



BEA WebLogic Workshop™ Help

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XMLBeans API Reference

The XMLBeans API provides classes and interfaces for accessing and creating XML, both with and without schema. All of the API is included in one package.

Topics Included in This Section

[com.bea.xml Package Summary](#)

Provides a list and descriptions of this package's contents, which includes classes and interfaces designed to provide access to XML.

[Related Topics](#)

[Getting Started with XMLBeans](#)

com.bea.xml Package

Provides classes for XML Beans schema, infoSet, XPath, and XQuery handling.

The XML Beans API is designed to work with the XML Beans *schema compiler*. The schema compiler produces XML Bean classes that extend and interact with the basic XML Bean classes and interfaces in this package. It is also possible to use XML Beans without the schema compiler to manipulate and validate XML in a late-bound way (with no types, or with runtime-loaded types only).

This package contains:

1. All the built-in XML Bean classes such as `XmlObject`, `XmlAnySimpleType`, and `XmlInt` (one for each of the 46 built-in XML Schema types).
2. Support for full XML infoSet, XPath, and XQuery (via `XmlCursor`, `XmlObject.selectPath(String)` and related methods).
3. Support for computation using XML Schema data types (via datatype classes such as `GDuration`).
4. Support for working with XML Schema type metadata itself (via `SchemaType`, `SchemaTypeSystem`, and related classes).

The place to begin when working with the XML Beans API is the following fundamental classes:

1. `XmlObject` is the base class for all XML Beans.
2. `XmlObject.Factory` is used to load and create XML Bean instances. Each XML Bean class has its own nested factory class.
3. `XmlCursor` is an efficient treewalking API for the full XML infoSet.
4. `SchemaType` is the type metadata interface for XML Schema types
5. `XmlBeans` provides a collection of utility functions.

Interface Summary

<code>GDateSpecification</code>	Represents an XML Schema-compatible Gregorian date.
<code>GDurationSpecification</code>	Represents an XML Schema-compatible duration.
<code>QNameSetSpecification</code>	Represents a lattice of finite and infinite sets of QNames.
<code>SchemaAttributeGroup</code>	Represents an attribute group.
<code>SchemaAttributeModel</code>	Represents the attribute structure allowed on a complex type.
<code>SchemaComponent</code>	Represents a global Schema Component.
<code>SchemaField</code>	Represents an element or an attribute declaration.
<code>SchemaGlobalAttribute</code>	Represents a global attribute definition
<code>SchemaGlobalElement</code>	Represents a global element definition.
<code>SchemaIdentityConstraint</code>	Represents an identity constraint definition.
<code>SchemaLocalAttribute</code>	Represents a local or global attribute definition.
<code>SchemaLocalElement</code>	Represents a local or global element definition.
<code>SchemaModelGroup</code>	Represents a model group.
<code>SchemaParticle</code>	Represents a Schema particle definition.
<code>SchemaProperty</code>	Represents a summary of similar SchemaFields in a complex type.
<code>SchemaStringEnumEntry</code>	Describes a code-generated string enumeration

XMLBeans API Reference

SchemaType	Represents a schema type.
SchemaTypeElementSequencer	This class is used to programatically validate the contents of an XML element. Call to both <code>SchemaTypeElementSequencer.next(QName)</code> and <code>SchemaTypeElementSequencer.peek(QName)</code> will return true if the element with the provided name is allowed at the current position in the element content, the difference being that <code>SchemaTypeElementSequencer.next(QName)</code> will advance the current position, while <code>SchemaTypeElementSequencer.peek(QName)</code> won't.
SchemaTypeLoader	Represents a searchable set of XML Schema component definitions.
SchemaTypeSystem	A finite set of XML Schema component definitions.
SimpleValue	All <code>XmlObject</code> implementations can be coerced to <code>SimpleValue</code> .
XmlAnySimpleType	Corresponds to the XML Schema <code>xs:anySimpleType</code> type.
XmlAnyURI	Corresponds to the XML Schema <code>xs:anyURI</code> type.
XmlBase64Binary	Corresponds to the XML Schema <code>xs:base64Binary</code> type.
XmlBoolean	Corresponds to the XML Schema <code>xs:boolean</code> type.
XmlByte	Corresponds to the XML Schema <code>xs:byte</code> type.
XmlCursor	Represents a position between two logical tokens in an XML document.
XmlCursor.ChangeStamp	Represents the state of a document at a particular point in time.
XmlCursor.XmlMark	An abstract <code>XmlCursor</code> factory.
XmlDate	Corresponds to the XML Schema <code>xs:date</code> type.
XmlDateTime	Corresponds to the XML Schema <code>xs:dateTime</code> type.
XmlDecimal	Corresponds to the XML Schema <code>xs:decimal</code> type.
XmlDouble	Corresponds to the XML Schema <code>xs:double</code> type.
XmlDuration	Corresponds to the XML Schema <code>xs:duration</code> type.
XmlENTITIES	Corresponds to the XML Schema <code>xs:ENTITIES</code> type, a list type.
XmlENTITY	Corresponds to the XML Schema <code>xs:ENTITY</code> type.
XmlFactoryHook	A hook for the XML Bean Factory mechanism.
XmlFloat	Corresponds to the XML Schema <code>xs:float</code> type.
XmlGDay	Corresponds to the XML Schema <code>xs:gDay</code> type.
XmlGMonth	Corresponds to the XML Schema <code>xs:gMonth</code> type.
XmlGMonthDay	Corresponds to the XML Schema <code>xs:gMonthDay</code> type.
XmlGYear	Corresponds to the XML Schema <code>xs:gYear</code> type.
XmlGYearMonth	Corresponds to the XML Schema <code>xs:gYearMonth</code> type.
XmlHexBinary	Corresponds to the XML Schema <code>xs:hexBinary</code> type.
XmlID	Corresponds to the XML Schema <code>xs:ID</code> type.
XmlIDREF	Corresponds to the XML Schema <code>xs:IDREF</code> type.
XmlIDREFS	Corresponds to the XML Schema <code>xs:IDREFS</code> type, a list type.
XmlInt	Corresponds to the XML Schema <code>xs:int</code> type.
XmlInteger	Corresponds to the XML Schema <code>xs:integer</code> type.
XmlLanguage	Corresponds to the XML Schema <code>xs:language</code> type.
XmlLong	Corresponds to the XML Schema <code>xs:long</code> type.

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<code>XmlName</code>	Corresponds to the XML Schema <code>xs:Name</code> type.
<code>XmlNCName</code>	Corresponds to the XML Schema <code>xs:Name</code> type.
<code>XmlNegativeInteger</code>	Corresponds to the XML Schema <code>xs:negativeInteger</code> type.
<code>XmlNMTOKEN</code>	Corresponds to the XML Schema <code>xs:NMTOKEN</code> type.
<code>XmlNMTOKENS</code>	Corresponds to the XML Schema <code>xs:NMTOKENS</code> type, a list type.
<code>XmlNonNegativeInteger</code>	Corresponds to the XML Schema <code>xs:nonNegativeInteger</code> type.
<code>XmlNonPositiveInteger</code>	Corresponds to the XML Schema <code>xs:nonPositiveInteger</code> type.
<code>XmlNormalizedString</code>	Corresponds to the XML Schema <code>xs:normalizedString</code> type.
<code>XmlNOTATION</code>	Corresponds to the XML Schema <code>xs:NOTATION</code> type.
<code>XmlObject</code>	Corresponds to the XML Schema <code>xs:anyType</code> , the base type for all XML Beans.
<code>XmlObjectList</code>	Interface to represent lists of <code>XmlObject</code> instances returned from a query.
<code>XmlPositiveInteger</code>	Corresponds to the XML Schema <code>xs:positiveInteger</code> type.
<code>XmlQName</code>	Corresponds to the XML Schema <code>xs:QName</code> type.
<code>XmlSaxHandler</code>	A holder for a SAX <code>ContentHandler</code> and <code>LexicalHandler</code> that are capable of loading an <code>XmlObject</code> instance.
<code>XmlShort</code>	Corresponds to the XML Schema <code>xs:short</code> type.
<code>XmlString</code>	Corresponds to the XML Schema <code>xs:string</code> type.
<code>XmlTime</code>	Corresponds to the XML Schema <code>xs:time</code> type.
<code>XmlToken</code>	Corresponds to the XML Schema <code>xs:token</code> type.
<code>XmlTokenSource</code>	Represents a holder of XML that can return an <code>XmlCursor</code> or copy itself to various media such as <code>Writer</code> or <code>File</code> .
<code>XmlUnsignedByte</code>	Corresponds to the XML Schema <code>xs:unsignedByte</code> type.
<code>XmlUnsignedInt</code>	Corresponds to the XML Schema <code>xs:unsignedInt</code> type.
<code>XmlUnsignedLong</code>	Corresponds to the XML Schema <code>xs:unsignedLong</code> type.
<code>XmlUnsignedShort</code>	Corresponds to the XML Schema <code>xs:unsignedShort</code> type.

Class Summary

<code>FilterXmlObject</code>	A <code>FilterXmlObject</code> delegates to some other <code>XmlObject</code> , which it can use as its basic source of data, possibly transforming the data along the way or providing additional functionality.
<code>GDate</code>	Represents an XML Schema-compatible Gregorian date.
<code>GDateBuilder</code>	Used to build <code>GDate</code> .
<code>GDuration</code>	Represents an XML Schema-compatible duration.
<code>GDurationBuilder</code>	Used to build <code>GDuration</code> .
<code>QNameCache</code>	A cache that can be used to pool <code>QName</code> instances.
<code>QNameSet</code>	This interface represents a lattice of finite and infinite sets of <code>QNames</code> .
<code>QNameSetBuilder</code>	Used to build <code>QNameSet</code> .
<code>StringEnumAbstractBase</code>	The base class for code-generated string enumeration value classes.
<code>StringEnumAbstractBase.Table</code>	Used to manage singleton instances of enumerations.
<code>XmlAnySimpleType.Factory</code>	A class with methods for creating instances of <code>XmlAnySimpleType</code> .
<code>XmlAnyURI.Factory</code>	A class with methods for creating instances of <code>XmlAnyURI</code> .

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XmlBase64Binary.Factory	A class with methods for creating instances of XmlBase64Binary.
XmlBeans	Provides an assortment of utilities for managing XML Bean types, type systems, QNames, paths, and queries.
XmlBoolean.Factory	A class with methods for creating instances of XmlBoolean.
XmlByte.Factory	A class with methods for creating instances of XmlByte.
XmlCalendar	An XML Schema compatible subclass of GregorianCalendar.
XmlCursor.TokenType	An enumeration that identifies the type of an XML token.
XmlCursor.XmlBookmark	Subclasses of XmlBookmark can be used to annotate an XML document.
XmlDate.Factory	A class with methods for creating instances of XmlDate.
XmlDateTime.Factory	A class with methods for creating instances of XmlDateTime.
XmlDecimal.Factory	A class with methods for creating instances of XmlDecimal.
XmlDocumentProperties	This class is used to attach arbitrary information to an XML document.
XmlDouble.Factory	A class with methods for creating instances of XmlDouble.
XmlDuration.Factory	A class with methods for creating instances of XmlDuration.
XmlENTITIES.Factory	A class with methods for creating instances of XmlENTITIES.
XmlENTITY.Factory	A class with methods for creating instances of XmlENTITY.
XmlError	Represents a message at a specific XML location.
XmlFactoryHook.ThreadContext	Used to manage the XmlFactoryHook for the current thread.
XmlFloat.Factory	A class with methods for creating instances of XmlFloat.
XmlGDay.Factory	A class with methods for creating instances of XmlGDay.
XmlGMonth.Factory	A class with methods for creating instances of XmlGMonth.
XmlGMonthDay.Factory	A class with methods for creating instances of XmlGMonthDay.
XmlGYear.Factory	A class with methods for creating instances of XmlGYear.
XmlGYearMonth.Factory	A class with methods for creating instances of XmlGYearMonth.
XmlHexBinary.Factory	A class with methods for creating instances of XmlHexBinary.
XmlID.Factory	A class with methods for creating instances of XmlID.
XmlIDREF.Factory	A class with methods for creating instances of XmlIDREF.
XmlIDREFS.Factory	A class with methods for creating instances of XmlIDREFS.
XmlInt.Factory	A class with methods for creating instances of XmlInt.
XmlInteger.Factory	A class with methods for creating instances of XmlInteger.
XmlLanguage.Factory	A class with methods for creating instances of XmlLanguage.
XmlLineNumber	A subclass of XmlBookmark that holds line number information.
XmlLong.Factory	A class with methods for creating instances of XmlLong.
XmlName.Factory	A class with methods for creating instances of XmlName.
XmlNCName.Factory	A class with methods for creating instances of XmlNCName.
XmlNegativeInteger.Factory	A class with methods for creating instances of XmlNegativeInteger.
XmlNMTOKEN.Factory	A class with methods for creating instances of XmlNMTOKEN.
XmlNMTOKENS.Factory	A class with methods for creating instances of XmlNMTOKENS.
XmlNonNegativeInteger.Factory	A class with methods for creating instances of XmlNonNegativeInteger.
XmlNonPositiveInteger.Factory	A class with methods for creating instances of XmlNonPositiveInteger.

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<code>XmlNormalizedString.Factory</code>	A class with methods for creating instances of <code>XmlNormalizedString</code> .
<code>XmlNOTATION.Factory</code>	A class with methods for creating instances of <code>XmlNOTATION</code> .
<code>XmlObject.Factory</code>	Static factory class for creating new instances.
<code>XmlObjectList.Factory</code>	Static factory class for creating new instances of <code>XmlObjectList</code>
<code>XmlOptions</code>	Used to supply options for loading, saving, and compiling, and validating.
<code>XmlPositiveInteger.Factory</code>	A class with methods for creating instances of <code>XmlPositiveInteger</code> .
<code>XmlQName.Factory</code>	A class with methods for creating instances of <code>XmlQName</code> .
<code>XmlShort.Factory</code>	A class with methods for creating instances of <code>XmlShort</code> .
<code>XmlSimpleList</code>	The immutable <code>List</code> returned for XML simple list values.
<code>XmlString.Factory</code>	A class with methods for creating instances of <code>XmlString</code> .
<code>XmlTime.Factory</code>	A class with methods for creating instances of <code>XmlTime</code> .
<code>XmlToken.Factory</code>	A class with methods for creating instances of <code>XmlToken</code> .
<code>XmlUnsignedByte.Factory</code>	A class with methods for creating instances of <code>XmlUnsignedByte</code> .
<code>XmlUnsignedInt.Factory</code>	A class with methods for creating instances of <code>XmlUnsignedInt</code> .
<code>XmlUnsignedLong.Factory</code>	A class with methods for creating instances of <code>XmlUnsignedLong</code> .
<code>XmlUnsignedShort.Factory</code>	A class with methods for creating instances of <code>XmlUnsignedShort</code> .
<code>XmlUtils</code>	Class providing some Utils for Xml Objects.

Exception Summary

<code>SchemaTypeLoaderException</code>	An exception that is thrown if there is corruption or a version mismatch in a compiled schema type system.
<code>XmlException</code>	A checked exception that can be thrown while processing, parsing, or compiling XML.
<code>XmlRuntimeException</code>	An unchecked XML exception.
<code>XMLStreamValidationException</code>	An exception thrown from a validating <code>XMLInputStream</code> .
<code>XmlUtilsException</code>	Exception for Transformation runtime exceptions.

FilterXmlObject Class

public abstract class FilterXmlObject

extends Object
implements SimpleValue, XmlObject

A FilterXmlObject delegates to some other XmlObject, which it can use as its basic source of data, possibly transforming the data along the way or providing additional functionality. The class FilterXmlObject itself simply overrides all methods of XmlObject with versions that pass all requests to the underlying XmlObject. Subclasses of FilterXmlObject may further override some of these methods and may also provide additional methods and fields.

Note: it is important that FilterXmlObject has no storage (i.e., no non-transient fields), because subclasses may be serializable and adding storage would break the serialization format.

Hierarchy

```
Object
  FilterXmlObject
```

All Implemented Interfaces

SimpleValue, XmlObject, XmlTokenSource

Constructor Summary

FilterXmlObject()

Method Summary

```
public BigDecimal
    bigDecimalValue()
        Returns the value as a BigDecimal

public BigInteger
    bigIntegerValue()
        Returns the value as a BigInteger

public boolean
    booleanValue()
        Returns the value as a boolean

public byte[]
```


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```
byteArrayValue()  
    Returns the value as a byte array  
  
public byte  
    byteValue()  
        Returns the value as a byte  
  
public Calendar  
    calendarValue()  
        Returns the value as a Calendar  
  
public XmlObject  
    changeType(SchemaType newType)  
        Changes the schema type associated with this data and returns a  
        new XmlObject instance whose schemaType is the new type.  
  
public int  
    compareTo(Object obj)  
        Implements the Comparable interface by comparing two simple  
        xml values based on their standard XML schema ordering.  
  
public int  
    compareValue(XmlObject obj)  
        This comparison method is similar to compareTo, but rather than  
        throwing a ClassCastException when two values are incomparable,  
        it returns the number 2.  
  
public XmlObject  
    copy()  
        Returns a deep copy of this XmlObject.  
  
public Date  
    dateValue()  
        Returns the value as a Date  
  
public  
XmlDocumentProperties documentProperties()  
    Returns the XmlDocumentProperties object for the document this  
    token source is associated with.  
  
public double  
    doubleValue()  
        Returns the value as a double  
  
public  
StringEnumAbstractBase enumValue()  
    Returns the value as a StringEnumAbstractBase  
  
public XmlObject[]  
    execQuery(String query)  
        Executes a query.  
  
public XmlObject[]  
    execQuery(String query, XmlOptions options)  
        Executes a query with options.  
  
public float  
    floatValue()  
        Returns the value as a float  
  
public GDate
```


XMLBeans API Reference

```
gDateValue()  
    Returns the value as a GDate  
  
public GDuration  
    gDurationValue()  
        Returns the value as a GDuration  
  
public BigDecimal  
    getBigDecimalValue()  
        Returns the value as a BigDecimal.  
  
public BigInteger  
    getBigIntegerValue()  
        Returns the value as a BigInteger.  
  
public boolean  
    getBooleanValue()  
        Returns the value as a boolean.  
  
public byte[]  
    getByteArrayValue()  
        Returns the value as a byte array.  
  
public byte  
    getByteValue()  
        Returns the value as a byte.  
  
public Calendar  
    getCalendarValue()  
        Returns the value as a Calendar.  
  
public Date  
    getDateValue()  
        Returns the value as a Date.  
  
public double  
    getDoubleValue()  
        Returns the value as a double.  
  
public  
StringEnumAbstractBase getEnumValue()  
    Returns the value as a StringEnumAbstractBase.  
  
public float  
    getFloatValue()  
        Returns the value as a float.  
  
public GDate  
    getGDateValue()  
        Returns the value as a GDate.  
  
public GDuration  
    getGDurationValue()  
        Returns the value as a GDuration.  
  
public int  
    getIntValue()  
        Returns the value as an int.  
  
public List  
    getListValue()  
        Returns the value as a List of friendly Java objects (String,
```


XMLBeans API Reference

Integer, Byte, Short, Long, BigInteger, Decimal, Float, Double, byte[], Calendar, GDuration).

```
public long
    getLongValue()
        Returns the value as a long.

public Object
    getObjectValue()
        Returns a union value as a its natural friendly Java object (String,
        Integer, Byte, Short, Long, BigInteger, Decimal, Float, Double,
        byte[], Calendar, GDuration).

public QName
    getQNameValue()
        Returns the value as a QName.

public short
    getShortValue()
        Returns the value as a short.

public String
    getStringValue()
        Returns the value as a String.

public SchemaType
    instanceType()
        The same as getSchemaType unless this is a union instance or nil
        value.

    public int
        intValue()
            Returns the value as an int

public boolean
    isImmutable()
        True if the value is an immutable value.

public boolean
    isNil()
        True if the value is nil.

public List
    listValue()
        Returns the value as a List of friendly Java objects (String,
        Integer, Byte, Short, Long, BigInteger, Decimal, Float, Double,
        byte[], Calendar, GDuration)

public long
    longValue()
        Returns the value as a long

public Object
    monitor()
        Returns the synchronization object for the document.

public XmlCursor
    newCursor()
        Returns a new XML cursor.

public Node
```


XMLBeans API Reference

newDomNode()
Returns a W3C DOM Node containing the XML represented by this source.

public Node
newDomNode(XmlOptions options)
Just like newDomNode() but with options.

public InputStream
newInputStream()
Returns a new stream containing standard XML text, encoded according to the given encoding.

public InputStream
newInputStream(XmlOptions options)
Just like newInputStream(String encoding) but with options.

public Reader
newReader()
Returns a new character reader containing XML text.

public Reader
newReader(XmlOptions options)
Just like newReader() but with options.

public XMLInputStream
newXMLInputStream()
Returns a new XmlInputStream.

public XMLInputStream
newXMLInputStream(XmlOptions options)
Just like newXMLInputStream() but with any of a number of options.

public void
objectSet(Object obj)
Sets the value as an arbitrary Object.

public Object
objectValue()
Returns a union value as a its natural friendly Java object (String, Integer, Byte, Short, Long, BigInteger, Decimal, Float, Double, byte[], Calendar, GDuration)

public QName
qNameValue()
Returns the value as a QName

public void
save(ContentHandler ch, LexicalHandler lh)
Writes the XML represented by this source to the given SAX content and lexical handlers.

public void
save(File file)
Writes the XML represented by this source to the given File.

public void
save(OutputStream os)
Writes the XML represented by this source to the given output stream.

XMLBeans API Reference

```
public void save(Writer w)
    Writes the XML represented by this source to the given writer.

public void
    save(ContentHandler ch, LexicalHandler lh, XmlOptions
options)
    Writes the XML represented by this source to the given SAX
    content and lexical handlers.

public void
    save(File file, XmlOptions options)
    Writes the XML represented by this source to the given File.

public void
    save(OutputStream os, XmlOptions options)
    Writes the XML represented by this source to the given output
    stream.

public void
    save(Writer w, XmlOptions options)
    Writes the XML represented by this source to the given writer.

public SchemaType
    schemaType()
    The schema type for this instance.

public XmlObject[]
    selectPath(String path)
    Selects a path.

public XmlObject[]
    selectPath(String path, XmlOptions options)
    Selects a path, applying options.

public XmlObject
    set(XmlObject srcObj)
    Set the value/type of this XmlObject to be a copy of the source
    XmlObject.

public void
    set(String obj)
    Sets the value as a String

public void
    set(boolean v)
    Sets the value as a boolean

public void
    set(byte v)
    Sets the value as a byte.

public void
    set(short v)
    Sets the value as a short.

public void
    set(int v)
    Sets the value as an int.

public void
    set(long v)
```


XMLBeans API Reference

Sets the value as a long.

public void

set(*BigInteger obj*)

Sets the value as a BigInteger.

public void

set(*BigDecimal obj*)

Sets the value as a BigDecimal

public void

set(*float v*)

Sets the value as a float.

public void

set(*double v*)

Sets the value as a double.

public void

set(*byte[] obj*)

Sets the value as a byte array.

public void

set(*StringEnumAbstractBase obj*)

Sets the value as a StringEnumAbstractBase.

public void

set(*Calendar obj*)

Sets the value as a Calendar.

public void

set(*Date obj*)

Sets the value as a Date.

public void

set(*GDateSpecification obj*)

Sets the value as a GDate.

public void

set(*GDurationSpecification obj*)

Sets the value as a GDuration.

public void

set(*QName obj*)

Sets the value as a QName.

public void

set(*List obj*)

Sets the value as a List.

public void

setBigDecimalValue(*BigDecimal obj*)

Sets the value as a BigDecimal.

public void

setBigIntegerValue(*BigInteger obj*)

Sets the value as a BigInteger.

public void

setBooleanValue(*boolean v*)

Sets the value as a boolean.

public void

XMLBeans API Reference

setByteArrayValue(byte[] obj)
Sets the value as a byte array.

public void
setByteValue(byte v)
Sets the value as a byte.

public void
setCalendarValue(Calendar obj)
Sets the value as a Calendar.

public void
setDateValue(Date obj)
Sets the value as a Date.

public void
setDoubleValue(double v)
Sets the value as a double.

public void
setEnumValue(StringEnumAbstractBase obj)
Sets the value as a StringEnumAbstractBase.

public void
setFloatValue(float v)
Sets the value as a float.

public void
setGDateValue(GDate obj)
Sets the value as a GDate.

public void
setGDurationValue(GDuration obj)
Sets the value as a GDuration.

public void
setIntValue(int v)
Sets the value as an int.

public void
setListValue(List obj)
Sets the value as a List.

public void
setLongValue(long v)
Sets the value as a long.

public void
setNil()
Sets the value to nil.

public void
setObjectValue(Object obj)
Sets the value as an arbitrary Object.

public void
setQNameValue(QName obj)
Sets the value as a QName.

public void
setShortValue(short v)
Sets the value as a short.

XMLBeans API Reference

```
public void setStringValue(String obj)
    Sets the value as a String.

public short
    shortValue()
    Returns the value as a short

public String
    stringValue()
    Returns the value as a String

public abstract
    XmlObject underlyingXmlObject()
    This abstract method is called to obtain the underlying XmlObject.

public boolean
    validate()
    Returns true if the contents of this object are valid according to
    schemaType().

public boolean
    validate(XmlOptions options)
    Just like validate(), but with options.

public boolean
    valueEquals(XmlObject obj)
    True if the xml values are equal.

    public int
        valueHashCode()

public List
    xgetListValue()
    Returns the value as a List of XmlAnySimpleType objects.

public List
    xlistValue()
    Returns the value as a List of XmlAnySimpleType objects

public String
    xmlText()
    Returns standard XML text.

public String
    xmlText(XmlOptions options)
    Just like xmlText() but with options.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Methods from interface `com.bea.xml.SimpleValue`

`bigDecimalValue`, `bigIntegerValue`, `booleanValue`, `byteArrayValue`,
`byteValue`, `calendarValue`, `dateValue`, `doubleValue`, `enumValue`, `floatValue`,
`gDateValue`, `gDurationValue`, `getBigDecimalValue`, `getBigIntegerValue`,
`getBooleanValue`, `getByteArrayValue`, `getByteValue`, `getCalendarValue`,
`getDateValue`, `getDoubleValue`, `getEnumValue`, `getFloatValue`,


```
getGDateValue, getGDurationValue, getIntValue, getListValue,
getLongValue, getObjectValue, getQNameValue, getShortValue,
getStringValue, instanceType, intValue, listValue, longValue, objectSet,
objectValue, qNameValue, set, set, set, set, set, set, set, set, set,
set, set, set, set, set, set, set, set, set, set, setBigDecimalValue,
setBigIntegerValue, setBooleanValue, setByteArrayValue, setByteValue,
setCalendarValue, setDateValue, setDoubleValue, setEnumValue,
setFloatValue, setGDateValue, setGDurationValue, setIntValue,
setListValue, setLongValue, setObjectValue, setQNameValue,
setShortValue, setStringValue, shortValue, stringValue, xgetListValue,
xlistValue
```

Methods from interface `com.bea.xml.XmlObject`

```
changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode
```

Methods from interface `com.bea.xml.XmlTokenSource`

```
documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText
```

Constructor Detail

FilterXmlObject

```
public FilterXmlObject()
```

Method Detail

bigDecimalValue() Method

```
public BigDecimal bigDecimalValue()
```

Description copied from SimpleValue.bigDecimalValue()
Returns the value as a BigDecimal.*

BigIntegerValue() Method

```
public BigInteger bigIntegerValue()
```

Description copied from SimpleValue BigIntegerValue()
Returns the value as a BigInteger.*

booleanValue() Method

```
public boolean booleanValue()
```

Description copied from SimpleValue.booleanValue()

Returns the value as a boolean. *

byteArrayValue() Method

```
public byte[] byteArrayValue()
```

Description copied from SimpleValue.byteArrayValue()

Returns the value as a byte array. *

byteValue() Method

```
public byte byteValue()
```

Description copied from SimpleValue.byteValue()

Returns the value as a byte. *

calendarValue() Method

```
public Calendar calendarValue()
```

Description copied from SimpleValue.calendarValue()

Returns the value as a Calendar. *

changeType(SchemaType) Method

```
public XmlObject changeType(SchemaType newType)
```

Description copied from XmlObject.changeType(SchemaType)

Changes the schema type associated with this data and returns a new XmlObject instance whose schemaType is the new type.

Returns null if the type change is not allowed. Certain type changes may be prohibited on the interior of an xml tree due to schema type system constraints (that is, due to a parent container within which the newly specified type is not permissible), but there are no constraints at the roottype changes are never prohibited at the root of an xml tree.

If the type change is allowed, then the new XmlObject should be used rather than the old one. The old XmlObject instance and any other XmlObject instances in the subtree are permanently invalidated and should not be used. (They will return InvalidStateException if you try to use them.) If a type change is done on the

interior of an Xml tree, then xsi:type attributes are updated as needed.

compareTo(Object) Method

```
public int compareTo(Object obj)
```

Description copied from XmlObject.compareTo(Object)

Implements the Comparable interface by comparing two simple xml values based on their standard XML schema ordering. Throws a ClassCastException if no standard ordering applies, or if the two values are incomparable within a partial order.

compareValue(XmlObject) Method

```
public int compareValue(XmlObject obj)
```

Description copied from XmlObject.compareValue(XmlObject)

This comparison method is similar to compareTo, but rather than throwing a ClassCastException when two values are incomparable, it returns the number 2. The result codes are -1 if this object is less than obj, 1 if this object is greater than obj, zero if the objects are equal, and 2 if the objects are incomparable.

copy() Method

```
public XmlObject copy()
```

Description copied from XmlObject.copy()

Returns a deep copy of this XmlObject. The returned object has the same type as the current object, and has all the content of the XML document underneath the current object. Note that any parts of the XML document above or outside this XmlObject are not copied.

dateValue() Method

```
public Date dateValue()
```

Description copied from SimpleValue.dateValue()

Returns the value as a Date. *

documentProperties() Method

```
public XmlDocumentProperties documentProperties()
```

Description copied from XmlTokenSource.documentProperties()

Returns the XmlDocumentProperties object for the document this token source is associated with.

doubleValue() Method

```
public double doubleValue()
```

Description copied from SimpleValue.doubleValue()
Returns the value as a double. *

enumValue() Method

```
public StringEnumAbstractBase enumValue()
```

Description copied from SimpleValue.enumValue()
Returns the value as a StringEnumAbstractBase. *

execQuery(String) Method

```
public XmlObject[] execQuery(String query)
```

Description copied from XmlObject.execQuery(String)
Executes a query. Query can be a string or precompiled query String.

An XQuery is very similar to an XPath, except that it also permits construction of new XML. As a result, the XmlObjects that are returned from execQuery are in newly created documents, separate from the XmlObject on which the query is executed.

Syntax and usage is otherwise similar to selectPath.

execQuery(String, XmlOptions) Method

```
public XmlObject[] execQuery(String query,
                             XmlOptions options)
```

Description copied from XmlObject.execQuery(String, XmlOptions)
Executes a query with options. Use the *options* parameter to specify the following:

To specify this	Use this method
The document type for the root element.	<code>XmlOptions.setDocumentType(SchemaType)</code>
To replace the document element with the specified QName when constructing the resulting document.	<code>XmlOptions.setLoadReplaceDocumentElement(QName)</code>
To strip all insignificant whitespace when constructing a document.	<code>XmlOptions.setLoadStripWhitespace()</code>
To strip all comments when constructing a document.	<code>XmlOptions.setLoadStripComments()</code>
To strip all processing instructions	<code>XmlOptions.setLoadStripProcinsts()</code>

when constructing a document.

A map of namespace URI

substitutions to use when constructing a document. `XmlOptions.setLoadSubstituteNamespaces(Map)`

Additional namespace mappings to be added when constructing a document.

`XmlOptions.setLoadAdditionalNamespaces(Map)`

To trim the underlying XML text buffer immediately after constructing a document, resulting in a smaller memory footprint.

`XmlOptions.setLoadTrimTextBuffer()`

Whether value facets should be checked as they are set.

`XmlOptions.setValidateOnSet()`

Parameters

query

The XQuery expression.

options

Options as described.

floatValue() Method

```
public float floatValue()
```

Description copied from SimpleValue.floatValue()

Returns the value as a float. *

gDateValue() Method

```
public GDate gDateValue()
```

Description copied from SimpleValue.gDateValue()

Returns the value as a GDate. *

gDurationValue() Method

```
public GDuration gDurationValue()
```

Description copied from SimpleValue.gDurationValue()

Returns the value as a GDuration. *

getBigDecimalValue() Method

```
public BigDecimal getBigDecimalValue()
```

Description copied from SimpleValue.getBigDecimalValue()
Returns the value as a BigDecimal.

getBigIntegerValue() Method

```
public BigInteger getBigIntegerValue()
```

Description copied from SimpleValue.getBigIntegerValue()
Returns the value as a BigInteger.

getBooleanValue() Method

```
public boolean getBooleanValue()
```

Description copied from SimpleValue.getBooleanValue()
Returns the value as a boolean.

getByteArrayValue() Method

```
public byte[] getByteArrayValue()
```

Description copied from SimpleValue.getByteArrayValue()
Returns the value as a byte array.

getByteValue() Method

```
public byte getByteValue()
```

Description copied from SimpleValue.getByteValue()
Returns the value as a byte.

getCalendarValue() Method

```
public Calendar getCalendarValue()
```

Description copied from SimpleValue.getCalendarValue()
Returns the value as a Calendar.

getDateValue() Method

```
public Date getDateValue()
```

Description copied from SimpleValue.getDateValue()
Returns the value as a Date.

getDoubleValue() Method

```
public double getDoubleValue()
```

Description copied from SimpleValue.getDoubleValue()
Returns the value as a double.

getEnumValue() Method

```
public StringEnumAbstractBase getEnumValue()
```

Description copied from SimpleValue.getEnumValue()
Returns the value as a StringEnumAbstractBase.

getFloatValue() Method

```
public float getFloatValue()
```

Description copied from SimpleValue.getFloatValue()
Returns the value as a float.

getGDateValue() Method

```
public GDate getGDateValue()
```

Description copied from SimpleValue.getGDateValue()
Returns the value as a GDate.

getGDurationValue() Method

```
public GDuration getGDurationValue()
```

Description copied from SimpleValue.getGDurationValue()
Returns the value as a GDuration.

getIntValue() Method

```
public int getIntValue()
```

Description copied from SimpleValue.getIntValue()
Returns the value as an int.

getListValue() Method

```
public List getListValue()
```

Description copied from SimpleValue.getListValue()
Returns the value as a List of friendly Java objects (String, Integer, Byte, Short, Long, BigInteger, Decimal, Float, Double, byte[], Calendar, GDuration).

getLongValue() Method

```
public long getLongValue()
```

Description copied from SimpleValue.getLongValue()
Returns the value as a long.

getObjectValue() Method

```
public Object getObjectValue()
```

Description copied from SimpleValue.getObjectValue()
Returns a union value as a its natural friendly Java object (String, Integer, Byte, Short, Long, BigInteger, Decimal, Float, Double, byte[], Calendar, GDuration).

getQNameValue() Method

```
public QName getQNameValue()
```

Description copied from SimpleValue.getQNameValue()
Returns the value as a QName.

getShortValue() Method

```
public short getShortValue()
```

Description copied from SimpleValue.getShortValue()
Returns the value as a short.

getStringValue() Method

```
public String getStringValue()
```

Description copied from SimpleValue.getStringValue()
Returns the value as a String.

instanceType() Method

```
public SchemaType instanceType()
```

Description copied from SimpleValue.instanceType()
The same as getSchemaType unless this is a union instance or nil value.

For unions, this returns the non–union constituent type of this instance. This type may change if setters are called that cause the instance to change to another constituent type of the union.

