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

Class SAXParserFactory

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

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

Defines a factory API that enables applications to configure and obtain a SAX based parser to parse XML documents.

| **Constructor Summary** | |
| --- | --- |
| protected | [**SAXParserFactory**](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#SAXParserFactory())()            Protected constructor to force use of [newInstance()](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#newInstance()). |

| **Method Summary** | |
| --- | --- |
| abstract  boolean | [**getFeature**](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#getFeature(java.lang.String))([String](http://docs.google.com/java/lang/String.html) name)            Returns the particular property requested for in the underlying implementation of org.xml.sax.XMLReader. |
| [Schema](http://docs.google.com/javax/xml/validation/Schema.html) | [**getSchema**](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#getSchema())()            Gets the [Schema](http://docs.google.com/javax/xml/validation/Schema.html) object specified through the [setSchema(Schema schema)](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#setSchema(javax.xml.validation.Schema)) method. |
| boolean | [**isNamespaceAware**](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#isNamespaceAware())()            Indicates whether or not the factory is configured to produce parsers which are namespace aware. |
| boolean | [**isValidating**](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#isValidating())()            Indicates whether or not the factory is configured to produce parsers which validate the XML content during parse. |
| boolean | [**isXIncludeAware**](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#isXIncludeAware())()            Get state of XInclude processing. |
| static [SAXParserFactory](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html) | [**newInstance**](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#newInstance())()            Obtain a new instance of a SAXParserFactory. |
| static [SAXParserFactory](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html) | [**newInstance**](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#newInstance(java.lang.String,%20java.lang.ClassLoader))([String](http://docs.google.com/java/lang/String.html) factoryClassName, [ClassLoader](http://docs.google.com/java/lang/ClassLoader.html) classLoader)            Obtain a new instance of a SAXParserFactory from class name. |
| abstract  [SAXParser](http://docs.google.com/javax/xml/parsers/SAXParser.html) | [**newSAXParser**](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#newSAXParser())()            Creates a new instance of a SAXParser using the currently configured factory parameters. |
| abstract  void | [**setFeature**](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#setFeature(java.lang.String,%20boolean))([String](http://docs.google.com/java/lang/String.html) name, boolean value)            Sets the particular feature in the underlying implementation of org.xml.sax.XMLReader. |
| void | [**setNamespaceAware**](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#setNamespaceAware(boolean))(boolean awareness)            Specifies that the parser produced by this code will provide support for XML namespaces. |
| void | [**setSchema**](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#setSchema(javax.xml.validation.Schema))([Schema](http://docs.google.com/javax/xml/validation/Schema.html) schema)            Set the [Schema](http://docs.google.com/javax/xml/validation/Schema.html) to be used by parsers created from this factory. |
| void | [**setValidating**](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#setValidating(boolean))(boolean validating)            Specifies that the parser produced by this code will validate documents as they are parsed. |
| void | [**setXIncludeAware**](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#setXIncludeAware(boolean))(boolean state)            Set state of XInclude processing. |

| **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** |
| --- |

### SAXParserFactory

protected **SAXParserFactory**()

Protected constructor to force use of [newInstance()](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#newInstance()).

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

### newInstance

public static [SAXParserFactory](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html) **newInstance**()

Obtain a new instance of a SAXParserFactory. This static method creates a new factory instance This method uses the following ordered lookup procedure to determine the SAXParserFactory implementation class to load:

* Use the javax.xml.parsers.SAXParserFactory system property.
* Use the properties file "lib/jaxp.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. The jaxp.properties file is read only once by the JAXP implementation and it's values are then cached for future use. If the file does not exist when the first attempt is made to read from it, no further attempts are made to check for its existence. It is not possible to change the value of any property in jaxp.properties after it has been read for the first time.
* 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.parsers.SAXParserFactory in jars available to the runtime.
* Platform default SAXParserFactory instance.

Once an application has obtained a reference to a SAXParserFactory it can use the factory to configure and obtain parser instances.

## Tip for Trouble-shooting

Setting the jaxp.debug system property will cause this method to print a lot of debug messages to System.err about what it is doing and where it is looking at.

If you have problems loading [DocumentBuilder](http://docs.google.com/javax/xml/parsers/DocumentBuilder.html)s, try:

java -Djaxp.debug=1 YourProgram ....

**Returns:**A new instance of a SAXParserFactory. **Throws:** [FactoryConfigurationError](http://docs.google.com/javax/xml/parsers/FactoryConfigurationError.html) - if the implementation is not available or cannot be instantiated.

### newInstance

public static [SAXParserFactory](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html) **newInstance**([String](http://docs.google.com/java/lang/String.html) factoryClassName,  
 [ClassLoader](http://docs.google.com/java/lang/ClassLoader.html) classLoader)

Obtain a new instance of a SAXParserFactory from class name. This function is useful when there are multiple providers in the classpath. It gives more control to the application as it can specify which provider should be loaded.

Once an application has obtained a reference to a SAXParserFactory it can use the factory to configure and obtain parser instances.

