html#createElement(javax.xml.soap.Name))([Name](http://docs.google.com/javax/xml/soap/Name.html) name)            Creates a SOAPElement object initialized with the given Name object. |
| [SOAPElement](http://docs.google.com/javax/xml/soap/SOAPElement.html) | [**createElement**](http://docs.google.com/javax/xml/soap/SOAPFactory.html#createElement(javax.xml.namespace.QName))([QName](http://docs.google.com/javax/xml/namespace/QName.html) qname)            Creates a SOAPElement object initialized with the given QName object. |
| abstract  [SOAPElement](http://docs.google.com/javax/xml/soap/SOAPElement.html) | [**createElement**](http://docs.google.com/javax/xml/soap/SOAPFactory.html#createElement(java.lang.String))([String](http://docs.google.com/java/lang/String.html) localName)            Creates a SOAPElement object initialized with the given local name. |
| abstract  [SOAPElement](http://docs.google.com/javax/xml/soap/SOAPElement.html) | [**createElement**](http://docs.google.com/javax/xml/soap/SOAPFactory.html#createElement(java.lang.String,%20java.lang.String,%20java.lang.String))([String](http://docs.google.com/java/lang/String.html) localName, [String](http://docs.google.com/java/lang/String.html) prefix, [String](http://docs.google.com/java/lang/String.html) uri)            Creates a new SOAPElement object with the given local name, prefix and uri. |
| abstract  [SOAPFault](http://docs.google.com/javax/xml/soap/SOAPFault.html) | [**createFault**](http://docs.google.com/javax/xml/soap/SOAPFactory.html#createFault())()            Creates a new default SOAPFault object |
| abstract  [SOAPFault](http://docs.google.com/javax/xml/soap/SOAPFault.html) | [**createFault**](http://docs.google.com/javax/xml/soap/SOAPFactory.html#createFault(java.lang.String,%20javax.xml.namespace.QName))([String](http://docs.google.com/java/lang/String.html) reasonText, [QName](http://docs.google.com/javax/xml/namespace/QName.html) faultCode)            Creates a new SOAPFault object initialized with the given reasonText and faultCode |
| abstract  [Name](http://docs.google.com/javax/xml/soap/Name.html) | [**createName**](http://docs.google.com/javax/xml/soap/SOAPFactory.html#createName(java.lang.String))([String](http://docs.google.com/java/lang/String.html) localName)            Creates a new Name object initialized with the given local name. |
| abstract  [Name](http://docs.google.com/javax/xml/soap/Name.html) | [**createName**](http://docs.google.com/javax/xml/soap/SOAPFactory.html#createName(java.lang.String,%20java.lang.String,%20java.lang.String))([String](http://docs.google.com/java/lang/String.html) localName, [String](http://docs.google.com/java/lang/String.html) prefix, [String](http://docs.google.com/java/lang/String.html) uri)            Creates a new Name object initialized with the given local name, namespace prefix, and namespace URI. |
| static [SOAPFactory](http://docs.google.com/javax/xml/soap/SOAPFactory.html) | [**newInstance**](http://docs.google.com/javax/xml/soap/SOAPFactory.html#newInstance())()            Creates a new SOAPFactory object that is an instance of the default implementation (SOAP 1.1), This method uses the following ordered lookup procedure to determine the SOAPFactory implementation class to load: Use the javax.xml.soap.SOAPFactory system property. |
| static [SOAPFactory](http://docs.google.com/javax/xml/soap/SOAPFactory.html) | [**newInstance**](http://docs.google.com/javax/xml/soap/SOAPFactory.html#newInstance(java.lang.String))([String](http://docs.google.com/java/lang/String.html) protocol)            Creates a new SOAPFactory object that is an instance of the specified implementation, this method uses the SAAJMetaFactory to locate the implementation class and create the SOAPFactory 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** |
| --- |

### SOAPFactory

public **SOAPFactory**()

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

### createElement

public [SOAPElement](http://docs.google.com/javax/xml/soap/SOAPElement.html) **createElement**([Element](http://docs.google.com/org/w3c/dom/Element.html) domElement)  
 throws [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html)

Creates a SOAPElement object from an existing DOM Element. If the DOM Element that is passed in as an argument is already a SOAPElement then this method must return it unmodified without any further work. Otherwise, a new SOAPElement is created and a deep copy is made of the domElement argument. The concrete type of the return value will depend on the name of the domElement argument. If any part of the tree rooted in domElement violates SOAP rules, a SOAPException will be thrown.