For nil values, this returns null.

intValue() Method

```
public int intValue()
```

Description copied from SimpleValue.intValue()
Returns the value as an int. *

isImmutable() Method

```
public boolean isImmutable()
```

Description copied from XmlObject.isImmutable()
True if the value is an immutable value. Immutable values do not have a position in a tree; rather, they are stand–alone simple type values. If the object is immutable, the equals() methods tests for value equality, and the object can be used as the key for a hash.

isNil() Method

```
public boolean isNil()
```

Description copied from XmlObject.isNil()
True if the value is nil. Note that in order to be nil, the value must be in an element, and the element containing the value must be marked as nillable in the schema.

listValue() Method

```
public List listValue()
```

Description copied from SimpleValue.listValue()

Returns the value as a List of friendly Java objects (String, Integer, Byte, Short, Long, BigInteger, Decimal, Float, Double, byte[], Calendar, GDuration). *

longValue() Method

```
public long longValue()
```

Description copied from SimpleValue.longValue()

Returns the value as a long. *

monitor() Method

```
public Object monitor()
```

Description copied from XmlTokenSource.monitor()

Returns the synchronization object for the document. If concurrent multithreaded access to a document is required, the access should be protected by synchronizing on this monitor() object. There is one monitor per XML document tree.

newCursor() Method

```
public XmlCursor newCursor()
```

Description copied from XmlTokenSource.newCursor()

Returns a new XML cursor. A cursor provides random access to all the tokens in the XML data, plus the ability to extract strongly-typed XmlObjects for the data. If the data is not read-only, the XML cursor also allows modifications to the data. Using a cursor for the first time typically forces the XML document into memory.

newDomNode() Method

```
public Node newDomNode()
```

Description copied from XmlTokenSource.newDomNode()

Returns a W3C DOM Node containing the XML represented by this source. This is a copy of the XML, it is not a live with the underlying store of this token source. If this is the document node, then a Document is returned, else a DocumentFragment is returned.

newDomNode(XmlOptions) Method

```
public Node newDomNode(XmlOptions options)
```

Description copied from XmlTokenSource.newDomNode(XmlOptions)
Just like newDomNode() but with options. Options map may be null.

newInputStream() Method

```
public InputStream newInputStream()
```

Description copied from XmlTokenSource.newInputStream()
Returns a new stream containing standard XML text, encoded according to the given encoding. The byte stream contains contents starting at the current begin-tag or begin-document and ending at the matching end-tag or end-document. The specified encoding is used and also emitted in a PI at the beginning of the stream. This is a fail-fast stream, so if the underlying data is changed while the stream is being read, the stream throws a ConcurrentModificationException. Throws an IllegalStateException if the XmlTokenSource is not positioned at begin-tag or begin-document (e.g., if it is at an attribute).

newInputStream(XmlOptions) Method

```
public InputStream newInputStream(XmlOptions options)
```

Description copied from XmlTokenSource.newInputStream(XmlOptions)
Just like newInputStream(String encoding) but with options. Options map may be null.

newReader() Method

```
public Reader newReader()
```

Description copied from XmlTokenSource.newReader()
Returns a new character reader containing XML text. The contents of the reader represents the document contents starting at the current begin-tag or begin-document and ending at the matching end-tag or end-document. No encoding annotation will be made in the text itself. This is a fail-fast reader, so if the underlying data is changed while the reader is being read, the reader throws a ConcurrentModificationException. Throws an IllegalStateException if the XmlTokenSource is not positioned at begin-tag or begin-document (e.g., if it is at an attribute).

newReader(XmlOptions) Method

```
public Reader newReader(XmlOptions options)
```

Description copied from XmlTokenSource.newReader(XmlOptions)
Just like newReader() but with options. Options map may be null.

newXMLInputStream() Method

DEPRECATED Superseded by JSR 173

```
public XMLInputStream newXMLInputStream()
```

Description copied from `com.bea.xml.XmlTokenSource.newXMLInputStream()`

Returns a new `XmlInputStream`. The stream starts at the current begin–tag or begin–document position and ends at the matching end–tag or end–document. This is a fail–fast stream, so if the underlying data is changed while the stream is being read, the stream throws a `ConcurrentModificationException`. Throws an `IllegalStateException` if the `XmlTokenSource` is not positioned at begin–tag or begin–document (e.g., if it is at an attribute).

newXMLInputStream(XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public XMLInputStream newXMLInputStream(XmlOptions options)
```

Description copied from

`com.bea.xml.XmlTokenSource.newXMLInputStream(com.bea.xml.XmlOptions)`

Just like `newXMLInputStream()` but with any of a number of options. Use the *options* parameter to specify the following:

To specify this	Use this method
The character encoding to use when converting the character data in the XML to bytes.	<code>XmlOptions.setCharacterEncoding(String)</code>
Prefix–to–namespace mappings that should be assumed when saving this XML. This is useful when the resulting XML will be part of a larger XML document, ensuring that this inner document will take advantage of namespaces defined in the outer document.	<code>XmlOptions.setSaveImplicitNamespaces(Map)</code>
Suggested namespace prefixes to use when saving. Used only when a namespace attribute needs to be synthesized.	<code>XmlOptions.setSaveSuggestedPrefixes(Map)</code>
That namespace attributes should occur first in elements when the XML is saved. By default, they occur last.	<code>XmlOptions.setSaveNamespacesFirst()</code>
The XML should be pretty printed when saved. Note that this should only be used for debugging.	<code>XmlOptions.setSavePrettyPrint()</code>

The number of spaces to use when indenting for pretty printing. The default is 2.	<code>XmlOptions.setSavePrettyPrintIndent(int)</code>
The additional number of spaces indented from the left for pretty printed XML.	<code>XmlOptions.setSavePrettyPrintOffset(int)</code>
To minimize the number of namespace attributes generated for the saved XML. Note that this can reduce performance significantly.	<code>XmlOptions.setSaveAggressiveNamespaces()</code>
To reduce the size of the saved document by allowing the use of the default namespace. Note that this can potentially change the semantic meaning of the XML if unprefixed QNames are present as the value of an attribute or element.	<code>XmlOptions.setUseDefaultNamespace()</code>
To filter out processing instructions with the specified target name.	<code>XmlOptions.setSaveFilterProcinst(String)</code>
Change the QName of the synthesized root element when saving. This replaces "xml-fragment" with "fragment" in the namespace http://www.openuri.org/fragment	<code>XmlOptions.setSaveUseOpenFrag()</code>
Saving should begin on the element's contents.	<code>XmlOptions.setSaveInner()</code>
Saving should begin on the element, rather than its contents.	<code>XmlOptions.setSaveOuter()</code>
To rename the document element, or to specify the document element for this XML.	<code>XmlOptions.setSaveSyntheticDocumentElement(QName)</code>

Parameters*options*

Any of the described options.

Returns*A new validating XMLInputStream.***objectSet(Object) Method****public void objectSet(Object obj)**

Description copied from SimpleValue.objectSet(Object)
 Sets the value as an arbitrary Object.

objectValue() Method

```
public Object objectValue()
```

Description copied from SimpleValue.objectValue()

Returns a union value as a its natural friendly Java object (String, Integer, Byte, Short, Long, BigInteger, Decimal, Float, Double, byte[], Calendar, GDuration). *

qNameValue() Method

```
public QName qNameValue()
```

Description copied from SimpleValue.qNameValue()

Returns the value as a QName. *

save(ContentHandler, LexicalHandler) Method

```
public void save(ContentHandler ch,  
                 LexicalHandler lh)  
    throws SAXException
```

Description copied from XmlTokenSource.save(ContentHandler, LexicalHandler)

Writes the XML represented by this source to the given SAX content and lexical handlers.

Exceptions

SAXException

save(File) Method

```
public void save(File file)  
    throws IOException
```

Description copied from XmlTokenSource.save(File)

Writes the XML represented by this source to the given File.

Exceptions

IOException

save(OutputStream) Method

```
public void save(OutputStream os)  
    throws IOException
```


Description copied from `XmlTokenSource.save(OutputStream)`
Writes the XML represented by this source to the given output stream.

Exceptions

IOException

save(Writer) Method

```
public void save(Writer w)
    throws IOException
```

Description copied from `XmlTokenSource.save(Writer)`
Writes the XML represented by this source to the given writer.

Exceptions

IOException

save(ContentHandler, LexicalHandler, XmlOptions) Method

```
public void save(ContentHandler ch,
    LexicalHandler lh,
    XmlOptions options)
    throws SAXException
```

Description copied from `XmlTokenSource.save(ContentHandler, LexicalHandler, XmlOptions)`
Writes the XML represented by this source to the given SAX content and lexical handlers.

Exceptions

SAXException

save(File, XmlOptions) Method

```
public void save(File file,
    XmlOptions options)
    throws IOException
```

Description copied from `XmlTokenSource.save(File, XmlOptions)`
Writes the XML represented by this source to the given File.

Exceptions

IOException

save(OutputStream, XmlOptions) Method

```
public void save(OutputStream os,
                 XmlOptions options)
    throws IOException
```

Description copied from XmlTokenSource.save(OutputStream, XmlOptions)
Writes the XML represented by this source to the given output stream.

Exceptions

IOException

save(Writer, XmlOptions) Method

```
public void save(Writer w,
                 XmlOptions options)
    throws IOException
```

Description copied from XmlTokenSource.save(Writer, XmlOptions)
Writes the XML represented by this source to the given writer.

Exceptions

IOException

schemaType() Method

```
public SchemaType schemaType()
```

Description copied from XmlObject.schemaType()
The schema type for this instance. This is a permanent, unchanging property of the instance.

selectPath(String) Method

```
public XmlObject[] selectPath(String path)
```

Description copied from XmlObject.selectPath(String)
Selects a path. Path can be a string or precompiled path String.

The path must be a relative path, where "." represents the element or attribute containing this XmlObject, and it must select only other elements or attributes. If a non-element or non-attribute is selected, an unchecked exception is thrown.

The array that is returned contains all the selected XmlObjects, within the same document, listed in document order. The actual array type of the result is inferred from the closest common base type of selected results.

Here is an example of usage. Suppose we have a global element definition for "owner" whose type is "person":

```
<schema targetNamespace="http://openuri.org/sample">
  <element name="owner" type="person"/>
  <complexType name="person">
    [...]
  </complexType>
</schema>
```

and suppose "owner" tags can be scattered throughout the document. Then we can write the following code to find them all:

```
import org.openuri.sample.Person;
import com.bea.xml.*;
[...]
XmlObject xobj = XmlObject.Factory.parse(myFile);
Person[] results;
results = (Person[])xobj.selectPath(
    "declare namespace s='http://www.openuri.org/sample' " +
    " ./s:owner");
```

Notice the way in which namespace declarations are done in XPath 2.0. Since XPath can only navigate within an XML document – it cannot construct new XML – the resulting XmlObjects all reside in the same XML document as this XmlObject itself.

selectPath(String, XmlOptions) Method

```
public XmlObject[] selectPath(String path,
                             XmlOptions options)
```

Description copied from XmlObject.selectPath(String, XmlOptions)
Selects a path, applying options.

set(XmlObject) Method

```
public XmlObject set(XmlObject srcObj)
```

Description copied from XmlObject.set(XmlObject)
Set the value/type of this XmlObject to be a copy of the source XmlObject. Because the type of the source may be different than this target, this XmlObject may become defunct. In this case the new XmlObject is returned. If no type change happens, the same this will be returned.

set(String) Method

```
public void set(String obj)
```

Description copied from SimpleValue.set(String)

Sets the value as a `String`. *

set(boolean) Method

```
public void set(boolean v)
```

Description copied from `SimpleValue.set(boolean)`
Sets the value as a boolean. *

set(byte) Method

```
public void set(byte v)
```

Description copied from `SimpleValue.set(byte)`
Sets the value as a byte.

set(short) Method

```
public void set(short v)
```

Description copied from `SimpleValue.set(short)`
Sets the value as a short.

set(int) Method

```
public void set(int v)
```

Description copied from `SimpleValue.set(int)`
Sets the value as an int.

set(long) Method

```
public void set(long v)
```

Description copied from `SimpleValue.set(long)`
Sets the value as a long.

set(BigInteger) Method

```
public void set(BigInteger obj)
```

Description copied from `SimpleValue.set(BigInteger)`
Sets the value as a `BigInteger`.

set(BigDecimal) Method

```
public void set(BigDecimal obj)
```

Description copied from SimpleValue.set(BigDecimal)
Sets the value as a BigDecimal

set(float) Method

```
public void set(float v)
```

Description copied from SimpleValue.set(float)
Sets the value as a float.

set(double) Method

```
public void set(double v)
```

Description copied from SimpleValue.set(double)
Sets the value as a double.

set(byte[]) Method

```
public void set(byte[] obj)
```

Description copied from SimpleValue.set(byte[])
Sets the value as a byte array.

set(StringEnumAbstractBase) Method

```
public void set(StringEnumAbstractBase obj)
```

Description copied from SimpleValue.set(StringEnumAbstractBase)
Sets the value as a StringEnumAbstractBase.

set(Calendar) Method

```
public void set(Calendar obj)
```

Description copied from SimpleValue.set(Calendar)
Sets the value as a Calendar.

set(Date) Method

```
public void set(Date obj)
```

Description copied from SimpleValue.set(Date)
Sets the value as a Date.

set(GDateSpecification) Method

```
public void set(GDateSpecification obj)
```

Description copied from SimpleValue.set(GDateSpecification)
Sets the value as a GDate.

set(GDurationSpecification) Method

```
public void set(GDurationSpecification obj)
```

Description copied from SimpleValue.set(GDurationSpecification)
Sets the value as a GDuration.

set(QName) Method

```
public void set(QName obj)
```

Description copied from SimpleValue.set(QName)
Sets the value as a QName.

set(List) Method

```
public void set(List obj)
```

Description copied from SimpleValue.set(List)
Sets the value as a List.

setBigDecimalValue(BigDecimal) Method

```
public void setBigDecimalValue(BigDecimal obj)
```

Description copied from SimpleValue.setBigDecimalValue(BigDecimal)
Sets the value as a BigDecimal.

setBigIntegerValue(BigInteger) Method

```
public void setBigIntegerValue(BigInteger obj)
```

Description copied from SimpleValue.setBigIntegerValue(BigInteger)
Sets the value as a BigInteger.

setBooleanValue(boolean) Method

```
public void setBooleanValue(boolean v)
```

Description copied from SimpleValue.setBooleanValue(boolean)
Sets the value as a boolean.

setByteArrayValue(byte[]) Method

```
public void setByteArrayValue(byte[] obj)
```

Description copied from SimpleValue.setByteArrayValue(byte[])
Sets the value as a byte array.

setByteValue(byte) Method

```
public void setByteValue(byte v)
```

Description copied from SimpleValue.setByteValue(byte)
Sets the value as a byte.

setCalendarValue(Calendar) Method

```
public void setCalendarValue(Calendar obj)
```

Description copied from SimpleValue.setCalendarValue(Calendar)
Sets the value as a Calendar.

setDateValue(Date) Method

```
public void setDateValue(Date obj)
```

Description copied from SimpleValue.setDateValue(Date)
Sets the value as a Date.

setDoubleValue(double) Method

```
public void setDoubleValue(double v)
```

Description copied from SimpleValue.setDoubleValue(double)
Sets the value as a double.

setEnumValue(StringEnumAbstractBase) Method

```
public void setEnumValue(StringEnumAbstractBase obj)
```

Description copied from SimpleValue.setEnumValue(StringEnumAbstractBase)
Sets the value as a StringEnumAbstractBase.

setFloatValue(float) Method

```
public void setFloatValue(float v)
```

Description copied from SimpleValue.setFloatValue(float)
Sets the value as a float.

setGDateValue(GDate) Method

```
public void setGDateValue(GDate obj)
```

Description copied from SimpleValue.setGDateValue(GDate)
Sets the value as a GDate.

setGDurationValue(GDuration) Method

```
public void setGDurationValue(GDuration obj)
```

Description copied from SimpleValue.setGDurationValue(GDuration)
Sets the value as a GDuration.

setIntValue(int) Method

```
public void setIntValue(int v)
```

Description copied from SimpleValue.setIntValue(int)
Sets the value as an int.

setListValue(List) Method

```
public void setListValue(List obj)
```

Description copied from SimpleValue.setListValue(List)
Sets the value as a List.

setLongValue(long) Method

```
public void setLongValue(long v)
```

Description copied from SimpleValue.setLongValue(long)
Sets the value as a long.

setNil() Method

```
public void setNil()
```

Description copied from XmlObject.setNil()
Sets the value to nil. The element containing the value must be marked as nillable in the schema.

setObjectValue(Object) Method

```
public void setObjectValue(Object obj)
```

Description copied from SimpleValue.setObjectValue(Object)
Sets the value as an arbitrary Object.

setQNameValue(QName) Method

```
public void setQNameValue(QName obj)
```

Description copied from SimpleValue.setQNameValue(QName)
Sets the value as a QName.

setShortValue(short) Method

```
public void setShortValue(short v)
```

Description copied from SimpleValue.setShortValue(short)
Sets the value as a short.

setStringValue(String) Method

```
public void setStringValue(String obj)
```

Description copied from SimpleValue.setStringValue(String)
Sets the value as a String.

shortValue() Method

```
public short shortValue()
```

Description copied from SimpleValue.shortValue()
Returns the value as a short. *

stringValue() Method

```
public String stringValue()
```

Description copied from SimpleValue.stringValue()
Returns the value as a String. *

underlyingXmlObject() Method

```
public abstract XmlObject underlyingXmlObject()
```

This abstract method is called to obtain the underlying XmlObject. Override this method to supply or compute the wrapped object.

Every other method of this class delegates to the object returned from this method. It is assumed that the object implements all the methods of both XmlObject and SimpleValue.

validate() Method

```
public boolean validate()
```

Description copied from XmlObject.validate()
Returns true if the contents of this object are valid according to schemaType().

Does a deep validation of the entire subtree under the object, but does not validate the parents or siblings of the object if the object is in the interior of an xml tree.

validate(XmlOptions) Method

```
public boolean validate(XmlOptions options)
```


Description copied from `XmlObject.validate(XmlOptions)`

Just like `validate()`, but with options.

If you wish to collect error messages and locations while validating, use the `XmlOptions.setErrorListener(Collection)` method. With that method, you can specify an object in which to store messages related to validation. The following is a simple example.

```
// Create an XmlOptions instance and set the error listener.
XmlOptions validateOptions = new XmlOptions();
ArrayList errorList = new ArrayList();
validateOptions.setErrorListener(errorList);

// Validate the XML.
boolean isValid = newEmp.validate(validateOptions);

// If the XML isn't valid, loop through the listener's contents,
// printing contained messages.
if (!isValid)
{
    for (int i = 0; i < errorList.size(); i++)
    {
        XmlError error = (XmlError)errorList.get(i);

        System.out.println("\n");
        System.out.println("Message: " + error.getMessage() + "\n");
        System.out.println("Location of invalid XML: " +
            error.getCursorLocation().xmlText() + "\n");
    }
}
```

Parameters

options

An object that implements the `Collection` interface.

valueEquals(XmlObject) Method

```
public boolean valueEquals(XmlObject obj)
```

Description copied from `XmlObject.valueEquals(XmlObject)`

True if the xml values are equal. Two different objects (which are distinguished by `equals(obj) == false`) may of course have equal values (`valueEquals(obj) == true`).

Usually this method can be treated as an ordinary equivalence relation, but actually it is not is not transitive. Here is a precise specification:

There are two categories of XML object: objects with a known instance type, and objects whose only known type is one of the ur-types (either `AnyType` or `AnySimpleType`). The first category is compared in terms of logical value spaces, and the second category is compared lexically.

Within each of these two categories, `valueEquals` is a well-behaved equivalence relation. However, when

comparing an object of known type with an object with ur-type, the comparison is done by attempting to convert the lexical form of the ur-typed object into the other type, and then comparing the results. Ur-typed objects are therefore treated as lexical wildcards and may be equal to objects in different value spaces, even though the objects in different value spaces are not equal to each other.

For example, the anySimpleType value "1" will compare as an equalValue to the string "1", the float value "1.0", the double value "1.0", the decimal "1", and the GYear "1", even though all these objects will compare unequal to each other since they lie in different value spaces.

valueHashCode() Method

```
public int valueHashCode()
```

xgetListValue() Method

```
public List xgetListValue()
```

Description copied from SimpleValue.xgetListValue()
Returns the value as a List of XmlAnySimpleType objects.

xlistValue() Method

```
public List xlistValue()
```

Description copied from SimpleValue.xlistValue()
Returns the value as a List of XmlAnySimpleType objects. *

xmlText() Method

```
public String xmlText()
```

Description copied from XmlTokenSource.xmlText()
Returns standard XML text. The text returned represents the document contents starting at the current begin-tag or begin-document and ending at the matching end-tag or end-document. This is same content as newReader, but it is returned as a single string. Throws an IllegalStateException if the XmlTokenSource is not positioned at begin-tag or begin-document (e.g., if it is at an attribute).

xmlText(XmlOptions) Method

```
public String xmlText(XmlOptions options)
```

Description copied from XmlTokenSource.xmlText(XmlOptions)
Just like xmlText() but with options. Options map may be null.

GDate Class

public final class GDate

extends Object
implements GDateSpecification, Serializable

Represents an XML Schema-compatible Gregorian date.

There are many date types in XML Schema, and this type represents the natural union of all those types. A GDate can hold any subset of date fields (Year, Month, Day, Time, Timezone, or some combination). Wherever the specification provides guidance, the guidelines in the XML Schema 1.0 specification (plus published errata) are followed.

Instances may separately have values or no values for the year, month, day-of-month, and time-of-day. Not all operations are meaningful on all combinations.

Hierarchy

```

Object
  GDate
  
```

All Implemented Interfaces

GDateSpecification, Serializable

Constructor Summary

GDate(GDateSpecification gdate)

Constructs a GDate based on another GDateSpecification.

GDate(int year, int month, int day, int hour, int minute, int second, BigDecimal fraction, int tzSign, int tzHour, int tzMinute)

Constructs an absolute GDate with the specified year, month, day, hours, minutes, seconds, and optional fractional seconds, and in the timezone specified.

GDate(int year, int month, int day, int hour, int minute, int second, BigDecimal fraction)

Constructs a GDate with the specified year, month, day, hours, minutes, seconds, and optional fractional seconds, in an unspecified timezone.

GDate(*CharSequence string*)

Constructs a GDate based on a lexical representation.

GDate(*Calendar calendar*)

Constructs a GDate based on a java.util.Calendar.

GDate(*Date date*)

Constructs a GDate based on a java.util.Date.

Method Summary

```

public
    GDate add(GDurationSpecification duration)
        Adds a duration to this GDate, and returns a new GDate.

public
    String canonicalString()
        The canonical string representation.

public int
    compareToGDate(GDateSpecification datespec)
        Comparison to another GDate.

public
    boolean equals(Object obj)
        GDate is an immutable class, and equality is computed based on its canonical value.

public int
    getBuiltinTypeCode()
        Returns the builtin type code for the shape of the information contained in this
        instance, or 0 if the instance doesn't contain information corresponding to a Schema
        type.

public
    XmlCalendar getCalendar()
        Retrieves the value of the current time as an XmlCalendar.

public
    Date getDate()
        Retrieves the value of the current time as a java.util.Date instance.

public
    final int getDay()
        Gets the day-of-month.

public int
    getFlags()
        Returns a combination of flags indicating the information contained by this GDate.

public
    final getFraction()
    BigDecimal
        Gets the fraction-of-second.

```



```

    public getHour()
        final int          Gets the hour-of-day.
public int
    getJulianDate()
        Returns the Julian date corresponding to this Gregorian date.
public int
    getMillisecond()
        Gets the rounded millisecond value.

    public
    final int getMinute()
        Gets the minute-of-hour.

    public
    final int getMonth()
        Gets the month-of-year.

    public
    final int getSecond()
        Gets the second-of-minute.

    public
    final int getTimeZoneHour()
        Gets the time zone hour.

    public
    final int getTimeZoneMinute()
        Gets the time zone minutes.

    public
    final int getTimeZoneSign()
        Gets the time zone sign.

    public
    final int getYear()
        Gets the year.

    public
    final hasDate()
    boolean          True if this date/time specification specifies a full date (year, month, day)
    public
    final hasDay()
    boolean          True if this date/time specification specifies a day-of-month.
public int
    hashCode()
        Returns a hash code for this GDate.

    public
    final hasMonth()
    boolean          True if this date/time specification specifies a month-of-year.
    public
    final hasTime()
    boolean          True if this date/time specification specifies a time-of-day.
    public
    final hasTimeZone()
    boolean          True if this date/time specification specifies a timezone.

```



```

    public
        final hasYear()
    boolean
        True if this date/time specification specifies a year.

    public
        final isImmutable()
    boolean
        Returns true: all GDate instances are immutable.

    public
    boolean isValid()
        True if this GDate corresponds to a valid gregorian date value in XML schema.

    public
        GDate subtract(GDurationSpecification duration)
        Adds a duration to this GDate, and returns a new GDate.

    public
    String toString()
        The natural string representation.

```

Methods from class `java.lang.Object`

`clone`, `finalize`, `getClass`, `notify`, `notifyAll`, `wait`, `wait`, `wait`

Methods from interface `com.bea.xml.GDateSpecification`

`canonicalString`, `compareToGDate`, `getBuiltinTypeCode`, `getCalendar`, `getDate`, `getDay`, `getFlags`, `getFraction`, `getHour`, `getJulianDate`, `getMillisecond`, `getMinute`, `getMonth`, `getSecond`, `getTimeZoneHour`, `getTimeZoneMinute`, `getTimeZoneSign`, `getYear`, `hasDate`, `hasDay`, `hasMonth`, `hasTime`, `hasTimeZone`, `hasYear`, `isImmutable`, `isValid`, `toString`

Constructor Detail

GDate

```
public GDate(GDateSpecification gdate)
```

Constructs a GDate based on another GDateSpecification.

GDate

```

public GDate(int year,
             int month,
             int day,
             int hour,
             int minute,
             int second,
             BigDecimal fraction,
             int tzSign,
             int tzHour,
             int tzMinute)

```


Constructs an absolute GDate with the specified year, month, day, hours, minutes, seconds, and optional fractional seconds, and in the timezone specified.

If you wish to have a time or date that isn't in a specified timezone, then use the constructor that does not include the timezone arguments.

GDate

```
public GDate(int year,
             int month,
             int day,
             int hour,
             int minute,
             int second,
             BigDecimal fraction)
```

Constructs a GDate with the specified year, month, day, hours, minutes, seconds, and optional fractional seconds, in an unspecified timezone.

Note that by not specifying the timezone the GDate becomes partially unordered with respect to times that do have a specified timezone.

GDate

```
public GDate(CharSequence string)
```

Constructs a GDate based on a lexical representation.

GDate

```
public GDate(Calendar calendar)
```

Constructs a GDate based on a java.util.Calendar.

If the calendar does not have some fields set, the same absence of information is reflected in the GDate. Note that java.util.GregorianCalendar fills in all fields as soon as any are fetched, so constructing a GDate with the same calendar object twice may result in a different GDate because of a changed calendar. Note that com.bea.xml.XmlCalendar is stable if you re-get a set field, so it does not have the same problem.

GDate

```
public GDate(Date date)
```

Constructs a GDate based on a java.util.Date.

The current offset of the default timezone is used as the timezone.

For example, if eastern daylight time is in effect at the given date, the timezone on the east coast of the united states translates to GMT-05:00 (EST) + 1:00 (DT offset) == GMT-04:00.

Method Detail

add(GDurationSpecification) Method

```
public GDate add(GDurationSpecification duration)
```

Adds a duration to this GDate, and returns a new GDate.

canonicalString() Method

```
public String canonicalString()
```

The canonical string representation. Specific moments or times-of-day in a specified timezone are normalized to UTC time to produce a canonical string form for them. Other recurring time specifications keep their timezone information.

compareToGDate(GDateSpecification) Method

```
public int compareToGDate(GDateSpecification datespec)
```

Comparison to another GDate.

- Returns -1 if this < date. (less-than)
- Returns 0 if this == date. (equal)
- Returns 1 if this > date. (greater-than)
- Returns 2 if this date. (incomparable)

Two instances are incomparable if they have different amounts of information.

Parameters

datespec

the date to compare against.

equals(Object) Method

```
public boolean equals(Object obj)
```

GDate is an immutable class, and equality is computed based on its canonical value.

Overrides

```
Object.equals(Object)
```


getBuiltinTypeCode() Method

```
public int getBuiltinTypeCode()
```

Returns the builtin type code for the shape of the information contained in this instance, or 0 if the instance doesn't contain information corresponding to a Schema type.

Value will be equal to `SchemaType.BTC_NOT_BUILTIN`, `SchemaType.BTC_G_YEAR`, `SchemaType.BTC_G_YEAR_MONTH`, `SchemaType.BTC_G_MONTH`, `SchemaType.BTC_G_MONTH_DAY`, `SchemaType.BTC_G_DAY`, `SchemaType.BTC_DATE`, `SchemaType.BTC_DATE_TIME`, or `SchemaType.BTC_TIME`.

getCalendar() Method

```
public XmlCalendar getCalendar()
```

Retrieves the value of the current time as an `XmlCalendar`.

`XmlCalendar` is a subclass of `GregorianCalendar` which is slightly customized to match XML schema date rules.

The returned `XmlCalendar` has only those time and date fields set that are reflected in the `GDate` object. Because of the way the `Calendar` contract works, any information in the `isSet()` vanishes as soon as you view any unset field using `get()` methods. This means that if it is important to understand which date fields are set, you must call `isSet()` first before `get()`.

getDate() Method

```
public Date getDate()
```

Retrieves the value of the current time as a `java.util.Date` instance.

getDay() Method

```
public final int getDay()
```

Gets the day-of-month. The first day of each month is 1.

getFlags() Method

```
public int getFlags()
```

Returns a combination of flags indicating the information contained by this `GDate`. The five flags are `HAS_TIMEZONE`, `HAS_YEAR`, `HAS_MONTH`, `HAS_DAY`, and `HAS_TIME`.

getFraction() Method

```
public final BigDecimal getFraction()
```

Gets the fraction-of-second. Range from 0 (inclusive) to 1 (exclusive).

getHour() Method

```
public final int getHour()
```

Gets the hour-of-day. Midnight is 0, and 11PM is 23.

getJulianDate() Method

```
public int getJulianDate()
```

Returns the Julian date corresponding to this Gregorian date. The Julian date (JD) is a continuous count of days from 1 January 4713 BC (= -4712 January 1).

getMillisecond() Method

```
public int getMillisecond()
```

Gets the rounded millisecond value. Range from 0 to 999

getMinute() Method

```
public final int getMinute()
```

Gets the minute-of-hour. Range from 0 to 59.

getMonth() Method

```
public final int getMonth()
```

Gets the month-of-year. January is 1.

getSecond() Method

```
public final int getSecond()
```

Gets the second-of-minute. Range from 0 to 59.

getTimeZoneHour() Method

```
public final int getTimeZoneHour()
```

Gets the time zone hour. This is always positive: for the sign, look at `getTimeZoneSign()`.

getTimeZoneMinute() Method

```
public final int getTimeZoneMinute()
```

Gets the time zone minutes. This is always positive: for the sign, look at `getTimeZoneSign()`.

getTimeZoneSign() Method

```
public final int getTimeZoneSign()
```

Gets the time zone sign. For time zones east of GMT, this is positive; for time zones west, this is negative.

getYear() Method

```
public final int getYear()
```

Gets the year. Should be a four-digit year specification.

hasDate() Method

```
public final boolean hasDate()
```

True if this date/time specification specifies a full date (year, month, day)

hasDay() Method

```
public final boolean hasDay()
```

True if this date/time specification specifies a day-of-month.

hashCode() Method

```
public int hashCode()
```

Returns a hash code for this `GDate`.

Overrides

`Object.hashCode()`

hasMonth() Method

`public final boolean hasMonth()`

True if this date/time specification specifies a month-of-year.

hasTime() Method

`public final boolean hasTime()`

True if this date/time specification specifies a time-of-day.

hasTimeZone() Method

`public final boolean hasTimeZone()`

True if this date/time specification specifies a timezone.

hasYear() Method

`public final boolean hasYear()`

True if this date/time specification specifies a year.

isImmutable() Method

`public final boolean isImmutable()`

Returns true: all GDate instances are immutable.

isValid() Method

`public boolean isValid()`

True if this GDate corresponds to a valid gregorian date value in XML schema.

subtract(GDurationSpecification) Method

`public GDate subtract(GDurationSpecification duration)`

Adds a duration to this GDate, and returns a new GDate.

toString() Method

```
public String toString()
```

The natural string representation. This represents the information that is available, including timezone. For types that correspond to defined schema types (`schemaBuiltinTypeCode() > 0`), this provides the natural lexical representation.

When both time and timezone are specified, this string is not the canonical representation unless the timezone is UTC (Z) (since the same moment in time can be expressed in different timezones). To get a canonical string, use the `canonicalString()` method.

Overrides

```
Object.toString()
```


GDateBuilder Class

public final class GDateBuilder

extends Object
implements GDateSpecification, Serializable

Used to build GDate.

Like GDate, a GDateBuilder represents an Gregorian Date, Time, and Timezone, or subset of information (Year, Month, Day, Time, Timezone, or some combination). Wherever it provides guidance, the XML Schema 1.0 specification (plus published errata) is followed.

Instances may separately set or clear the year, month, day-of-month, and time-of-day. Not all operations are meaningful on all combinations. In particular, timezone normalization is only possible if there is a time, or a time together with a full date.

Hierarchy

Object
GDateBuilder

All Implemented Interfaces

GDateSpecification, Serializable

Constructor Summary

GDateBuilder()

Constructs a GDateBuilder specifying no date or time

GDateBuilder(GDateSpecification gdate)

Construts a GDateBuilder by copying another GDateSpecifcaiton.

GDateBuilder(int year, int month, int day, int hour, int minute, int second, BigDecimal fraction, int tzSign, int tzHour, int tzMinute)

Constructs an absolute GDateBuilder with the specified year, month, day, hours, minutes, seconds, and optional fractional seconds, and in the timezone specified.

GDateBuilder(int year, int month, int day, int hour, int minute, int second, BigDecimal fraction)

Constructs a GDateBuilder with the specified year, month, day, hours, minutes, seconds, and optional fractional seconds, in an unspecified timezone.

GDateBuilder(*CharSequence string*)

Constructs a GDateBuilder from a lexical representation.

GDateBuilder(*Calendar calendar*)

GDateBuilder(*Date date*)

Constructs a GDateBuilder based on a java.util.Date.

Method Summary

```
public
    void addDuration(int sign, int year, int month, int day, int hour, int minute, int second,
                     BigDecimal fraction)
        Adds a given duration to the date/time.

public
    void addGDuration(GDurationSpecification duration)
        Adds a given duration to the date/time.

public
    String canonicalString()
        The canonical string representation.

public
    void clearDay()
        Clears the day-of-month.

public
    void clearMonth()
        Clears the month-of-year.

public
    void clearTime()
        Clears the time-of-day.

public
    void clearTimeZone()
        Clears the timezone.

public
    void clearYear()
        Clears the year.

public
    Object clone()
        Builds another GDateBuilder with the same value as this one.
```


XMLBeans API Reference

```
public compareToGDate(GDateSpecification datespec)
final int      Comparison to another GDate.

public
final int getBuiltinTypeCode()
      Returns the builtin type code for the shape of the information contained in this
      instance, or 0 if the instance doesn't contain information corresponding to a Schema
      type.

public
XmlCalendar getCalendar()
      Retrieves the value of the current time as an XmlCalendar.

public
Date getDate()
      Retrieves the value of the current time as a java.util.Date instance.

public
final int getDay()
      Gets the day-of-month.

public int
getFlags()
      Returns a combination of flags indicating the information contained by this GDate.

public
final getFraction()
BigDecimal    Gets the fraction-of-second.

public
final int getHour()
      Gets the hour-of-day.

public
final int getJulianDate()
      Returns the Julian date corresponding to this Gregorian date.

public
final int getMillisecond()
      Gets the rounded millisecond value.

public
final int getMinute()
      Gets the minute-of-hour.

public
final int getMonth()
      Gets the month-of-year.

public
final int getSecond()
      Gets the second-of-minute.

public
final int getTimeZoneHour()
      Gets the time zone hour.

public
final int getTimeZoneMinute()
      Gets the time zone minutes.

public
```



```

final int getTimeZoneSign()
    Gets the time zone sign.

    public
final int getYear()
    Gets the year.

    public
    final hasDate()
boolean    True if this date/time specification specifies a full date (year, month, day)
    public
    final hasDay()
boolean    True if this date/time specification specifies a day-of-month.
    public
    final hasMonth()
boolean    True if this date/time specification specifies a month-of-year.
    public
    final hasTime()
boolean    True if this date/time specification specifies a time-of-day.
    public
    final hasTimeZone()
boolean    True if this date/time specification specifies a timezone.
    public
    final hasYear()
boolean    True if this date/time specification specifies a year.
    public
boolean isImmutable()
    True if the instance is immutable.

    public
boolean isValid()
    True if all date fields lie within their legal ranges.

    public
    void normalize()
        Normalizes the instance, ensuring date and time fields are within their normal
        ranges.

    public
    void normalizeToTimeZone(int tzSign, int tzHour, int tzMinute)
        If the time and timezone are known, this method changes the timezone to the
        specified UTC offset, altering minutes, hours, day, month, and year as necessary to
        ensure that the actual described moment in time is the same.

    public
    void normalizeToTimeZone(int tzTotalMinutes)
        Normalizes to a time zone specified by a number of offset minutes rather than
        sign/hour/minute; for example, normalizeToTimeZone(-60) is the same as
        normalizeToTimeZone(-1, 1, 0).

    public
    void setBuiltinTypeCode(int typeCode)
        Clears the fields in this GDateBuilder that are not applicable for the given
        SchemaType date code.

```


XMLBeans API Reference

```
public setDate(Date date)
    void          Sets the current time and date based on a java.util.Date instance.

public
    void setDay(int day)
        Sets the day-of-month.

public
    void setGDate(GDateSpecification gdate)
        Copies a GDateSpecification, completely replacing the current information in this
        GDateBuilder.

public
    void setJulianDate(int julianday)
        Sets the Gregorian date based on the given Julian date.

public
    void setMonth(int month)
        Sets the month-of-year.

public
    void setTime(int hour, int minute, int second, BigDecimal fraction)
        Sets the time.

public
    void setTimeZone(int tzSign, int tzHour, int tzMinute)
        Sets the time zone without changing the other time fields.

public
    void setTimeZone(int tzTotalMinutes)
        Sets the time zone based on a number of offset minutes rather than
        sign/hour/minute; for example, setTimeZone(-60) is the same as setTimeZone(-1,
        1, 0).

public
    void setYear(int year)
        Sets the year.

public
    void subtractGDuration(GDurationSpecification duration)
        Subtracts a given duration from the date/time.

public
    GDate toGDate()
        Builds a GDate from this GDateBuilder.

public
    final toString()
    String      The natural string representation.
```

Methods from class `java.lang.Object`

`equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `wait`, `wait`, `wait`

Methods from interface `com.bea.xml.GDateSpecification`

`canonicalString`, `compareToGDate`, `getBuiltinTypeCode`, `getCalendar`, `getDate`, `getDay`, `getFlags`, `getFraction`, `getHour`, `getJulianDate`,

`getMillisecond, getMinute, getMonth, getSecond, getTimeZoneHour, getTimeZoneMinute, getTimeZoneSign, getYear, hasDate, hasDay, hasMonth, hasTime, hasTimeZone, hasYear, isImmutable, isValid, toString`

Constructor Detail

GDateBuilder

```
public GDateBuilder()
```

Constructs a GDateBuilder specifying no date or time

GDateBuilder

```
public GDateBuilder(GDateSpecification gdate)
```

Constructs a GDateBuilder by copying another GDateSpecification.

GDateBuilder

```
public GDateBuilder(int year,
                    int month,
                    int day,
                    int hour,
                    int minute,
                    int second,
                    BigDecimal fraction,
                    int tzSign,
                    int tzHour,
                    int tzMinute)
```

Constructs an absolute GDateBuilder with the specified year, month, day, hours, minutes, seconds, and optional fractional seconds, and in the timezone specified.

Note that you can reexpress the GDateBuilder in any timezone using `normalizeToTimeZone()`. The `normalize()` method normalizes to UTC.

If you wish to have a time or date that isn't in a specified timezone, then use the constructor that does not include the timezone arguments.

GDateBuilder

```
public GDateBuilder(int year,
                    int month,
                    int day,
                    int hour,
                    int minute,
                    int second,
                    BigDecimal fraction)
```


Constructs a GDateBuilder with the specified year, month, day, hours, minutes, seconds, and optional fractional seconds, in an unspecified timezone.

Note that by not specifying the timezone the GDateBuilder becomes partially unordered with respect to times that do have a specified timezone.

GDateBuilder

```
public GDateBuilder(CharSequence string)
```

Constructs a GDateBuilder from a lexical representation. The lexical space contains the union of the lexical spaces of all the schema date/time types (except for duration).

GDateBuilder

```
public GDateBuilder(Calendar calendar)
```

GDateBuilder

```
public GDateBuilder(Date date)
```

Constructs a GDateBuilder based on a java.util.Date.

The current offset of the default timezone is used as the timezone.

For example, if eastern daylight time is in effect at the given date, the timezone on the east coast of the united states translates to GMT−05:00 (EST) + 1:00 (DT offset) == GMT−04:00.

Method Detail

addDuration(int, int, int, int, int, int, int, BigDecimal) Method

```
public void addDuration(int sign,
                       int year,
                       int month,
                       int day,
                       int hour,
                       int minute,
                       int second,
                       BigDecimal fraction)
```

Adds a given duration to the date/time.

Parameters

<i>sign</i>	+1 to add, -1 to subtract
<i>year</i>	the number of years to add
<i>month</i>	the number of months to add
<i>day</i>	the number of days to add
<i>hour</i>	the number of hours to add
<i>minute</i>	the number of minutes to add
<i>second</i>	the number of seconds to add
<i>fraction</i>	the number of fractional seconds to add (may be null)

addGDuration(GDurationSpecification) Method

```
public void addGDuration(GDurationSpecification duration)
```

Adds a given duration to the date/time.

Parameters

<i>duration</i>	the duration to add
-----------------	---------------------

canonicalString() Method

```
public String canonicalString()
```

The canonical string representation. Specific moments or times-of-day in a specified timezone are normalized to UTC time to produce a canonical string form for them. Other recurring time specifications keep their timezone information.

clearDay() Method

```
public void clearDay()
```

Clears the day-of-month. After clearing, hasDay returns false and the value of getDay is undefined.

clearMonth() Method

```
public void clearMonth()
```

Clears the month-of-year. After clearing, hasMonth returns false and the value of getMonth is undefined.

clearTime() Method

```
public void clearTime()
```

Clears the time-of-day. After clearing, hasTime returns false and the value of getTime is undefined.

clearTimeZone() Method

```
public void clearTimeZone()
```

Clears the timezone. After clearing, hasTimeZone returns false and the value of getTimeZoneHour and getTimeZoneMinute are undefined. Does not change the other time fields.

clearYear() Method

```
public void clearYear()
```

Clears the year. After clearing, hasYear returns false and the value of getYear is undefined.

clone() Method

```
public Object clone()
```

Builds another GDateBuilder with the same value as this one.

Overrides

```
Object.clone()
```

compareToGDate(GDateSpecification) Method

```
public final int compareToGDate(GDateSpecification datespec)
```


Comparison to another GDate.

- Returns -1 if this < date. (less-than)
- Returns 0 if this == date. (equal)
- Returns 1 if this > date. (greater-than)
- Returns 2 if this date. (incomparable)

Two instances are incomparable if they have different amounts of information.

Parameters

datespec

the date to compare against

getBuiltinTypeCode() Method

```
public final int getBuiltinTypeCode()
```

Returns the builtin type code for the shape of the information contained in this instance, or 0 if the instance doesn't contain information corresponding to a Schema type.

Value will be equal to `SchemaType.BTC_NOT_BUILTIN`, `SchemaType.BTC_G_YEAR`, `SchemaType.BTC_G_YEAR_MONTH`, `SchemaType.BTC_G_MONTH`, `SchemaType.BTC_G_MONTH_DAY`, `SchemaType.BTC_G_DAY`, `SchemaType.BTC_DATE`, `SchemaType.BTC_DATE_TIME`, or `SchemaType.BTC_TIME`.

getCalendar() Method

```
public XmlCalendar getCalendar()
```

Retrieves the value of the current time as an `XmlCalendar`.

`XmlCalendar` is a subclass of `GregorianCalendar` which is slightly customized to match XML schema date rules.

The returned `XmlCalendar` has only those time and date fields set that are reflected in the `GDate` object. Because of the way the `Calendar` contract works, any information in the `isSet()` vanishes as soon as you view any unset field using `get()` methods. This means that if it is important to understand which date fields are set, you must call `isSet()` first before `get()`.

getDate() Method

```
public Date getDate()
```

Retrieves the value of the current time as a `java.util.Date` instance.

getDay() Method

```
public final int getDay()
```

Gets the day-of-month. The first day of each month is 1.

getFlags() Method

```
public int getFlags()
```

Returns a combination of flags indicating the information contained by this GDate. The five flags are HAS_TIMEZONE, HAS_YEAR, HAS_MONTH, HAS_DAY, and HAS_TIME.

getFraction() Method

```
public final BigDecimal getFraction()
```

Gets the fraction-of-second. Range from 0 (inclusive) to 1 (exclusive).

getHour() Method

```
public final int getHour()
```

Gets the hour-of-day. Midnight is 0, and 11PM is 23.

getJulianDate() Method

```
public final int getJulianDate()
```

Returns the Julian date corresponding to this Gregorian date. The Julian date (JD) is a continuous count of days from 1 January 4713 BC (= -4712 January 1).

getMillisecond() Method

```
public final int getMillisecond()
```

Gets the rounded millisecond value. Range from 0 to 999

getMinute() Method

```
public final int getMinute()
```

Gets the minute-of-hour. Range from 0 to 59.

getMonth() Method

```
public final int getMonth()
```

Gets the month-of-year. January is 1.

getSecond() Method

```
public final int getSecond()
```

Gets the second-of-minute. Range from 0 to 59.

getTimeZoneHour() Method

```
public final int getTimeZoneHour()
```

Gets the time zone hour. This is always positive: for the sign, look at `getTimeZoneSign()`.

getTimeZoneMinute() Method