## Tip for Trouble-shooting

Setting the jaxp.debug system property will cause this method to print a lot of debug messages to System.err about what it is doing and where it is looking at.

If you have problems, try:

java -Djaxp.debug=1 YourProgram ....

**Parameters:**factoryClassName - fully qualified factory class name that provides implementation of javax.xml.parsers.SAXParserFactory.classLoader - ClassLoader used to load the factory class. If null current Thread's context classLoader is used to load the factory class. **Returns:**New instance of a SAXParserFactory **Throws:** [FactoryConfigurationError](http://docs.google.com/javax/xml/parsers/FactoryConfigurationError.html) - if factoryClassName is null, or the factory class cannot be loaded, instantiated.**Since:** 1.6 **See Also:**[newInstance()](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#newInstance())

### newSAXParser

public abstract [SAXParser](http://docs.google.com/javax/xml/parsers/SAXParser.html) **newSAXParser**()  
 throws [ParserConfigurationException](http://docs.google.com/javax/xml/parsers/ParserConfigurationException.html),  
 [SAXException](http://docs.google.com/org/xml/sax/SAXException.html)

Creates a new instance of a SAXParser using the currently configured factory parameters.

**Returns:**A new instance of a SAXParser. **Throws:** [ParserConfigurationException](http://docs.google.com/javax/xml/parsers/ParserConfigurationException.html) - if a parser cannot be created which satisfies the requested configuration. [SAXException](http://docs.google.com/org/xml/sax/SAXException.html) - for SAX errors.

### setNamespaceAware

public void **setNamespaceAware**(boolean awareness)

Specifies that the parser produced by this code will provide support for XML namespaces. By default the value of this is set to false.

**Parameters:**awareness - true if the parser produced by this code will provide support for XML namespaces; false otherwise.

### setValidating

public void **setValidating**(boolean validating)

Specifies that the parser produced by this code will validate documents as they are parsed. By default the value of this is set to false.

Note that "the validation" here means [a validating parser](http://www.w3.org/TR/REC-xml#proc-types) as defined in the XML recommendation. In other words, it essentially just controls the DTD validation. (except the legacy two properties defined in JAXP 1.2.)

To use modern schema languages such as W3C XML Schema or RELAX NG instead of DTD, you can configure your parser to be a non-validating parser by leaving the [setValidating(boolean)](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#setValidating(boolean)) method false, then use the [setSchema(Schema)](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#setSchema(javax.xml.validation.Schema)) method to associate a schema to a parser.

**Parameters:**validating - true if the parser produced by this code will validate documents as they are parsed; false otherwise.

### isNamespaceAware

public boolean **isNamespaceAware**()

Indicates whether or not the factory is configured to produce parsers which are namespace aware.

**Returns:**true if the factory is configured to produce parsers which are namespace aware; false otherwise.

### isValidating

public boolean **isValidating**()

Indicates whether or not the factory is configured to produce parsers which validate the XML content during parse.

**Returns:**true if the factory is configured to produce parsers which validate the XML content during parse; false otherwise.

### setFeature

public abstract void **setFeature**([String](http://docs.google.com/java/lang/String.html) name,  
 boolean value)  
 throws [ParserConfigurationException](http://docs.google.com/javax/xml/parsers/ParserConfigurationException.html),  
 [SAXNotRecognizedException](http://docs.google.com/org/xml/sax/SAXNotRecognizedException.html),  
 [SAXNotSupportedException](http://docs.google.com/org/xml/sax/SAXNotSupportedException.html)

Sets the particular feature in the underlying implementation of org.xml.sax.XMLReader. A list of the core features and properties can be found at <http://www.saxproject.org/>

All implementations are required to support the [XMLConstants.FEATURE\_SECURE\_PROCESSING](http://docs.google.com/javax/xml/XMLConstants.html#FEATURE_SECURE_PROCESSING) feature. When the feature is

* true: the implementation will limit XML processing to conform to implementation limits. Examples include enity expansion limits and XML Schema constructs that would consume large amounts of resources. If XML processing is limited for security reasons, it will be reported via a call to the registered [ErrorHandler.fatalError(SAXParseException exception)](http://docs.google.com/org/xml/sax/ErrorHandler.html#fatalError(org.xml.sax.SAXParseException)). See [SAXParser](http://docs.google.com/javax/xml/parsers/SAXParser.html) parse methods for handler specification.
* When the feature is false, the implementation will processing XML according to the XML specifications without regard to possible implementation limits.