**Parameters:**domElement - - the Element to be copied. **Returns:**a new SOAPElement that is a copy of domElement. **Throws:** [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html) - if there is an error in creating the SOAPElement object**Since:** SAAJ 1.3

### createElement

public abstract [SOAPElement](http://docs.google.com/javax/xml/soap/SOAPElement.html) **createElement**([Name](http://docs.google.com/javax/xml/soap/Name.html) name)  
 throws [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html)

Creates a SOAPElement object initialized with the given Name object. The concrete type of the return value will depend on the name given to the new SOAPElement. For instance, a new SOAPElement with the name "{http://www.w3.org/2003/05/soap-envelope}Envelope" would cause a SOAPEnvelope that supports SOAP 1.2 behavior to be created.

**Parameters:**name - a Name object with the XML name for the new element **Returns:**the new SOAPElement object that was created **Throws:** [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html) - if there is an error in creating the SOAPElement object**See Also:**[createElement(javax.xml.namespace.QName)](http://docs.google.com/javax/xml/soap/SOAPFactory.html#createElement(javax.xml.namespace.QName))

### createElement

public [SOAPElement](http://docs.google.com/javax/xml/soap/SOAPElement.html) **createElement**([QName](http://docs.google.com/javax/xml/namespace/QName.html) qname)  
 throws [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html)

Creates a SOAPElement object initialized with the given QName object. The concrete type of the return value will depend on the name given to the new SOAPElement. For instance, a new SOAPElement with the name "{http://www.w3.org/2003/05/soap-envelope}Envelope" would cause a SOAPEnvelope that supports SOAP 1.2 behavior to be created.

**Parameters:**qname - a QName object with the XML name for the new element **Returns:**the new SOAPElement object that was created **Throws:** [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html) - if there is an error in creating the SOAPElement object**Since:** SAAJ 1.3 **See Also:**[createElement(Name)](http://docs.google.com/javax/xml/soap/SOAPFactory.html#createElement(javax.xml.soap.Name))

### createElement

public abstract [SOAPElement](http://docs.google.com/javax/xml/soap/SOAPElement.html) **createElement**([String](http://docs.google.com/java/lang/String.html) localName)  
 throws [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html)

Creates a SOAPElement object initialized with the given local name.

**Parameters:**localName - a String giving the local name for the new element **Returns:**the new SOAPElement object that was created **Throws:** [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html) - if there is an error in creating the SOAPElement object

### createElement

public abstract [SOAPElement](http://docs.google.com/javax/xml/soap/SOAPElement.html) **createElement**([String](http://docs.google.com/java/lang/String.html) localName,  
 [String](http://docs.google.com/java/lang/String.html) prefix,  
 [String](http://docs.google.com/java/lang/String.html) uri)  
 throws [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html)

Creates a new SOAPElement object with the given local name, prefix and uri. The concrete type of the return value will depend on the name given to the new SOAPElement. For instance, a new SOAPElement with the name "{http://www.w3.org/2003/05/soap-envelope}Envelope" would cause a SOAPEnvelope that supports SOAP 1.2 behavior to be created.

**Parameters:**localName - a String giving the local name for the new elementprefix - the prefix for this SOAPElementuri - a String giving the URI of the namespace to which the new element belongs **Throws:** [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html) - if there is an error in creating the SOAPElement object

### createDetail

public abstract [Detail](http://docs.google.com/javax/xml/soap/Detail.html) **createDetail**()  
 throws [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html)

Creates a new Detail object which serves as a container for DetailEntry objects.

This factory method creates Detail objects for use in situations where it is not practical to use the SOAPFault abstraction.