```
public final int getTimeZoneMinute()
```

Gets the time zone minutes. This is always positive: for the sign, look at `getTimeZoneSign()`.

getTimeZoneSign() Method

```
public final int getTimeZoneSign()
```

Gets the time zone sign. For time zones east of GMT, this is positive; for time zones west, this is negative.

getYear() Method

```
public final int getYear()
```

Gets the year. Should be a four-digit year specification.

hasDate() Method

```
public final boolean hasDate()
```

True if this date/time specification specifies a full date (year, month, day)

hasDay() Method

```
public final boolean hasDay()
```

True if this date/time specification specifies a day-of-month.

hasMonth() Method

```
public final boolean hasMonth()
```

True if this date/time specification specifies a month-of-year.

hasTime() Method

```
public final boolean hasTime()
```

True if this date/time specification specifies a time-of-day.

hasTimeZone() Method

```
public final boolean hasTimeZone()
```

True if this date/time specification specifies a timezone.

hasYear() Method

```
public final boolean hasYear()
```

True if this date/time specification specifies a year.

isImmutable() Method

```
public boolean isImmutable()
```

True if the instance is immutable.

isValid() Method

```
public boolean isValid()
```

True if all date fields lie within their legal ranges. A GDateBuilder can be invalid, for example, if you change the month to February and the day-of-month is 31.

normalize() Method

```
public void normalize()
```

Normalizes the instance, ensuring date and time fields are within their normal ranges.

If no timezone or no time is specified, or if a partial date is specified, this method does nothing, and leaves the timezone information as-is.

If a time or time and date is specified, this method normalizes the timezone to UTC.

normalizeToTimeZone(int, int, int) Method

```
public void normalizeToTimeZone(int tzSign,
                                int tzHour,
                                int tzMinute)
```

If the time and timezone are known, this method changes the timezone to the specified UTC offset, altering minutes, hours, day, month, and year as necessary to ensure that the actual described moment in time is the same.

It is an error to operate on instances without a time or timezone, or with a partially specified date.

Parameters

tzSign

the timezone offset sign, either +1, 0, or -1

tzHour

the timezone offset hour

tzMinute

the timezone offset minute

normalizeToTimeZone(int) Method

```
public void normalizeToTimeZone(int tzTotalMinutes)
```

Normalizes to a time zone specified by a number of offset minutes rather than sign/hour/minute; for example, `normalizeToTimeZone(-60)` is the same as `normalizeToTimeZone(-1, 1, 0)`.

setBuiltinTypeCode(int) Method

```
public void setBuiltinTypeCode(int typeCode)
```

Clears the fields in this `GDateBuilder` that are not applicable for the given `SchemaType` date code. The code should be `SchemaType.BTC_G_YEAR`, `SchemaType.BTC_G_YEAR_MONTH`, `SchemaType.BTC_G_MONTH`, `SchemaType.BTC_G_MONTH_DAY`, `SchemaType.BTC_G_DAY`,

`SchemaType.BTC_DATE`, `SchemaType.BTC_DATE_TIME`, or `SchemaType.BTC_TIME`.

Parameters

typeCode
the type code to apply

setDate(Date) Method

```
public void setDate(Date date)
```

Sets the current time and date based on a `java.util.Date` instance.

The timezone offset used is based on the default `TimeZone`. (The default `TimeZone` is consulted to incorporate daylight savings offsets if applicable for the current date as well as the base timezone offset.)

If you wish to normalize the timezone, e.g., to UTC, follow this with a call to `normalizeToTimeZone`.

Parameters

date
the `Date` object to copy

setDay(int) Method

```
public void setDay(int day)
```

Sets the day-of-month. The first day of each month is 1.

Parameters

day
the day of month, from 1–31

setGDate(GDateSpecification) Method

```
public void setGDate(GDateSpecification gdate)
```

Copies a `GDateSpecification`, completely replacing the current information in this `GDateBuilder`.

Parameters

gdate
the `GDateSpecification` to copy

setJulianDate(int) Method

```
public void setJulianDate(int julianday)
```

Sets the Gregorian date based on the given Julian date. The Julian date (JD) is a continuous count of days from 1 January 4713 BC (= -4712 January 1).

Parameters

julianday
the julian day number

setMonth(int) Method

```
public void setMonth(int month)
```

Sets the month-of-year. January is 1.

Parameters

month
the month, from 1–12

setTime(int, int, int, BigDecimal) Method

```
public void setTime(int hour,  
                   int minute,  
                   int second,  
                   BigDecimal fraction)
```

Sets the time. Hours in the day range from 0 to 23; minutes and seconds range from 0 to 59; and fractional seconds range from 0 (inclusive) to 1 (exclusive). The fraction can be null and is assumed to be zero.

Parameters

hour
the hour of day, from 0–23

minute
the minute of hour, from 0–59

second
the second of minute, from 0–59

fraction
the fraction of second, 0.0 to 0.999... (may be null)

setTimeZone(int, int, int) Method

```
public void setTimeZone(int tzSign,
                       int tzHour,
                       int tzMinute)
```

Sets the time zone without changing the other time fields. If you wish to adjust other time fields to express the same actual moment in time in a different time zone, use `normalizeToTimeZone`.

Timezones must be between -14:00 and +14:00. Sign must be -1 or 1 (or 0 for UTC only), and the offset hours and minute arguments must be nonnegative.

Parameters

tzSign

the timezone offset sign, either +1, 0, or -1

tzHour

the timezone offset hour

tzMinute

the timezone offset minute

setTimeZone(int) Method

```
public void setTimeZone(int tzTotalMinutes)
```

Sets the time zone based on a number of offset minutes rather than sign/hour/minute; for example, `setTimeZone(-60)` is the same as `setTimeZone(-1, 1, 0)`.

setYear(int) Method

```
public void setYear(int year)
```

Sets the year. Should be a four-digit year specification.

Parameters

year

the year

subtractGDuration(GDurationSpecification) Method

```
public void subtractGDuration(GDurationSpecification duration)
```

Subtracts a given duration from the date/time.

Parameters

duration

the duration to subtract

toGDate() Method

```
public GDate toGDate()
```

Builds a GDate from this GDateBuilder.

toString() Method

```
public final String toString()
```

The natural string representation. This represents the information that is available, including timezone. For types that correspond to defined schema types (`schemaBuiltinTypeCode() > 0`), this provides the natural lexical representation.

When both time and timezone are specified, this string is not the canonical representation unless the timezone is UTC (Z) (since the same moment in time can be expressed in different timezones). To get a canonical string, use the `canonicalString()` method.

Overrides

```
Object.toString()
```


GDateSpecification Interface

public interface GDateSpecification

Represents an XML Schema-compatible Gregorian date.

Both the immutable GDate and the mutable GDateBuilder are GDateSpecifications. Use this interface where you want to allow callers to pass any implementation of a GDate.

Related Topics

GDate
XmlCalendar

All Known Implementing Classes

GDateBuilder, GDate

Field Summary

```

    public
    static HAS_DAY
    final int
                Day of month is specified.

    public
    static HAS_MONTH
    final int
                Month of year is specified.

    public
    static HAS_TIME
    final int
                Time of day is specified.

    public
    static HAS_TIMEZONE
    final int
                Timezone is specified.

    public
    static HAS_YEAR
    final int
                Year is specified.

```

Method Summary

```

    public
    String canonicalString()
                The canonical string representation.

    public int
                compareToGDate(GDateSpecification gdatespec)
                Comparison to another GDate.

```



```

public int getBuiltinTypeCode()
    Returns the builtin type code for the shape of the information contained in this
    instance, or 0 if the instance doesn't contain information corresponding to a Schema
    type.

    public
    XmlCalendar getCalendar()
        Retrieves the value of the current time as an XmlCalendar.

    public
    Date getDate()
        Retrieves the value of the current time as a java.util.Date instance.

public int
    getDay()
        Gets the day-of-month.

public int
    getFlags()
        Returns a combination of flags indicating the information contained by this GDate.

    public
    BigDecimal getFraction()
        Gets the fraction-of-second.

public int
    getHour()
        Gets the hour-of-day.

public int
    getJulianDate()
        Returns the Julian date corresponding to this Gregorian date.

public int
    getMillisecond()
        Gets the rounded millisecond value.

public int
    getMinute()
        Gets the minute-of-hour.

public int
    getMonth()
        Gets the month-of-year.

public int
    getSecond()
        Gets the second-of-minute.

public int
    getTimeZoneHour()
        Gets the time zone hour.

public int
    getTimeZoneMinute()
        Gets the time zone minutes.

public int
    getTimeZoneSign()
        Gets the time zone sign.

public int

```



```

    getYear()
        Gets the year.

    public
    boolean hasDate()
        True if this date/time specification specifies a full date (year, month, day)

    public
    boolean hasDay()
        True if this date/time specification specifies a day-of-month.

    public
    boolean hasMonth()
        True if this date/time specification specifies a month-of-year.

    public
    boolean hasTime()
        True if this date/time specification specifies a time-of-day.

    public
    boolean hasTimeZone()
        True if this date/time specification specifies a timezone.

    public
    boolean hasYear()
        True if this date/time specification specifies a year.

    public
    boolean isImmutable()
        True if this GDate specification is immutable.

    public
    boolean isValid()
        True if this GDate corresponds to a valid gregorian date value in XML schema.

    public
    String toString()
        The natural string representation.

```

Field Detail

HAS_DAY

```
public static final int HAS_DAY
```

Day of month is specified. See `GDateSpecification.getFlags()`.

HAS_MONTH

```
public static final int HAS_MONTH
```

Month of year is specified. See `GDateSpecification.getFlags()`.

HAS_TIME

```
public static final int HAS_TIME
```

Time of day is specified. See `GDateSpecification.getFlags()`.

HAS_TIMEZONE

```
public static final int HAS_TIMEZONE
```

Timezone is specified. See `GDateSpecification.getFlags()`.

HAS_YEAR

```
public static final int HAS_YEAR
```

Year is specified. See `GDateSpecification.getFlags()`.

Method Detail

canonicalString() Method

```
public String canonicalString()
```

The canonical string representation. Specific moments or times-of-day in a specified timezone are normalized to UTC time to produce a canonical string form for them. Other recurring time specifications keep their timezone information.

compareToGDate(GDateSpecification) Method

```
public int compareToGDate(GDateSpecification gdatespec)
```

Comparison to another GDate.

- Returns -1 if this < date. (less-than)
- Returns 0 if this == date. (equal)
- Returns 1 if this > date. (greater-than)
- Returns 2 if this date. (incomparable)

Two instances are incomparable if they have different amounts of information.

Parameters

gdatespec
the date to compare against.

getBuiltinTypeCode() Method

```
public int getBuiltinTypeCode()
```

Returns the builtin type code for the shape of the information contained in this instance, or 0 if the instance doesn't contain information corresponding to a Schema type.

Value will be equal to `SchemaType.BTC_NOT_BUILTIN`, `SchemaType.BTC_G_YEAR`, `SchemaType.BTC_G_YEAR_MONTH`, `SchemaType.BTC_G_MONTH`, `SchemaType.BTC_G_MONTH_DAY`, `SchemaType.BTC_G_DAY`, `SchemaType.BTC_DATE`, `SchemaType.BTC_DATE_TIME`, or `SchemaType.BTC_TIME`.

getCalendar() Method

```
public XmlCalendar getCalendar()
```

Retrieves the value of the current time as an `XmlCalendar`.

`XmlCalendar` is a subclass of `GregorianCalendar` which is slightly customized to match XML schema date rules.

The returned `XmlCalendar` has only those time and date fields set that are reflected in the `GDate` object. Because of the way the `Calendar` contract works, any information in the `isSet()` vanishes as soon as you view any unset field using `get()` methods. This means that if it is important to understand which date fields are set, you must call `isSet()` first before `get()`.

getDate() Method

```
public Date getDate()
```

Retrieves the value of the current time as a `java.util.Date` instance.

getDay() Method

```
public int getDay()
```

Gets the day-of-month. The first day of each month is 1.

getFlags() Method

```
public int getFlags()
```

Returns a combination of flags indicating the information contained by this `GDate`. The five flags are `GDateSpecification.HAS_TIMEZONE`, `GDateSpecification.HAS_YEAR`,

GDateSpecification.HAS_MONTH, GDateSpecification.HAS_DAY, and GDateSpecification.HAS_TIME.

getFraction() Method

```
public BigDecimal getFraction()
```

Gets the fraction-of-second. Range from 0 (inclusive) to 1 (exclusive).

getHour() Method

```
public int getHour()
```

Gets the hour-of-day. Midnight is 0, and 11PM is 23.

getJulianDate() Method

```
public int getJulianDate()
```

Returns the Julian date corresponding to this Gregorian date. The Julian date (JD) is a continuous count of days from 1 January 4713 BC (= -4712 January 1).

getMillisecond() Method

```
public int getMillisecond()
```

Gets the rounded millisecond value. Range from 0 to 999

getMinute() Method

```
public int getMinute()
```

Gets the minute-of-hour. Range from 0 to 59.

getMonth() Method

```
public int getMonth()
```

Gets the month-of-year. January is 1.

getSecond() Method

```
public int getSecond()
```

Gets the second-of-minute. Range from 0 to 59.

getTimeZoneHour() Method

```
public int getTimeZoneHour()
```

Gets the time zone hour. This is always positive: for the sign, look at `getTimeZoneSign()`.

getTimeZoneMinute() Method

```
public int getTimeZoneMinute()
```

Gets the time zone minutes. This is always positive: for the sign, look at `getTimeZoneSign()`.

getTimeZoneSign() Method

```
public int getTimeZoneSign()
```

Gets the time zone sign. For time zones east of GMT, this is positive; for time zones west, this is negative.

getYear() Method

```
public int getYear()
```

Gets the year. Should be a four-digit year specification.

hasDate() Method

```
public boolean hasDate()
```

True if this date/time specification specifies a full date (year, month, day)

hasDay() Method

```
public boolean hasDay()
```

True if this date/time specification specifies a day-of-month.

hasMonth() Method

```
public boolean hasMonth()
```

True if this date/time specification specifies a month-of-year.

hasTime() Method

```
public boolean hasTime()
```

True if this date/time specification specifies a time-of-day.

hasTimeZone() Method

```
public boolean hasTimeZone()
```

True if this date/time specification specifies a timezone.

hasYear() Method

```
public boolean hasYear()
```

True if this date/time specification specifies a year.

isImmutable() Method

```
public boolean isImmutable()
```

True if this GDate specification is immutable. GDate returns true, and GDateBuilder returns false.

isValid() Method

```
public boolean isValid()
```

True if this GDate corresponds to a valid gregorian date value in XML schema.

toString() Method

```
public String toString()
```

The natural string representation. This represents the information that is available, including timezone. For types that correspond to defined schema types (`schemaBuiltinTypeCode() > 0`), this provides the natural lexical representation. When both time and timezone are specified, this string is not the canonical representation unless the timezone is UTC (Z) (since the same moment in time can be expressed in different

timezones). To get a canonical string, use the canonicalString() method.

Overrides

`Object.toString()`

GDuration Class

public final class GDuration

extends Object
implements GDurationSpecification, Serializable

Represents an XML Schema-compatible duration.

A duration is made up of a number of years, months, days, hours, minutes, seconds, and fractions of seconds. See the XML Schema specification section on xs:duration for details on the rules for comparing durations and adding durations to dates.

Hierarchy

Object
GDuration

All Implemented Interfaces

GDurationSpecification, Serializable

Constructor Summary

GDuration()

Constructs an empty GDuration representing zero seconds.

GDuration(GDurationSpecification gDuration)

Constructs a GDuration from another GDurationSpecification.

GDuration(int sign, int year, int month, int day, int hour, int minute, int second, BigDecimal fraction)

Constructs a GDuration with the specified sign, year, month, day, hours, minutes, seconds, and optional fractional seconds.

GDuration(CharSequence str)

Constructs a GDuration from a lexical representation.

Method Summary

```

    public
    GDuration add(GDurationSpecification duration)
        Returns a new GDuration which is the sum of this one and the
        supplied duration.

    public
    Object clone()
        Builds another GDate with the same value as this one.

    public
    final int compareToGDuration(GDurationSpecification duration)
        Comparison to another GDuration.

    public
    boolean equals(Object obj)
        Two GDurations are equal if all their fields are equal.

    public
    final int getDay()
        Gets the day-of-month component.

    public
    BigDecimal getFraction()
        Gets the fraction-of-second.

    public
    final int getHour()
        Gets the hour-of-day component.

    public
    final int getMinute()
        Gets the minute-of-hour component.

    public
    final int getMonth()
        Gets the month-of-year component.

    public
    final int getSecond()
        Gets the second-of-minute component.

    public
    final int getSign()
        Returns the sign of the duration: +1 is forwards and -1 is backwards
        in time.

    public
    final int getYear()
        Gets the year component.

    public
    int hashCode()

    public
    final isImmutable()
    boolean        All GDuration instances return true.

```



```

    public isValid()
    boolean          Returns true if all of the individual components of the duration are
                     nonnegative.

    public
    GDuration subtract(GDurationSpecification duration)
                     Returns a new GDuration which is the result of subtracting the
                     supplied duration from this one.

    public
    String toString()
                     The natural string representation of the duration.

```

Methods from class `java.lang.Object`

```

finalize, getClass, notify, notifyAll, wait, wait, wait

```

Methods from interface `com.bea.xml.GDurationSpecification`

```

compareToGDuration, getDay, getFraction, getHour, getMinute, getMonth,
getSecond, getSign, getYear, isImmutable, isValid

```

Constructor Detail

GDuration

```

public GDuration()

```

Constructs an empty GDuration representing zero seconds.

GDuration

```

public GDuration(GDurationSpecification gDuration)

```

Constructs a GDuration from another GDurationSpecification.

GDuration

```

public GDuration(int sign,
                 int year,
                 int month,
                 int day,
                 int hour,
                 int minute,
                 int second,
                 BigDecimal fraction)

```

Constructs a GDuration with the specified sign, year, month, day, hours, minutes, seconds, and optional fractional seconds.

GDuration

```
public GDuration(CharSequence str)
```

Constructs a GDuration from a lexical representation. The lexical space contains the union of the lexical spaces of all the schema date/time types (except for duration).

Method Detail

add(GDurationSpecification) Method

```
public GDuration add(GDurationSpecification duration)
```

Returns a new GDuration which is the sum of this one and the supplied duration. Does a fieldwise addition, with no normalization.

clone() Method

```
public Object clone()
```

Builds another GDate with the same value as this one.

Overrides

```
Object.clone()
```

compareToGDuration(GDurationSpecification) Method

```
public final int compareToGDuration(GDurationSpecification duration)
```

Comparison to another GDuration.

- Returns -1 if this < date. (less-than)
- Returns 0 if this == date. (equal)
- Returns 1 if this > date. (greater-than)
- Returns 2 if this date. (incomparable)

Two instances are incomparable if they have different amounts of information.

equals(Object) Method

```
public boolean equals(Object obj)
```

Two GDurations are equal if all their fields are equal. The equals function does not apply normalization.

Overrides

`Object.equals(Object)`

getDay() Method

```
public final int getDay()
```

Gets the day-of-month component.

getFraction() Method

```
public BigDecimal getFraction()
```

Gets the fraction-of-second. Range from 0 (inclusive) to 1 (exclusive).

getHour() Method

```
public final int getHour()
```

Gets the hour-of-day component.

getMinute() Method

```
public final int getMinute()
```

Gets the minute-of-hour component.

getMonth() Method

```
public final int getMonth()
```

Gets the month-of-year component.

getSecond() Method

```
public final int getSecond()
```

Gets the second-of-minute component.

getSign() Method

```
public final int getSign()
```

Returns the sign of the duration: +1 is forwards and -1 is backwards in time.

getYear() Method

```
public final int getYear()
```

Gets the year component.

hashCode() Method

```
public int hashCode()
```

Overrides

```
Object.hashCode()
```

isImmutable() Method

```
public final boolean isImmutable()
```

All GDuration instances return true.

isValid() Method

```
public boolean isValid()
```

Returns true if all of the individual components of the duration are nonnegative.

subtract(GDurationSpecification) Method

```
public GDuration subtract(GDurationSpecification duration)
```

Returns a new GDuration which is the result of subtracting the supplied duration from this one. Does a fieldwise subtraction, with no normalization.

toString() Method

```
public String toString()
```

The natural string representation of the duration.

Any components that are zero are omitted. Note that if the duration is invalid, i.e., it has negative components, those negative components are serialized out here. To check for validity, use the isValid() method; and to normalize most durations to a valid form use the normalize() method.

Overrides

`Object.toString()`

GDurationBuilder Class

public class **GDurationBuilder**

extends `Object`

implements `GDurationSpecification`, `Serializable`

Used to build `GDuration`.

Hierarchy

`Object`

`GDurationBuilder`

All Implemented Interfaces

`GDurationSpecification`, `Serializable`

Constructor Summary

GDurationBuilder()

Constructs an empty `GDurationBuilder` representing zero seconds.

GDurationBuilder(GDurationSpecification gDuration)

Constructs a `GDurationBuilder` from another `GDurationBuilderSpecification`.

GDurationBuilder(int sign, int year, int month, int day, int hour, int minute, int second, BigDecimal fraction)

Constructs a `GDurationBuilder` with the specified sign, year, month, day, hours, minutes, seconds, and optional fractional seconds.

GDurationBuilder(String s)

Constructs a `GDuration` from a lexical representation.

Method Summary

`public`

`void` ***addGDuration***(`GDurationSpecification duration`)

Adds to this duration.

```
public
Object clone()
```

Builds another GDurationBuilder with the same value as this one.

```
public
final int compareToGDuration(GDurationSpecification duration)
```

Comparison to another GDuration.

```
public
final int getDay()
```

Gets the day-of-month component.

```
public
BigDecimal getFraction()
```

Gets the fraction-of-second.

```
public
final int getHour()
```

Gets the hour-of-day component.

```
public
final int getMinute()
```

Gets the minute-of-hour component.

```
public
final int getMonth()
```

Gets the month-of-year component.

```
public
final int getSecond()
```

Gets the second-of-minute component.

```
public
final int getSign()
```

Returns the sign of the duration: +1 is forwards and -1 is backwards in time.

```
public
final int getYear()
```

Gets the year component.

```
public
final isImmutable()
```

boolean All GDuration instances return true.

```
public
boolean isValid()
```

Returns true if all of the individual components of the duration are nonnegative.

```
public
void normalize()
```

Normalize a duration value.

```
public
void setDay(int day)
```

Sets the day component.

```
public
void setFraction(BigDecimal fraction)
```

Sets the fraction-of-second component.


```

public setHour(int hour)
    void          Sets the hour component.
public
    void setMinute(int minute)
        Sets the minute component.
public
    void setMonth(int month)
        Sets the month component.
public
    void setSecond(int second)
        Sets the second component.
public
    final setSign(int sign)
        void          Sets the sign.
public
    void setYear(int year)
        Sets the year component.
public
    void subtractGDuration(GDurationSpecification duration)
        Subtracts from this duration.

public
GDuration toGDuration()
        Builds a GDuration from this GDurationBuilder.

public
String toString()
        The natural string representation of the duration.

```

Methods from class `java.lang.Object`

`equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `wait`, `wait`, `wait`

Methods from interface `com.bea.xml.GDurationSpecification`

`compareToGDuration`, `getDay`, `getFraction`, `getHour`, `getMinute`, `getMonth`, `getSecond`, `getSign`, `getYear`, `isImmutable`, `isValid`

Constructor Detail

GDurationBuilder

```
public GDurationBuilder()
```

Constructs an empty GDurationBuilder representing zero seconds.

GDurationBuilder

```
public GDurationBuilder(GDurationSpecification gDuration)
```

Constructs a GDurationBuilder from another GDurationBuilderSpecification.

GDurationBuilder

```
public GDurationBuilder(int sign,
                        int year,
                        int month,
                        int day,
                        int hour,
                        int minute,
                        int second,
                        BigDecimal fraction)
```

Constructs a GDurationBuilder with the specified sign, year, month, day, hours, minutes, seconds, and optional fractional seconds.

GDurationBuilder

```
public GDurationBuilder(String s)
```

Constructs a GDuration from a lexical representation.

Method Detail

addGDuration(GDurationSpecification) Method

```
public void addGDuration(GDurationSpecification duration)
```

Adds to this duration. Does a fieldwise add, with no normalization.

clone() Method

```
public Object clone()
```

Builds another GDurationBuilder with the same value as this one.

Overrides

```
Object.clone()
```

compareToGDuration(GDurationSpecification) Method

```
public final int compareToGDuration(GDurationSpecification duration)
```

Comparison to another GDuration.

- Returns -1 if this < date. (less-than)
- Returns 0 if this == date. (equal)
- Returns 1 if this > date. (greater-than)
- Returns 2 if this date. (incomparable)

Two instances are incomparable if they have different amounts of information.

getDay() Method

```
public final int getDay()
```

Gets the day-of-month component.

getFraction() Method

```
public BigDecimal getFraction()
```

Gets the fraction-of-second. Range from 0 (inclusive) to 1 (exclusive).

getHour() Method

```
public final int getHour()
```

Gets the hour-of-day component.

getMinute() Method

```
public final int getMinute()
```

Gets the minute-of-hour component.

getMonth() Method

```
public final int getMonth()
```

Gets the month-of-year component.

getSecond() Method

```
public final int getSecond()
```

Gets the second-of-minute component.

getSign() Method

```
public final int getSign()
```

Returns the sign of the duration: +1 is forwards and -1 is backwards in time. This value does not necessarily reflect the true direction of the duration if the duration is not normalized or not normalizable.

getYear() Method

```
public final int getYear()
```

Gets the year component.

isImmutable() Method

```
public final boolean isImmutable()
```

All GDuration instances return true.

isValid() Method

```
public boolean isValid()
```

Returns true if all of the individual components of the duration are nonnegative.

normalize() Method

```
public void normalize()
```

Normalize a duration value. This ensures that months, hours, minutes, seconds, and fractions are positive and within the ranges 0..11, 0..23, 0..59, etc. Negative durations are indicated by a negative sign rather than negative components.

Most duration specifications can be normalized to valid durations with all positive components, but not all of them can.

The only situations which cannot be normalized are where the year/month and the day/hour/minute/second offsets are of opposite sign. Days cannot be carried into months since the length of a Gregorian month is variable depending on when the duration is applied. In these cases, this method normalizes the components so

that "day" is the only negative component.

setDay(int) Method

```
public void setDay(int day)
```

Sets the day component.

setFraction(BigDecimal) Method

```
public void setFraction(BigDecimal fraction)
```

Sets the fraction-of-second component.

setHour(int) Method

```
public void setHour(int hour)
```

Sets the hour component.

setMinute(int) Method

```
public void setMinute(int minute)
```

Sets the minute component.

setMonth(int) Method

```
public void setMonth(int month)
```

Sets the month component.

setSecond(int) Method

```
public void setSecond(int second)
```

Sets the second component.

setSign(int) Method

```
public final void setSign(int sign)
```

Sets the sign.

setYear(int) Method

```
public void setYear(int year)
```

Sets the year component.

subtractGDuration(GDurationSpecification) Method

```
public void subtractGDuration(GDurationSpecification duration)
```

Subtracts from this duration. Does a fieldwise subtraction, with no normalization.

toGDuration() Method

```
public GDuration toGDuration()
```

Builds a GDuration from this GDurationBuilder.

toString() Method

```
public String toString()
```

The natural string representation of the duration.

Any components that are zero are omitted. Note that if the duration is invalid, i.e., it has negative components, those negative components are serialized out here. To check for validity, use the `isValid()` method; and to normalize most durations to a valid form use the `normalize()` method.

Overrides

```
Object.toString()
```


GDurationSpecification Interface

public interface GDurationSpecification

Represents an XML Schema-compatible duration.

Both the immutable GDuration and the mutable GDurationBuilder are GDurationSpecifications. Use this interface where you want to allow callers to pass any implementation of a GDuration.

Related Topics

GDuration

All Known Implementing Classes

GDurationBuilder, GDuration

Method Summary

```
public
    int compareToGDuration(GDurationSpecification duration)
        Comparison to another GDuration.

public
    int getDay()
        Gets the day-of-month component.

public
    BigDecimal getFraction()
        Gets the fraction-of-second.

public
    int getHour()
        Gets the hour-of-day component.

public
    int getMinute()
        Gets the minute-of-hour component.

public
    int getMonth()
        Gets the month-of-year component.

public
    int getSecond()
        Gets the second-of-minute component.

public
    int getSign()
        Returns the sign of the duration: +1 is forwards and -1 is backwards in time.

public
    int getYear()
```


Gets the year component.

```
public
boolean isImmutable()
```

True if this instance is immutable.

```
public
boolean isValid()
```

Returns true if all of the individual components of the duration are nonnegative.

Method Detail

compareToGDuration(GDurationSpecification) Method

```
public int compareToGDuration(GDurationSpecification duration)
```

Comparison to another GDuration.

- Returns -1 if this < date. (less-than)
- Returns 0 if this == date. (equal)
- Returns 1 if this > date. (greater-than)
- Returns 2 if this date. (incomparable)

Two instances are incomparable if they have different amounts of information.

getDay() Method

```
public int getDay()
```

Gets the day-of-month component.

getFraction() Method

```
public BigDecimal getFraction()
```

Gets the fraction-of-second. Range from 0 (inclusive) to 1 (exclusive).

getHour() Method

```
public int getHour()
```

Gets the hour-of-day component.

getMinute() Method

```
public int getMinute()
```

Gets the minute-of-hour component.

getMonth() Method

```
public int getMonth()
```

Gets the month-of-year component.

getSecond() Method

```
public int getSecond()
```

Gets the second-of-minute component.

getSign() Method

```
public int getSign()
```

Returns the sign of the duration: +1 is forwards and -1 is backwards in time.

getYear() Method

```
public int getYear()
```

Gets the year component.

isImmutable() Method

```
public boolean isImmutable()
```

True if this instance is immutable.

isValid() Method

```
public boolean isValid()
```

Returns true if all of the individual components of the duration are nonnegative.

QNameCache Class

public final class QNameCache

extends `Object`

A cache that can be used to pool QName instances. Each thread has one.

Hierarchy

`Object`
`QNameCache`

Constructor Summary

QNameCache(int initialCapacity, float loadFactor)

Creates a QNameCache with the given initialCapacity and loadFactor.

QNameCache(int initialCapacity)

Creates a QNameCache with the given initialCapacity.

Method Summary

`public`

`QName` **getName**(*String uri, String localName*)

Fetches a QName with the given namespace and localname.

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructor Detail

QNameCache

```
public QNameCache(int initialCapacity,  
                  float loadFactor)
```


Creates a QNameCache with the given initialCapacity and loadFactor.

QNameCache

```
public QNameCache(int initialCapacity)
```

Creates a QNameCache with the given initialCapacity.

Method Detail

getName(String, String) Method

```
public QName getName(String uri,  
                    String localName)
```

Fetches a QName with the given namespace and localname. Creates one if one is not found in the cache.

Parameters

uri
the namespace

localName
the localname

Returns

the cached QName

QNameSet Class

public final class QNameSet

extends Object

implements QNameSetSpecification, Serializable

This interface represents a lattice of finite and infinite sets of QNames. The lattice the minimal one that is closed under union, intersection, and inverse, and contains individual QNames as well as entire namespaces. Here is a summary of the two kinds of QNameSets:

- A QNameSet can cover a finite set of namespaces, additionally including a finite set of QNames outside those namespaces, and with the exception of a finite set of QNames excluded from those namespaces:
 - ◆ excludedQNamesInIncludedURIs == the set of excluded QNames from coveredURIs namespaces
 - ◆ excludedURIs == null
 - ◆ includedURIs == the set of covered namespace URIs
 - ◆ includedQNamesInExcludedURIs == set of additional QNames outside coveredURIs namespaces
- A QNameSet can cover all namespaces except for a finite number of excluded ones, additionally including a finite set of QNames within the excluded namespaces, and with the exception of a finite set of QNames outside the excluded namespaces:
 - ◆ excludedQNamesInIncludedURIs == the set of excluded QNames outside uncoveredURIs namespaces
 - ◆ excludedURIs == the set of uncovered namespace URIs
 - ◆ includedURIs == null
 - ◆ includedQNamesInExcludedURIs == set of additional QNames from uncoveredURIs namespaces

Notice that a finite set of QNames is a degenerate case of the first category outlined above:

- A QNameSet can contain a finite number of QNames:
 - ◆ excludedQNamesInIncludedURIs == null
 - ◆ excludedURIs == null
 - ◆ includedURIs == empty set
 - ◆ includedQNamesInExcludedURIs == set of included QNames

Hierarchy

```
Object
  QNameSet
```

All Implemented Interfaces

```
QNameSetSpecification, Serializable
```


Field Summary

public
 static **ALL**
 final QNameSet The QNameSet containing all QNames.

public
 static **EMPTY**
 final QNameSet The empty QNameSet.

public
 static **LOCAL**
 final QNameSet The QNameSet containing all QNames in the local (no-)namespace.

public
 static **NONLOCAL**
 final QNameSet The QNameSet containing all QNames except for those in the local (no-)namespace.

Method Summary

public
 boolean **contains**(*QName name*)
 True if this ModelTransitionSet contains the given qname.

public
 boolean **containsAll**(*QNameSetSpecification set*)
 True if the given set is a subset of this one.

public
 Set **excludedQNamesInIncludedURIs**()
 The set of QNames excluded from the set even though they are within a namespace that is otherwise fully included in the set.

public
 Set **excludedURIs**()
 Namespaces that are fully excluded from the set except for a finite number of individual QName exceptions.

public
 static **forArray**(*QName[] includedQNames*)
 QNameSet Returns a QNameSet based on the given array of included QNames

public
 static **forSets**(*Set excludedURIs, Set includedURIs, Set excludedQNamesInIncludedURIs, Set QNameSet includedQNamesInExcludedURIs*)
 Returns a QNameSet based on the given sets of excluded URIs, included URIs, excluded QNames in included namespaces, and included QNames in excluded namespaces.

public
 static **forSpecification**(*QNameSetSpecification spec*)
 QNameSet Returns a QNameSet with the same contents as the given QNameSetSpecification.

public
 static **forWildcardNamespaceString**(*String wildcard, String targetURI*)

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`QNameSet` Returns a `QNameSet` corresponding to the given wildcard namespace string.

public
Set ***includedQNamesInExcludedURIs()***
The set of `QNames` included in the set even though they are within a namespace that is otherwise fully included in the set.

public
Set ***includedURIs()***
Namespaces that are fully included in set except for a finite number of individual `QName` exceptions.

public
`QNameSet` ***intersect(QNameSetSpecification set)***
Returns a new `QNameSet` that is the intersection of this one and another.

public
`QNameSet` ***inverse()***
Returns a new `QNameSet` that is the inverse of this one.

public
boolean ***isAll()***
True if this `ModelTransitionSet` contains all `QNames`.

public
boolean ***isDisjoint(QNameSetSpecification set)***
True if the given set is disjoint from this one.

public
boolean ***isEmpty()***
True if this `ModelTransitionSet` contains no `QNames`.

public
static ***singleton(QName name)***
`QNameSet` Returns a `QNameSet` containing only the given `QName`.

public
String ***toString()***
Returns a string representation useful for debugging, subject to change.

public
`QNameSet` ***union(QNameSetSpecification set)***
Returns a new `QNameSet` that is the union of this one and another.

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `wait`, `wait`, `wait`

Methods from interface `com.bea.xml.QNameSetSpecification`

`contains`, `containsAll`, `excludedQNamesInIncludedURIs`, `excludedURIs`, `includedQNamesInExcludedURIs`, `includedURIs`, `intersect`, `inverse`, `isAll`, `isDisjoint`, `isEmpty`, `union`

Field Detail

ALL

```
public static final QNameSet ALL
```

The QNameSet containing all QNames.

EMPTY

```
public static final QNameSet EMPTY
```

The empty QNameSet.

LOCAL

```
public static final QNameSet LOCAL
```

The QNameSet containing all QNames in the local (no-)namespace.

NONLOCAL

```
public static final QNameSet NONLOCAL
```

The QNameSet containing all QNames except for those in the local (no-)namespace.

Method Detail

contains(QName) Method

```
public boolean contains(QName name)
```

True if this ModelTransitionSet contains the given qname.

containsAll(QNameSetSpecification) Method

```
public boolean containsAll(QNameSetSpecification set)
```

True if the given set is a subset of this one.

Parameters*set*

the set to test

Returns*true if this contains all QNames contained by the given set*

excludedQNamesInIncludedURIs() Method

```
public Set excludedQNamesInIncludedURIs()
```

The set of QNames excluded from the set even though they are within a namespace that is otherwise fully included in the set.

Returns*the set of excluded QNames from within includedURI namespaces*

excludedURIs() Method

```
public Set excludedURIs()
```

Namespaces that are fully excluded from the set except for a finite number of individual QName exceptions. Returns null if this set is infinite.

Returns*the set of excluded namespace URI strings*

forArray(QName[]) Method

```
public static QNameSet forArray(QName[] includedQNames)
```

Returns a QNameSet based on the given array of included QNames

Parameters*includedQNames*the array of included QNames

forSets(Set, Set, Set, Set) Method

```
public static QNameSet forSets(Set excludedURIs,  
                               Set includedURIs,  
                               Set excludedQNamesInIncludedURIs,
```


Set *includedQNamesInExcludedURIs*)

Returns a QNameSet based on the given sets of excluded URIs, included URIs, excluded QNames in included namespaces, and included QNames in excluded namespaces.

Parameters

excludedURIs

the finite set of namespace URI strings to exclude from the set, or null if this set is infinite

includedURIs

the finite set of namespace URI strings to include in the set, or null if this set is infinite

excludedQNamesInIncludedURIs

the finite set of exceptional QNames to exclude from the included namespaces

includedQNamesInExcludedURIs

the finite set of exceptional QNames to include that are in the excluded namespaces

Returns

the constructed QNameSet

forSpecification(QNameSetSpecification) Method

```
public static QNameSet forSpecification(QNameSetSpecification spec)
```

Returns a QNameSet with the same contents as the given QNameSetSpecification.

Returns

the copied QNameSet

forWildcardNamespaceString(String, String) Method

```
public static QNameSet forWildcardNamespaceString(String wildcard,
                                                    String targetURI)
```

Returns a QNameSet corresponding to the given wildcard namespace string. This is a space-separated list of URIs, plus special tokens as specified in the XML Schema specification (##any, ##other, ##targetNamespace, ##local).

Returns

the constructed QNameSet

includedQNamesInExcludedURIs() Method

```
public Set includedQNamesInExcludedURIs()
```

The set of QNames included in the set even though they are within a namespace that is otherwise fully included in the set.

Returns

the set of included QNames from within excludedURI namespaces

includedURIs() Method

```
public Set includedURIs()
```

Namespaces that are fully included in set except for a finite number of individual QName exceptions. Returns null if this set is infinite.

Returns

the set of included namespace URI strings

intersect(QNameSetSpecification) Method

```
public QNameSet intersect(QNameSetSpecification set)
```

Returns a new QNameSet that is the intersection of this one and another.

Parameters

set
the set to intersect with

Returns

the intersection

inverse() Method

```
public QNameSet inverse()
```

Returns a new QNameSet that is the inverse of this one.

isAll() Method

```
public boolean isAll()
```

True if this ModelTransitionSet contains all QNames.

isDisjoint(QNameSetSpecification) Method

```
public boolean isDisjoint(QNameSetSpecification set)
```

True if the given set is disjoint from this one.

Parameters

set
the set to test

Returns

true if the set is disjoint from this set

isEmpty() Method

```
public boolean isEmpty()
```

True if this ModelTransitionSet contains no QNames.

singleton(QName) Method

```
public static QNameSet singleton(QName name)
```

Returns a QNameSet containing only the given QName.

Returns

the constructed QNameSet

toString() Method

```
public String toString()
```

Returns a string representation useful for debugging, subject to change.

Overrides

`Object.toString()`

union(QNameSetSpecification) Method

```
public QNameSet union(QNameSetSpecification set)
```

Returns a new QNameSet that is the union of this one and another.

Parameters

set

the set to union with

Returns

the union

QNameSetBuilder Class

public class QNameSetBuilder

extends Object

implements QNameSetSpecification, Serializable

Used to build QNameSet.

Hierarchy

Object

QNameSetBuilder

All Implemented Interfaces

QNameSetSpecification, Serializable

Constructor Summary

QNameSetBuilder()

Constructs an empty QNameSetBuilder.

QNameSetBuilder(QNameSetSpecification set)

Constructs a QNameSetBuilder whose initial contents are given by another QNameSetSpecification.

QNameSetBuilder(String str, String targetURI)

Constructs a QNameSetBuilder whose initial contents are given as a list of namespace URIs, using the same format used by wildcards in XSD files.

QNameSetBuilder(Set excludedURIs, Set includedURIs, Set excludedQNamesInIncludedURIs, Set includedQNamesInExcludedURIs)

Constructs a QNameSetBuilder whose initial contents are given by the four sets.

Method Summary

public

void **add**(QName qname)

XMLBeans API Reference

Adds a single QName to this QNameSetBuilder.