**Parameters:**name - The name of the feature to be set.value - The value of the feature to be set. **Throws:** [ParserConfigurationException](http://docs.google.com/javax/xml/parsers/ParserConfigurationException.html) - if a parser cannot be created which satisfies the requested configuration. [SAXNotRecognizedException](http://docs.google.com/org/xml/sax/SAXNotRecognizedException.html) - When the underlying XMLReader does not recognize the property name. [SAXNotSupportedException](http://docs.google.com/org/xml/sax/SAXNotSupportedException.html) - When the underlying XMLReader recognizes the property name but doesn't support the property. [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - If the name parameter is null.**See Also:**[XMLReader.setFeature(java.lang.String, boolean)](http://docs.google.com/org/xml/sax/XMLReader.html#setFeature(java.lang.String,%20boolean))

### getFeature

public abstract boolean **getFeature**([String](http://docs.google.com/java/lang/String.html) name)  
 throws [ParserConfigurationException](http://docs.google.com/javax/xml/parsers/ParserConfigurationException.html),  
 [SAXNotRecognizedException](http://docs.google.com/org/xml/sax/SAXNotRecognizedException.html),  
 [SAXNotSupportedException](http://docs.google.com/org/xml/sax/SAXNotSupportedException.html)

Returns the particular property requested for in the underlying implementation of org.xml.sax.XMLReader.

**Parameters:**name - The name of the property to be retrieved. **Returns:**Value of the requested property. **Throws:** [ParserConfigurationException](http://docs.google.com/javax/xml/parsers/ParserConfigurationException.html) - if a parser cannot be created which satisfies the requested configuration. [SAXNotRecognizedException](http://docs.google.com/org/xml/sax/SAXNotRecognizedException.html) - When the underlying XMLReader does not recognize the property name. [SAXNotSupportedException](http://docs.google.com/org/xml/sax/SAXNotSupportedException.html) - When the underlying XMLReader recognizes the property name but doesn't support the property.**See Also:**[XMLReader.getProperty(java.lang.String)](http://docs.google.com/org/xml/sax/XMLReader.html#getProperty(java.lang.String))

### getSchema

public [Schema](http://docs.google.com/javax/xml/validation/Schema.html) **getSchema**()

Gets the [Schema](http://docs.google.com/javax/xml/validation/Schema.html) object specified through the [setSchema(Schema schema)](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#setSchema(javax.xml.validation.Schema)) method.

**Returns:**the [Schema](http://docs.google.com/javax/xml/validation/Schema.html) object that was last set through the [setSchema(Schema)](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#setSchema(javax.xml.validation.Schema)) method, or null if the method was not invoked since a [SAXParserFactory](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html) is created. **Throws:** [UnsupportedOperationException](http://docs.google.com/java/lang/UnsupportedOperationException.html) - When implementation does not override this method**Since:** 1.5

### setSchema

public void **setSchema**([Schema](http://docs.google.com/javax/xml/validation/Schema.html) schema)

Set the [Schema](http://docs.google.com/javax/xml/validation/Schema.html) to be used by parsers created from this factory.

When a [Schema](http://docs.google.com/javax/xml/validation/Schema.html) is non-null, a parser will use a validator created from it to validate documents before it passes information down to the application.

When warnings/errors/fatal errors are found by the validator, the parser must handle them as if those errors were found by the parser itself. In other words, if the user-specified [ErrorHandler](http://docs.google.com/org/xml/sax/ErrorHandler.html) is set, it must receive those errors, and if not, they must be treated according to the implementation specific default error handling rules.

A validator may modify the SAX event stream (for example by adding default values that were missing in documents), and a parser is responsible to make sure that the application will receive those modified event stream.

Initialy, null is set as the [Schema](http://docs.google.com/javax/xml/validation/Schema.html).

This processing will take effect even if the [isValidating()](http://docs.google.com/javax/xml/parsers/SAXParserFactory.html#isValidating()) method returns false.

It is an error to use the http://java.sun.com/xml/jaxp/properties/schemaSource property and/or the http://java.sun.com/xml/jaxp/properties/schemaLanguage property in conjunction with a non-null [Schema](http://docs.google.com/javax/xml/validation/Schema.html) object. Such configuration will cause a [SAXException](http://docs.google.com/org/xml/sax/SAXException.html) exception when those properties are set on a [SAXParser](http://docs.google.com/javax/xml/parsers/SAXParser.html).

#### Note for implmentors

A parser must be able to work with any [Schema](http://docs.google.com/javax/xml/validation/Schema.html) implementation. However, parsers and schemas are allowed to use implementation-specific custom mechanisms as long as they yield the result described in the specification.

**Parameters:**schema - Schema to use, null to remove a schema. **Throws:** [UnsupportedOperationException](http://docs.google.com/java/lang/UnsupportedOperationException.html) - When implementation does not override this method**Since:** 1.5

### setXIncludeAware

public void **setXIncludeAware**(boolean state)

Set state of XInclude processing.

If XInclude markup is found in the document instance, should it be processed as specified in  [XML Inclusions (XInclude) Version 1.0](http://www.w3.org/TR/xinclude/).

XInclude processing defaults to false.

**Parameters:**state - Set XInclude processing to true or false **Throws:** [UnsupportedOperationException](http://docs.google.com/java/lang/UnsupportedOperationException.html) - When implementation does not override this method**Since:** 1.5

### isXIncludeAware

public boolean **isXIncludeAware**()

Get state of XInclude processing.

**Returns:**current state of XInclude processing **Throws:** [UnsupportedOperationException](http://docs.google.com/java/lang/UnsupportedOperationException.html) - When implementation does not override this method**Since:** 1.5

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