**Returns:**a Detail object **Throws:** [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html) - if there is a SOAP error [UnsupportedOperationException](http://docs.google.com/java/lang/UnsupportedOperationException.html) - if the protocol specified for the SOAPFactory was DYNAMIC\_SOAP\_PROTOCOL

### createFault

public abstract [SOAPFault](http://docs.google.com/javax/xml/soap/SOAPFault.html) **createFault**([String](http://docs.google.com/java/lang/String.html) reasonText,  
 [QName](http://docs.google.com/javax/xml/namespace/QName.html) faultCode)  
 throws [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html)

Creates a new SOAPFault object initialized with the given reasonText and faultCode

**Parameters:**reasonText - the ReasonText/FaultString for the faultfaultCode - the FaultCode for the fault **Returns:**a SOAPFault object **Throws:** [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html) - if there is a SOAP error**Since:** SAAJ 1.3

### createFault

public abstract [SOAPFault](http://docs.google.com/javax/xml/soap/SOAPFault.html) **createFault**()  
 throws [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html)

Creates a new default SOAPFault object

**Returns:**a SOAPFault object **Throws:** [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html) - if there is a SOAP error**Since:** SAAJ 1.3

### createName

public abstract [Name](http://docs.google.com/javax/xml/soap/Name.html) **createName**([String](http://docs.google.com/java/lang/String.html) localName,  
 [String](http://docs.google.com/java/lang/String.html) prefix,  
 [String](http://docs.google.com/java/lang/String.html) uri)  
 throws [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html)

Creates a new Name object initialized with the given local name, namespace prefix, and namespace URI.

This factory method creates Name objects for use in situations where it is not practical to use the SOAPEnvelope abstraction.

**Parameters:**localName - a String giving the local nameprefix - a String giving the prefix of the namespaceuri - a String giving the URI of the namespace **Returns:**a Name object initialized with the given local name, namespace prefix, and namespace URI **Throws:** [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html) - if there is a SOAP error

### createName

public abstract [Name](http://docs.google.com/javax/xml/soap/Name.html) **createName**([String](http://docs.google.com/java/lang/String.html) localName)  
 throws [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html)

Creates a new Name object initialized with the given local name.

This factory method creates Name objects for use in situations where it is not practical to use the SOAPEnvelope abstraction.

**Parameters:**localName - a String giving the local name **Returns:**a Name object initialized with the given local name **Throws:** [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html) - if there is a SOAP error

### newInstance

public static [SOAPFactory](http://docs.google.com/javax/xml/soap/SOAPFactory.html) **newInstance**()  
 throws [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html)

Creates a new SOAPFactory object that is an instance of the default implementation (SOAP 1.1), This method uses the following ordered lookup procedure to determine the SOAPFactory implementation class to load:

* Use the javax.xml.soap.SOAPFactory system property.
* Use the properties file "lib/jaxm.properties" in the JRE directory. This configuration file is in standard java.util.Properties format and contains the fully qualified name of the implementation class with the key being the system property defined above.
* Use the Services API (as detailed in the JAR specification), if available, to determine the classname. The Services API will look for a classname in the file META-INF/services/javax.xml.soap.SOAPFactory in jars available to the runtime.
* Use the SAAJMetaFactory instance to locate the SOAPFactory implementation class.

**Returns:**a new instance of a SOAPFactory **Throws:** [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html) - if there was an error creating the default SOAPFactory**See Also:**[SAAJMetaFactory](http://docs.google.com/javax/xml/soap/SAAJMetaFactory.html)

### newInstance

public static [SOAPFactory](http://docs.google.com/javax/xml/soap/SOAPFactory.html) **newInstance**([String](http://docs.google.com/java/lang/String.html) protocol)  
 throws [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html)

Creates a new SOAPFactory object that is an instance of the specified implementation, this method uses the SAAJMetaFactory to locate the implementation class and create the SOAPFactory instance.

**Parameters:**protocol - a string constant representing the protocol of the specified SOAP factory implementation. May be either DYNAMIC\_SOAP\_PROTOCOL, DEFAULT\_SOAP\_PROTOCOL (which is the same as) SOAP\_1\_1\_PROTOCOL, or SOAP\_1\_2\_PROTOCOL. **Returns:**a new instance of a SOAPFactory **Throws:** [SOAPException](http://docs.google.com/javax/xml/soap/SOAPException.html) - if there was an error creating the specified SOAPFactory**Since:** SAAJ 1.3 **See Also:**[SAAJMetaFactory](http://docs.google.com/javax/xml/soap/SAAJMetaFactory.html)

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/SOAPFactory.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/soap/SOAPException.html)   [**NEXT CLASS**](http://docs.google.com/javax/xml/soap/SOAPFault.html) | [**FRAMES**](http://docs.google.com/index.html?javax/xml/soap/SOAPFactory.html)    [**NO FRAMES**](http://docs.google.com/SOAPFactory.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.

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