```
public  
void addAll(QNameSetSpecification set)
```

Adds the contents of another QNameSet to this QNameSetBuilder.

```
public  
void addNamespace(String uri)
```

Adds an entire namespace URI of QNames to this QNameSetBuilder.

```
public  
void clear()
```

Clears this QNameSetBuilder

```
public  
boolean contains(QName name)
```

True if this ModelTransitionSet contains the given qname.

```
public  
boolean containsAll(QNameSetSpecification set)
```

True if the parameter is a subset of this set.

```
public  
Set excludedQNamesInIncludedURIs()
```

The finite set of QNames that are excluded from the set within namespaces that are otherwise included.

```
public  
Set excludedURIs()
```

The finite set of namespace URIs that are almost completely excluded from the set (that is, each namespace URI that included in the set with with a finite number of QName exceptions).

```
public  
Set includedQNamesInExcludedURIs()
```

The finite set of QNames that are included in the set within namespaces that are otherwise excluded.

```
public  
Set includedURIs()
```

The finite set of namespace URIs that are almost completely included in the set (that is, each namespace URI that included in the set with with a finite number of QName exceptions).

```
public  
QNameSet intersect(QNameSetSpecification set)
```

Returns a new QNameSet that is the intersection of this one and another.

```
public  
QNameSet inverse()
```

Returns a new QNameSet that is the inverse of this one.

```
public  
void invert()
```

Inverts this QNameSetBuilder.

```
public  
boolean isAll()
```

True if this ModelTransitionSet contains all QNames.

```
public
```



```

boolean isDisjoint(QNameSetSpecification set)
    True if the given set is disjoint from this one.

    public
boolean isEmpty()
    True if this ModelTransitionSet contains no QNames.

    public
    void remove(QName qname)
        Removes the given qname from this QNameSetBuilder.

    public
    void removeAll(QNameSetSpecification set)
        Removes all contents of a given QNameSet from this QNameSetBuilder.

    public
    void removeNamespace(String uri)
        Removes an entire namespace URI from this QNameSetBuilder.

    public
    void restrict(QNameSetSpecification set)
        Restricts the contents of this QNameSetBuilder to be a subset of the given QNameSet.

    public
QNameSet toQNameSet()
    Returns a QNameSet equivalent to the current state of this QNameSetBuilder.

    public
String toString()
    Returns a string representation useful for debugging, subject to change.

    public
QNameSet union(QNameSetSpecification set)
    Returns a new QNameSet that is the union of this one and another.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `wait`, `wait`, `wait`

Methods from interface `com.bea.xml.QNameSetSpecification`

`contains`, `containsAll`, `excludedQNamesInIncludedURIs`, `excludedURIs`, `includedQNamesInExcludedURIs`, `includedURIs`, `intersect`, `inverse`, `isAll`, `isDisjoint`, `isEmpty`, `union`

Constructor Detail

QNameSetBuilder

```
public QNameSetBuilder()
```

Constructs an empty QNameSetBuilder.

QNameSetBuilder

```
public QNameSetBuilder(QNameSetSpecification set)
```

Constructs a QNameSetBuilder whose initial contents are given by another QNameSetSpecification.

QNameSetBuilder

```
public QNameSetBuilder(String str,
                        String targetURI)
```

Constructs a QNameSetBuilder whose initial contents are given as a list of namespace URIs, using the same format used by wildcards in XSD files.

QNameSetBuilder

```
public QNameSetBuilder(Set excludedURIs,
                        Set includedURIs,
                        Set excludedQNamesInIncludedURIs,
                        Set includedQNamesInExcludedURIs)
```

Constructs a QNameSetBuilder whose initial contents are given by the four sets. Exactly one of either excludedURIs or includedURIs must be non-null.

Method Detail

add(QName) Method

```
public void add(QName qname)
```

Adds a single QName to this QNameSetBuilder.

addAll(QNameSetSpecification) Method

```
public void addAll(QNameSetSpecification set)
```

Adds the contents of another QNameSet to this QNameSetBuilder.

addNamespace(String) Method

```
public void addNamespace(String uri)
```

Adds an entire namespace URI of QNames to this QNameSetBuilder. The empty string is used to signify the (local) no-namespace.

clear() Method

```
public void clear()
```

Clears this QNameSetBuilder

contains(QName) Method

```
public boolean contains(QName name)
```

True if this ModelTransitionSet contains the given qname.

containsAll(QNameSetSpecification) Method

```
public boolean containsAll(QNameSetSpecification set)
```

True if the parameter is a subset of this set.

excludedQNamesInIncludedURIs() Method

```
public Set excludedQNamesInIncludedURIs()
```

Description copied from QNameSetSpecification.excludedQNamesInIncludedURIs()
The finite set of QNames that are excluded from the set within namespaces that are otherwise included. Should only contain QNames within namespace that are within the set includedURIs() (or any URI, if includedURIs() is null, which means that all URIs are almost completely included).

Never null.

The same set as inverse().includedQNames().

excludedURIs() Method

```
public Set excludedURIs()
```

Description copied from QNameSetSpecification.excludedURIs()
The finite set of namespace URIs that are almost completely excluded from the set (that is, each namespace URI that included in the set with with a finite number of QName exceptions). Null if the set of namespaceURIs that are almost completely included is infinite.

Null (meaning almost all URIs excluded) if includedURIs() is non-null; non-null otherwise.

The same set as inverse().includedURIs().

includedQNamesInExcludedURIs() Method

```
public Set includedQNamesInExcludedURIs()
```

Description copied from QNameSetSpecification.includedQNamesInExcludedURIs()

The finite set of QNames that are included in the set within namespaces that are otherwise excluded. Should only contain QNames within namespace that are within the set excludedURIs() (or any URI, if excludedURIs() is null, which means that all URIs are almost completely excluded).

Never null.

The same as inverse().excludedQNames().

includedURIs() Method

```
public Set includedURIs()
```

Description copied from QNameSetSpecification.includedURIs()

The finite set of namespace URIs that are almost completely included in the set (that is, each namespace URI that included in the set with with a finite number of QName exceptions). Null if the set of namespaceURIs that are almost completely included is infinite.

Null (meaning almost all URIs included) if excludedURIs() is non-null; non-null otherwise.

The same as inverse.excludedURIs().

intersect(QNameSetSpecification) Method

```
public QNameSet intersect(QNameSetSpecification set)
```

Returns a new QNameSet that is the intersection of this one and another.

inverse() Method

```
public QNameSet inverse()
```

Returns a new QNameSet that is the inverse of this one.

invert() Method

```
public void invert()
```

Inverts this QNameSetBuilder.

isAll() Method

```
public boolean isAll()
```

True if this ModelTransitionSet contains all QNames.

isDisjoint(QNameSetSpecification) Method

```
public boolean isDisjoint(QNameSetSpecification set)
```

True if the given set is disjoint from this one.

isEmpty() Method

```
public boolean isEmpty()
```

True if this ModelTransitionSet contains no QNames.

remove(QName) Method

```
public void remove(QName qname)
```

Removes the given qname from this QNameSetBuilder.

removeAll(QNameSetSpecification) Method

```
public void removeAll(QNameSetSpecification set)
```

Removes all contents of a given QNameSet from this QNameSetBuilder.

removeNamespace(String) Method

```
public void removeNamespace(String uri)
```

Removes an entire namespace URI from this QNameSetBuilder.

restrict(QNameSetSpecification) Method

```
public void restrict(QNameSetSpecification set)
```

Restricts the contents of this QNameSetBuilder to be a subset of the given QNameSet. In other words, computes an intersection.

toQNameSet() Method

```
public QNameSet toQNameSet()
```

Returns a QNameSet equivalent to the current state of this QNameSetBuilder.

toString() Method

```
public String toString()
```

Returns a string representation useful for debugging, subject to change.

Overrides

```
Object.toString()
```

union(QNameSetSpecification) Method

```
public QNameSet union(QNameSetSpecification set)
```

Returns a new QNameSet that is the union of this one and another.

QNameSetSpecification Interface

public interface QNameSetSpecification

Represents a lattice of finite and infinite sets of QNames.

Related Topics

QNameSet

All Known Implementing Classes

QNameSetBuilder, QNameSet

Method Summary

```

public
boolean contains(QName name)
    True if the set contains the given QName.

public
boolean containsAll(QNameSetSpecification set)
    True if the parameter is a subset of this set.

public
Set excludedQNamesInIncludedURIs()
    The finite set of QNames that are excluded from the set within namespaces that are
    otherwise included.

public
Set excludedURIs()
    The finite set of namespace URIs that are almost completely excluded from the set (that
    is, each namespace URI that included in the set with with a finite number of QName
    exceptions).

public
Set includedQNamesInExcludedURIs()
    The finite set of QNames that are included in the set within namespaces that are
    otherwise excluded.

public
Set includedURIs()
    The finite set of namespace URIs that are almost completely included in the set (that is,
    each namespace URI that included in the set with with a finite number of QName
    exceptions).

public
QNameSet intersect(QNameSetSpecification set)
    Returns the intersection with another QNameSet.

public
QNameSet inverse()

```


Return the inverse of this QNameSet.

```

public
boolean isAll()
    True if the set is the set of all QNames.

public
boolean isDisjoint(QNameSetSpecification set)
    True if is disjoint from the specified set.

public
boolean isEmpty()
    True if the set is empty.

public
QNameSet union(QNameSetSpecification set)
    Returns the union with another QNameSet.

```

Method Detail

contains(QName) Method

```
public boolean contains(QName name)
```

True if the set contains the given QName. Roughly equivalent to: (includedURIs() == null ? excludedURIs().contains(namespace) : includedURIs().contains(namespace)) ? !excludedQNamesInIncludedURIs().contains(name) : includedQNamesInExcludedURIs().contains(name)

containsAll(QNameSetSpecification) Method

```
public boolean containsAll(QNameSetSpecification set)
```

True if the parameter is a subset of this set.

excludedQNamesInIncludedURIs() Method

```
public Set excludedQNamesInIncludedURIs()
```

The finite set of QNames that are excluded from the set within namespaces that are otherwise included. Should only contain QNames within namespace that are within the set includedURIs() (or any URI, if includedURIs() is null, which means that all URIs are almost completely included).

Never null.

The same set as inverse().includedQNames().

excludedURIs() Method

```
public Set excludedURIs()
```


The finite set of namespace URIs that are almost completely excluded from the set (that is, each namespace URI that included in the set with with a finite number of QName exceptions). Null if the set of namespaceURIs that are almost completely included is infinite.

Null (meaning almost all URIs excluded) if includedURIs() is non-null; non-null otherwise.

The same set as inverse().includedURIs().

includedQNamesInExcludedURIs() Method

```
public Set includedQNamesInExcludedURIs()
```

The finite set of QNames that are included in the set within namespaces that are otherwise excluded. Should only contain QNames within namespace that are within the set excludedURIs() (or any URI, if excludedURIs() is null, which means that all URIs are almost completely excluded).

Never null.

The same as inverse().excludedQNames().

includedURIs() Method

```
public Set includedURIs()
```

The finite set of namespace URIs that are almost completely included in the set (that is, each namespace URI that included in the set with with a finite number of QName exceptions). Null if the set of namespaceURIs that are almost completely included is infinite.

Null (meaning almost all URIs included) if excludedURIs() is non-null; non-null otherwise.

The same as inverse.excludedURIs().

intersect(QNameSetSpecification) Method

```
public QNameSet intersect(QNameSetSpecification set)
```

Returns the intersection with another QNameSet.

inverse() Method

```
public QNameSet inverse()
```

Return the inverse of this QNameSet. That is the QNameSet which contains all the QNames not contained in this set. In other words for which set.contains(name) != set.inverse().contains(name) for all names.

isAll() Method

```
public boolean isAll()
```

True if the set is the set of all QNames.

isDisjoint(QNameSetSpecification) Method

```
public boolean isDisjoint(QNameSetSpecification set)
```

True if is disjoint from the specified set.

isEmpty() Method

```
public boolean isEmpty()
```

True if the set is empty.

union(QNameSetSpecification) Method

```
public QNameSet union(QNameSetSpecification set)
```

Returns the union with another QNameSet.

SchemaAttributeGroup Interface

public interface SchemaAttributeGroup

extends SchemaComponent

Represents an attribute group.

An attribute group is a syntactic construct, not a part of the logical model. For example, types declared within an attribute group become local to the type that uses the group – they're not local to the attribute group itself. Therefore in the logical model of a schema type system, an attribute group doesn't represent anything. Its contents are merged into the logical model at parse time.

Related Topics

`SchemaTypeLoader.findAttributeGroup(QName)`

All Superinterfaces

SchemaComponent

Field Summary

Fields from interface com.bea.xml.SchemaComponent

ATTRIBUTE, ATTRIBUTE_GROUP, ELEMENT, IDENTITY_CONSTRAINT, MODEL_GROUP, NOTATION, TYPE

Method Summary

```
public
    int getComponentType()
        Returns
        SchemaComponent.ATTRIBUTE_GROUP.

public
    QName getName()
        The name of the model group.
```

Methods from interface com.bea.xml.SchemaComponent

`getComponentRef`, `getTypeSystem`

Method Detail

getComponentType() Method

```
public int getComponentType()
```

Returns SchemaComponent.ATTRIBUTE_GROUP.

getName() Method

```
public QName getName()
```

The name of the model group.

SchemaAttributeModel Interface

public interface SchemaAttributeModel

Represents the attribute structure allowed on a complex type.

Related Topics

`SchemaType.getAttributeModel()`

Field

Summary

```

    public
    static LAX
    final int
        Lax wildcard processing.

    public
    static NONE
    final int
        See SchemaAttributeModel.getWildcardProcess()

    public
    static SKIP
    final int
        Skip wildcard processing.

    public
    static STRICT
    final int
        Strict wildcard processing.

```

Method

Summary

```

    public
    SchemaLocalAttribute getAttribute(QName name)
        Returns the attribute with the given name.

    public
    SchemaLocalAttribute[] getAttributes()
        Returns an array containing all the attributes in the model.

    public int
        getWildcardProcess()
        Returns the processing code (SchemaAttributeModel.STRICT,
        SchemaAttributeModel.LAX,
        SchemaAttributeModel.SKIP).

    public QNameSet
        getWildcardSet()
        QNameSet representing the attribute wildcard specification.

```


Field Detail

LAX

```
public static final int LAX
```

Lax wildcard processing. See `SchemaAttributeModel.getWildcardProcess()`

NONE

```
public static final int NONE
```

See `SchemaAttributeModel.getWildcardProcess()`

SKIP

```
public static final int SKIP
```

Skip wildcard processing. See `SchemaAttributeModel.getWildcardProcess()`

STRICT

```
public static final int STRICT
```

Strict wildcard processing. See `SchemaAttributeModel.getWildcardProcess()`

Method Detail

getAttribute(QName) Method

```
public SchemaLocalAttribute getAttribute(QName name)
```

Returns the attribute with the given name.

getAttributes() Method

```
public SchemaLocalAttribute[] getAttributes()
```

Returns an array containing all the attributes in the model.

getWildcardProcess() Method

```
public int getWildcardProcess()
```

Returns the processing code (`SchemaAttributeModel.STRICT`, `SchemaAttributeModel.LAX`, `SchemaAttributeModel.SKIP`). Returns 0 (`SchemaAttributeModel.NONE`) if no wildcard specified.

getWildcardSet() Method

```
public QNameSet getWildcardSet()
```

`QNameSet` representing the attribute wildcard specification.

SchemaComponent Interface

public interface SchemaComponent

Represents a global Schema Component. That is, a type, element, attribute, model group, attribute group, or identity constraint.

Note that not all types, elements, and attributes are global; local types, element, and attributes do not appear in the global lookup table. Also note that other information items such as particles, facets, and so on are not globally indexed, so are not SchemaComponents.

Related Topics

SchemaType
 SchemaGlobalElement
 SchemaGlobalAttribute
 SchemaAttributeGroup
 SchemaModelGroup
 SchemaIdentityConstraint

All Known Subinterfaces

SchemaAttributeGroup, SchemaGlobalAttribute, SchemaGlobalElement,
 SchemaIdentityConstraint, SchemaModelGroup, SchemaType

Field Summary

```

    public
    static ATTRIBUTE
    final int           An attribute definition.

    public
    static ATTRIBUTE_GROUP
    final int           An attribute group definition.

    public
    static ELEMENT
    final int           An element definition.

    public
    static IDENTITY_CONSTRAINT
    final int           An identity constraint definition.

    public
    static MODEL_GROUP
    final int           A model group definition.

    public
    static NOTATION
    final int           A notation definition.
  
```



```

    public TYPE
    static
    final int

```

A type definition.

Method Summary

```

    public
    SchemaComponent.Ref getComponentRef()
        Used for on-demand loading of schema components.

    public int
        getComponentType()
        Returns the type code for the schema object, either
        SchemaComponent.TYPE, SchemaComponent.ELEMENT,
        SchemaComponent.ATTRIBUTE,
        SchemaComponent.ATTRIBUTE_GROUP,
        SchemaComponent.MODEL_GROUP,
        SchemaComponent.IDENTITY_CONSTRAINT, or
        SchemaComponent.NOTATION.

    public QName
        getName()
        The name of the schema component

    public
    SchemaTypeSystem getTypeSystem()
        Returns the typesystem within which this component definition resides

```

Field Detail

ATTRIBUTE

```
public static final int ATTRIBUTE
```

An attribute definition. See `SchemaComponent.getComponentType()`

ATTRIBUTE_GROUP

```
public static final int ATTRIBUTE_GROUP
```

An attribute group definition. See `SchemaComponent.getComponentType()`

ELEMENT

```
public static final int ELEMENT
```

An element definition. See `SchemaComponent.getComponentType()`

IDENTITY_CONSTRAINT

```
public static final int IDENTITY_CONSTRAINT
```

An identity constraint definition. See `SchemaComponent.getComponentType()`

MODEL_GROUP

```
public static final int MODEL_GROUP
```

A model group definition. See `SchemaComponent.getComponentType()`

NOTATION

```
public static final int NOTATION
```

A notation definition. See `SchemaComponent.getComponentType()`

TYPE

```
public static final int TYPE
```

A type definition. See `SchemaComponent.getComponentType()`

Method Detail

getComponentRef() Method

```
public SchemaComponent.Ref getComponentRef()
```

Used for on-demand loading of schema components.

getComponentType() Method

```
public int getComponentType()
```

Returns the type code for the schema object, either `SchemaComponent.TYPE`, `SchemaComponent.ELEMENT`, `SchemaComponent.ATTRIBUTE`, `SchemaComponent.ATTRIBUTE_GROUP`, `SchemaComponent.MODEL_GROUP`, `SchemaComponent.IDENTITY_CONSTRAINT`, or `SchemaComponent.NOTATION`.

getName() Method

```
public QName getName()
```

The name of the schema component

getTypeSystem() Method

```
public SchemaTypeSystem getTypeSystem()
```

Returns the typesystem within which this component definition resides

SchemaField Interface

public interface SchemaField

Represents an element or an attribute declaration.

Related Topics

SchemaType.getContainerField()
 SchemaLocalElement
 SchemaLocalAttribute

All Known Subinterfaces

SchemaGlobalAttribute, SchemaGlobalElement, SchemaLocalAttribute,
 SchemaLocalElement

Method Summary

```

    public String
        getDefaultText()
            The default value as plain text.

    public
    XmlAnySimpleType getDefaultValue()
        The default value as a strongly-typed value.

    public
    BigInteger getMaxOccurs()
        Returns the maxOccurs value for this particle, or null if it is
        unbounded.

    public
    BigInteger getMinOccurs()
        Returns the minOccurs value for this particle.

    public QName
        getName()
            Returns the form-unqualified-or-qualified name.

    public
    SchemaType getType()
        Returns the type of this use.

    public boolean
        isAttribute()
            True if this use is an attribute

    public boolean
        isDefault()
            True if a default is supplied.
  
```



```
public boolean isFixed()
    True if the value is fixed.

public boolean
    isNillable()
    True if nillable; always false for attributes.
```

Method Detail

getDefaultText() Method

```
public String getDefaultText()
```

The default value as plain text. See `SchemaField.isDefault()` and `SchemaField.isFixed()`.

getDefaultValue() Method

```
public XmlAnySimpleType getDefaultValue()
```

The default value as a strongly-typed value. See `SchemaField.isDefault()` and `SchemaField.isFixed()`.

getMaxOccurs() Method

```
public BigInteger getMaxOccurs()
```

Returns the maxOccurs value for this particle, or null if it is unbounded. If it is not specified explicitly, this defaults to `BigInteger.ONE`.

getMinOccurs() Method

```
public BigInteger getMinOccurs()
```

Returns the minOccurs value for this particle. If it is not specified explicitly, this defaults to `BigInteger.ONE`.

getName() Method

```
public QName getName()
```

Returns the form-unqualified-or-qualified name.

getType() Method

```
public SchemaType getType()
```

Returns the type of this use.

isAttribute() Method

```
public boolean isAttribute()
```

True if this use is an attribute

isDefault() Method

```
public boolean isDefault()
```

True if a default is supplied. If `SchemaField.isFixed()`, then `isDefault` is always true.

isFixed() Method

```
public boolean isFixed()
```

True if the value is fixed.

isNillable() Method

```
public boolean isNillable()
```

True if nillable; always false for attributes.

SchemaGlobalAttribute Interface

public interface SchemaGlobalAttribute

extends SchemaComponent, SchemaLocalAttribute

Represents a global attribute definition

Related Topics

SchemaTypeLoader.findAttribute(QName)

All Superinterfaces

SchemaComponent, SchemaField, SchemaLocalAttribute

Field Summary

Fields from interface com.bea.xml.SchemaComponent

ATTRIBUTE, ATTRIBUTE_GROUP, ELEMENT, IDENTITY_CONSTRAINT, MODEL_GROUP, NOTATION, TYPE

Fields from interface com.bea.xml.SchemaLocalAttribute

OPTIONAL, PROHIBITED, REQUIRED

Method Summary

```
public
SchemaGlobalAttribute.Ref getRef()
    Retrurns a SchemaGlobalElement.Ref pointing to this element
    itself.

public String
    getSourceName()
    The name of the source .xsd file within which this attribute was
    defined
```

Methods from interface com.bea.xml.SchemaComponent

getComponentRef, getComponentType, getName, getTypeSystem

Methods from interface com.bea.xml.SchemaField

`getDefaultText, getDefaultValue, getMaxOccurs, getMinOccurs, getName, getType, isAttribute, isDefault, isFixed, isNillable`

Methods from interface `com.bea.xml.SchemaLocalAttribute`

`getUse`

Method Detail

getRef() Method

```
public SchemaGlobalAttribute.Ref getRef()
```

Retruns a `SchemaGlobalElement.Ref` pointing to this element itself.

getSourceName() Method

```
public String getSourceName()
```

The name of the source `.xsd` file within which this attribute was defined

SchemaGlobalElement Interface

public interface SchemaGlobalElement

extends SchemaComponent, SchemaLocalElement

Represents a global element definition.

Related Topics

SchemaTypeLoader.findElement(QName)

All Superinterfaces

SchemaComponent, SchemaField, SchemaLocalElement

Field Summary

Fields from interface com.bea.xml.SchemaComponent

ATTRIBUTE, ATTRIBUTE_GROUP, ELEMENT, IDENTITY_CONSTRAINT, MODEL_GROUP, NOTATION, TYPE

Method Summary

```

    public boolean
        finalExtension()
            True if using this element as the head of a substitution group for a
            substitution via type extension is prohibited.

    public boolean
        finalRestriction()
            True if using this element as the head of a substitution group for a
            substitution via type restriction is prohibited.

    public
    SchemaGlobalElement.Ref getRef()
        Retrurns a SchemaGlobalElement.Ref pointing to this element
        itself.

    public String
        getSourceName()
            The name of the source .xsd file within which this attribute was
            defined

    public
    SchemaGlobalElement substitutionGroup()

```


The element that is the head of this element's substitution group, or null if this element is not a member of a substitution group.

```
public QName[]
```

```
    substitutionGroupMembers()
```

Set of QNames for elements that are the members of the substitution group for which this element is the head, not including this element.

Methods from interface `com.bea.xml.SchemaComponent`

```
getComponentRef, getComponentType, getName, getTypeSystem
```

Methods from interface `com.bea.xml.SchemaField`

```
getDefaultText, getDefaultValue, getMaxOccurs, getMinOccurs, getName,
getType, isAttribute, isDefault, isFixed, isNillable
```

Methods from interface `com.bea.xml.SchemaLocalElement`

```
blockExtension, blockRestriction, blockSubstitution,
getIdentityConstraints, isAbstract
```

Method Detail

finalExtension() Method

```
public boolean finalExtension()
```

True if using this element as the head of a substitution group for a substitution via type extension is prohibited. If both `finalExtension` and `finalRestriction` are true, this element cannot be head of a substitution group. Sensible only for global elements.

finalRestriction() Method

```
public boolean finalRestriction()
```

True if using this element as the head of a substitution group for a substitution via type restriction is prohibited. If both `finalExtension` and `finalRestriction` are true, this element cannot be head of a substitution group. Sensible only for global elements.

getRef() Method

```
public SchemaGlobalElement.Ref getRef()
```

Retruns a `SchemaGlobalElement.Ref` pointing to this element itself.

getSourceName() Method

```
public String getSourceName()
```

The name of the source .xsd file within which this attribute was defined

substitutionGroup() Method

```
public SchemaGlobalElement substitutionGroup()
```

The element that is the head of this element's substitution group, or `null` if this element is not a member of a substitution group.

substitutionGroupMembers() Method

```
public QName[] substitutionGroupMembers()
```

Set of QNames for elements that are the members of the substitution group for which this element is the head, not including this element.

SchemaIdentityConstraint Interface

public interface SchemaIdentityConstraint

extends SchemaComponent

Represents an identity constraint definition.

All Superinterfaces

SchemaComponent

Field Summary

```

    public
    static CC_KEY
    final int
           A xs:key constraint.

    public
    static CC_KEYREF
    final int
           A xs:keyRef constraint.

    public
    static CC_UNIQUE
    final int
           A xs:unique constraint.
```

Fields from interface com.bea.xml.SchemaComponent

ATTRIBUTE, ATTRIBUTE_GROUP, ELEMENT, IDENTITY_CONSTRAINT, MODEL_GROUP, NOTATION, TYPE

Method Summary

```

    public int
           getConstraintCategory()
           Return the constraint category.

    public Object
           getFieldPath(int index)
           Return a compiled xpath object for the field.

    public String[]
           getFields()
           Return (a copy of) the xpaths for all the fields.

    public Map
           getNSMap()
```


Return a read-only copy of the namespace map.

```

    public
SchemaIdentityConstraint getReferencedKey()
    Returns the key that a key ref refers to.

    public String
getSelector()
    Return the selector xpath as a string.

    public Object
getSelectorPath()
    Return a compiled xpath object for the
    selector.

```

Methods from interface `com.bea.xml.SchemaComponent`

`getComponentRef`, `getComponentType`, `getName`, `getTypeSystem`

Field Detail

CC_KEY

```
public static final int CC_KEY
```

A xs:key constraint. See `SchemaIdentityConstraint.getConstraintCategory()`.

CC_KEYREF

```
public static final int CC_KEYREF
```

A xs:keyRef constraint. See `SchemaIdentityConstraint.getConstraintCategory()`.

CC_UNIQUE

```
public static final int CC_UNIQUE
```

A xs:unique constraint. See `SchemaIdentityConstraint.getConstraintCategory()`.

Method Detail

`getConstraintCategory()` Method

```
public int getConstraintCategory()
```


Return the constraint category. Either `SchemaIdentityConstraint.CC_KEY`, `SchemaIdentityConstraint.CC_KEYREF`, or `SchemaIdentityConstraint.CC_UNIQUE`.

getFieldPath(int) Method

```
public Object getFieldPath(int index)
```

Return a compiled xpath object for the field.

getFields() Method

```
public String[] getFields()
```

Return (a copy of) the xpaths for all the fields.

getNSMap() Method

```
public Map getNSMap()
```

Return a read-only copy of the namespace map. This is the set of prefix to URI mappings that were in scope in the schema at the point at which this constraint was declared

getReferencedKey() Method

```
public SchemaIdentityConstraint getReferencedKey()
```

Returns the key that a key ref refers to. Only valid for keyrefs.

getSelector() Method

```
public String getSelector()
```

Return the selector xpath as a string.

getSelectorPath() Method

```
public Object getSelectorPath()
```

Return a compiled xpath object for the selector.

SchemaLocalAttribute Interface

public interface SchemaLocalAttribute

extends SchemaField

Represents a local or global attribute definition.

All Superinterfaces

SchemaField

All Known Subinterfaces

SchemaGlobalAttribute

Field

Summary

```

    public
    static OPTIONAL
    final int
        An optional attribute.

    public
    static PROHIBITED
    final int
        A prohibited attribute.

    public
    static REQUIRED
    final int
        A required attribute.

```

Method

Summary

```

    public
    int getUse()
        Returns SchemaLocalAttribute.PROHIBITED,
        SchemaLocalAttribute.OPTIONAL, or SchemaLocalAttribute.REQUIRED.

```

Methods from interface com.bea.xml.SchemaField

getDefaultText, getDefaultValue, getMaxOccurs, getMinOccurs, getName, getType, isAttribute, isDefault, isFixed, isNillable

Field Detail

OPTIONAL

```
public static final int OPTIONAL
```

An optional attribute. See `SchemaLocalAttribute.getUse()`.

PROHIBITED

```
public static final int PROHIBITED
```

A prohibited attribute. See `SchemaLocalAttribute.getUse()`.

REQUIRED

```
public static final int REQUIRED
```

A required attribute. See `SchemaLocalAttribute.getUse()`.

Method Detail

getUse() Method

```
public int getUse()
```

Returns `SchemaLocalAttribute.PROHIBITED`, `SchemaLocalAttribute.OPTIONAL`, or `SchemaLocalAttribute.REQUIRED`. (Actually, never returns `PROHIBITED` because the schema specifaion states that a prohibited attribute is equivalent to no attribute at all, so a prohibited attribute will never be present in the compiled model.)

SchemaLocalElement Interface

public interface SchemaLocalElement

extends SchemaField

Represents a local or global element definition.

All Superinterfaces

SchemaField

All Known Subinterfaces

SchemaGlobalElement

Method Summary

```

    public boolean
        blockExtension()
            True if extension is blocked.

    public boolean
        blockRestriction()
            True if restriction is blocked.

    public boolean
        blockSubstitution()
            True if element substitution is blocked.

    public
SchemaIdentityConstraint[] getIdentityConstraints()
            Returns all the Key, KeyRef, and Unique constraints on this
            element.

    public boolean
        isAbstract()
            True if this element is prohibited in content.

```

Methods from interface com.bea.xml.SchemaField

getDefaultText, getDefaultValue, getMaxOccurs, getMinOccurs, getName, getType, isAttribute, isDefault, isFixed, isNillable

Method Detail

blockExtension() Method

```
public boolean blockExtension()
```

True if extension is blocked.

blockRestriction() Method

```
public boolean blockRestriction()
```

True if restriction is blocked.

blockSubstitution() Method

```
public boolean blockSubstitution()
```

True if element substitution is blocked.

getIdentityConstraints() Method

```
public SchemaIdentityConstraint[] getIdentityConstraints()
```

Returns all the Key, KeyRef, and Unique constraints on this element.

isAbstract() Method

```
public boolean isAbstract()
```

True if this element is prohibited in content. Only sensible if this is the head of a substitution group; then only substitution group members can appear.

Although local elements cannot be abstract, if an element use is a ref to a global element, then the flag from the global element is copied in to the local element where the use occurs.

SchemaModelGroup Interface

public interface SchemaModelGroup

extends SchemaComponent

Represents a model group.

A model group is a syntactic construct, not a part of the logical model. For example, types declared within a model group become local to the type that uses the group – they're not local to the model group itself. Therefore in the logical model of a schema type system, a model group doesn't represent anything. Its contents are merged into the logical model at parse time.

All Superinterfaces

SchemaComponent

Field Summary

Fields from interface com.bea.xml.SchemaComponent

ATTRIBUTE, ATTRIBUTE_GROUP, ELEMENT, IDENTITY_CONSTRAINT, MODEL_GROUP, NOTATION, TYPE

Method Summary

```
public
    int getComponentType()
        Returns
        SchemaComponent.GROUP.

public
    QName getName()
        The name of the model group.
```

Methods from interface com.bea.xml.SchemaComponent

getComponentRef, getTypeSystem

Method Detail

getComponentType() Method

```
public int getComponentType()
```

Returns SchemaComponent.GROUP.

getName() Method

```
public QName getName()
```

The name of the model group.

SchemaParticle Interface

public interface SchemaParticle

Represents a Schema particle definition.

The content model of a complex type is a tree of particles. Each particle is either an `SchemaParticle.ALL`, `SchemaParticle.CHOICE`, `SchemaParticle.SEQUENCE`, `SchemaParticle.ELEMENT`, or `SchemaParticle.WILDCARD`. All, choice and sequence particles are groups that can have child particles; elements and wildcards are always leaves of the particle tree.

The tree of particles available on a schema type is minimized, that is, it already has removed "pointless" particles such as empty sequences, nonrepeating sequences with only one item, and so on. (Pointless particles are defined precisely in the XML Schema specification.)

Related Topics

`SchemaType.getContentModel()`

Field Summary

```

    public
    static ALL
    final int
                An xs:all group.

    public
    static CHOICE
    final int
                A xs:choice group.

    public
    static ELEMENT
    final int
                An xs:element particle.

    public
    static LAX
    final int
                Lax wildcard processing.

    public
    static SEQUENCE
    final int
                A xs:sequence group.

    public
    static SKIP
    final int
                Skip wildcard processing.

    public
    static STRICT
    final int
                Strict wildcard processing.

    public
    static WILDCARD
    final int

```


An xs:any particle, also known as an element wildcard.

Method Summary

```

public QNameSet
    acceptedStartNames()
        Returns the QNameSet of element names that can be
        accepted at the beginning of this particle.

public boolean
    canStartWithElement(QName name)
        True if this particle can start with the given element (taking
        into account the structure of all child particles of course).

public int
    countOfParticleChild()
        The number of children.

public String
    getDefaultText()
        For elements only: returns the default (or fixed) text value

public
XmlAnySimpleType getDefaultValue()
        For elements only: returns the default (or fixed)
        strongly-typed value

public int
    getIntMaxOccurs()
        Returns the maxOccurs value, pegged to a 32-bit int for
        convenience of a validating state machine that doesn't
        count higher than MAX_INT anyway.

public int
    getIntMinOccurs()
        Returns the minOccurs value, pegged to a 32-bit int for
        convenience of a validating state machine that doesn't
        count higher than MAX_INT anyway.

public
BigInteger getMaxOccurs()
        Returns the maxOccurs value for this particle, or null if it is
        unbounded.

public
BigInteger getMinOccurs()
        Returns the minOccurs value for this particle.

public QName
    getName()
        For elements only: the QName for the element use.

public
SchemaParticle getParticleChild(int i)
        Another way to access the particle children.

public
SchemaParticle[] getParticleChildren()

```


XMLBeans API Reference

Applies to sequence, choice, and all particles only: returns an array of all the particle children in order.

```
public int
    getParticleType()
        Returns the particle type (SchemaParticle.ALL,
        SchemaParticle.CHOICE,
        SchemaParticle.SEQUENCE,
        SchemaParticle.ELEMENT, or
        SchemaParticle.WILDCARD).

    public
    SchemaType getType()
        For elements only: returns the type of the element.

    public int
    getWildcardProcess()
        For wildcards, returns the processing code
        (SchemaParticle.STRICT,
        SchemaParticle.LAX, SchemaParticle.SKIP).

    public QNameSet
    getWildcardSet()
        For wildcards, returns a QNameSet representing the
        wildcard.

    public boolean
    isDefault()
        For elements only: True if has default.

    public boolean
    isFixed()
        For elements only: true if is fixed value.

    public boolean
    isNillable()
        For elements only: true if nillable.

    public boolean
    isSingleton()
        One if minOccurs == maxOccurs == 1.

    public boolean
    isSkippable()
        True if this particle can be skipped (taking into account
        both the minOccurs as well as the structure of all the child
        particles)
```

Field Detail

ALL

```
public static final int ALL
```

An xs:all group. See `SchemaParticle.getParticleType()`.

CHOICE

```
public static final int CHOICE
```

An xs:choice group. See `SchemaParticle.getParticleType()`.

ELEMENT

```
public static final int ELEMENT
```

An xs:element particle. This code means the particle can be coerced to `SchemaLocalElement`. See `SchemaParticle.getParticleType()`.

LAX

```
public static final int LAX
```

Lax wildcard processing. See `SchemaParticle.getWildcardProcess()`

SEQUENCE

```
public static final int SEQUENCE
```

A xs:sequence group. See `SchemaParticle.getParticleType()`.

SKIP

```
public static final int SKIP
```

Skip wildcard processing. See `SchemaParticle.getWildcardProcess()`

STRICT

```
public static final int STRICT
```

Strict wildcard processing. See `SchemaParticle.getWildcardProcess()`

WILDCARD

```
public static final int WILDCARD
```

An xs:any particle, also known as an element wildcard. See `SchemaParticle.getParticleType()`.

Method Detail

acceptedStartNames() Method

```
public QNameSet acceptedStartNames()
```

Returns the QNameSet of element names that can be accepted at the beginning of this particle.

canStartWithElement(QName) Method

```
public boolean canStartWithElement(QName name)
```

True if this particle can start with the given element (taking into account the structure of all child particles of course).

countOfParticleChild() Method

```
public int countOfParticleChild()
```

The number of children.

getDefaultText() Method

```
public String getDefaultText()
```

For elements only: returns the default (or fixed) text value

getDefaultValue() Method

```
public XmlAnySimpleType getDefaultValue()
```

For elements only: returns the default (or fixed) strongly-typed value

getIntMaxOccurs() Method

```
public int getIntMaxOccurs()
```

Returns the maxOccurs value, pegged to a 32-bit int for convenience of a validating state machine that doesn't count higher than MAX_INT anyway. Unbounded is given as MAX_INT.

getIntMinOccurs() Method

```
public int getIntMinOccurs()
```

Returns the minOccurs value, pegged to a 32-bit int for convenience of a validating state machine that doesn't count higher than MAX_INT anyway.

getMaxOccurs() Method

```
public BigInteger getMaxOccurs()
```

Returns the maxOccurs value for this particle, or null if it is unbounded. If it's not specified explicitly, this returns BigInteger.ONE.

getMinOccurs() Method

```
public BigInteger getMinOccurs()
```

Returns the minOccurs value for this particle. If it's not specified explicitly, this returns BigInteger.ONE.

getName() Method

```
public QName getName()
```

For elements only: the QName for the element use. May be unqualified version of referenced element's name.

getParticleChild(int) Method

```
public SchemaParticle getParticleChild(int i)
```

Another way to access the particle children.

getParticleChildren() Method

```
public SchemaParticle[] getParticleChildren()
```

Applies to sequence, choice, and all particles only: returns an array of all the particle children in order.

getParticleType() Method

```
public int getParticleType()
```

Returns the particle type (SchemaParticle.ALL, SchemaParticle.CHOICE, SchemaParticle.SEQUENCE, SchemaParticle.ELEMENT, or SchemaParticle.WILDCARD).

getType() Method

```
public SchemaType getType()
```

For elements only: returns the type of the element.

getWildcardProcess() Method

```
public int getWildcardProcess()
```

For wildcards, returns the processing code (`SchemaParticle.STRICT`, `SchemaParticle.LAX`, `SchemaParticle.SKIP`).

getWildcardSet() Method

```
public QNameSet getWildcardSet()
```

For wildcards, returns a `QNameSet` representing the wildcard.

isDefault() Method

```
public boolean isDefault()
```

For elements only: True if has default. If `isFixed`, then `isDefault` is always true.

isFixed() Method

```
public boolean isFixed()
```

For elements only: true if is fixed value.

isNillable() Method

```
public boolean isNillable()
```

For elements only: true if nillable.

isSingleton() Method

```
public boolean isSingleton()
```

One if `minOccurs == maxOccurs == 1`.

isSkippable() Method

```
public boolean isSkippable()
```

True if this particle can be skipped (taking into account both the minOccurs as well as the structure of all the child particles)

SchemaProperty Interface

public interface SchemaProperty

Represents a summary of similar SchemaFields in a complex type.

In a schema type, every element with the same name must have the same type. Therefore, all together, elements with the same name form a coherent collection of similar elements. Similarly, attributes can only be defined once, so each attribute obviously is a coherent group on its own.

A SchemaProperty represents a summary of the the elements with a given name or the attribute with a given name. It represents the summary cardinality of the fields, the summary default and fixed values, and so on. When inferring information about an element or attribute, it is typically easier to consult then SchemaProperty than to hunt for the exact SchemaField in the particle tree or attribute model.

Related Topics

```
SchemaType.getProperties()
SchemaType.getAttributeProperties()
SchemaType.getElementProperties()
SchemaType.getAttributeProperty(QName)
SchemaType.getElementProperty(QName)
```

Field Summary

```
public
static CONSISTENTLY
final int          Applies to all elements for this property.

public
static JAVA_BIG_DECIMAL
final int          A BigDecimal.

public
static JAVA_BIG_INTEGER
final int          A BigInteger.

public
static JAVA_BOOLEAN
final int          A Java boolean.

public
static JAVA_BYTE
final int          A Java byte.

public
static JAVA_BYTE_ARRAY
final int          A byte[].

public
static
```



```

final int JAVA_CALENDAR
        A Calendar.

    public
    static
final int JAVA_DATE
        A Date.

    public
    static
final int JAVA_DOUBLE
        A Java double.

    public
    static
final int JAVA_ENUM
        A generated StringEnumAbstractBase subclass.

    public
    static
final int JAVA_FIRST_PRIMITIVE
        Java primitive type codes (for non-nullable Java types) are between
        JAVA_FIRST_PRIMITIVE and JAVA_LAST_PRIMITIVE, inclusive.

    public
    static
final int JAVA_FLOAT
        A Java float.

    public
    static
final int JAVA_GDATE
        A GDate.

    public
    static
final int JAVA_GDURATION
        A GDuration.

    public
    static
final int JAVA_INT
        A Java int.

    public
    static
final int JAVA_LAST_PRIMITIVE
        Java primitive type codes (for non-nullable Java types) are between
        JAVA_FIRST_PRIMITIVE and JAVA_LAST_PRIMITIVE, inclusive.

    public
    static
final int JAVA_LIST
        A List.

    public
    static
final int JAVA_LONG
        A Java long.

    public
    static
final int JAVA_OBJECT
        A Object, used for some simple type unions.

    public
    static
final int JAVA_QNAME
        A QName.

    public
    static
final int JAVA_SHORT
        A Java short.

    public
    static

```



```

final int JAVA_STRING
        A String.

        public
        static NEVER
final int
        Applies to no elements for this property.

        public
        static VARIABLE
final int
        Applies to some, but not other elements for this property.

        public
        static XML_OBJECT
final int
        An XML Bean type that inherits from XmlObject.

```

Method Summary

```

public QName[]
        acceptedNames()
        For element properties the set of names that are accepted for this property if
        this element is the head of a substitution group.

public boolean
        extendsJavaArray()
        True if there is a Java getter that returns an array.

public boolean
        extendsJavaOption()
        True if there is an Java isSet method that tests for presence.

public boolean
        extendsJavaSingleton()
        True if there is a Java getter that returns a singleton.

        public
        SchemaType getContainerType()
        The type within which this property appears

public String
        getDefaultText()
        Returns the default or fixed value, if it is consistent.

        public
        XmlAnySimpleType getDefaultValue()
        Returns the default or fixed value as a strongly-typed value, if it is
        consistent.

public String
        getJavaPropertyName()
        The Java name for this property.

public QNameSet
        getJavaSetterDelimiter()
        Returns the set of element names which should appear strictly after all
        occurrences of the elements described by this property.

        public int
        getJavaTypeCode()

```


XMLBeans API Reference

Returns the natural Java type for this property.

```
public  
BigInteger getMaxOccurs()
```

Returns a summarized minimum occurrence number.

```
public  
BigInteger getMinOccurs()
```

Returns a summarized minimum occurrence number.

```
public QName  
          getName()
```

The name of this element or attribute

```
public  
SchemaType getType()
```

The schema type for the property.

```
public int  
          hasDefault()
```

Returns SchemaProperty.NEVER, SchemaProperty.VARIABLE, or SchemaProperty.CONSISTENTLY defaulted, depending on the defaults present in the elements in this property.

```
public int  
          hasFixed()
```

Returns SchemaProperty.NEVER, SchemaProperty.VARIABLE, or SchemaProperty.CONSISTENTLY fixed, depending on the fixed constraints present in the elements in this property.

```
public int  
          hasNillable()
```

Returns SchemaProperty.NEVER, SchemaProperty.VARIABLE, or SchemaProperty.CONSISTENTLY nillable, depending on the nillability of the elements in this property.

```
public boolean  
          isAttribute()
```

True for attributes.

```
public boolean  
          isReadOnly()
```

True for read-only properties.

```
public  
SchemaType javaBasedOnType()
```

The schema type returned from the Java getter for this property.

Field Detail

CONSISTENTLY

```
public static final int CONSISTENTLY
```

Applies to all elements for this property. See SchemaProperty.hasNillable(), SchemaProperty.hasDefault(), SchemaProperty.hasFixed()

JAVA_BIG_DECIMAL

```
public static final int JAVA_BIG_DECIMAL
```

A BigDecimal. See `SchemaProperty.getJavaTypeCode()`.

JAVA_BIG_INTEGER

```
public static final int JAVA_BIG_INTEGER
```

A BigInteger. See `SchemaProperty.getJavaTypeCode()`.

JAVA_BOOLEAN

```
public static final int JAVA_BOOLEAN
```

A Java boolean. See `SchemaProperty.getJavaTypeCode()`.

JAVA_BYTE

```
public static final int JAVA_BYTE
```

A Java byte. See `SchemaProperty.getJavaTypeCode()`.

JAVA_BYTE_ARRAY

```
public static final int JAVA_BYTE_ARRAY
```

A byte[]. See `SchemaProperty.getJavaTypeCode()`.

JAVA_CALENDAR

```
public static final int JAVA_CALENDAR
```

A Calendar. See `SchemaProperty.getJavaTypeCode()`.

JAVA_DATE

```
public static final int JAVA_DATE
```

A Date. See `SchemaProperty.getJavaTypeCode()`.

JAVA_DOUBLE

```
public static final int JAVA_DOUBLE
```

A Java double. See `SchemaProperty.getJavaTypeCode()`.

JAVA_ENUM

```
public static final int JAVA_ENUM
```

A generated `StringEnumAbstractBase` subclass. See `SchemaProperty.getJavaTypeCode()`.

JAVA_FIRST_PRIMITIVE

```
public static final int JAVA_FIRST_PRIMITIVE
```

Java primitive type codes (for non-nullable Java types) are between `JAVA_FIRST_PRIMITIVE` and `JAVA_LAST_PRIMITIVE`, inclusive.

JAVA_FLOAT

```
public static final int JAVA_FLOAT
```

A Java float. See `SchemaProperty.getJavaTypeCode()`.

JAVA_GDATE

```
public static final int JAVA_GDATE
```

A `GDate`. See `SchemaProperty.getJavaTypeCode()`.

JAVA_GDURATION

```
public static final int JAVA_GDURATION
```

A `GDuration`. See `SchemaProperty.getJavaTypeCode()`.

JAVA_INT

```
public static final int JAVA_INT
```

A Java int. See `SchemaProperty.getJavaTypeCode()`.

JAVA_LAST_PRIMITIVE

```
public static final int JAVA_LAST_PRIMITIVE
```

Java primitive type codes (for non-nullable Java types) are between `JAVA_FIRST_PRIMITIVE` and `JAVA_LAST_PRIMITIVE`, inclusive.

JAVA_LIST

```
public static final int JAVA_LIST
```

A List. See `SchemaProperty.getJavaTypeCode()`.

JAVA_LONG

```
public static final int JAVA_LONG
```

A Java long. See `SchemaProperty.getJavaTypeCode()`.

JAVA_OBJECT

```
public static final int JAVA_OBJECT
```

A Object, used for some simple type unions. See `SchemaProperty.getJavaTypeCode()`.

JAVA_QNAME

```
public static final int JAVA_QNAME
```

A QName. See `SchemaProperty.getJavaTypeCode()`.

JAVA_SHORT

```
public static final int JAVA_SHORT
```

A Java short. See `SchemaProperty.getJavaTypeCode()`.

JAVA_STRING

```
public static final int JAVA_STRING
```

A String. See `SchemaProperty.getJavaTypeCode()`.

NEVER

```
public static final int NEVER
```

Applies to no elements for this property. See `SchemaProperty.hasNillable()`, `SchemaProperty.hasDefault()`, `SchemaProperty.hasFixed()`

VARIABLE

```
public static final int VARIABLE
```

Applies to some, but not other elements for this property. See `SchemaProperty.hasNillable()`, `SchemaProperty.hasDefault()`, `SchemaProperty.hasFixed()`

XML_OBJECT

```
public static final int XML_OBJECT
```

An XML Bean type that inherits from `XmlObject`. See `SchemaProperty.getJavaTypeCode()`.

Method Detail

acceptedNames() Method

```
public QName[] acceptedNames()
```

For element properties the set of names that are accepted for this property if this element is the head of a substitution group. This will always have at least one element, ie, the property's name.

extendsJavaArray() Method

```
public boolean extendsJavaArray()
```

True if there is a Java getter that returns an array.

extendsJavaOption() Method

```
public boolean extendsJavaOption()
```

True if there is an Java `isSet` method that tests for presence.

extendsJavaSingleton() Method

```
public boolean extendsJavaSingleton()
```

True if there is a Java getter that returns a singleton.

getContainerType() Method

```
public SchemaType getContainerType()
```

The type within which this property appears

getDefaultText() Method

```
public String getDefaultText()
```

Returns the default or fixed value, if it is consistent. If it is not consistent, then returns null. See `SchemaProperty.hasDefault()` and `SchemaProperty.hasFixed()`.

getDefaultValue() Method

```
public XmlAnySimpleType getDefaultValue()
```

Returns the default or fixed value as a strongly-typed value, if it is consistent. If it is not consistent, then returns null. See `SchemaProperty.hasDefault()` and `SchemaProperty.hasFixed()`.

getJavaPropertyName() Method

```
public String getJavaPropertyName()
```

The Java name for this property. For example, if the method to access this property is called `getFirstName`, then this method returns the string "FirstName". May be null if the schema type has not been compiled to Java.

getJavaSetterDelimiter() Method

```
public QNameSet getJavaSetterDelimiter()
```

Returns the set of element names which should appear strictly after all occurrences of the elements described by this property. For element properties only.

getJavaTypeCode() Method

```
public int getJavaTypeCode()
```

Returns the natural Java type for this property. Returns either XML_OBJECT (for complex types) or one of the JAVA_* constants described in this interface.

getMaxOccurs() Method

```
public BigInteger getMaxOccurs()
```

Returns a summarized minimum occurrence number. For example, a sequence containing a nonoptional singleton element repeated twice will result in a property getMaxOccurs() of 2.

getMinOccurs() Method

```
public BigInteger getMinOccurs()
```

Returns a summarized minimum occurrence number. For example, a sequence containing a nonoptional singleton element repeated twice will result in a property getMinOccurs() of 2.

getName() Method

```
public QName getName()
```

The name of this element or attribute

getType() Method

```
public SchemaType getType()
```

The schema type for the property.

hasDefault() Method

```
public int hasDefault()
```

Returns SchemaProperty.NEVER, SchemaProperty.VARIABLE, or SchemaProperty.CONSISTENTLY defaulted, depending on the defaults present in the elements in this property.

hasFixed() Method

```
public int hasFixed()
```

Returns `SchemaProperty.NEVER`, `SchemaProperty.VARIABLE`, or `SchemaProperty.CONSISTENTLY` fixed, depending on the fixed constraints present in the elements in this property.

hasNillable() Method

```
public int hasNillable()
```

Returns `SchemaProperty.NEVER`, `SchemaProperty.VARIABLE`, or `SchemaProperty.CONSISTENTLY` nillable, depending on the nillability of the elements in this property.

isAttribute() Method

```
public boolean isAttribute()
```

True for attributes.

isReadOnly() Method

```
public boolean isReadOnly()
```

True for read-only properties.

javaBasedOnType() Method

```
public SchemaType javaBasedOnType()
```

The schema type returned from the Java getter for this property. Applies only to types that have been code generated to Java; may be a base type of `getType()`.

SchemaStringEnumEntry Interface

public interface SchemaStringEnumEntry

Describes a code-generated string enumeration

Related Topics

`SchemaType.getStringEnumEntries()`

Method Summary

```
public
String getEnumName()
    A capitalized name to use for the enumeration constant
    name

public
    int getIntValue()
        An integer to represent this choice in the enumeration

public
String getString()
    The enumerated string value
```

Method Detail

getEnumName() Method

```
public String getEnumName()
```

A capitalized name to use for the enumeration constant name

getIntValue() Method

```
public int getIntValue()
```

An integer to represent this choice in the enumeration

getString() Method

```
public String getString()
```

The enumerated string value

SchemaType Interface

public interface SchemaType

extends SchemaComponent

Represents a schema type.

SchemaType is the metadata "type" class for XmlObject, and it plays the analogous role for XmlObject that Class plays for Object.

Every XML Bean class corresponds to a singleton SchemaType object obtainable by `ClassName.type` (e.g., `XmlNonPositiveInteger.type`), and every XML Bean instance has an actual SchemaType, obtainable by `XmlObject.schemaType()`. The `ClassName.type` and `schemaType()` mechanisms are analogous to the ordinary Java `ClassName.class` and `obj.getClass()` mechanisms.

All schema types are represented by a SchemaType, this includes all types regardless of whether they are built-in or user-defined, compiled or uncompiled, simple or complex.

In addition, a compiled XML Bean type system includes special "document" schema types each representing a document containing nothing but a single element for each global element, and special "attribute" schema types each representing a fragment containing nothing but a single global attribute for global attribute.

Do not confuse Schema Types with other types of Schema Components such as `SchemaGlobalElement`, `SchemaGlobalAttribute`, `SchemaModelGroup`, or `SchemaAttributeGroup`. `SchemaType` represents a Type component, not any of the other kinds of components. There are different kinds of metadata objects for the different Schema components.

The space of SchemaTypes is divided as follows:

- First, there is the universal base type and the universal subtype. These are `XmlObject.type` (corresponding to `xs:anyType`) and `XmlBeans.NO_TYPE`, respectively. The first type is a base type of all other types. The other type indicates the absence of type information and, at least in set-theoretic terms, is a subtype of all other types.
- There is another universal base type that is the base type for all simple types. This is the `XmlAnySimpleType.type`, corresponding to `xs:anySimpleType`. Only `XmlObject.type` and `XmlAnySimpleType.type` return `true` for `SchemaType.isURType()`, and only `XmlBeans.NO_TYPE` returns `true` for `SchemaType.isNoType()`.
- The two "special" kinds of types that are generated that do not formally exist in the actual Schema specification are document types and global attribute types (corresponding to documents that contain a global element, or fragments that contain a global attribute). They can be detected using `SchemaType.isDocumentType()` and `SchemaType.isAttributeType()`. Other than their anonymity (lack of a type name) and their appearance only at the root of an instance, they are otherwise just like ordinary complex types.
- Simple types can be detected using `SchemaType.isSimpleType()`. Complex types are considered to be all the types that are not simple.
- Simple types are divided into three varieties: atomic types, list types, and union types. Which variety

of simple type you have can be discovered using `SchemaType.getSimpleVariety()`. It will return either `SchemaType.ATOMIC`, `SchemaType.LIST`, or `SchemaType.UNION`.

- An `SchemaType.ATOMIC` simple type is always based on one of the 20 built-in primitive schema types. You can determine the underlying primitive type for an atomic simple type by calling `SchemaType.getPrimitiveType()`. An atomic type may add facet restrictions on top of the primitive type, and these facets can be explored using `SchemaType.getFacet(int)`, `SchemaType.getWhiteSpaceRule()`, `SchemaType.matchPatternFacet(String)`, `SchemaType.getEnumerationValues()`, and related methods.
- A `SchemaType.LIST` simple type is always based on another non-list simple type. The underlying list item type can be obtained by using `SchemaType.getListItemType()`.
- A `SchemaType.UNION` simple type is always composed out of a number of other simple types. The direct members of the union can be obtained by `SchemaType.getUnionMemberTypes()`. When unions consist of other unions, it is useful to know the "leaves of the union tree", so the set of non-union types making up the union can be obtained by `SchemaType.getUnionConstituentTypes()`. The closure of the entire "union tree" is `SchemaType.getUnionSubTypes()` (this includes the type itself). For simple unions that do not consist of other unions, all three of these sets are the same.
- Complex types have nested structure. They are divided into four content types: empty content, simple content, element-only content, and mixed content. All kinds of complex types may have attributes. The content type for a complex type can be determined using `SchemaType.getContentType()`. This will return `SchemaType.EMPTY_CONTENT`, `SchemaType.SIMPLE_CONTENT`, `SchemaType.ELEMENT_CONTENT`, or `SchemaType.MIXED_CONTENT`.
- If a complex type has `SchemaType.EMPTY_CONTENT`, the content model will be null.
- If a complex type has `SchemaType.SIMPLE_CONTENT`, then it will extend the simple type that describes the content. In addition, the type may impose additional simple type facet restrictions; these can be determined in the same way they are for a simple type.
- If a complex type has `SchemaType.ELEMENT_CONTENT` or `SchemaType.MIXED_CONTENT`, then the detailed content model can be determined by examining the particle tree (which may be null for `MIXED_CONTENT`). The particle tree can be obtained via `SchemaType.getContentModel()`.
- When working with a complex type, most users will find it sufficient to discover the summarized shape of the content model and attribute model using `SchemaType.getElementProperties()`, `SchemaType.getAttributeProperties()`, and related methods rather than examining the particle tree and attribute model directly.

Related Topics

`SchemaTypeLoader`
`XmlObject.schemaType()`
`SimpleValue.instanceType()`

All Superinterfaces

`SchemaComponent`

Field Summary

```

    public
    static ATOMIC
final int
    Atomic type.

    public
    static BTC_ANY_SIMPLE
final int
    xs:anySimpleType, aka XmlAnySimpleType.type

    public
    static BTC_ANY_TYPE
final int
    xs:anyType, aka XmlObject.type

    public
    static BTC_ANY_URI
final int
    xs:anyURI, aka XmlAnyURI.type

    public
    static BTC_BASE_64_BINARY
final int
    xs:base64Binary, aka XmlBase64Binary.type

    public
    static BTC_BOOLEAN
final int
    xs:boolean, aka XmlBoolean.type

    public
    static BTC_BYTE
final int
    xs:byte, aka XmlByte.type

    public
    static BTC_DATE
final int
    xs:date, aka XmlDate.type

    public
    static BTC_DATE_TIME
final int
    xs:dateTime, aka XmlDateTime.type

    public
    static BTC_DECIMAL
final int
    xs:decimal, aka XmlDecimal.type

    public
    static BTC_DOUBLE
final int
    xs:double, aka XmlDouble.type

    public
    static BTC_DURATION
final int
    xs:duration, aka XmlDuration.type

    public
    static BTC_ENTITIES
final int
    xs:ENTITIES, aka XmlENTITIES.type

    public
    static BTC_ENTITY
final int
    xs:ENTITY, aka XmlENTITY.type

    public
    static BTC_FIRST_PRIMITIVE
final int

```


XMLBeans API Reference

The primitive types have codes between `BTC_FIRST_PRIMITIVE` and `BTC_LAST_PRIMITIVE` inclusive

```
public
static BTC_FLOAT
final int          xs:float, aka XmlFloat.type

public
static BTC_G_DAY
final int          xs:gDay, aka XmlGDay.type

public
static BTC_G_MONTH
final int          xs:gMonth, aka XmlGMonth.type

public
static BTC_G_MONTH_DAY
final int          xs:gMonthDay, aka XmlGMonthDay.type

public
static BTC_G_YEAR
final int          xs:gYear, aka XmlGYear.type

public
static BTC_G_YEAR_MONTH
final int          xs:gYearMonth, aka XmlGYearMonth.type

public
static BTC_HEX_BINARY
final int          xs:hexBinary, aka XmlBase64Binary.type

public
static BTC_ID
final int          xs:ID, aka XmlID.type

public
static BTC_IDREF
final int          xs:IDREF, aka XmlIDREF.type

public
static BTC_IDREFS
final int          xs:IDREFS, aka XmlIDREFS.type

public
static BTC_INT
final int          xs:int, aka XmlInt.type

public
static BTC_INTEGER
final int          xs:integer, aka XmlInteger.type

public
static BTC_LANGUAGE
final int          xs:language, aka XmlLanguage.type

public
static BTC_LAST_BUILTIN
final int          int

public
static BTC_LAST_PRIMITIVE
final int          The primitive types have codes between BTC_FIRST_PRIMITIVE and
```


XMLBeans API Reference

BTC_LAST_PRIMITIVE inclusive

```
public
static BTC_LONG
final int
    xs:long, aka XmlLong.type

public
static BTC_NAME
final int
    xs:Name, aka XmlName.type

public
static BTC_NCNAME
final int
    xs:NCName, aka XmlNCName.type

public
static BTC_NEGATIVE_INTEGER
final int
    xs:NegativeInteger, aka XmlNegativeInteger.type

public
static BTC_NMTOKEN
final int
    xs:NMTOKEN, aka XmlNMTOKEN.type

public
static BTC_NMTOKENS
final int
    xs:NMTOKENS, aka XmlNMTOKENS.type

public
static BTC_NON_NEGATIVE_INTEGER
final int
    xs:nonNegativeInteger, aka XmlNonNegativeInteger.type

public
static BTC_NON_POSITIVE_INTEGER
final int
    xs:nonPositiveInteger, aka XmlNonPositiveInteger.type

public
static BTC_NORMALIZED_STRING
final int
    xs:normalizedString, aka XmlNormalizedString.type

public
static BTC_NOT_BUILTIN
final int
    Not a builtin type

public
static BTC_NOTATION
final int
    xs:NOTATION, aka XmlNOTATION.type

public
static BTC_POSITIVE_INTEGER
final int
    xs:positiveInteger, aka XmlPositiveInteger.type

public
static BTC_QNAME
final int
    xs:QName, aka XmlQName.type

public
static BTC_SHORT
final int
    xs:short, aka XmlShort.type

public
static BTC_STRING
final int
    xs:string, aka XmlString.type

public
```



```

    public
    static BTC_TIME
final int      xs:time, aka XmlTime.type

    public
    static BTC_TOKEN
final int      xs:token, aka XmlToken.type

    public
    static BTC_UNSIGNED_BYTE
final int      xs:unsignedByte, aka XmlUnsignedByte.type

    public
    static BTC_UNSIGNED_INT
final int      xs:unsignedInt, aka XmlUnsignedInt.type

    public
    static BTC_UNSIGNED_LONG
final int      xs:unsignedLong, aka XmlUnsignedLong.type

    public
    static BTC_UNSIGNED_SHORT
final int      xs:unsignedShort, aka XmlUnsignedShort.type

    public
    static DT_EXTENSION
final int      Derived by extension.

    public
    static DT_NOT_DERIVED
final int      Not derived.

    public
    static DT_RESTRICTION
final int      Derived by restriction.

    public
    static ELEMENT_CONTENT
final int      Element-only content.

    public
    static EMPTY_CONTENT
final int      Empty content.

    public
    static FACET_ENUMERATION
final int      xs:enumeration facet – use SchemaType.getEnumerationValues() instead

    public
    static FACET_FRACTION_DIGITS
final int      xs:fractionDigits facet

    public
    static FACET_LENGTH
final int      xs:length facet

    public
    static FACET_MAX_EXCLUSIVE
final int      xs:maxExclusive facet

    public
    static FACET_MAX_INCLUSIVE
final int      xs:maxInclusive facet

```



```

    public
    static FACET_MAX_LENGTH
final int      xs:maxLength facet

    public
    static FACET_MIN_EXCLUSIVE
final int      xs:minExclusive facet

    public
    static FACET_MIN_INCLUSIVE
final int      xs:minInclusive facet

    public
    static FACET_MIN_LENGTH
final int      xs:minLength facet

    public
    static FACET_PATTERN
final int      xs:pattern facet – use SchemaType.matchPatternFacet(String) instead

    public
    static FACET_TOTAL_DIGITS
final int      xs:totalDigits facet

    public
    static FACET_WHITE_SPACE
final int      xs:whiteSpace facet – use SchemaType.getWhiteSpaceRule() instead

    public
    static LAST_BASIC_FACET
final int      int

    public
    static LAST_FACET
final int      The last ordinary facet code

    public
    static LAST_PROPERTY
final int      The last property code

    public
    static LIST
final int      Simple list type.

    public
    static MIXED_CONTENT
final int      Mixed content.

    public
    static NOT_COMPLEX_TYPE
final int      Not a complex type.

    public
    static NOT_DECIMAL
final int      Not a decimal restriction.

    public
    static NOT_SIMPLE
final int      Not a simple type or simple content.

    public
    static PARTIAL_ORDER
final int      Partially ordered.

```



```

    public
    static PROPERTY_BOUNDED
final int      int

    public
    static PROPERTY_CARDINALITY
final int      int

    public
    static PROPERTY_NUMERIC
final int      int

    public
    static PROPERTY_ORDERED
final int      int

    public
    static SIMPLE_CONTENT
final int      Simple content.

    public
    static SIZE_BIG_DECIMAL
final int      Fits in a BigDecimal.

    public
    static SIZE_BIG_INTEGER
final int      Fits in a BigInteger.

    public
    static SIZE_BYTE
final int      Fits in a byte.

    public
    static SIZE_INT
final int      Fits in an int.

    public
    static SIZE_LONG
final int      Fits in a long.

    public
    static SIZE_SHORT
final int      Fits in a short.

    public
    static TOTAL_ORDER
final int      Totally ordered.

    public
    static UNION
final int      Union type.

    public
    static UNORDERED
final int      Unordered.

    public
    static WS_COLLAPSE
final int      Whitespace collapsed and trimmed.

    public
    static WS_PRESERVE
final int      Whitespace preserved.

```



```

    public static WS_REPLACE
    final int      Whitespace replaced by ordinary space.

    public static WS_UNSPECIFIED
    final int      Whitespace rule unspecified.

```

Fields from interface com.bea.xml.SchemaComponent

ATTRIBUTE, ATTRIBUTE_GROUP, ELEMENT, IDENTITY_CONSTRAINT, MODEL_GROUP, NOTATION, TYPE

Method Summary

```

    public boolean
        blockExtension()
        True if extensions of this type cannot be substituted for this
        type

    public boolean
        blockRestriction()
        True if restrictions of this type cannot be substituted for this
        type

    public
    SchemaStringEnumEntry enumEntryForString(String s)
        Returns the string enum entry corresponding to the given
        enumerated string, or null if there is no match or this type is
        not a string enumeration.

    public
    StringEnumAbstractBase enumForInt(int i)
        Returns the string enum value corresponding to the given
        enumerated string, or null if there is no match or this type is
        not a string enumeration.

    public
    StringEnumAbstractBase enumForString(String s)
        Returns the string enum value corresponding to the given
        enumerated string, or null if there is no match or this type is
        not a string enumeration.

    public boolean
        finalExtension()
        True if other types cannot extend this type (only for complex
        types)

    public boolean
        finalList()
        True if list derivation of this type is prohibited (only for
        simple types)

    public boolean
        finalRestriction()
        True if other types cannot restrict this type

```


XMLBeans API Reference

```
public boolean finalUnion()
    True if union derivation of this type is prohibited (only for
    simple types)

public SchemaType[]
    getAnonymousTypes()
        The array of inner (anonymous) types defined within this
        type.

    public int
        getAnonymousUnionMemberOrdinal()
            For anonymous types defined inside a union only: gets the
            integer indicating the declaration order of this type within the
            outer union type, or zero if this is not applicable.

    public
    SchemaAttributeModel getAttributeModel()
        Returns the attribute model for this complex type (with
        simple or complex content).

public SchemaProperty[]
    getAttributeProperties()
        Returns all the SchemaProperties corresponding to attributes.

public SchemaProperty
    getAttributeProperty(QName attrName)
        Returns a SchemaProperty corresponding to an attribute
        within this complex type by looking up the attribute name.

public SchemaType
    getAttributeType(QName eltName, SchemaTypeLoader
    wildcardTypeLoader)
        Returns the type of an attribute based on the attribute name
        and the type system within which (wildcard) names are
        resolved.

    public QName
        getAttributeTypeAttributeName()
            Returns the attribute qname if this is a attribute type, or null
            otherwise.

public SchemaType
    getBaseEnumType()
        If this is a string enumeration, returns the most basic base
        schema type that this enuemration is based on.

public SchemaType
    getBaseType()
        Returns base restriction or extension type.

    public int
        getBuiltinTypeCode()
            Returns an integer for builtin types that can be used for quick
            comparison.

public SchemaType
    getCommonBaseType(SchemaType type)
        Returns common base type with the given type.

public SchemaField
```


XMLBeans API Reference

```
getContainerField()
    The parent schema element.

public SchemaParticle
getContentModel()
    Returns the complex content model for this complex type
    (with complex content).

public int
getContentType()
    Returns SchemaType.EMPTY_CONTENT,
    SchemaType.SIMPLE_CONTENT,
    SchemaType.ELEMENT_CONTENT, or
    SchemaType.MIXED_CONTENT for complex types.

public int
getDecimalSize()
    For atomic numeric restrictions of decimal only: the numeric
    size category.

public int
getDerivationType()
    Returns an integer for the derivation type, either
    SchemaType.DT_EXTENSION,
    SchemaType.DT_RESTRICTION,
    SchemaType.DT_NOT_DERIVED.

public SchemaProperty[]
getDerivedProperties()
    Returns the SchemaProperties defined by this complex type,
    exclusive of the base type (if any).

public QName
getDocumentElementName()
    Returns the document element name if this is a document
    type, or null otherwise.

public SchemaProperty[]
getElementProperties()
    Returns all the SchemaProperties corresponding to elements.

public SchemaProperty
getElementProperty(QName eltName)
    Returns a SchemaProperty corresponding to an element
    within this complex type by looking up the element name.

public
SchemaTypeElementSequencer getElementSequencer()
    Returns a SchemaTypeElementSequencer object,
    which can then be used to validate complex content inside
    this element.

public SchemaType
getElementType(QName eltName, QName xsiType,
SchemaTypeLoader wildcardTypeLoader)
    Returns the type of a child element based on the element
    name and an xsi:type attribute (and the type system within
    which names are resolved).
```


XMLBeans API Reference

```
public XmlAnySimpleType[] getEnumerationValues()
    Returns the array of valid objects from the enumeration facet,
    null if no enumeration defined.

    public Class
        getEnumJavaClass()
        The Java class corresponding to the enumeration type for this
        schema type, if applicable (or null if not an enumeration).

public XmlAnySimpleType
    getFacet(int facetCode)
    Returns the value of the given facet, or null if none is set.

    public String
        getFullJavaImplName()
        The fully-qualified Java type name of the implementation
        class.

    public String
        getFullJavaName()
        The fully-qualified Java type name of the class.

    public Class
        getJavaClass()
        The Java class corresponding to this schema type.

public SchemaType
    getListItemType()
    For list types only: get the item type.

    public QName
        getName()
        The name used to describe the type in the schema.

public SchemaType
    getOuterType()
    The outer schema type.

    public String[]
        getPatterns()
        True

public SchemaType
    getPrimitiveType()
    For atomic types only: get the primitive type underlying this
    one.

public SchemaProperty[]
    getProperties()
    Returns all the SchemaProperties within this complex type,
    elements followed by attributes.

    public SchemaType.Ref
        getRef()
        Retrurns a SchemaType.Ref pointing to this schema type
        itself.

    public String
        getShortJavaImplName()
        The short unqualified Java name for the implementation
        class.
```


XMLBeans API Reference

```
public String getShortJavaName()
    The short unqualified Java name for the class.

    public int
        getSimpleVariety()
            Returns whether the simple type is ATOMIC, UNION, or
            LIST.

    public String
        getSourceName()
            Returns the filename for the XSD file from which this type
            was loaded.

    public
SchemaStringEnumEntry[] getStringEnumEntries()
    Returns the array of SchemaStringEnumEntries for this type:
    this array includes information about the java constant names
    used for each string enum entry.

    public SchemaTypeSystem
        getTypeSystem()
            Returns the SchemaTypeLoader in which this type was
            defined.

    public SchemaType
        getUnionCommonBaseType()
            For union types only: get the most specific common base type
            of the constituent member types.

    public SchemaType[]
        getUnionConstituentTypes()
            For union types only: get the constituent member types.

    public SchemaType[]
        getUnionMemberTypes()
            For union types only: get the shallow member types.

    public SchemaType[]
        getUnionSubTypes()
            For union types only: gets the full tree of member types.

    public int
        getWhiteSpaceRule()
            For nonunion simple types: get the whitespace rule.

    public boolean
        hasAllContent()
            True if the complex content model for this complex type is an
            "all" group.

    public boolean
        hasAttributeWildcards()
            True if this type permits wildcard attributes.

    public boolean
        hasElementWildcards()
            True if this type permits element wildcards.

    public boolean
        hasPatternFacet()
            True if there are regex pattern facets
```


XMLBeans API Reference

`public boolean hasStringEnumValues()`
True if this is a string enum where an integer is assigned to each enumerated value.

`public boolean isAbstract()`
True if this type cannot be used directly in instances

`public boolean isAnonymousType()`
True if the Xsd type is anonymous (i.e., not top-level).

`public boolean isAssignableFrom(SchemaType type)`
True if the specified type derives from this type (or if it is the same type).

`public boolean isAttributeType()`
True if this is a attribute type.

`public boolean isBounded()`
True if bounded.

`public boolean isBuiltinType()`
True for any of the 40+ built-in types.

`public boolean isCompiled()`
True if this schema type was compiled to have a corresponding Java class.

`public boolean isDocumentType()`
True if this is a document type.

`public boolean isFacetFixed(int facetCode)`
True if the given facet is fixed.

`public boolean isFinite()`
True if finite.

`public boolean isNoType()`
True for the type object that represents a the absence of a determined type.

`public boolean isNumeric()`
True if numeric.

`public boolean isOrderSensitive()`
True if particles have same defaults, nillability, etc, that are invariant when order changes.

`public boolean`

XMLBeans API Reference

```
public boolean isPrimitiveType()
    True for any of the 20 primitive types (plus anySimpleType)

public boolean isSimpleType()
    True for the anySimpleType and any restrictions/unions/lists.

public boolean isSkippedAnonymousType()
    True if this anonymous type has no corresponding Java type.

public boolean isURType()
    True for anyType and anySimpleType.

public boolean isValidSubstitution(QName name)
    For document types, true if the given name can be substituted
    for the document element name.

public boolean matchPatternFacet(String s)
    True if the given string matches the pattern facets.

public XmlAnySimpleType newValue(Object v)
    Creates an immutable simple type value that does not reside
    in a tree.

public int ordered()
    True if ordered.
```

Methods from interface `com.bea.xml.SchemaComponent`

`getComponentRef`, `getComponentType`,

Field Detail

ATOMIC

```
public static final int ATOMIC
```

Atomic type. See `SchemaType.getSimpleVariety()`

BTC_ANY_SIMPLE

```
public static final int BTC_ANY_SIMPLE
```

`xs:anySimpleType`, aka `XmlAnySimpleType.type`

BTC_ANY_TYPE

```
public static final int BTC_ANY_TYPE

    xs:anyType, aka XmlObject.type
```

BTC_ANY_URI

```
public static final int BTC_ANY_URI

    xs:anyURI, aka XmlAnyURI.type
```

BTC_BASE_64_BINARY

```
public static final int BTC_BASE_64_BINARY

    xs:base64Binary, aka XmlBase64Binary.type
```

BTC_BOOLEAN

```
public static final int BTC_BOOLEAN

    xs:boolean, aka XmlBoolean.type
```

BTC_BYTE

```
public static final int BTC_BYTE

    xs:byte, aka XmlByte.type
```

BTC_DATE

```
public static final int BTC_DATE

    xs:date, aka XmlDate.type
```

BTC_DATE_TIME

```
public static final int BTC_DATE_TIME

    xs:dateTime, aka XmlDateTime.type
```

BTC_DECIMAL

```
public static final int BTC_DECIMAL
```

xs:decimal, aka XmlDecimal.type

BTC_DOUBLE

```
public static final int BTC_DOUBLE
```

xs:double, aka XmlDouble.type

BTC_DURATION

```
public static final int BTC_DURATION
```

xs:duration, aka XmlDuration.type

BTC_ENTITIES

```
public static final int BTC_ENTITIES
```

xs:ENTITIES, aka XmlENTITIES.type

BTC_ENTITY

```
public static final int BTC_ENTITY
```

xs:ENTITY, aka XmlENTITY.type

BTC_FIRST_PRIMITIVE

```
public static final int BTC_FIRST_PRIMITIVE
```

The primitive types have codes between BTC_FIRST_PRIMITIVE and BTC_LAST_PRIMITIVE inclusive

BTC_FLOAT

```
public static final int BTC_FLOAT
```

xs:float, aka XmlFloat.type

BTC_G_DAY

```
public static final int BTC_G_DAY
```

`xs:gDay`, aka `XmlGDay.type`

BTC_G_MONTH

```
public static final int BTC_G_MONTH
```

`xs:gMonth`, aka `XmlGMonth.type`

BTC_G_MONTH_DAY

```
public static final int BTC_G_MONTH_DAY
```

`xs:gMonthDay`, aka `XmlGMonthDay.type`

BTC_G_YEAR

```
public static final int BTC_G_YEAR
```

`xs:gYear`, aka `XmlGYear.type`

BTC_G_YEAR_MONTH

```
public static final int BTC_G_YEAR_MONTH
```

`xs:gYearMonth`, aka `XmlGYearMonth.type`

BTC_HEX_BINARY

```
public static final int BTC_HEX_BINARY
```

`xs:hexBinary`, aka `XmlBase64Binary.type`

BTC_ID

```
public static final int BTC_ID
```

`xs:ID`, aka `XmlID.type`

BTC_IDREF

```
public static final int BTC_IDREF

xs:IDREF, aka XmlIDREF.type
```

BTC_IDREFS

```
public static final int BTC_IDREFS

xs:IDREFS, aka XmlIDREFS.type
```

BTC_INT

```
public static final int BTC_INT

xs:int, aka XmlInt.type
```

BTC_INTEGER

```
public static final int BTC_INTEGER

xs:integer, aka XmlInteger.type
```

BTC_LANGUAGE

```
public static final int BTC_LANGUAGE

xs:language, aka XmlLanguage.type
```

BTC_LAST_BUILTIN

```
public static final int BTC_LAST_BUILTIN
```

BTC_LAST_PRIMITIVE

```
public static final int BTC_LAST_PRIMITIVE
```

The primitive types have codes between `BTC_FIRST_PRIMITIVE` and `BTC_LAST_PRIMITIVE` inclusive

BTC_LONG

```
public static final int BTC_LONG
```

xs:long, aka XmlLong.type

BTC_NAME

```
public static final int BTC_NAME
```

xs:Name, aka XmlName.type

BTC_NCNAME

```
public static final int BTC_NCNAME
```

xs:NCName, aka XmlNCName.type

BTC_NEGATIVE_INTEGER

```
public static final int BTC_NEGATIVE_INTEGER
```

xs:NegativeInteger, aka XmlNegativeInteger.type

BTC_NMTOKEN

```
public static final int BTC_NMTOKEN
```

xs:NMTOKEN, aka XmlNMTOKEN.type

BTC_NMTOKENS

```
public static final int BTC_NMTOKENS
```

xs:NMTOKENS, aka XmlNMTOKENS.type

BTC_NON_NEGATIVE_INTEGER

```
public static final int BTC_NON_NEGATIVE_INTEGER
```

xs:nonNegativeInteger, aka XmlNonNegativeInteger.type

BTC_NON_POSITIVE_INTEGER

```
public static final int BTC_NON_POSITIVE_INTEGER
```

xs:nonPositiveInteger, aka XmlNonPositiveInteger.type

BTC_NORMALIZED_STRING

```
public static final int BTC_NORMALIZED_STRING
```

xs:normalizedString, aka XmlNormalizedString.type

BTC_NOT_BUILTIN

```
public static final int BTC_NOT_BUILTIN
```

Not a builtin type

BTC_NOTATION

```
public static final int BTC_NOTATION
```

xs:NOTATION, aka XmlNOTATION.type

BTC_POSITIVE_INTEGER

```
public static final int BTC_POSITIVE_INTEGER
```

xs:positiveInteger, aka XmlPositiveInteger.type

BTC_QNAME

```
public static final int BTC_QNAME
```

xs:QName, aka XmlQName.type

BTC_SHORT

```
public static final int BTC_SHORT
```

xs:short, aka XmlShort.type

BTC_STRING

```
public static final int BTC_STRING
```

xs:string, aka XmlString.type

BTC_TIME

```
public static final int BTC_TIME
```

xs:time, aka XmlTime.type

BTC_TOKEN

```
public static final int BTC_TOKEN
```

xs:token, aka XmlToken.type

BTC_UNSIGNED_BYTE

```
public static final int BTC_UNSIGNED_BYTE
```

xs:unsignedByte, aka XmlUnsignedByte.type

BTC_UNSIGNED_INT

```
public static final int BTC_UNSIGNED_INT
```

xs:unsignedInt, aka XmlUnsignedInt.type

BTC_UNSIGNED_LONG

```
public static final int BTC_UNSIGNED_LONG
```

xs:unsignedLong, aka XmlUnsignedLong.type

BTC_UNSIGNED_SHORT

```
public static final int BTC_UNSIGNED_SHORT
```

xs:unsignedShort, aka XmlUnsignedShort.type

DT_EXTENSION

```
public static final int DT_EXTENSION
```

Derived by extension. See `SchemaType.getDerivationType()`.

DT_NOT_DERIVED

```
public static final int DT_NOT_DERIVED
```

Not derived. True for `XmlObject.type` only. See `SchemaType.getDerivationType()`.

DT_RESTRICTION

```
public static final int DT_RESTRICTION
```

Derived by restriction. See `SchemaType.getDerivationType()`.

ELEMENT_CONTENT

```
public static final int ELEMENT_CONTENT
```

Element-only content. See `SchemaType.getContentType()`.

EMPTY_CONTENT

```
public static final int EMPTY_CONTENT
```

Empty content. See `SchemaType.getContentType()`.

FACET_ENUMERATION

```
public static final int FACET_ENUMERATION
```

xs:enumeration facet – use `SchemaType.getEnumerationValues()` instead

FACET_FRACTION_DIGITS

```
public static final int FACET_FRACTION_DIGITS
```

xs:fractionDigits facet

FACET_LENGTH

```
public static final int FACET_LENGTH
```

xs:length facet

FACET_MAX_EXCLUSIVE

```
public static final int FACET_MAX_EXCLUSIVE
```

xs:maxExclusive facet

FACET_MAX_INCLUSIVE

```
public static final int FACET_MAX_INCLUSIVE
```

xs:maxInclusive facet

FACET_MAX_LENGTH

```
public static final int FACET_MAX_LENGTH
```

xs:maxLength facet

FACET_MIN_EXCLUSIVE

```
public static final int FACET_MIN_EXCLUSIVE
```

xs:minExclusive facet

FACET_MIN_INCLUSIVE

```
public static final int FACET_MIN_INCLUSIVE
```

xs:minInclusive facet

FACET_MIN_LENGTH

```
public static final int FACET_MIN_LENGTH
```

xs:minLength facet

FACET_PATTERN

```
public static final int FACET_PATTERN
```

xs:pattern facet – use `SchemaType.matchPatternFacet(String)` instead

FACET_TOTAL_DIGITS

```
public static final int FACET_TOTAL_DIGITS
```

xs:totalDigits facet

FACET_WHITE_SPACE

```
public static final int FACET_WHITE_SPACE
```

xs:whiteSpace facet – use `SchemaType.getWhiteSpaceRule()` instead

LAST_BASIC_FACET

```
public static final int LAST_BASIC_FACET
```

LAST_FACET

```
public static final int LAST_FACET
```

The last ordinary facet code

LAST_PROPERTY

```
public static final int LAST_PROPERTY
```

The last property code

LIST

```
public static final int LIST
```

Simple list type. See `SchemaType.getSimpleVariety()`

MIXED_CONTENT

```
public static final int MIXED_CONTENT
```

Mixed content. See `SchemaType.getContentType()`.

NOT_COMPLEX_TYPE

```
public static final int NOT_COMPLEX_TYPE
```

Not a complex type. See `SchemaType.getContentType()`.

NOT_DECIMAL

```
public static final int NOT_DECIMAL
```

Not a decimal restriction. See `SchemaType.getDecimalSize()`.

NOT_SIMPLE

```
public static final int NOT_SIMPLE
```

Not a simple type or simple content. See `SchemaType.getSimpleVariety()`.

PARTIAL_ORDER

```
public static final int PARTIAL_ORDER
```

Partially ordered. See `SchemaType.ordered()`.

PROPERTY_BOUNDED

```
public static final int PROPERTY_BOUNDED
```

Related Topics

`SchemaType.isBounded()`

PROPERTY_CARDINALITY

```
public static final int PROPERTY_CARDINALITY
```

Related Topics

`SchemaType.isFinite()`

PROPERTY_NUMERIC

`public static final int PROPERTY_NUMERIC`

Related Topics

`SchemaType.isNumeric()`

PROPERTY_ORDERED

`public static final int PROPERTY_ORDERED`

Related Topics

`SchemaType.ordered()`

SIMPLE_CONTENT

`public static final int SIMPLE_CONTENT`

Simple content. See `SchemaType.getContentType()`.

SIZE_BIG_DECIMAL

`public static final int SIZE_BIG_DECIMAL`

Fits in a `BigDecimal`. See `SchemaType.getDecimalSize()`.

SIZE_BIG_INTEGER

`public static final int SIZE_BIG_INTEGER`

Fits in a `BigInteger`. See `SchemaType.getDecimalSize()`.

SIZE_BYTE

`public static final int SIZE_BYTE`

Fits in a byte. See `SchemaType.getDecimalSize()`.

SIZE_INT

```
public static final int SIZE_INT
```

Fits in an int. See `SchemaType.getDecimalSize()`.

SIZE_LONG

```
public static final int SIZE_LONG
```

Fits in a long. See `SchemaType.getDecimalSize()`.

SIZE_SHORT

```
public static final int SIZE_SHORT
```

Fits in a short. See `SchemaType.getDecimalSize()`.

TOTAL_ORDER

```
public static final int TOTAL_ORDER
```

Totally ordered. See `SchemaType.ordered()`.

UNION

```
public static final int UNION
```

Union type. See `SchemaType.getSimpleVariety()`

UNORDERED

```
public static final int UNORDERED
```

Unordered. See `SchemaType.ordered()`.

WS_COLLAPSE

```
public static final int WS_COLLAPSE
```

Whitespace collapsed and trimmed. See `SchemaType.getWhiteSpaceRule()`.

WS_PRESERVE

```
public static final int WS_PRESERVE
```

Whitespace preserved. See `SchemaType.getWhiteSpaceRule()`.

WS_REPLACE

```
public static final int WS_REPLACE
```

Whitespace replaced by ordinary space. See `SchemaType.getWhiteSpaceRule()`.

WS_UNSPECIFIED

```
public static final int WS_UNSPECIFIED
```

Whitespace rule unspecified. See `SchemaType.getWhiteSpaceRule()`.

Method Detail

blockExtension() Method

```
public boolean blockExtension()
```

True if extensions of this type cannot be substituted for this type

blockRestriction() Method

```
public boolean blockRestriction()
```

True if restrictions of this type cannot be substituted for this type

enumEntryForString(String) Method

```
public SchemaStringEnumEntry enumEntryForString(String s)
```

Returns the string enum entry corresponding to the given enumerated string, or null if there is no match or this type is not a string enumeration.

enumForInt(int) Method

```
public StringEnumAbstractBase enumForInt(int i)
```

Returns the string enum value corresponding to the given enumerated string, or null if there is no match or this type is not a string enumeration.

enumForString(String) Method

```
public StringEnumAbstractBase enumForString(String s)
```

Returns the string enum value corresponding to the given enumerated string, or null if there is no match or this type is not a string enumeration.

finalExtension() Method

```
public boolean finalExtension()
```

True if other types cannot extend this type (only for complex types)

finalList() Method

```
public boolean finalList()
```

True if list derivation of this type is prohibited (only for simple types)

finalRestriction() Method

```
public boolean finalRestriction()
```

True if other types cannot restrict this type

finalUnion() Method

```
public boolean finalUnion()
```

True if union derivation of this type is prohibited (only for simple types)

getAnonymousTypes() Method

```
public SchemaType[] getAnonymousTypes()
```

The array of inner (anonymous) types defined within this type.

getAnonymousUnionMemberOrdinal() Method

```
public int getAnonymousUnionMemberOrdinal()
```

For anonymous types defined inside a union only: gets the integer indicating the declaration order of this type within the outer union type, or zero if this is not applicable. The first anonymous union member within a union type is numbered "1". Used to differentiate between different anonymous types.

getAttributeModel() Method

```
public SchemaAttributeModel getAttributeModel()
```

Returns the attribute model for this complex type (with simple or complex content).

getAttributeProperties() Method

```
public SchemaProperty[] getAttributeProperties()
```

Returns all the SchemaProperties corresponding to attributes.

getAttributeProperty(QName) Method

```
public SchemaProperty getAttributeProperty(QName attrName)
```

Returns a SchemaProperty corresponding to an attribute within this complex type by looking up the attribute name.

getAttributeType(QName, SchemaTypeLoader) Method

```
public SchemaType getAttributeType(QName eltName,  
                                   SchemaTypeLoader wildcardTypeLoader)
```

Returns the type of an attribute based on the attribute name and the type system within which (wildcard) names are resolved.

getAttributeTypeAttributeName() Method

```
public QName getAttributeTypeAttributeName()
```

Returns the attribute qname if this is a attribute type, or null otherwise.

getBaseEnumType() Method

```
public SchemaType getBaseEnumType()
```

If this is a string enumeration, returns the most basic base schema type that this enumeration is based on. Otherwise returns null.

getBaseType() Method

```
public SchemaType getBaseType()
```

Returns base restriction or extension type. Unions and lists return the anySimpleType.

getBuiltinTypeCode() Method

```
public int getBuiltinTypeCode()
```

Returns an integer for builtin types that can be used for quick comparison.

getCommonBaseType(SchemaType) Method

```
public SchemaType getCommonBaseType(SchemaType type)
```

Returns common base type with the given type. The returned type is the most specific declared base type of both types.

getContainerField() Method

```
public SchemaField getContainerField()
```

The parent schema element. Null for top-level (named) types and document types.

getContentModel() Method

```
public SchemaParticle getContentModel()
```

Returns the complex content model for this complex type (with complex content).

getContentType() Method

```
public int getContentType()
```

Returns `SchemaType.EMPTY_CONTENT`, `SchemaType.SIMPLE_CONTENT`, `SchemaType.ELEMENT_CONTENT`, or `SchemaType.MIXED_CONTENT` for complex types. For

noncomplex types, returns `SchemaType.NOT_COMPLEX_TYPE`.

getDecimalSize() Method

```
public int getDecimalSize()
```

For atomic numeric restrictions of decimal only: the numeric size category. Takes into account min and max restrictions as well as totalDigits and fractionDigits facets.

Returns either `SchemaType.NOT_DECIMAL`, `SchemaType.SIZE_BYTE`, `SchemaType.SIZE_SHORT`, `SchemaType.SIZE_INT`, `SchemaType.SIZE_LONG`, `SchemaType.SIZE_BIG_INTEGER`, or `SchemaType.SIZE_BIG_DECIMAL`.

getDerivationType() Method

```
public int getDerivationType()
```

Returns an integer for the derivation type, either `SchemaType.DT_EXTENSION`, `SchemaType.DT_RESTRICTION`, `SchemaType.DT_NOT_DERIVED`.

getDerivedProperties() Method

```
public SchemaProperty[] getDerivedProperties()
```

Returns the SchemaProperties defined by this complex type, exclusive of the base type (if any).

getDocumentElementName() Method

```
public QName getDocumentElementName()
```

Returns the document element name if this is a document type, or null otherwise.

getElementProperties() Method

```
public SchemaProperty[] getElementProperties()
```

Returns all the SchemaProperties corresponding to elements.

getElementProperty(QName) Method

```
public SchemaProperty getElementProperty(QName eltName)
```

Returns a SchemaProperty corresponding to an element within this complex type by looking up the element name.

getElementSequencer() Method

```
public SchemaTypeElementSequencer getElementSequencer()
```

Returns a `SchemaTypeElementSequencer` object, which can then be used to validate complex content inside this element. This is useful for example for trying out different names and see which one would be valid as a child of this element.

getElementType(QName, QName, SchemaTypeLoader) Method

```
public SchemaType getElementType(QName eltName,  
                                QName xsiType,  
                                SchemaTypeLoader wildcardTypeLoader)
```

Returns the type of a child element based on the element name and an `xsi:type` attribute (and the type system within which names are resolved).

getEnumerationValues() Method

```
public XmlAnySimpleType[] getEnumerationValues()
```

Returns the array of valid objects from the enumeration facet, null if no enumeration defined.

getEnumJavaClass() Method

```
public Class getEnumJavaClass()
```

The Java class corresponding to the enumeration type for this schema type, if applicable (or null if not an enumeration).

getFacet(int) Method

```
public XmlAnySimpleType getFacet(int facetCode)
```

Returns the value of the given facet, or null if none is set.

getFullJavaImplName() Method

```
public String getFullJavaImplName()
```

The fully-qualified Java type name of the implementation class.

getFullJavaName() Method

```
public String getFullJavaName()
```

The fully-qualified Java type name of the class.

getJavaClass() Method

```
public Class getJavaClass()
```

The Java class corresponding to this schema type.

getListItemType() Method

```
public SchemaType getListItemType()
```

For list types only: get the item type. This is the atomic or union type that is the type of every entry in the list.

Returns null if this type is not a list.

getName() Method

```
public QName getName()
```

The name used to describe the type in the schema. Null if the type is anonymous (nested), or if it is a document type.

getOuterType() Method

```
public SchemaType getOuterType()
```

The outer schema type. Null for top-level (named) types.

getPatterns() Method

```
public String[] getPatterns()
```

True

getPrimitiveType() Method

```
public SchemaType getPrimitiveType()
```

For atomic types only: get the primitive type underlying this one.

Returns null if this is not an atomic type.

getProperties() Method

```
public SchemaProperty[] getProperties()
```

Returns all the SchemaProperties within this complex type, elements followed by attributes.

getRef() Method

```
public SchemaType.Ref getRef()
```

Returns a SchemaType.Ref pointing to this schema type itself.

getShortJavaImplName() Method

```
public String getShortJavaImplName()
```

The short unqualified Java name for the implementation class.

getShortJavaName() Method

```
public String getShortJavaName()
```

The short unqualified Java name for the class.

getSimpleVariety() Method

```
public int getSimpleVariety()
```

Returns whether the simple type is ATOMIC, UNION, or LIST. Returns SchemaType.NOT_SIMPLE, SchemaType.ATOMIC, SchemaType.UNION, or SchemaType.LIST.

getSourceName() Method

```
public String getSourceName()
```

Returns the filename for the XSD file from which this type was loaded. Intended for use when debugging.

getStringEnumEntries() Method

```
public SchemaStringEnumEntry[] getStringEnumEntries()
```


Returns the array of `SchemaStringEnumEntries` for this type: this array includes information about the java constant names used for each string enum entry.

getTypeSystem() Method

```
public SchemaTypeSystem getTypeSystem()
```

Returns the `SchemaTypeLoader` in which this type was defined. Complex types are defined and used in exactly one schema type system, but simple types are defined in one type system and can be used in any number of type systems. The most common case is the builtin types, which are defined in the builtin type system and used elsewhere.

getUnionCommonBaseType() Method

```
public SchemaType getUnionCommonBaseType()
```

For union types only: get the most specific common base type of the constituent member types. May return a UR type.

Returns null if this type is not a union.

getUnionConstituentTypes() Method

```
public SchemaType[] getUnionConstituentTypes()
```

For union types only: get the constituent member types. This returns only non-union types, so, for example, for unions of unions, this returns the flattened list of individual member types within the innermost unions.

Returns null if this type is not a union.

getUnionMemberTypes() Method

```
public SchemaType[] getUnionMemberTypes()
```

For union types only: get the shallow member types. This returns the declared member types of the union, so, for example if the type contains another union, the nested members of that union are NOT returned here.

Returns null if this type is not a union.

getUnionSubTypes() Method

```
public SchemaType[] getUnionSubTypes()
```

For union types only: gets the full tree of member types. This computes the closure of the set returned by `getUnionMemberTypes()`, so, for example, it returns all the types nested within unions of unions as well as the

top-level members; the set also includes the type itself. If you are seeking only the basic non-union constituents, use `getUnionConstituentTypes`.

Returns null if this type is not a union.

getWhiteSpaceRule() Method

```
public int getWhiteSpaceRule()
```

For nonunion simple types: get the whitespace rule. This is either `SchemaType.WS_PRESERVE`, `SchemaType.WS_REPLACE`, or `SchemaType.WS_COLLAPSE`. Returns `SchemaType.WS_UNSPECIFIED` for unions and complex types.

hasAllContent() Method

```
public boolean hasAllContent()
```

True if the complex content model for this complex type is an "all" group.

hasAttributeWildcards() Method

```
public boolean hasAttributeWildcards()
```

True if this type permits wildcard attributes. See the attribute model for more information about which wildcards are allowed.

hasElementWildcards() Method

```
public boolean hasElementWildcards()
```

True if this type permits element wildcards. See the content model for more information about which wildcards are allowed, and where.

hasPatternFacet() Method

```
public boolean hasPatternFacet()
```

True if there are regex pattern facets

hasStringEnumValues() Method

```
public boolean hasStringEnumValues()
```

True if this is a string enum where an integer is assigned to each enumerated value.

isAbstract() Method

```
public boolean isAbstract()
```

True if this type cannot be used directly in instances

isAnonymousType() Method

```
public boolean isAnonymousType()
```

True if the Xsd type is anonymous (i.e., not top-level).

isAssignableFrom(SchemaType) Method

```
public boolean isAssignableFrom(SchemaType type)
```

True if the specified type derives from this type (or if it is the same type). Note that `XmlObject.type` (the `anyType`) is assignable from all type, and the `XmlBeans.noType` (the absence of a type) is assignable to all types.

isAttributeType() Method

```
public boolean isAttributeType()
```

True if this is a attribute type.

Attribute types are generated for every global attribute. An attribute type is an unnamed complex type that contains exactly one attribute: we define these types, because they are the types of the "attribute documents" which contain the defined global attribute, and they all turn into Java types. (Named `AttributenameAttribute`.)

isBounded() Method

```
public boolean isBounded()
```

True if bounded.

isBuiltinType() Method

```
public boolean isBuiltinType()
```

True for any of the 40+ built-in types.

isCompiled() Method

```
public boolean isCompiled()
```

True if this schema type was compiled to have a corresponding Java class.

isDocumentType() Method

```
public boolean isDocumentType()
```

True if this is a document type.

Document types are generated for every global element. A document type is an unnamed complex type that contains exactly one element: we define these types, because they are the types of the "documents" which contain the defined global elements, and they all turn into Java types. (Named ElementnameDocument.)

isFacetFixed(int) Method

```
public boolean isFacetFixed(int facetCode)
```

True if the given facet is fixed.

isFinite() Method

```
public boolean isFinite()
```

True if finite.

isNoType() Method

```
public boolean isNoType()
```

True for the type object that represents a the absence of a determined type. XML Objects whose type isNoType() are never valid.

isNumeric() Method

```
public boolean isNumeric()
```

True if numeric.

isOrderSensitive() Method

```
public boolean isOrderSensitive()
```

True if particles have same defaults, nillability, etc, that are invariant when order changes. Computed only for Javaized types.

isPrimitiveType() Method

```
public boolean isPrimitiveType()
```

True for any of the 20 primitive types (plus anySimpleType)

isSimpleType() Method

```
public boolean isSimpleType()
```

True for the anySimpleType and any restrictions/unions/lists.

isSkippedAnonymousType() Method

```
public boolean isSkippedAnonymousType()
```

True if this anonymous type has no corresponding Java type. True for anonymous types nested within simple type restrictions.

isURType() Method

```
public boolean isURType()
```

True for anyType and anySimpleType.

isValidSubstitution(QName) Method

```
public boolean isValidSubstitution(QName name)
```

For document types, true if the given name can be substituted for the document element name.

matchPatternFacet(String) Method

```
public boolean matchPatternFacet(String s)
```

True if the given string matches the pattern facets. Always true if there are no pattern facets.

newValue(Object) Method

```
public XmlAnySimpleType newValue(Object v)
```

Creates an immutable simple type value that does not reside in a tree.

ordered() Method

```
public int ordered()
```

True if ordered. Returns either `SchemaType.UNORDERED`, `SchemaType.PARTIAL_ORDER`, or `SchemaType.TOTAL_ORDER`.

SchemaTypeElementSequencer Interface

public interface SchemaTypeElementSequencer

This class is used to programatically validate the contents of an XML element. Call to both `SchemaTypeElementSequencer.next(QName)` and `SchemaTypeElementSequencer.peek(QName)` will return true if the element with the provided name is allowed at the current position in the element content, the difference being that `SchemaTypeElementSequencer.next(QName)` will advance the current position, while `SchemaTypeElementSequencer.peek(QName)` won't.

Related Topics

`SchemaType.getElementSequencer()`

Method Summary

```
public
boolean next(QName elementName)
    Returns true if the element with the given name is valid at the current
    position.

public
boolean peek(QName elementName)
    Return true if the element with the given name is valid at the current position.
```

Method Detail

next(QName) Method

```
public boolean next(QName elementName)
```

Returns true if the element with the given name is valid at the current position. Advances the current position.

peek(QName) Method

```
public boolean peek(QName elementName)
```

Return true if the element with the given name is valid at the current position. Does not advance the current position.

SchemaTypeLoader Interface

public interface SchemaTypeLoader

Represents a searchable set of XML Schema component definitions.

SchemaTypeLoader is somewhat analogous to ClassLoader, because it is responsible for finding SchemaComponent definitions by name, yet it is not responsible for being able to enumerate all the component definitions available. (If you wish to enumerate component definitions, see SchemaTypeSystem.) There are some ways in which SchemaTypeSystems are dissimilar from ClassLoaders, however. Since XML Schema has a number of instance-oriented typing mechanisms (such as wildcards) that do not exist in Java, a SchemaTypeLoader is not associated with a type; instead, a SchemaTypeLoader is associated with each XML instance.

Every XML instance is loaded within the context of a SchemaTypeLoader; the SchemaTypeLoader for an instance is used to resolve all type definitions within the instance and for applying type-sensitive methods such as XmlObject.validate().

Normally the SchemaTypeLoader being used for all instances is the context type loader (that is, the SchemaTypeLoader returned from XmlBeans.getContextTypeLoader()). The context type loader consults the thread's context ClassLoader (see Thread.getContextClassLoader()) to find schema type definitions that are available on the classpath. The net result is that you can use schema types simply by putting their compiled schema JARs on your classpath. If you wish to load instances using a different SchemaTypeLoader, then you must call SchemaTypeLoader.parse(String, SchemaType, XmlOptions) methods on the SchemaTypeLoader instance explicitly rather than using the normal convenient Factory methods.

A SchemaTypeLoader can be obtained by dynamically loading XSD files using XmlBeans.loadXsd(XmlObject[]), or by assembling other SchemaTypeLoaders or SchemaTypeSystems on a path using XmlBeans.typeLoaderUnion(SchemaTypeLoader[]).

Related Topics

```
XmlBeans.loadXsd(XmlObject[])
XmlBeans.getContextTypeLoader()
XmlBeans.typeLoaderUnion(SchemaTypeLoader[])
SchemaTypeSystem
```

All Known Subinterfaces

SchemaTypeSystem

Method Summary

```
public String
    compilePath(String pathExpr, XmlOptions options)
```


XMLBeans API Reference

Compiles an XPath

public String

compileQuery(String queryExpr, XmlOptions options)

Compiles an XQuery

public SchemaGlobalAttribute

findAttribute(QName name)

Returns the global attribute definition with the given name, or null if none.

public SchemaAttributeGroup

findAttributeGroup(QName name)

Returns the attribute group definition with the given name, or null if none.

public

SchemaAttributeGroup.Ref **findAttributeGroupRef**(QName name)

Used for on-demand loading.

public

SchemaGlobalAttribute.Ref **findAttributeRef**(QName name)

Used for on-demand loading.

public SchemaType

findAttributeType(QName name)

Returns the attribute type containing the given attribute name, or null if none.

public SchemaType.Ref

findAttributeTypeRef(QName name)

Used for on-demand loading.

public SchemaType

findDocumentType(QName name)

Returns the document type rooted at the given element name, or null if none.

public SchemaType.Ref

findDocumentTypeRef(QName name)

Used for on-demand loading.

public SchemaGlobalElement

findElement(QName name)

Returns the global element definition with the given name, or null if none.

public

SchemaGlobalElement.Ref **findElementRef**(QName name)

Used for on-demand loading.

public

SchemaIdentityConstraint.Ref **findIdentityConstraintRef**(QName name)

Used for on-demand loading.

public SchemaModelGroup

findModelGroup(QName name)

Returns the model group definition with the given name, or null if none.

public SchemaModelGroup.Ref

XMLBeans API Reference

findModelGroupRef(QName name)
Used for on-demand loading.

public SchemaType
findType(QName name)
Returns the type with the given name, or null if none.

public SchemaType.Ref
findTypeRef(QName name)
Used for on-demand loading.

public InputStream
getSourceAsStream(String sourceName)
Loads original XSD source as a stream.

public boolean
isNamespaceDefined(String namespace)
True if the typeloader contains any definitions in the given namespace.

public XmlObject
newInstance(SchemaType type, XmlOptions options)
Creates an instance of the given type.

public XMLInputStream
newValidatingXMLInputStream(XMLInputStream xis, SchemaType type, XmlOptions options)
Returns a validating XMLInputStream that will throw an exception if the XML is not valid

public XmlSaxHandler
newXmlSaxHandler(SchemaType type, XmlOptions options)
Returns an XmlSaxHandler that can parse an instance of the given type.

public XmlObject
parse(String xmlText, SchemaType type, XmlOptions options)
Parses an instance of the given type.

public XmlObject
parse(File file, SchemaType type, XmlOptions options)
Parses an instance of the given type.

public XmlObject
parse(URL file, SchemaType type, XmlOptions options)
Parses an instance of the given type.

public XmlObject
parse(InputStream jiois, SchemaType type, XmlOptions options)
Parses an instance of the given type.

public XmlObject
parse(Reader jior, SchemaType type, XmlOptions options)
Parses an instance of the given type.

public XmlObject
parse(Node node, SchemaType type, XmlOptions options)

Parses an instance of the given type.

```
public XmlObject
```

```
parse(XMLInputStream xis, SchemaType type,  
      XmlOptions options)
```

Parses an instance of the given type.

```
public SchemaType
```

```
typeForClassname(String classname)
```

Finds a type for a given fully-qualified XML Bean
classname

```
public SchemaType
```

```
typeForSignature(String signature)
```

Finds a type for a given signature string

Method Detail

compilePath(String, XmlOptions) Method

```
public String compilePath(String pathExpr,  
                          XmlOptions options)  
    throws XmlException
```

Compiles an XPath

Exceptions

XmlException

compileQuery(String, XmlOptions) Method

```
public String compileQuery(String queryExpr,  
                           XmlOptions options)  
    throws XmlException
```

Compiles an XQuery

Exceptions

XmlException

findAttribute(QName) Method

```
public SchemaGlobalAttribute findAttribute(QName name)
```

Returns the global attribute definition with the given name, or null if none.

findAttributeGroup(QName) Method

```
public SchemaAttributeGroup findAttributeGroup(QName name)
```

Returns the attribute group definition with the given name, or null if none.

findAttributeGroupRef(QName) Method

```
public SchemaAttributeGroup.Ref findAttributeGroupRef(QName name)
```

Used for on-demand loading.

findAttributeRef(QName) Method

```
public SchemaGlobalAttribute.Ref findAttributeRef(QName name)
```

Used for on-demand loading.

findAttributeType(QName) Method

```
public SchemaType findAttributeType(QName name)
```

Returns the attribute type containing the given attribute name, or null if none.

findAttributeTypeRef(QName) Method

```
public SchemaType.Ref findAttributeTypeRef(QName name)
```

Used for on-demand loading.

findDocumentType(QName) Method

```
public SchemaType findDocumentType(QName name)
```

Returns the document type rooted at the given element name, or null if none.

findDocumentTypeRef(QName) Method

```
public SchemaType.Ref findDocumentTypeRef(QName name)
```

Used for on-demand loading.

findElement(QName) Method

```
public SchemaGlobalElement findElement(QName name)
```

Returns the global element definition with the given name, or null if none.

findElementRef(QName) Method

```
public SchemaGlobalElement.Ref findElementRef(QName name)
```

Used for on-demand loading.

findIdentityConstraintRef(QName) Method

```
public SchemaIdentityConstraint.Ref findIdentityConstraintRef(QName name)
```

Used for on-demand loading.

findModelGroup(QName) Method

```
public SchemaModelGroup findModelGroup(QName name)
```

Returns the model group definition with the given name, or null if none.

findModelGroupRef(QName) Method

```
public SchemaModelGroup.Ref findModelGroupRef(QName name)
```

Used for on-demand loading.

findType(QName) Method

```
public SchemaType findType(QName name)
```

Returns the type with the given name, or null if none.

findTypeRef(QName) Method

```
public SchemaType.Ref findTypeRef(QName name)
```

Used for on-demand loading.

getSourceAsStream(String) Method

```
public InputStream getSourceAsStream(String sourceName)
```

Loads original XSD source as a stream. See `SchemaType.getSourceName()`.

isNamespaceDefined(String) Method

```
public boolean isNamespaceDefined(String namespace)
```

True if the typeloader contains any definitions in the given namespace.

newInstance(SchemaType, XmlOptions) Method

```
public XmlObject newInstance(SchemaType type,
                             XmlOptions options)
```

Creates an instance of the given type.

newValidatingXMLInputStream(XMLInputStream, SchemaType, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
                                                  SchemaType type,
                                                  XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream that will throw an exception if the XML is not valid

Exceptions

XmlException

XMLStreamException

newXmlSaxHandler(SchemaType, XmlOptions) Method

```
public XmlSaxHandler newXmlSaxHandler(SchemaType type,
                                       XmlOptions options)
```

Returns an XmlSaxHandler that can parse an instance of the given type.

parse(String, SchemaType, XmlOptions) Method

```
public XmlObject parse(String xmlText,  
                        SchemaType type,  
                        XmlOptions options)  
    throws XmlException
```

Parses an instance of the given type.

Exceptions

XmlException

parse(File, SchemaType, XmlOptions) Method

```
public XmlObject parse(File file,  
                        SchemaType type,  
                        XmlOptions options)  
    throws XmlException, IOException
```

Parses an instance of the given type.

Exceptions

XmlException

IOException

parse(URL, SchemaType, XmlOptions) Method

```
public XmlObject parse(URL file,  
                        SchemaType type,  
                        XmlOptions options)  
    throws XmlException, IOException
```

Parses an instance of the given type.

Exceptions

XmlException

IOException

parse(InputStream, SchemaType, XmlOptions) Method

```
public XmlObject parse(InputStream jiois,  
                        SchemaType type,  
                        XmlOptions options)  
    throws XmlException, IOException
```

Parses an instance of the given type.

Exceptions

XmlException

IOException

parse(Reader, SchemaType, XmlOptions) Method

```
public XmlObject parse(Reader rior,
                       SchemaType type,
                       XmlOptions options)
    throws XmlException, IOException
```

Parses an instance of the given type.

Exceptions

XmlException

IOException

parse(Node, SchemaType, XmlOptions) Method

```
public XmlObject parse(Node node,
                       SchemaType type,
                       XmlOptions options)
    throws XmlException
```

Parses an instance of the given type.

Exceptions

XmlException

parse(XMLInputStream, SchemaType, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public XmlObject parse(XMLInputStream xis,
                       SchemaType type,
                       XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses an instance of the given type.

Exceptions

XmlException

XMLStreamException

typeForClassname(String) Method

```
public SchemaType typeForClassname(String classname)
```

Finds a type for a given fully-qualified XML Bean classname

typeForSignature(String) Method

```
public SchemaType typeForSignature(String signature)
```

Finds a type for a given signature string

SchemaTypeLoaderException Class

public class SchemaTypeLoaderException

extends XmlRuntimeException

An exception that is thrown if there is corruption or a version mismatch in a compiled schema type system.

Hierarchy

```
Object
  Throwable
    Exception
      RuntimeException
        XmlRuntimeException
          SchemaTypeLoaderException
```

All Implemented Interfaces

```
Serializable
```

Field Summary

```
public
static BAD_HANDLE
final int      int

public
static BAD_PARTICLE_TYPE
final int      int

public
static INT_TOO_LARGE
final int      int

public
static IO_EXCEPTION
final int      int

public
static MALFORMED_CONTENT_MODEL
final int      int

public
static NESTED_EXCEPTION
final int      int

public
static NO_RESOURCE
final int      int
```



```

    public
    static NOT_WRITEABLE
    final int          int

    public
    static UNRECOGNIZED_INDEX_ENTRY
    final int          int

    public
    static WRONG_FILE_TYPE
    final int          int

    public
    static WRONG_MAGIC_COOKIE
    final int          int

    public
    static WRONG_MAJOR_VERSION
    final int          int

    public
    static WRONG_MINOR_VERSION
    final int          int

    public
    static WRONG_PROPERTY_TYPE
    final int          int

    public
    static WRONG_SIMPLE_VARIETY
    final int          int

```

Constructor Summary

SchemaTypeLoaderException(String message, String name, String handle, int code, Exception cause)

Constructs an exception with the given message, filename, extension, code, and cause

SchemaTypeLoaderException(String message, String name, String handle, int code)

Constructs an exception with the given message, filename, extension, and code

Method Summary

```

public
    int getCode()
        Returns the reason for the failure, given by one of the numeric constants in this
        class

```

Methods from `com.bea.xml.XmlRuntimeException`

`getError, getErrors`

Methods from `java.lang.Throwable`

`fillInStackTrace, getCause, getLocalizedMessage, getMessage, getStackTrace, initCause, printStackTrace, printStackTrace, printStackTrace, setStackTrace, toString`

Methods from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Field Detail

BAD_HANDLE

```
public static final int BAD_HANDLE
```

BAD_PARTICLE_TYPE

```
public static final int BAD_PARTICLE_TYPE
```

INT_TOO_LARGE

```
public static final int INT_TOO_LARGE
```

IO_EXCEPTION

```
public static final int IO_EXCEPTION
```

MALFORMED_CONTENT_MODEL

```
public static final int MALFORMED_CONTENT_MODEL
```

NESTED_EXCEPTION

```
public static final int NESTED_EXCEPTION
```

NO_RESOURCE

```
public static final int NO_RESOURCE
```

NOT_WRITEABLE

```
public static final int NOT_WRITEABLE
```

UNRECOGNIZED_INDEX_ENTRY

```
public static final int UNRECOGNIZED_INDEX_ENTRY
```

WRONG_FILE_TYPE

```
public static final int WRONG_FILE_TYPE
```

WRONG_MAGIC_COOKIE

```
public static final int WRONG_MAGIC_COOKIE
```

WRONG_MAJOR_VERSION

```
public static final int WRONG_MAJOR_VERSION
```

WRONG_MINOR_VERSION

```
public static final int WRONG_MINOR_VERSION
```

WRONG_PROPERTY_TYPE

```
public static final int WRONG_PROPERTY_TYPE
```

WRONG_SIMPLE_VARIETY

```
public static final int WRONG_SIMPLE_VARIETY
```

Constructor Detail

SchemaTypeLoaderException

```
public SchemaTypeLoaderException(String message,  
                                String name,  
                                String handle,  
                                int code,  
                                Exception cause)
```


Constructs an exception with the given message, filename, extension, code, and cause

SchemaTypeLoaderException

```
public SchemaTypeLoaderException(String message,  
                                String name,  
                                String handle,  
                                int code)
```

Constructs an exception with the given message, filename, extension, and code

Method Detail

getCode() Method

```
public int getCode()
```

Returns the reason for the failure, given by one of the numeric constants in this class

SchemaTypeSystem Interface

public interface SchemaTypeSystem

extends SchemaTypeLoader

A finite set of XML Schema component definitions.

Every SchemaComponent such as a SchemaType, SchemaGlobalElement, SchemaGlobalAttribute, SchemaModelGroup, SchemaAttributeGroup, or SchemaIdentityConstraint, is defined in exactly one SchemaTypeSystem. (See SchemaComponent.getTypeSystem().) A single SchemaTypeSystem can include definitions from any number of namespaces; one SchemaTypeSystem consists simply of a set of component definitions that were compiled together.

Since every component is defined in a single SchemaTypeSystem, no SchemaTypeSystem other than XmlBeans.getBuiltinTypeSystem() includes any of the the built-in types. That means you cannot ordinarily load instances using a single SchemaTypeSystem by itself. Instead, you will want to combine a path of SchemaTypeSystems together using XmlBeans.typeLoaderUnion(SchemaTypeLoader[]) to form a SchemaTypeLoader that can be used for loading instances.

For example, the following code compiles the schema in myXSDFile in the presence of only the minimal builtin type system. The resulting SchemaTypeSystem sts contains only the definitions from myXSD file. In order to load and validate an instance within the context of those types, we must next construct a SchemaTypeLoader stl that contains both the builtin type system and the types defined within the myXSD file.

```
SchemaTypeSystem sts = XmlBeans.compileXsd(new XmlObject[]
    { XmlObject.Factory.parse(myXSDFile) },
    XmlBeans.getBuiltinTypeSystem(),
    null);
SchemaTypeLoader stl = XmlBeans.typeLoaderUnion(new SchemaTypeLoader[]
    { sts, XmlBeans.getBuiltinTypeSystem() });
XmlObject mydoc = stl.parse(instanceFile, null, null);
System.out.println("Document valid: " + mydoc.validate());
```

As you can see, for working with instances, you typically want to work with a SchemaTypeLoader constructed from a path rather than a solitary SchemaTypeSystem. See XmlBeans.loadXsd(XmlObject[]) for a convenient alternative to XmlBeans.compileXsd(XmlObject[], SchemaTypeLoader, XmlOptions).

A SchemaTypeSystem is useful when you need to enumerate the exact set of component definitions derived from a set of XSD files, for example, when you are analyzing the contents of the XSD files themselves. Here is how to use a SchemaTypeSystem to inspect a set of schema definitions:

1. First, use XmlBeans.compileXsd(XmlObject[], SchemaTypeLoader, XmlOptions) to compile any number of schema files. If the schema files are valid, result will be a SchemaTypeSystem that contains all the component definitions from those files. It will contain no

other component definitions.

2. Alternatively, call `SchemaComponent.getTypeSystem()` on a precompiled schema component to discover the `SchemaTypeSystem` within which that component was originally compiled.
3. Once you have a `SchemaTypeSystem`, call:
 - ◆ `SchemaTypeSystem.globalTypes()` for all the global type definitions.
 - ◆ `SchemaTypeSystem.globalElements()` for all the global element definitions.
 - ◆ `SchemaTypeSystem.globalAttributes()` for all the global attribute definitions.
 - ◆ `SchemaTypeSystem.modelGroups()` for all the named model group definitions.
 - ◆ `SchemaTypeSystem.attributeGroups()` for all the attribute group definitions.
4. In addition, there are special types generated for XML Beans there are not formally part of the Schema specification:
 - ◆ `SchemaTypeSystem.documentTypes()` returns all the document types.
 - ◆ `SchemaTypeSystem.attributeTypes()` returns all the attribute types.

A document type is a type that contains a single global element; there is one document type for each global element definition in a `SchemaTypeSystem`. In an instance document, only the root `XmlObject` can have a document type as its type.

Similarly, an attribute type is a type that contains a single global attribute, and there is one attribute type for each global attribute definition in a `SchemaTypeSystem`. It is possible to have a root `XmlObject` representing a fragment whose type is an attribute type, but attribute types are present mainly for symmetry and to simplify code such as the type-tree-walking code below.

The global component methods above only provide a view of the top-level components of a `SchemaTypeSystem` and do not include any nested definitions. To view all the nested definitions, you will want to traverse the entire tree of `SchemaType` definitions within a `SchemaTypeSystem` by examining the `SchemaType.getAnonymousTypes()` within each `SchemaType` recursively.

The following code is a standard treewalk that visits every `SchemaType` in the `SchemaTypeSystem` once, including nested definitions.

```
List allSeenTypes = new ArrayList();
allSeenTypes.addAll(Arrays.asList(typeSystem.documentTypes()));
allSeenTypes.addAll(Arrays.asList(typeSystem.attributeTypes()));
allSeenTypes.addAll(Arrays.asList(typeSystem.globalTypes()));
for (int i = 0; i < allSeenTypes.size(); i++)
{
    SchemaType sType = (SchemaType)allSeenTypes.get(i);
    System.out.println("Visiting " + sType.toString());
    allSeenTypes.addAll(Arrays.asList(sType.getAnonymousTypes()));
}
```

Related Topics

`SchemaType`

`SchemaTypeLoader`

`XmlBeans.compileXsd(XmlObject[], SchemaTypeLoader, XmlOptions)`

`XmlBeans.typeLoaderUnion(SchemaTypeLoader[])`

`XmlBeans.getBuiltinTypeSystem()`

*All Superinterfaces*SchemaTypeLoader

**Method
Summary**

```

        public
SchemaAttributeGroup[] attributeGroups()
                        Returns the attribute groups defined in this loader.

        public SchemaType[]
                        attributeTypes()
                        Returns the attribute types defined in this loader.

        public SchemaType[]
                        documentTypes()
                        Returns the document types defined in this loader.

        public ClassLoader
                        getClassLoader()
                        Returns the classloader used by this loader for resolving types.

        public String
                        getName()
                        Returns the name of this loader.

        public
SchemaGlobalAttribute[] globalAttributes()
                        Returns the global attributes defined in this loader.

        public
SchemaGlobalElement[] globalElements()
                        Returns the global elements defined in this loader.

        public SchemaType[]
                        globalTypes()
                        Returns the global types defined in this loader.

        public
SchemaModelGroup[] modelGroups()
                        Returns the model groups defined in this loader.

        public void
                        resolve()
                        Initializes a type system (resolves all handles within the type
                        system).

        public
SchemaComponent resolveHandle(String handle)
                        Locates a type, element, or attribute using the handle.

        public void
                        saveToDirectory(File classDir)
                        Saves this type to a directory.

        public SchemaType
                        typeForHandle(String handle)
                        Locates a type, element, or attribute using the handle.

```


Methods from interface `com.bea.xml.SchemaTypeLoader`

```
compilePath, compileQuery, findAttribute, findAttributeGroup,
findAttributeGroupRef, findAttributeRef, findAttributeType,
findAttributeTypeRef, findDocumentType, findDocumentTypeRef,
findElement, findElementRef, findIdentityConstraintRef, findModelGroup,
findModelGroupRef, findType, findTypeRef, getSourceAsStream,
isNamespaceDefined, newInstance, newValidatingXMLInputStream,
newXmlSaxHandler, parse, parse, parse, parse, parse, parse, parse,
typeForClassname, typeForSignature
```

Method Detail**attributeGroups() Method**

```
public SchemaAttributeGroup[] attributeGroups()
```

Returns the attribute groups defined in this loader.

attributeTypes() Method

```
public SchemaType[] attributeTypes()
```

Returns the attribute types defined in this loader.

documentTypes() Method

```
public SchemaType[] documentTypes()
```

Returns the document types defined in this loader.

getClassLoader() Method

```
public ClassLoader getClassLoader()
```

Returns the classloader used by this loader for resolving types.

getName() Method

```
public String getName()
```

Returns the name of this loader.

globalAttributes() Method

```
public SchemaGlobalAttribute[] globalAttributes()
```

Returns the global attributes defined in this loader.

globalElements() Method

```
public SchemaGlobalElement[] globalElements()
```

Returns the global elements defined in this loader.

globalTypes() Method

```
public SchemaType[] globalTypes()
```

Returns the global types defined in this loader.

modelGroups() Method

```
public SchemaModelGroup[] modelGroups()
```

Returns the model groups defined in this loader.

resolve() Method

```
public void resolve()
```

Initializes a type system (resolves all handles within the type system).

resolveHandle(String) Method

```
public SchemaComponent resolveHandle(String handle)
```

Locates a type, element, or attribute using the handle.

saveToDirectory(File) Method

```
public void saveToDirectory(File classDir)
```

Saves this type to a directory.

typeForHandle(String) Method

```
public SchemaType typeForHandle(String handle)
```

Locates a type, element, or attribute using the handle.

SimpleValue Interface

public interface SimpleValue

extends XmlObject

All XmlObject implementations can be coerced to SimpleValue. For any given schema type, only a subset of the conversion methods will work. Others will throw an exception.

SimpleValue is useful for declaring variables which can hold more than one similar schema type that may not happen to have a common XML base type, for example, two list types, or two unrelated integer restrictions that happen to fit into an int.

All Known Implementing Classes

FilterXmlObject

All Superinterfaces

XmlObject, XmlTokenSource

Nested Class Summary

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```
public BigDecimal
    bigDecimalValue()
        Returns the value as a BigDecimal

public BigInteger
    bigIntegerValue()
        Returns the value as a BigInteger
```


XMLBeans API Reference

```
public boolean booleanValue()
    Returns the value as a boolean

public byte[]
    byteArrayValue()
    Returns the value as a byte array

public byte
    byteValue()
    Returns the value as a byte

public Calendar
    calendarValue()
    Returns the value as a Calendar

public Date
    dateValue()
    Returns the value as a Date

public double
    doubleValue()
    Returns the value as a double

public
StringEnumAbstractBase enumValue()
    Returns the value as a StringEnumAbstractBase

public float
    floatValue()
    Returns the value as a float

public GDate
    gDateValue()
    Returns the value as a GDate

public GDuration
    gDurationValue()
    Returns the value as a GDuration

public BigDecimal
    getBigDecimalValue()
    Returns the value as a BigDecimal.

public BigInteger
    getBigIntegerValue()
    Returns the value as a BigInteger.

public boolean
    getBooleanValue()
    Returns the value as a boolean.

public byte[]
    getByteArrayValue()
    Returns the value as a byte array.

public byte
    getByteValue()
    Returns the value as a byte.

public Calendar
    getCalendarValue()
    Returns the value as a Calendar.
```


XMLBeans API Reference

```
public Date getDateValue()
    Returns the value as a Date.

public double
    getDoubleValue()
    Returns the value as a double.

    public
StringEnumAbstractBase getEnumValue()
    Returns the value as a StringEnumAbstractBase.

public float
    getFloatValue()
    Returns the value as a float.

public GDate
    getGDateValue()
    Returns the value as a GDate.

public GDuration
    getGDurationValue()
    Returns the value as a GDuration.

public int
    getIntValue()
    Returns the value as an int.

public List
    getListValue()
    Returns the value as a List of friendly Java objects (String,
    Integer, Byte, Short, Long, BigInteger, Decimal, Float, Double,
    byte[], Calendar, GDuration).

public long
    getLongValue()
    Returns the value as a long.

public Object
    getObjectValue()
    Returns a union value as a its natural friendly Java object (String,
    Integer, Byte, Short, Long, BigInteger, Decimal, Float, Double,
    byte[], Calendar, GDuration).

public QName
    getQNameValue()
    Returns the value as a QName.

public short
    getShortValue()
    Returns the value as a short.

public String
    getStringValue()
    Returns the value as a String.

public SchemaType
    instanceType()
    The same as getSchemaType unless this is a union instance or nil
    value.

public int
```


XMLBeans API Reference

```
intValue()
    Returns the value as an int

public List
    listValue()
        Returns the value as a List of friendly Java objects (String,
        Integer, Byte, Short, Long, BigInteger, Decimal, Float, Double,
        byte[], Calendar, GDuration)

public long
    longValue()
        Returns the value as a long

public void
    objectSet(Object obj)
        Sets the value as an arbitrary Object.

public Object
    objectValue()
        Returns a union value as a its natural friendly Java object (String,
        Integer, Byte, Short, Long, BigInteger, Decimal, Float, Double,
        byte[], Calendar, GDuration)

public QName
    qNameValue()
        Returns the value as a QName

public void
    set(String obj)
        Sets the value as a String

public void
    set(boolean v)
        Sets the value as a boolean

public void
    set(byte v)
        Sets the value as a byte.

public void
    set(short v)
        Sets the value as a short.

public void
    set(int v)
        Sets the value as an int.

public void
    set(long v)
        Sets the value as a long.

public void
    set(BigInteger obj)
        Sets the value as a BigInteger.

public void
    set(BigDecimal obj)
        Sets the value as a BigDecimal

public void
    set(float v)
```


XMLBeans API Reference

Sets the value as a float.

public void

set(double v)

Sets the value as a double.

public void

set(byte[] obj)

Sets the value as a byte array.

public void

set(StringEnumAbstractBase obj)

Sets the value as a StringEnumAbstractBase.

public void

set(Calendar obj)

Sets the value as a Calendar.

public void

set(Date obj)

Sets the value as a Date.

public void

set(GDateSpecification obj)

Sets the value as a GDate.

public void

set(GDurationSpecification obj)

Sets the value as a GDuration.

public void

set(QName obj)

Sets the value as a QName.

public void

set(List obj)

Sets the value as a List.

public void

setBigDecimalValue(BigDecimal obj)

Sets the value as a BigDecimal.

public void

setBigIntegerValue(BigInteger obj)

Sets the value as a BigInteger.

public void

setBooleanValue(boolean v)

Sets the value as a boolean.

public void

setByteArrayValue(byte[] obj)

Sets the value as a byte array.

public void

setByteValue(byte v)

Sets the value as a byte.

public void

setCalendarValue(Calendar obj)

Sets the value as a Calendar.

public void

XMLBeans API Reference

```
setDateValue(Date obj)
    Sets the value as a Date.

public void
setDoubleValue(double v)
    Sets the value as a double.

public void
setEnumValue(StringEnumAbstractBase obj)
    Sets the value as a StringEnumAbstractBase.

public void
setFloatValue(float v)
    Sets the value as a float.

public void
setGDateValue(GDate obj)
    Sets the value as a GDate.

public void
setGDurationValue(GDuration obj)
    Sets the value as a GDuration.

public void
setIntValue(int v)
    Sets the value as an int.

public void
setListValue(List obj)
    Sets the value as a List.

public void
setLongValue(long v)
    Sets the value as a long.

public void
setObjectValue(Object obj)
    Sets the value as an arbitrary Object.

public void
setQNameValue(QName obj)
    Sets the value as a QName.

public void
setShortValue(short v)
    Sets the value as a short.

public void
setStringValue(String obj)
    Sets the value as a String.

public short
shortValue()
    Returns the value as a short

public String
stringValue()
    Returns the value as a String

public List
xgetListValue()
    Returns the value as a List of XmlAnySimpleType objects.
```



```
public List xlistValue()
```

Returns the value as a List of XmlAnySimpleType objects

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`,
`isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`,
`toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`,
`newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`,
`newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`,
`xmlText`, `xmlText`

Method Detail

bigDecimalValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getBigDecimalValue()`

```
public BigDecimal bigDecimalValue()
```

Returns the value as a BigDecimal. *

bigIntegerValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getBigIntegerValue()`

```
public BigInteger bigIntegerValue()
```

Returns the value as a BigInteger. *

booleanValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getBooleanValue()`

```
public boolean booleanValue()
```

Returns the value as a boolean. *

byteArrayValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getByteArrayValue()`

```
public byte[] byteArrayValue()
```


Returns the value as a byte array. *

byteValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getBytesValue()`

```
public byte byteValue()
```

Returns the value as a byte. *

calendarValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getCalendarValue()`

```
public Calendar calendarValue()
```

Returns the value as a Calendar. *

dateValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getDateValue()`

```
public Date dateValue()
```

Returns the value as a Date. *

doubleValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getDoubleValue()`

```
public double doubleValue()
```

Returns the value as a double. *

enumValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getEnumValue()`

```
public StringEnumAbstractBase enumValue()
```

Returns the value as a StringEnumAbstractBase. *

floatValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getFloatValue()`

```
public float floatValue()
```

Returns the value as a float. *

gDateValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getGDateValue()`

```
public GDate gDateValue()
```

Returns the value as a GDate. *

gDurationValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getGDurationValue()`

```
public GDuration gDurationValue()
```

Returns the value as a GDuration. *

getBigDecimalValue() Method

```
public BigDecimal getBigDecimalValue()
```

Returns the value as a BigDecimal.

getBigIntegerValue() Method

```
public BigInteger getBigIntegerValue()
```

Returns the value as a BigInteger.

getBooleanValue() Method

```
public boolean getBooleanValue()
```

Returns the value as a boolean.

getByteArrayValue() Method

```
public byte[] getByteArrayValue()
```

Returns the value as a byte array.

getByteValue() Method

```
public byte getByteValue()
```

Returns the value as a byte.

getCalendarValue() Method

```
public Calendar getCalendarValue()
```

Returns the value as a Calendar.

getDateValue() Method

```
public Date getDateValue()
```

Returns the value as a Date.

getDoubleValue() Method

```
public double getDoubleValue()
```

Returns the value as a double.

getEnumValue() Method

```
public StringEnumAbstractBase getEnumValue()
```

Returns the value as a StringEnumAbstractBase.

getFloatValue() Method

```
public float getFloatValue()
```

Returns the value as a float.

getGDateValue() Method

```
public GDate getGDateValue()
```

Returns the value as a `GDate`.

getGDurationValue() Method

```
public GDuration getGDurationValue()
```

Returns the value as a `GDuration`.

getIntValue() Method

```
public int getIntValue()
```

Returns the value as an `int`.

getListValue() Method

```
public List getListValue()
```

Returns the value as a `List` of friendly Java objects (`String`, `Integer`, `Byte`, `Short`, `Long`, `BigInteger`, `Decimal`, `Float`, `Double`, `byte[]`, `Calendar`, `GDuration`).

getLongValue() Method

```
public long getLongValue()
```

Returns the value as a `long`.

getObjectValue() Method

```
public Object getObjectValue()
```

Returns a union value as a its natural friendly Java object (`String`, `Integer`, `Byte`, `Short`, `Long`, `BigInteger`, `Decimal`, `Float`, `Double`, `byte[]`, `Calendar`, `GDuration`).

getQNameValue() Method

```
public QName getQNameValue()
```

Returns the value as a `QName`.

getShortValue() Method

```
public short getShortValue()
```

Returns the value as a short.

getStringValue() Method

```
public String getStringValue()
```

Returns the value as a String.

instanceType() Method

```
public SchemaType instanceType()
```

The same as getSchemaType unless this is a union instance or nil value.

For unions, this returns the non-union constituent type of this instance. This type may change if setters are called that cause the instance to change to another constituent type of the union.

For nil values, this returns null.

intValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getIntValue()`

```
public int intValue()
```

Returns the value as an int. *

listValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getListValue()`

```
public List listValue()
```

Returns the value as a List of friendly Java objects (String, Integer, Byte, Short, Long, BigInteger, Decimal, Float, Double, byte[], Calendar, GDuration). *

longValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getLongValue()`

```
public long longValue()
```


Returns the value as a long. *

objectSet(Object) Method

DEPRECATED replaced with

`com.bea.xml.SimpleValue.setObjectValue(java.lang.Object)`

```
public void objectSet(Object obj)
```

Sets the value as an arbitrary Object.

objectValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getObjectValue()`

```
public Object objectValue()
```

Returns a union value as a its natural friendly Java object (String, Integer, Byte, Short, Long, BigInteger, Decimal, Float, Double, byte[], Calendar, GDuration). *

qNameValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getQNameValue()`

```
public QName qNameValue()
```

Returns the value as a QName. *

set(String) Method

DEPRECATED replaced with

`com.bea.xml.SimpleValue.setStringValue(java.lang.String)`

```
public void set(String obj)
```

Sets the value as a String. *

set(boolean) Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.setBooleanValue(boolean)`

```
public void set(boolean v)
```

Sets the value as a boolean. *

set(byte) Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.setByteValue(byte)`

```
public void set(byte v)
```

Sets the value as a byte.

set(short) Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.setShortValue(short)`

```
public void set(short v)
```

Sets the value as a short.

set(int) Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.setIntValue(int)`

```
public void set(int v)
```

Sets the value as an int.

set(long) Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.setLongValue(long)`

```
public void set(long v)
```

Sets the value as a long.

set(BigInteger) Method

DEPRECATED replaced with
`com.bea.xml.SimpleValue.setBigIntegerValue(java.math.BigInteger)`

```
public void set(BigInteger obj)
```

Sets the value as a BigInteger.

set(BigDecimal) Method

DEPRECATED replaced with
`com.bea.xml.SimpleValue.setBigDecimalValue(java.math.BigDecimal)`


```
public void set(BigDecimal obj)
```

Sets the value as a BigDecimal

set(float) Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.setFloatValue(float)`

```
public void set(float v)
```

Sets the value as a float.

set(double) Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.setDoubleValue(double)`

```
public void set(double v)
```

Sets the value as a double.

set(byte[]) Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.setByteArrayValue(byte[])`

```
public void set(byte[] obj)
```

Sets the value as a byte array.

set(StringEnumAbstractBase) Method

DEPRECATED replaced with
`com.bea.xml.SimpleValue.setEnumValue(com.bea.xml.StringEnumAbstractBase)`

```
public void set(StringEnumAbstractBase obj)
```

Sets the value as a StringEnumAbstractBase.

set(Calendar) Method

DEPRECATED replaced with
`com.bea.xml.SimpleValue.setCalendarValue(java.util.Calendar)`

```
public void set(Calendar obj)
```

Sets the value as a Calendar.

set(Date) Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.setDateValue(java.util.Date)`

```
public void set(Date obj)
```

Sets the value as a `Date`.

set(GDateSpecification) Method

DEPRECATED replaced with
`com.bea.xml.SimpleValue.setGDateValue(com.bea.xml.GDate)`

```
public void set(GDateSpecification obj)
```

Sets the value as a `GDate`.

set(GDurationSpecification) Method

DEPRECATED replaced with
`com.bea.xml.SimpleValue.setGDurationValue(com.bea.xml.GDuration)`

```
public void set(GDurationSpecification obj)
```

Sets the value as a `GDuration`.

set(QName) Method

DEPRECATED replaced with
`com.bea.xml.SimpleValue.setQNameValue(javax.xml.namespace.QName)`

```
public void set(QName obj)
```

Sets the value as a `QName`.

set(List) Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.setListValue(java.util.List)`

```
public void set(List obj)
```

Sets the value as a `List`.

setBigDecimalValue(BigDecimal) Method

```
public void setBigDecimalValue(BigDecimal obj)
```

Sets the value as a `BigDecimal`.

setBigIntegerValue(BigInteger) Method

```
public void setBigIntegerValue(BigInteger obj)
```

Sets the value as a `BigInteger`.

setBooleanValue(boolean) Method

```
public void setBooleanValue(boolean v)
```

Sets the value as a `boolean`.

setByteArrayValue(byte[]) Method

```
public void setByteArrayValue(byte[] obj)
```

Sets the value as a byte array.

setByteValue(byte) Method

```
public void setByteValue(byte v)
```

Sets the value as a `byte`.

setCalendarValue(Calendar) Method

```
public void setCalendarValue(Calendar obj)
```

Sets the value as a `Calendar`.

setDateValue(Date) Method

```
public void setDateValue(Date obj)
```

Sets the value as a `Date`.

setDoubleValue(double) Method

```
public void setDoubleValue(double v)
```

Sets the value as a double.

setEnumValue(StringEnumAbstractBase) Method

```
public void setEnumValue(StringEnumAbstractBase obj)
```

Sets the value as a `StringEnumAbstractBase`.

setFloatValue(float) Method

```
public void setFloatValue(float v)
```

Sets the value as a float.

setGDateValue(GDate) Method

```
public void setGDateValue(GDate obj)
```

Sets the value as a `GDate`.

setGDurationValue(GDuration) Method

```
public void setGDurationValue(GDuration obj)
```

Sets the value as a `GDuration`.

setIntValue(int) Method

```
public void setIntValue(int v)
```

Sets the value as an int.

setListValue(List) Method

```
public void setListValue(List obj)
```

Sets the value as a `List`.

setLongValue(long) Method

```
public void setLongValue(long v)
```

Sets the value as a long.

setObjectValue(Object) Method

```
public void setObjectValue(Object obj)
```

Sets the value as an arbitrary Object.

setQNameValue(QName) Method

```
public void setQNameValue(QName obj)
```

Sets the value as a QName.

setShortValue(short) Method

```
public void setShortValue(short v)
```

Sets the value as a short.

setStringValue(String) Method

```
public void setStringValue(String obj)
```

Sets the value as a String.

shortValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getShortValue()`

```
public short shortValue()
```

Returns the value as a short. *

stringValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getStringValue()`

```
public String stringValue()
```


Returns the value as a `String`. *

xgetListValue() Method

```
public List xgetListValue()
```

Returns the value as a `List` of `XmlAnySimpleType` objects.

xlistValue() Method

DEPRECATED replaced with `com.bea.xml.SimpleValue.getListValue()`

```
public List xlistValue()
```

Returns the value as a `List` of `XmlAnySimpleType` objects. *

StringEnumAbstractBase Class

*public class **StringEnumAbstractBase***

extends `Object`
implements `Serializable`

The base class for code-generated string enumeration value classes.

Subclasses are intended to be final types with a finite set of singleton instances. Each instance has a string value, which it returns via `StringEnumAbstractBase.toString()`, and an int value for the purpose of switching in case statements, returned via `StringEnumAbstractBase.intValue()`.

Each subclass manages an instance of `StringEnumAbstractBase.Table`, which holds all the singleton instances for the subclass. A `Table` can return a singleton instance given a `String` or an integer code.

Hierarchy

```

Object
  StringEnumAbstractBase
  
```

All Implemented Interfaces

```

Serializable
  
```

Nested Class Summary

```

public static final class StringEnumAbstractBase.Table
    Used to manage singleton instances of enumerations.
  
```

Constructor Summary

***StringEnumAbstractBase**(String s, int i)*

Singleton instances should only be created by subclasses.

Method Summary

```

public
    final hashCode()
        int        Returns the hash code of the underlying string
public
    final intValue()
        int        Returns an int code that can be used for switch statements
public
    final toString()
String        Returns the underlying string value

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `notify`, `notifyAll`, `wait`, `wait`, `wait`

Constructor Detail

StringEnumAbstractBase

```

protected StringEnumAbstractBase(String s,
                                   int i)

```

Singleton instances should only be created by subclasses.

Method Detail

hashCode() Method

```
public final int hashCode()
```

Returns the hash code of the underlying string

Overrides

`Object.hashCode()`

intValue() Method

```
public final int intValue()
```

Returns an int code that can be used for switch statements

toString() Method

```
public final String toString()
```

Returns the underlying string value

Overrides

```
Object.toString()
```


StringEnumAbstractBase.Table Class

public static final class StringEnumAbstractBase.Table

extends Object

Used to manage singleton instances of enumerations. Each subclass of StringEnumAbstractBase has an instance of a table to hold the singleton instances.

Hierarchy

```
Object
  StringEnumAbstractBase.Table
```

Enclosing class

```
StringEnumAbstractBase
```

Constructor Summary

StringEnumAbstractBase.Table(StringEnumAbstractBase array)

Method Summary

```

    public
StringEnumAbstractBase forInt(int i)
    Returns the singleton for an int code, or null if none.

    public
StringEnumAbstractBase forString(String s)
    Returns the singleton for a String, or null if none.

    public int
lastInt()
    Returns the last valid int code (the first is 1; zero is not used).
```

Methods from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll,
toString, wait, wait, wait
```


Constructor Detail

StringEnumAbstractBase.Table

```
public StringEnumAbstractBase.Table(StringEnumAbstractBase[] array)
```

Method Detail

forInt(int) Method

```
public StringEnumAbstractBase forInt(int i)
```

Returns the singleton for an `int` code, or null if none.

forString(String) Method

```
public StringEnumAbstractBase forString(String s)
```

Returns the singleton for a `String`, or null if none.

lastInt() Method

```
public int lastInt()
```

Returns the last valid `int` code (the first is 1; zero is not used).

XmlAnySimpleType Interface

public interface XmlAnySimpleType

extends XmlObject

Corresponds to the XML Schema xs:anySimpleType type.

All simple types are convertible to String.

All Superinterfaces

XmlObject, XmlTokenSource

All Known Subinterfaces

XmlAnyURI, XmlBase64Binary, XmlBoolean, XmlByte, XmlDate, XmlDateTime, XmlDecimal, XmlDouble, XmlDuration, XmlENTITIES, XmlENTITY, XmlFloat, XmlGDay, XmlGMonth, XmlGMonthDay, XmlGYear, XmlGYearMonth, XmlHexBinary, XmlID, XmlIDREF, XmlIDREFS, XmlInt, XmlInteger, XmlLanguage, XmlLong, XmlName, XmlNCName, XmlNegativeInteger, XmlNMTOKEN, XmlNMTOKENS, XmlNonNegativeInteger, XmlNonPositiveInteger, XmlNormalizedString, XmlNOTATION, XmlPositiveInteger, XmlQName, XmlShort, XmlString, XmlTime, XmlToken, XmlUnsignedByte, XmlUnsignedInt, XmlUnsignedLong, XmlUnsignedShort

Nested Class Summary

```

    public static final class XmlAnySimpleType.Factory
    A class with methods for creating instances of XmlAnySimpleType.
```

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```

    public static final SchemaType type
    The constant SchemaType object representing this schema type.
```

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```
public
String getStringValue()
    Returns the value as a String

public
void set(String s)
    Sets the value as a String

public
void setStringValue(String s)
    Sets the value as a String

public
String stringValue()
    Returns the value as a String
```

Methods from interface `com.bea.xml.XmlObject`

changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode

Methods from interface `com.bea.xml.XmlTokenSource`

documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Method Detail

getStringValue() Method

```
public String getStringValue()
```

Returns the value as a String

com.bea.xml.XmlAnySimpleType Interface

set(String) Method

DEPRECATED replaced by

`com.bea.xml.XmlAnySimpleType.setStringValue(java.lang.String)`

```
public void set(String s)
```

Sets the value as a `String`

setStringValue(String) Method

```
public void setStringValue(String s)
```

Sets the value as a `String`

stringValue() Method

DEPRECATED replaced by `com.bea.xml.XmlAnySimpleType.getStringValue()`

```
public String stringValue()
```

Returns the value as a `String`

XmlAnySimpleType.Factory Class

public static final class XmlAnySimpleType.Factory

extends Object

A class with methods for creating instances of XmlAnySimpleType.

Hierarchy

```
Object
  XmlAnySimpleType.Factory
```

Enclosing interface

```
XmlAnySimpleType
```

Method Summary

```
public static
XmlAnySimpleType newInstance()
    Creates an empty instance of XmlAnySimpleType

public static
XmlAnySimpleType newInstance(XmlOptions options)
    Creates an empty instance of XmlAnySimpleType

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
options)
    Returns a validating XMLInputStream.

public static
XmlAnySimpleType newValue(Object obj)
    Creates an immutable XmlAnySimpleType value

public static
XmlAnySimpleType parse(String s)
    Parses a XmlAnySimpleType fragment from a String.

public static
XmlAnySimpleType parse(String s, XmlOptions options)
    Parses a XmlAnySimpleType fragment from a String.

public static
XmlAnySimpleType parse(File f)
    Parses a XmlAnySimpleType fragment from a File.
```



```

    public static parse(File f, XmlOptions options)
XmlAnySimpleType      Parses a XmlAnySimpleType fragment from a File.

    public static
XmlAnySimpleType parse(URL u)
                        Parses a XmlAnySimpleType fragment from a URL.

    public static
XmlAnySimpleType parse(URL u, XmlOptions options)
                        Parses a XmlAnySimpleType fragment from a URL.

    public static
XmlAnySimpleType parse(InputStream is)
                        Parses a XmlAnySimpleType fragment from an InputStream.

    public static
XmlAnySimpleType parse(InputStream is, XmlOptions options)
                        Parses a XmlAnySimpleType fragment from an InputStream.

    public static
XmlAnySimpleType parse(Reader r)
                        Parses a XmlAnySimpleType fragment from a Reader.

    public static
XmlAnySimpleType parse(Reader r, XmlOptions options)
                        Parses a XmlAnySimpleType fragment from a Reader.

    public static
XmlAnySimpleType parse(Node node)
                        Parses a XmlAnySimpleType fragment from a DOM Node.

    public static
XmlAnySimpleType parse(Node node, XmlOptions options)
                        Parses a XmlAnySimpleType fragment from a DOM Node.

    public static
XmlAnySimpleType parse(XMLInputStream xis)
                        Parses a XmlAnySimpleType fragment from an XMLInputStream.

    public static
XmlAnySimpleType parse(XMLInputStream xis, XmlOptions options)
                        Parses a XmlAnySimpleType fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlAnySimpleType newInstance()
```

Creates an empty instance of `XmlAnySimpleType`

newInstance(XmlOptions) Method

```
public static XmlAnySimpleType newInstance(XmlOptions options)
```

Creates an empty instance of `XmlAnySimpleType`

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlAnySimpleType newValue(Object obj)
```

Creates an immutable `XmlAnySimpleType` value

parse(String) Method

```
public static XmlAnySimpleType parse(String s)
    throws XmlException
```


Parses a `XmlAnySimpleType` fragment from a `String`. For example:
"<xml-fragment>anything</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlAnySimpleType parse(String s,  
                                     XmlOptions options)  
    throws XmlException
```

Parses a `XmlAnySimpleType` fragment from a `String`. For example:
"<xml-fragment>anything</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlAnySimpleType parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlAnySimpleType` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlAnySimpleType parse(File f,  
                                     XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlAnySimpleType` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlAnySimpleType parse(URL u)
    throws XmlException, IOException
```

Parses a `XmlAnySimpleType` fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlAnySimpleType parse(URL u,
                                     XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlAnySimpleType` fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlAnySimpleType parse(InputStream is)
    throws XmlException, IOException
```

Parses a `XmlAnySimpleType` fragment from an `InputStream`.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlAnySimpleType parse(InputStream is,
                                     XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlAnySimpleType` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlAnySimpleType parse(Reader r)
    throws XmlException, IOException
```

Parses a `XmlAnySimpleType` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlAnySimpleType parse(Reader r,
                                     XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlAnySimpleType` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlAnySimpleType parse(Node node)
    throws XmlException
```

Parses a `XmlAnySimpleType` fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlAnySimpleType parse(Node node,
                                     XmlOptions options)
    throws XmlException
```


Parses a `XmlAnySimpleType` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlAnySimpleType parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlAnySimpleType` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlAnySimpleType parse(XMLInputStream xis,
                                     XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlAnySimpleType` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

com.bea.xml

XmlAnyURI Interface

public interface XmlAnyURI

extends XmlAnySimpleType

Corresponds to the XML Schema xs:anyURI type.

Convertible to String.

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
public static final class XmlAnyURI.Factory
    A class with methods for creating instances of XmlAnyURI.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
public static final SchemaType type
    The constant SchemaType object representing this schema type.
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`, `isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`, `toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`, `newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`, `newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `xmlText`, `xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

XmlAnyURI.Factory Class

public static final class XmlAnyURI.Factory

extends Object

A class with methods for creating instances of XmlAnyURI.

Hierarchy

```
Object
  XmlAnyURI.Factory
```

Enclosing interface

```
XmlAnyURI
```

Method Summary

```
public static
    XmlAnyURI newInstance()
        Creates an empty instance of XmlAnyURI

public static
    XmlAnyURI newInstance(XmlOptions options)
        Creates an empty instance of XmlAnyURI

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlAnyURI newValue(Object obj)
        Creates an immutable XmlAnyURI value

public static
    XmlAnyURI parse(String s)
        Parses a XmlAnyURI fragment from a String.

public static
    XmlAnyURI parse(String s, XmlOptions options)
        Parses a XmlAnyURI fragment from a String.

public static
    XmlAnyURI parse(File f)
        Parses a XmlAnyURI fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlAnyURI      Parses a XmlAnyURI fragment from a File.
public static
    XmlAnyURI parse(URL u)
    Parses a XmlAnyURI fragment from a URL.
public static
    XmlAnyURI parse(URL u, XmlOptions options)
    Parses a XmlAnyURI fragment from a URL.
public static
    XmlAnyURI parse(InputStream is)
    Parses a XmlAnyURI fragment from an InputStream.
public static
    XmlAnyURI parse(InputStream is, XmlOptions options)
    Parses a XmlAnyURI fragment from an InputStream.
public static
    XmlAnyURI parse(Reader r)
    Parses a XmlAnyURI fragment from a Reader.
public static
    XmlAnyURI parse(Reader r, XmlOptions options)
    Parses a XmlAnyURI fragment from a Reader.
public static
    XmlAnyURI parse(Node node)
    Parses a XmlAnyURI fragment from a DOM Node.
public static
    XmlAnyURI parse(Node node, XmlOptions options)
    Parses a XmlAnyURI fragment from a DOM Node.
public static
    XmlAnyURI parse(XMLInputStream xis)
    Parses a XmlAnyURI fragment from an XMLInputStream.
public static
    XmlAnyURI parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlAnyURI fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlAnyURI newInstance()
```

Creates an empty instance of `XmlAnyURI`

newInstance(XmlOptions) Method

```
public static XmlAnyURI newInstance(XmlOptions options)
```

Creates an empty instance of XmlAnyURI

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlAnyURI newValue(Object obj)
```

Creates an immutable XmlAnyURI value

parse(String) Method

```
public static XmlAnyURI parse(String s)
    throws XmlException
```


Parses a XmlAnyURI fragment from a String. For example:

```
"<xml-fragment>http://www.w3.org/</xml-fragment>".
```

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlAnyURI parse(String s,  
                               XmlOptions options)  
    throws XmlException
```

Parses a XmlAnyURI fragment from a String. For example:

```
"<xml-fragment>http://www.w3.org/</xml-fragment>".
```

Exceptions

XmlException

parse(File) Method

```
public static XmlAnyURI parse(File f)  
    throws XmlException, IOException
```

Parses a XmlAnyURI fragment from a File.

Exceptions

XmlException

IOException

parse(File, XmlOptions) Method

```
public static XmlAnyURI parse(File f,  
                               XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlAnyURI fragment from a File.

Exceptions

XmlException

IOException

parse(URL) Method

```
public static XmlAnyURI parse(URL u)
    throws XmlException, IOException
```

Parses a XmlAnyURI fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlAnyURI parse(URL u,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlAnyURI fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlAnyURI parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlAnyURI fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlAnyURI parse(InputStream is,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlAnyURI fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlAnyURI parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlAnyURI fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlAnyURI parse(Reader r,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlAnyURI fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlAnyURI parse(Node node)
    throws XmlException
```

Parses a XmlAnyURI fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlAnyURI parse(Node node,
                               XmlOptions options)
    throws XmlException
```


Parses a XmlAnyURI fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlAnyURI parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlAnyURI fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlAnyURI parse(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlAnyURI fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

XmlBase64Binary Interface

public interface XmlBase64Binary

extends XmlAnySimpleType

Corresponds to the XML Schema xs:base64Binary type.

Convertible to a byte array.

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
public static final class XmlBase64Binary.Factory
    A class with methods for creating instances of XmlBase64Binary.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
public static final SchemaType type
    The constant SchemaType object representing this schema type.
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

public
byte[] byteArrayValue()
    Returns this value as a byte array.

public
byte[] getByteArrayValue()
    Returns this value as a byte array.

public
void set(byte[] ba)
    Sets this value as a byte array.

public
void setByteArrayValue(byte[] ba)
    Sets this value as a byte array.

```

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`, `isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`, `toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`, `newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`, `newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `xmlText`, `xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

Method Detail

byteArrayValue() Method

DEPRECATED replaced by `com.bea.xml.XmlBase64Binary.getByteArrayValue()`

```
public byte[] byteArrayValue()
```

Returns this value as a byte array.

getByteArrayValue() Method

```
public byte[] getByteArrayValue()
```

Returns this value as a byte array.

set(byte[]) Method

DEPRECATED replaced by `com.bea.xml.XmlBase64Binary.setByteArrayValue(byte[])`

```
public void set(byte[] ba)
```

Sets this value as a byte array.

setByteArrayValue(byte[]) Method

```
public void setByteArrayValue(byte[] ba)
```

Sets this value as a byte array.

XmlBase64Binary.Factory Class

public static final class XmlBase64Binary.Factory

extends Object

A class with methods for creating instances of XmlBase64Binary.

Hierarchy

```
Object
  XmlBase64Binary.Factory
```

Enclosing interface

```
XmlBase64Binary
```

Method Summary

```
public static
XmlBase64Binary newInstance()
    Creates an empty instance of XmlBase64Binary

public static
XmlBase64Binary newInstance(XmlOptions options)
    Creates an empty instance of XmlBase64Binary

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
options)
    Returns a validating XMLInputStream.

public static
XmlBase64Binary newValue(Object obj)
    Creates an immutable XmlBase64Binary value

public static
XmlBase64Binary parse(String s)
    Parses a XmlBase64Binary fragment from a String.

public static
XmlBase64Binary parse(String s, XmlOptions options)
    Parses a XmlBase64Binary fragment from a String.

public static
XmlBase64Binary parse(File f)
    Parses a XmlBase64Binary fragment from a File.
```


XMLBeans API Reference

```
public static parse(File f, XmlOptions options)
XmlBase64Binary      Parses a XmlBase64Binary fragment from a File.

public static
XmlBase64Binary parse(URL u)
                    Parses a XmlBase64Binary fragment from a URL.

public static
XmlBase64Binary parse(URL u, XmlOptions options)
                    Parses a XmlBase64Binary fragment from a URL.

public static
XmlBase64Binary parse(InputStream is)
                    Parses a XmlBase64Binary fragment from an InputStream.

public static
XmlBase64Binary parse(InputStream is, XmlOptions options)
                    Parses a XmlBase64Binary fragment from an InputStream.

public static
XmlBase64Binary parse(Reader r)
                    Parses a XmlBase64Binary fragment from a Reader.

public static
XmlBase64Binary parse(Reader r, XmlOptions options)
                    Parses a XmlBase64Binary fragment from a Reader.

public static
XmlBase64Binary parse(Node node)
                    Parses a XmlBase64Binary fragment from a DOM Node.

public static
XmlBase64Binary parse(Node node, XmlOptions options)
                    Parses a XmlBase64Binary fragment from a DOM Node.

public static
XmlBase64Binary parse(XMLInputStream xis)
                    Parses a XmlBase64Binary fragment from an XMLInputStream.

public static
XmlBase64Binary parse(XMLInputStream xis, XmlOptions options)
                    Parses a XmlBase64Binary fragment from an XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlBase64Binary newInstance()
```

Creates an empty instance of `XmlBase64Binary`

newInstance(XmlOptions) Method

```
public static XmlBase64Binary newInstance(XmlOptions options)
```

Creates an empty instance of XmlBase64Binary

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlBase64Binary newValue(Object obj)
```

Creates an immutable XmlBase64Binary value

parse(String) Method

```
public static XmlBase64Binary parse(String s)
    throws XmlException
```


Parses a `XmlBase64Binary` fragment from a `String`. For example:
"<xml-fragment>VGhpcyBzdHJp</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlBase64Binary parse(String s,  
                                   XmlOptions options)  
    throws XmlException
```

Parses a `XmlBase64Binary` fragment from a `String`. For example:
"<xml-fragment>VGhpcyBzdHJp</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlBase64Binary parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlBase64Binary` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlBase64Binary parse(File f,  
                                   XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlBase64Binary` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlBase64Binary parse(URL u)
    throws XmlException, IOException
```

Parses a XmlBase64Binary fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlBase64Binary parse(URL u,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlBase64Binary fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlBase64Binary parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlBase64Binary fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlBase64Binary parse(InputStream is,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlBase64Binary fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlBase64Binary parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlBase64Binary fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlBase64Binary parse(Reader r,
                                   XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlBase64Binary fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlBase64Binary parse(Node node)
    throws XmlException
```

Parses a XmlBase64Binary fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlBase64Binary parse(Node node,
                                   XmlOptions options)
    throws XmlException
```


Parses a XmlBase64Binary fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlBase64Binary parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlBase64Binary fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlBase64Binary parse(XMLInputStream xis,
                                   XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlBase64Binary fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

XmlBeans Class

public final class XmlBeans

extends Object

Provides an assortment of utilities for managing XML Bean types, type systems, QNames, paths, and queries.

Hierarchy

```

Object
 XmlBeans
  
```

Field Summary

```

public
static SchemaType NO_TYPE
    
```

The SchemaType object given to an XmlObject instance when no type can be determined.

Method Summary

```

public static
String compilePath(String pathExpr)
    Compiles an XPath, returning a String equal to that which was passed, but
    whose identity is that of one which has been precompiled and cached.

public static
String compilePath(String pathExpr, XmlOptions options)
    Compiles an XPath, returning a String equal to that which was passed, but
    whose identity is that of one which has been precompiled and cached; takes
    an option for specifying text that indicates the name of context node.

public static
String compileQuery(String queryExpr)
    Compiles an XQuery, returning a String equal to that which was passed, but
    whose identity is that of one which has been precompiled and cached.

public static
String compileQuery(String queryExpr, XmlOptions options)
    Compiles an XQuery, returning a String equal to that which was passed, but
    whose identity is that of one which has been precompiled and cached; takes
    an option for specifying text that indicates the context node.

public static
SchemaTypeSystem compileXsd(XmlObject[] schemas, SchemaTypeLoader typepath,
    XmlOptions options)
    
```


XMLBeans API Reference

Returns the SchemaTypeSystem that results from compiling the XML schema definitions passed.

```
public static  
SchemaTypeSystem getBuiltinTypeSystem()
```

Returns the builtin type system.

```
public static  
SchemaTypeLoader getContextTypeLoader()
```

Gets the SchemaTypeLoader based on the current thread's context ClassLoader.

```
public static  
QName getQName(String localPart)
```

Obtains a name from the thread local QNameCache

```
public static  
QName getQName(String namespaceUri, String localPart)
```

Obtains a name from the thread local QNameCache

```
public static  
QNameCache getQNameCache()
```

Returns a thread local QNameCache

```
public static  
SchemaTypeLoader loadXsd(XmlObject[] schemas)
```

Returns the SchemaTypeSystem that results from compiling the XML schema definitions passed.

```
public static  
SchemaTypeLoader loadXsd(XmlObject[] schemas, XmlOptions options)
```

Returns the SchemaTypeSystem that results from compiling the XML schema definitions passed in *schemas*.

```
public static  
SchemaType typeForClass(Class c)
```

Returns the SchemaType from a corresponding XmlObject subclass, or null if none.

```
public static  
SchemaTypeLoader typeLoaderForClassLoader(ClassLoader loader)
```

Returns a SchemaTypeLoader that searches for compiled schema types in the given ClassLoader.

```
public static  
SchemaTypeLoader typeLoaderUnion(SchemaTypeLoader[] typeLoaders)
```

Returns the union of a list of typeLoaders.

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Field Detail

NO_TYPE

```
public static SchemaType NO_TYPE
```

The SchemaType object given to an XmlObject instance when no type can be determined.

The NO_TYPE is the universal derived type. That is, it is derived from all other schema types, and no instances of the NO_TYPE are valid. (It is not to be confused with the anyType, which is the universal base type from which all other types can be derived, and of which all instances are valid.)

Method Detail

compilePath(String) Method

```
public static String compilePath(String pathExpr)
    throws XmlException
```

Compiles an XPath, returning a String equal to that which was passed, but whose identity is that of one which has been precompiled and cached.

Exceptions

XmlException

compilePath(String, XmlOptions) Method

```
public static String compilePath(String pathExpr,
                                XmlOptions options)
    throws XmlException
```

Compiles an XPath, returning a String equal to that which was passed, but whose identity is that of one which has been precompiled and cached; takes an option for specifying text that indicates the name of context node. The default is "this", as in "\$this".

Parameters

pathExpr

Options for the path. For example, you can call the `XmlOptions.setXqueryCurrentNodeVar(String)` method to specify a particular name for the expression variable that indicates the context node.

Exceptions

XmlException

compileQuery(String) Method

```
public static String compileQuery(String queryExpr)
    throws XmlException
```

Compiles an XQuery, returning a String equal to that which was passed, but whose identity is that of one which has been precompiled and cached.

Exceptions

XmlException

compileQuery(String, XmlOptions) Method

```
public static String compileQuery(String queryExpr,
                                   XmlOptions options)
    throws XmlException
```

Compiles an XQuery, returning a String equal to that which was passed, but whose identity is that of one which has been precompiled and cached; takes an option for specifying text that indicates the context node.

Parameters

queryExpr

Options for the query. For example, you can call the `XmlOptions.setXqueryCurrentNodeVar(String)` method to specify a particular name for the expression variable that indicates the context node and the `XmlOptions.setXqueryVariables(Map)` method to map external variable names to values.

Exceptions

XmlException

compileXsd(XmlObject[], SchemaTypeLoader, XmlOptions) Method

```
public static SchemaTypeSystem compileXsd(XmlObject[] schemas,
                                           SchemaTypeLoader typepath,
                                           XmlOptions options)
    throws XmlException
```

Returns the SchemaTypeSystem that results from compiling the XML schema definitions passed.

The XmlObjects passed in should be w3c <schema> elements whose type is `org.w3c.x2001.xmlSchema.Schema`. (That is, schema elements in the XML namespace `http://www.w3c.org/2001/XMLSchema`.) Also `org.w3c.x2001.xmlSchema.SchemaDocument` is permitted.

The optional second argument is a SchemaTypeLoader which will be consulted for already-compiled schema types which may be linked while processing the given schemas.

The `SchemaTypeSystem` that is returned should be combined (via `XmlBeans.typeLoaderUnion(SchemaTypeLoader[])`) with the `typepath` `typeLoader` in order to create a `typeLoader` that can be used for creating and validating instances.

Use the *options* parameter to specify the following:

- A collection instance that should be used as an error listener during compilation, as described in `XmlOptions.setErrorListener(Collection)`.
- Whether validation should not be done when building the `SchemaTypeSystem`, as described in `XmlOptions.setCompileNoValidation()`.

Parameters

schemas

The schema definitions from which to build the schema type system.

typepath

The path to already-compiled schema types for linking while processing.

options

Options specifying an error listener and/or validation behavior.

Exceptions

XmlException

getBuiltinTypeSystem() Method

```
public static SchemaTypeSystem getBuiltinTypeSystem()
```

Returns the builtin type system. This `SchemaTypeSystem` contains only the 46 builtin types defined by the XML Schema specification.

getContextTypeLoader() Method

```
public static SchemaTypeLoader getContextTypeLoader()
```

Gets the `SchemaTypeLoader` based on the current thread's context `ClassLoader`. This is the `SchemaTypeLoader` that is used to assign schema types to XML documents by default. The `SchemaTypeLoader` is also consulted to resolve wildcards and `xsi:type` attributes.

The "parse" methods of `XmlBeans` all delegate to the "parseInstance" methods of the context type loader.

getQName(String) Method

```
public static QName getQName(String localPart)
```


Obtains a name from the thread local QNameCache

getQName(String, String) Method

```
public static QName getQName(String namespaceUri,  
                             String localPart)
```

Obtains a name from the thread local QNameCache

getQNameCache() Method

```
public static QNameCache getQNameCache()
```

Returns a thread local QNameCache

loadXsd(XmlObject[]) Method

```
public static SchemaTypeLoader loadXsd(XmlObject[] schemas)  
    throws XmlException
```

Returns the SchemaTypeSystem that results from compiling the XML schema definitions passed.

Just like compileTypeSystem, but uses the context type loader for linking, and returns a unioned typeloader that is suitable for creating instances.

Exceptions

XmlException

loadXsd(XmlObject[], XmlOptions) Method

```
public static SchemaTypeLoader loadXsd(XmlObject[] schemas,  
                                       XmlOptions options)  
    throws XmlException
```

Returns the SchemaTypeSystem that results from compiling the XML schema definitions passed in *schemas*.

This is just like compileTypeSystem, but uses the context type loader for linking, and returns a unioned typeloader that is suitable for creating instances.

Use the *options* parameter to specify one or both of the following:

- A collection instance that should be used as an error listener during compilation, as described in `XmlOptions.setErrorListener(Collection)`.
- Whether validation should not be done when building the SchemaTypeSystem, as described in `XmlOptions.setCompileNoValidation()`.

Parameters

schemas

The schema definitions from which to build the schema type system.

options

Options specifying an error listener and/or validation behavior.

Exceptions

XmlException

typeForClass(Class) Method

```
public static SchemaType typeForClass(Class c)
```

Returns the SchemaType from a corresponding XmlObject subclass, or null if none.

typeLoaderForClassLoader(ClassLoader) Method

```
public static SchemaTypeLoader typeLoaderForClassLoader(ClassLoader loader)
```

Returns a SchemaTypeLoader that searches for compiled schema types in the given ClassLoader.

typeLoaderUnion(SchemaTypeLoader[]) Method

```
public static SchemaTypeLoader typeLoaderUnion(SchemaTypeLoader[] typeLoaders)
```

Returns the union of a list of typeLoaders. The returned SchemaTypeLoader searches the given list of SchemaTypeLoaders in order from first to last.

XmlBoolean Interface

public interface XmlBoolean

extends XmlAnySimpleType

Corresponds to the XML Schema xs:boolean type.

Naturally, convertible to Java boolean.

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
public static final class XmlBoolean.Factory
    A class with methods for creating instances of XmlBoolean.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
public static final SchemaType type
    The constant SchemaType object representing this schema type.
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

public
boolean booleanValue()
    Returns this value as a boolean

public
boolean getBooleanValue()
    Returns this value as a boolean

public
void set(boolean v)
    Sets this value as a boolean

public
void setBooleanValue(boolean v)
    Sets this value as a boolean

```

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`, `isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`, `toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`, `newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`, `newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `xmlText`, `xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

Method Detail

booleanValue() Method

DEPRECATED replaced by `com.bea.xml.XmlBoolean.getBooleanValue()`

```
public boolean booleanValue()
```

Returns this value as a boolean

getBooleanValue() Method

```
public boolean getBooleanValue()
```

Returns this value as a boolean

set(boolean) Method

DEPRECATED replaced by `com.bea.xml.XmlBoolean.setBooleanValue(boolean)`

```
public void set(boolean v)
```

Sets this value as a boolean

setBooleanValue(boolean) Method

```
public void setBooleanValue(boolean v)
```

Sets this value as a boolean

XmlBoolean.Factory Class

public static final class XmlBoolean.Factory

extends Object

A class with methods for creating instances of XmlBoolean.

Hierarchy

```
Object
  XmlBoolean.Factory
```

Enclosing interface

```
XmlBoolean
```

Method Summary

```
public static
  XmlBoolean newInstance()
    Creates an empty instance of XmlBoolean

public static
  XmlBoolean newInstance(XmlOptions options)
    Creates an empty instance of XmlBoolean

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
  options)
    Returns a validating XMLInputStream.

public static
  XmlBoolean newValue(Object obj)
    Creates an immutable XmlBoolean value

public static
  XmlBoolean parse(String s)
    Parses a XmlBoolean fragment from a String.

public static
  XmlBoolean parse(String s, XmlOptions options)
    Parses a XmlBoolean fragment from a String.

public static
  XmlBoolean parse(File f)
    Parses a XmlBoolean fragment from a File.
```


XMLBeans API Reference

```
public static parse(File f, XmlOptions options)
    XmlBoolean      Parses a XmlBoolean fragment from a File.
public static
    XmlBoolean parse(URL u)
    Parses a XmlBoolean fragment from a URL.
public static
    XmlBoolean parse(URL u, XmlOptions options)
    Parses a XmlBoolean fragment from a URL.
public static
    XmlBoolean parse(InputStream is)
    Parses a XmlBoolean fragment from an InputStream.
public static
    XmlBoolean parse(InputStream is, XmlOptions options)
    Parses a XmlBoolean fragment from an InputStream.
public static
    XmlBoolean parse(Reader r)
    Parses a XmlBoolean fragment from a Reader.
public static
    XmlBoolean parse(Reader r, XmlOptions options)
    Parses a XmlBoolean fragment from a Reader.
public static
    XmlBoolean parse(Node node)
    Parses a XmlBoolean fragment from a DOM Node.
public static
    XmlBoolean parse(Node node, XmlOptions options)
    Parses a XmlBoolean fragment from a DOM Node.
public static
    XmlBoolean parse(XMLInputStream xis)
    Parses a XmlBoolean fragment from an XMLInputStream.
public static
    XmlBoolean parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlBoolean fragment from an XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlBoolean newInstance()
```

Creates an empty instance of `XmlBoolean`

newInstance(XmlOptions) Method

```
public static XmlBoolean newInstance(XmlOptions options)
```

Creates an empty instance of XmlBoolean

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlBoolean newValue(Object obj)
```

Creates an immutable XmlBoolean value

parse(String) Method

```
public static XmlBoolean parse(String s)
    throws XmlException
```


Parses a `XmlBoolean` fragment from a `String`. For example:
"<xml-fragment>true</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlBoolean parse(String s,  
                               XmlOptions options)  
    throws XmlException
```

Parses a `XmlBoolean` fragment from a `String`. For example:
"<xml-fragment>true</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlBoolean parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlBoolean` fragment from a `File`.

Exceptions

XmlException

IOException

parse(File, XmlOptions) Method

```
public static XmlBoolean parse(File f,  
                               XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlBoolean` fragment from a `File`.

Exceptions

XmlException

IOException

parse(URL) Method

```
public static XmlBoolean parse(URL u)
    throws XmlException, IOException
```

Parses a XmlBoolean fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlBoolean parse(URL u,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlBoolean fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlBoolean parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlBoolean fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlBoolean parse(InputStream is,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlBoolean fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlBoolean parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlBoolean fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlBoolean parse(Reader r,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlBoolean fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlBoolean parse(Node node)
    throws XmlException
```

Parses a XmlBoolean fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlBoolean parse(Node node,
                               XmlOptions options)
    throws XmlException
```


Parses a XmlBoolean fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlBoolean parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlBoolean fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlBoolean parse(XMLInputStream xis,
                               XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlBoolean fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

XmlByte Interface

public interface XmlByte

extends XmlShort

Corresponds to the XML Schema xs:byte type.

Naturally, convertible to Java byte.

All Superinterfaces

XmlAnySimpleType, XmlDecimal, XmlInt, XmlInteger, XmlLong, XmlObject,
XmlShort, XmlTokenSource

Nested Class Summary

```
public static final class XmlByte.Factory
    A class with methods for creating instances of XmlByte.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlDecimal

XmlDecimal.Factory

Nested classes from interface com.bea.xml.XmlInt

XmlInt.Factory

Nested classes from interface com.bea.xml.XmlInteger

XmlInteger.Factory

Nested classes from interface com.bea.xml.XmlLong

XmlLong.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Nested classes from interface `com.bea.xml.XmlShort`

`XmlShort.Factory`

Field Summary

```

    public
    static type
final SchemaType

```

The constant `SchemaType` object representing this schema type.

Fields from interface `com.bea.xml.XmlAnySimpleType`

`type`

Fields from interface `com.bea.xml.XmlDecimal`

`type`

Fields from interface `com.bea.xml.XmlInt`

`type`

Fields from interface `com.bea.xml.XmlInteger`

`type`

Fields from interface `com.bea.xml.XmlLong`

`type`

Fields from interface `com.bea.xml.XmlObject`

`EQUAL`, `GREATER_THAN`, `LESS_THAN`, `NOT_EQUAL`, `type`

Fields from interface `com.bea.xml.XmlShort`

`type`

Method Summary

```

public
    byte byteValue()
        Returns this value as a
        byte

public
    byte getByteValue()
        Returns this value as a
        byte

```



```

public set(byte s)
    void          Sets this value as a byte
public
    void setByteValue(byte s)
        Sets this value as a byte

```

Methods from interface **com.bea.xml.XmlAnySimpleType**

```
getStringValue, set, setStringValue, stringValue
```

Methods from interface **com.bea.xml.XmlDecimal**

```
bigDecimalValue, getBigDecimalValue, set, setBigDecimalValue
```

Methods from interface **com.bea.xml.XmlInt**

```
getIntValue, intValue, set, setIntValue
```

Methods from interface **com.bea.xml.XmlInteger**

```
bigIntegerValue, getBigIntegerValue, set, setBigIntegerValue
```

Methods from interface **com.bea.xml.XmlLong**

```
getLongValue, longValue, set, setLongValue
```

Methods from interface **com.bea.xml.XmlObject**

```
changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode
```

Methods from interface **com.bea.xml.XmlShort**

```
getShortValue, set, setShortValue, shortValue
```

Methods from interface **com.bea.xml.XmlTokenSource**

```
documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText
```

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Method Detail

byteValue() Method

DEPRECATED replaced by `com.bea.xml.XmlByte.getByteValue()`

```
public byte byteValue()
```

Returns this value as a byte

getByteValue() Method

```
public byte getByteValue()
```

Returns this value as a byte

set(byte) Method

DEPRECATED replaced by `com.bea.xml.XmlByte.setByteValue(byte)`

```
public void set(byte s)
```

Sets this value as a byte

setByteValue(byte) Method

```
public void setByteValue(byte s)
```

Sets this value as a byte

XmlByte.Factory Class

public static final class XmlByte.Factory

extends Object

A class with methods for creating instances of XmlByte.

Hierarchy

```
Object
  XmlByte.Factory
```

Enclosing interface

```
XmlByte
```

Method Summary

```
public static
    XmlByte newInstance()
        Creates an empty instance of XmlByte

public static
    XmlByte newInstance(XmlOptions options)
        Creates an empty instance of XmlByte

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlByte newValue(Object obj)
        Creates an immutable XmlByte value

public static
    XmlByte parse(String s)
        Parses a XmlByte fragment from a String.

public static
    XmlByte parse(String s, XmlOptions options)
        Parses a XmlByte fragment from a String.

public static
    XmlByte parse(File f)
        Parses a XmlByte fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlByte      Parses a XmlByte fragment from a File.
public static
    XmlByte parse(URL u)
    Parses a XmlByte fragment from a URL.
public static
    XmlByte parse(URL u, XmlOptions options)
    Parses a XmlByte fragment from a URL.
public static
    XmlByte parse(InputStream is)
    Parses a XmlByte fragment from an InputStream.
public static
    XmlByte parse(InputStream is, XmlOptions options)
    Parses a XmlByte fragment from an InputStream.
public static
    XmlByte parse(Reader r)
    Parses a XmlByte fragment from a Reader.
public static
    XmlByte parse(Reader r, XmlOptions options)
    Parses a XmlByte fragment from a Reader.
public static
    XmlByte parse(Node node)
    Parses a XmlByte fragment from a DOM Node.
public static
    XmlByte parse(Node node, XmlOptions options)
    Parses a XmlByte fragment from a DOM Node.
public static
    XmlByte parse(XMLInputStream xis)
    Parses a XmlByte fragment from an XMLInputStream.
public static
    XmlByte parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlByte fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlByte newInstance()
```

Creates an empty instance of `XmlByte`

newInstance(XmlOptions) Method

```
public static XmlByte newInstance(XmlOptions options)
```

Creates an empty instance of XmlByte

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlByte newValue(Object obj)
```

Creates an immutable XmlByte value

parse(String) Method

```
public static XmlByte parse(String s)
    throws XmlException
```

Parses a XmlByte fragment from a String. For example: "<xml-fragment>123</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlByte parse(String s,  
                             XmlOptions options)  
    throws XmlException
```

Parses a `XmlByte` fragment from a `String`. For example: "<xml-fragment>123</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlByte parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlByte` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlByte parse(File f,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlByte` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlByte parse(URL u)  
    throws XmlException, IOException
```

Parses a `XmlByte` fragment from a `URL`.

Exceptions

XmlException

IOException

parse(URL, XmlOptions) Method

```
public static XmlByte parse(URL u,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlByte` fragment from a URL.

Exceptions

XmlException

IOException

parse(InputStream) Method

```
public static XmlByte parse(InputStream is)  
    throws XmlException, IOException
```

Parses a `XmlByte` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(InputStream, XmlOptions) Method

```
public static XmlByte parse(InputStream is,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlByte` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlByte parse(Reader r)  
    throws XmlException, IOException
```


Parses a `XmlByte` fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlByte parse(Reader r,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlByte` fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlByte parse(Node node)  
    throws XmlException
```

Parses a `XmlByte` fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlByte parse(Node node,  
                             XmlOptions options)  
    throws XmlException
```

Parses a `XmlByte` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173


```
public static XmlByte parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlByte` fragment from an `XMLInputStream`.

Exceptions

XmlException
XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlByte parse(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlByte` fragment from an `XMLInputStream`.

Exceptions

XmlException
XMLStreamException

XmlCalendar Class

public class XmlCalendar

extends `GregorianCalendar`

An XML Schema compatible subclass of `GregorianCalendar`. `XmlCalendar` modifies several key details in the behavior of `GregorianCalendar` to make it more useful when dealing with XML dates.

It is easy to convert between `XmlCalendar` and `GDate`, or to parse or emit an `XmlCalendar` using a standard XML Schema lexical representation.

1. To match XML Schema dates, this `XmlCalendar` is a fully proleptic Gregorian calendar by default, which means that Gregorian calendar rules are applied backwards in time as if they had always been in effect, actual historical circumstances concerning the observance of the 1582 decree of Pope Gregory XIII notwithstanding.
2. In order to better support partially-specified dates for XML Schema, this implementation provides a stable `get(field)` method that does not modify the instance if you are accessing a field right after it was explicitly set: a set followed by a get will always return the same thing and will not fill in any other fields. However, if you get a field that was not explicitly set, then all the fields are still automatically filled and normalized for you, just like a regular `GregorianCalendar`. If you wish to force the completion and defaulting of all the fields (without hunting to get one that happens to be unset), you can always do so by calling `getTime()`.
3. When a year is unspecified and needs to be filled in automatically (for example when using a `.get` or `.getTime` method as discussed above), the year is defaulted to year 0 (also known as 1 BC). This is different from `GregorianCalendar`, which chooses 1970. The reason 0 is preferable is that it is a leap year and so it permits the date --2--29 to be specified stably. A different default year can be chosen via the static method `XmlCalendar.setDefaultYear()`, or by setting the system property "user.defaultyear". If you do change this value, you should pick another leap year such as 2000 and avoid non-leap years such as 1900.
4. When constructing an `XmlCalendar` from an XML Schema formatted date or time string or `GDate` object, the timezone for the calendar is taken from the string if it is present, or taken to be `TimeZone.getDefault()` if not.

For example, the XML timezone "Z" is translated to "GMT"; the XML timezone "+05:00" is translated to "GMT+05:00".

5. Finally, this implementation provides a `String` constructor and a `toString()` method that comply with the XML Schema conventions for formatting a date. If only a subset of fields have been explicitly set, `toString()` produces a string with the proper subset of information.

Hierarchy

```

Object
  Calendar
    GregorianCalendar
      XmlCalendar
  
```


*All Implemented Interfaces*Cloneable, Serializable

Field Summary

Fields from `java.util.GregorianCalendar`

AD, BC

Fields from `java.util.Calendar`

AM, AM_PM, APRIL, areFieldsSet, AUGUST, DATE, DAY_OF_MONTH, DAY_OF_WEEK, DAY_OF_WEEK_IN_MONTH, DAY_OF_YEAR, DECEMBER, DST_OFFSET, ERA, FEBRUARY, FIELD_COUNT, fields, FRIDAY, HOUR, HOUR_OF_DAY, isSet, isTimeSet, JANUARY, JULY, JUNE, MARCH, MAY, MILLISECOND, MINUTE, MONDAY, MONTH, NOVEMBER, OCTOBER, PM, SATURDAY, SECOND, SEPTEMBER, SUNDAY, THURSDAY, time, TUESDAY, UNDECIMBER, WEDNESDAY, WEEK_OF_MONTH, WEEK_OF_YEAR, YEAR, ZONE_OFFSET

Constructor Summary

XmlCalendar()

Constructs an empty instance with no fields set.

XmlCalendar(GDateSpecification date)

Constructs an XmlCalendar from a GDate.

XmlCalendar(int year, int month, int day, int hour, int minute, int second, BigDecimal fraction, int tzSign, int tzHour, int tzMinute)

Constructs an XmlCalendar with the specified year, month, day, hours, minutes, seconds, and optional fractional seconds, in the specified timezone.

XmlCalendar(int year, int month, int day, int hour, int minute, int second, BigDecimal fraction)

Constructs an XmlCalendar with the specified year, month, day, hours, minutes, seconds, and optional fractional seconds, in the default timezone.

XmlCalendar(String xmlSchemaDateString)

Constructs an XmlCalendar for a standard XML schema formatted date string.

XmlCalendar(Date date)

Constructs an XmlCalendar from a Date.

Method Summary

```
protected
    void computeTime()
        Overrides GregorianCalendar.computeTime to apply a different default year.

public
    int get(int field)
        Gets the value for a given time field.

public
    static getDefaultYear()
        int        Returns the default year that is used when no year is specified.

public
    static setDefaultYear(int year)
        void        Sets the default year to be used when no year is specified.

public
    String toString()
        Prints the XmlCalendar using a standard XML Schema format, as described in
        XmlCalendar(String s).
```

Methods from java.util.GregorianCalendar

add, computeFields, equals, getActualMaximum, getActualMinimum, getGreatestMinimum, getGregorianChange, getLeastMaximum, getMaximum, getMinimum, hashCode, isLeapYear, roll, roll, setGregorianChange

Methods from java.util.Calendar

add, after, before, clear, clear, clone, complete, computeFields, computeTime, equals, getActualMaximum, getActualMinimum, getAvailableLocales, getFirstDayOfWeek, getGreatestMinimum, getInstance, getInstance, getInstance, getInstance, getLeastMaximum, getMaximum, getMinimalDaysInFirstWeek, getMinimum, getTime, getTimeInMillis, getTimeZone, hashCode, internalGet, isLenient, isSet, roll, roll, set, set, set, set, setFirstDayOfWeek, setLenient, setMinimalDaysInFirstWeek, setTime, setTimeInMillis, setTimeZone,

Methods from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructor Detail

XmlCalendar

```
public XmlCalendar()
```

Constructs an empty instance with no fields set.

XmlCalendar

```
public XmlCalendar(GDateSpecification date)
```

Constructs an XmlCalendar from a GDate. If the instance is not completed, you can round-trip to an equivalent GDate by writing "new GDate(new XmlCalendar(gdate))". However, if you access any of the unset fields of the calendar, all the fields will be automatically filled in, so partial dates without timezones or other fields will not round-trip after access.

XmlCalendar

```
public XmlCalendar(int year,
                   int month,
                   int day,
                   int hour,
                   int minute,
                   int second,
                   BigDecimal fraction,
                   int tzSign,
                   int tzHour,
                   int tzMinute)
```

Constructs an XmlCalendar with the specified year, month, day, hours, minutes, seconds, and optional fractional seconds, in the specified timezone.

XmlCalendar

```
public XmlCalendar(int year,
                   int month,
                   int day,
                   int hour,
                   int minute,
                   int second,
                   BigDecimal fraction)
```

Constructs an XmlCalendar with the specified year, month, day, hours, minutes, seconds, and optional fractional seconds, in the default timezone.

XmlCalendar

```
public XmlCalendar(String xmlSchemaDateString)
```

Constructs an XmlCalendar for a standard XML schema formatted date string. The parser accepts any of the following formats: YYYY-MM-DDThh:mm:ss – dateTime YYYY-MM-DD – date hh:mm:ss – time YYYY – gYear --MM – gMonth ---DD – gDay The parser actually accepts all 16 combinations of subsets of fields (Y, M, D, T) using the same scheme, even for combinations that are not defined as types in the schema spec, such as year, day, and time: YYYY--DDThh:mm:ss – [everything but month specified] In the string, each field must be padded to its full width, for example, January must be --01, not just --1. In particular, a year must be padded to at least four digits, so "98" is not a valid year, although "1998" and "0098" are both valid years, unambiguously 19 centuries separated from each other. A year may also be preceded by a minus symbol: 0000 is 1 BC and -0001 is 2 BC. Finally a timezone is always allowed (yet optional) at the end. Timezones must be either "Z" (UTC, which we translate to GMT), or simple offsets from UTC in the range "-14:00" to "+14:00", for example: "14:30:00-05:00" specifies 2:30 PM in the afternoon at UTC-05:00, which is the same as EST. If a timezone is not specified, the default TimeZone is used.

XmlCalendar

```
public XmlCalendar(Date date)
```

Constructs an XmlCalendar from a Date. The default TimeZone is used for computing the various fields.

Method Detail

computeTime() Method

```
protected void computeTime()
```

Overrides `GregorianCalendar.computeTime` to apply a different default year. (It must be a leap year.)

Overrides

```
GregorianCalendar.computeTime()
```

get(int) Method

```
public int get(int field)
```

Gets the value for a given time field. Unlike the `GregorianCalendar` implementation, the `get()` does not force a complete of all fields. If you wish to force a completion of all the fields, call `getTime()` first.

Overrides

```
Calendar.get(int)
```

getDefaultYear() Method

```
public static int getDefaultYear()
```

Returns the default year that is used when no year is specified.

setDefaultYear(int) Method

```
public static void setDefaultYear(int year)
```

Sets the default year to be used when no year is specified.

toString() Method

```
public String toString()
```

Prints the XmlCalendar using a standard XML Schema format, as described in XmlCalendar(String s).

Overrides

```
Calendar.toString()
```


XmlCursor Interface

public interface XmlCursor

extends XmlTokenSource

Represents a position between two logical tokens in an XML document. The tokens themselves are not exposed as objects, but their type and properties are discoverable through methods on the cursor. In particular, the general category of token is represented by a `XmlCursor.TokenType`. You use an `XmlCursor` instance to navigate through and manipulate an XML instance document. Once you obtain an XML document, you can create a cursor to represent a specific place in the XML. Because you can use a cursor with or without a schema corresponding to the XML, cursors are an ideal way to handle XML without a schema. You can create a new cursor by calling the `newCursor` method exposed by an object representing the XML, whether it was parsed into a strong type compiled from schema or an `XmlObject` (as in the no-schema case). With an `XmlCursor`, you can also:

- Execute XQuery and XPath expressions against the XML with the `execQuery` and `selectPath` methods.
- Edit and reshape the document by inserting, moving, copying, and removing XML.
- Insert bookmarks that "stick" to the XML at the cursor's position even if the cursor or XML moves.
- Get and set values for containers (elements and whole documents), attributes, processing instructions, and comments.

A cursor moves through XML by moving past tokens. A token represents a category of XML markup, such as the start of an element, its end, an attribute, comment, and so on. `XmlCursor` methods such as `toNextToken`, `toNextSibling`, `toParent`, and so on move the cursor among tokens. Each token's category is of a particular *type*, represented by one of the nine types defined by the `XmlCursor.TokenType` class. When you get a new cursor for a whole instance document, the cursor is initially located before the STARTDOC token. This token, which has no analogy in the XML specification, is present in this logical model of XML so that you may distinguish between the document as a whole and the content of the document. Terminating the document is an ENDDOC token. This token is also not part of the XML specification. A cursor located immediately before this token is at the very end of the document. It is not possible to position the cursor after the ENDDOC token. Thus, the STARTDOC and ENDDOC tokens are effectively "bookends" for the content of the document. For example, for the following XML, if you were to navigate a cursor through the XML document using `toNextToken()`, the list of token types that follows represents the token sequence you would encounter.

```
<sample x='y'>
  <value>foo</value>
</sample>
```

STARTDOC START (sample) ATTR (x='y') TEXT ("\n ") START (value) TEXT ("foo") END (value) TEXT ("\n") END (sample) ENDDOC When there are no more tokens available, `hasNextToken()` returns false and `toNextToken()` returns the special token type NONE and does not move the cursor. The `currentTokenType()` method will return the type of the token that is immediately after the cursor. You can also use a number of convenience methods that test for a particular token type. These include the methods `isStart()`, `isStartdoc()`, `isText()`, `isAttr()`, and so on. Each returns a boolean value indicating whether the token

that follows the cursor is the type in question. A few other methods determine whether the token is of a kind that may include multiple token types. The `isAnyAttr()` method, for example, returns true if the token immediately following the cursor is any kind of attribute, including those of the `ATTR` token type and `xmlns` attributes. Legitimate sequences of tokens for an XML document are described by the following Backus–Naur Form (BNF):

```
<doc> ::= STARTDOC <attributes> <content> ENDDOC
<element> ::= START <attributes> <content> END
<attributes> ::= ( ATTR | NAMESPACE ) *
<content> ::= ( COMMENT | PROCINST | TEXT | <element> ) *
```

Note that a legitimate sequence is `STARTDOC ENDDOC`, the result of creating a brand new instance of an empty document. Also note that attributes may only follow container tokens (`STARTDOC` or `START`)

All Superinterfaces

`XmlTokenSource`

Nested Class Summary

```
public static XmlCursor.ChangeStamp
    interface          Represents the state of a document at a particular point in time.

public static XmlCursor.TokenType
    final class        An enumeration that identifies the type of an XML token.

    public
    abstract XmlCursor.XmlBookmark
    static class      Subclasses of XmlBookmark can be used to annotate an XML document.

public static XmlCursor.XmlMark
    interface          An abstract XmlCursor factory.
```

Method Summary

```
public void
    addToSelection()
        Appends the current location of the cursor to the selection.

public void
    beginElement(QName name)
        Inserts a new element around this cursor, giving the element the
        specified qualified name.

public void
    beginElement(String localName)
        Inserts a new element around this cursor, giving the element the
        specified local name.

public void
    beginElement(String localName, String uri)
```


XMLBeans API Reference

Inserts a new element around this cursor, giving the element the specified local name and associating it with the specified namespace.

```
public void
    clearBookmark(Object key)
        Clears the bookmark whose key is specified, if the bookmark exists
        at this cursor's location.

public void
    clearSelections()
        Clears this cursor's selection, but does not modify the document.

public int
    comparePosition(XmlCursor cursor)
        Returns an integer indicating whether this cursor is before, after, or at
        the same position as the specified cursor.

public int
    copyChars(int maxCharacterCount, XmlCursor toHere)
        Copies characters to the position immediately after the specified
        cursor.

public boolean
    copyXml(XmlCursor toHere)
        Copies the XML immediately after this cursor to the location
        specified by the toHere cursor.

public boolean
    copyXmlContents(XmlCursor toHere)
        Copies the contents of the container (STARTDOC OR START)
        immediately to the right of the cursor to the location specified by the
        toHere cursor.

public
    XmlCursor.TokenType currentTokenType()
        Returns the type of the current token.

public void
    dispose()
        Deallocates resources needed to manage the cursor, rendering this
        cursor inoperable.

public XmlCursor
    execQuery(String query)
        Executes the specified XQuery expression against the XML this
        cursor is in.

public XmlCursor
    execQuery(String query, XmlOptions options)
        Executes the specified XQuery expression against the XML this
        cursor is in, and using the specified options.

public void
    getAllBookmarkRefs(Collection listToFill)
        Retrieves all the bookmarks at this location, adding them to the
        specified collection.

public void
    getAllNamespaces(Map addToThis)
```


XMLBeans API Reference

Adds to the specified map, all the namespaces in scope at the container where this cursor is positioned.

```
public String
    getAttributeText(QName attrName)
        When at a START or STARTDOC, returns the attribute text for the
        given attribute.

    public
    XmlCursor.XmlBookmark getBookmark(Object key)
        Retrieves the bookmark with the specified key at this cursor's
        location.

public String
    getChars()
        Returns characters to the right of the cursor up to the next token.

public int
    getChars(char[] returnedChars, int offset, int maxCharacterCount)
        Copies characters up to the specified maximum number, counting
        right from this cursor's location to the character at
        maxCharacterCount.

    public
    XmlCursor.ChangeStamp getDocChangeStamp()
        Returns the current change stamp for the document the current cursor
        is in.

public QName
    getName()
        Returns the name of the current token.

public XmlObject
    getObject()
        Returns the strongly-typed XmlObject at the current START,
        STARTDOC, or ATTR.

public int
    getSelectionCount()
        Returns the count of the current selection.

public String
    getTextValue()
        Gets the text value of the current document, element, attribute,
        comment, procinst or text token.

public int
    getTextValue(char[] returnedChars, int offset, int maxCharacterCount)
        Copies the text value of the current document, element, attribute,
        comment, processing instruction or text token, counting right from
        this cursor's location up to maxCharacterCount, and copies the
        returned text into returnedChars.

public boolean
    hasNextSelection()
        Returns whether or not there is a next selection.

public boolean
    hasNextToken()
        True if there is a next token.
```


XMLBeans API Reference

`public boolean hasPrevToken()`
True if there is a previous token.

`public void insertAttribute(String localName)`
Inserts a new attribute immediately before this cursor's location, giving it the specified local name.

`public void insertAttribute(String localName, String uri)`
Inserts a new attribute immediately before this cursor's location, giving it the specified local name and associating it with the specified namespace.

`public void insertAttribute(QName name)`
Inserts a new attribute immediately before this cursor's location, giving it the specified name.

`public void insertAttributeWithValue(String Name, String value)`
Inserts a new attribute immediately before this cursor's location, giving it the specified value and name.

`public void insertAttributeWithValue(String name, String uri, String value)`
Inserts an attribute immediately before the cursor's location, giving it the specified name and value, and associating it with the specified namespace.

`public void insertAttributeWithValue(QName name, String value)`
Inserts an attribute immediately before the cursor's location, giving it the specified name and value.

`public void insertChars(String text)`
Inserts the specified text immediately before this cursor's location.

`public void insertComment(String text)`
Inserts an XML comment immediately before the cursor's location, giving it the specified content.

`public void insertElement(QName name)`
Inserts an element immediately before this cursor's location, giving the element the specified qualified name.

`public void insertElement(String localName)`
Inserts an element immediately before this cursor's location, giving the element the specified local name.

`public void insertElement(String localName, String uri)`
Inserts a new element immediately before this cursor's location, giving the element the specified local name and associating it with

XMLBeans API Reference

specified namespace

public void

insertElementWithText(*QName name, String text*)

Inserts a new element immediately before this cursor's location, giving the element the specified qualified name and content.

public void

insertElementWithText(*String localName, String text*)

Inserts a new element immediately before this cursor's location, giving the element the specified local name and content.

public void

insertElementWithText(*String localName, String uri, String text*)

Inserts a new element immediately before this cursor's location, giving the element the specified local name, associating it with the specified namespace, and giving it the specified content.

public void

insertNamespace(*String prefix, String namespace*)

Inserts a namespace declaration immediately before the cursor's location, giving it the specified prefix and URI.

public void

insertProcInst(*String target, String text*)

Inserts an XML processing instruction immediately before the cursor's location, giving it the specified target and text.

public boolean

isAnyAttr()

True if this token is any attribute.

public boolean

isAtSamePositionAs(*XmlCursor cursor*)

Determines if this cursor is at the same position as the specified cursor.

public boolean

isAttr()

True if this token is an ATTR token type, meaning just before an attribute.

public boolean

isComment()

True if this token is a COMMENT token type, meaning just before a comment.

public boolean

isContainer()

True if this token is a container token.

public boolean

isEnd()

True if this token is an END token type, meaning just before an element's end.

public boolean

isEnddoc()

XMLBeans API Reference

True if this token is an ENDDOC token type, meaning at the very end of the document.

public boolean

isFinish()

True if this token is a finish token.

public boolean

isInSameDocument(XmlCursor cursor)

Determines if the specified cursor is in the same document as this cursor.

public boolean

isLeftOf(XmlCursor cursor)

Determines if this cursor is to the left of (or before) the specified cursor.

public boolean

isNamespace()

True if this token is a NAMESPACE token type, meaning just before a namespace declaration.

public boolean

isProcinst()

True if this token is a PROCINST token type, meaning just before a processing instruction.

public boolean

isRightOf(XmlCursor cursor)

Determines if this cursor is to the right of (or after) the specified cursor.

public boolean

isStart()

True if this token is a START token type, meaning just before an element's start.

public boolean

isStartdoc()

True if the current token is a STARTDOC token type, meaning at the very root of the document.

public boolean

isText()

True if the this token is a TEXT token type, meaning just before or inside text.

public int

moveChars(int maxCharacterCount, XmlCursor toHere)

Moves characters immediately after this cursor to the position immediately after the specified cursor.

public boolean

moveXml(XmlCursor toHere)

Moves the XML immediately after this cursor to the location specified by the *toHere* cursor, shifting XML at that location to the right to make room.

public boolean

moveXmlContents(XmlCursor toHere)

XMLBeans API Reference

Moves the contents of the container (STARTDOC OR START) immediately after this cursor to the location specified by the *toHere* cursor.

```
public String
    namespaceForPrefix(String prefix)
        Returns the namespace URI indicated by the given prefix.

public boolean
    pop()
        Restores the cursor location most recently saved with the push()
        method.

public String
    prefixForNamespace(String namespaceURI)
        Returns a prefix that can be used to indicate a namespace URI.

    public
    XmlCursor.TokenType prevTokenType()
        Returns the type of the previous token.

public void
    push()
        Saves the current location of this cursor on an internal stack of saved
        positions (independent of selection).

public boolean
    removeAttribute(QName attrName)
        When at a START or STARTDOC, removes the attribute with the
        given name.

public int
    removeChars(int maxCharacterCount)
        Removes characters up to the specified maximum number, counting
        right from this cursor's location to the character at
        maxCharacterCount.

public boolean
    removeXml()
        Removes the XML that is immediately after this cursor.

public boolean
    removeXmlContents()
        Removes the contents of the container (STARTDOC OR START)
        immediately after this cursor.

public void
    selectPath(String path)
        Executes the specified XPath expression against the XML that this
        cursor is in.

public void
    selectPath(String path, XmlOptions options)
        Executes the specified XPath expression against the XML that this
        cursor is in.

public boolean
    setAttributeText(QName attrName, String value)
        When at a START or STARTDOC, sets the attribute text for the
        given attribute.
```


XMLBeans API Reference

```
public void setBookmark(XmlCursor.XmlBookmark bookmark)
    Sets a bookmark to the document at this cursor's location.

public void
    setName(QName name)
    Sets the name of the current token.

public void
    setTextValue(String text)
    Sets the text value of the XML at this cursor's location if that XML's
    token type is START, STARTDOC, ATTR, COMMENT or
    PROCINST.

public void
    setTextValue(char[] sourceChars, int offset, int length)
    Sets the text value of the XML at this cursor's location (if that XML's
    token type is START, STARTDOC, ATTR, COMMENT or
    PROCINST) to the contents of the specified character array.

public boolean
    toBookmark(XmlCursor.XmlBookmark bookmark)
    Moves this cursor to the same position as the bookmark.

public boolean
    toChild(String name)
    Moves the cursor to the first child element of the specified name in
    no namespace.

public boolean
    toChild(String namespace, String name)
    Moves the cursor to the first child element of the specified name in
    the specified namespace.

public boolean
    toChild(QName name)
    Moves the cursor to the first child element of the specified qualified
    name.

public boolean
    toChild(int index)
    Moves the cursor to the child element specified by index.

public boolean
    toChild(QName name, int index)
    Moves the cursor to the specified index child element of the specified
    name, where that element is the .

public boolean
    toCursor(XmlCursor moveTo)
    Moves this cursor to the same position as the moveTo cursor.

public void
    toEndDoc()
    Moves the cursor to the ENDDOC token, which is the end of the
    document.

public
    XmlCursor.TokenType toEndToken()
    Moves the cursor to the END or ENDDOC token corresponding to
    the current START or STARTDOC, and returns END or ENDDOC.
```


XMLBeans API Reference

```
public boolean toFirstAttribute()
    Moves the cursor to the first attribute of this element, or returns false
    and does not move the cursor if there are no attributes.

public boolean
    toFirstChild()
    Moves the cursor to the first child element, or returns false and does
    not move the cursor if there are no element children.

    public
    XmlCursor.TokenType toFirstContentToken()
    Moves the cursor to the first token in the content of the current
    START or STARTDOC.

public boolean
    toLastAttribute()
    Moves the cursor to the last attribute of this element, or returns false
    and does not move the cursor if there are no attributes.

public boolean
    toLastChild()
    Moves the cursor to the last element child, or returns false and does
    not move the cursor if there are no element children.

public boolean
    toNextAttribute()
    Moves the cursor to the next sibling attribute, or returns false and
    does not move the cursor if there is no next sibling attribute.

    public
    XmlCursor.XmlBookmark toNextBookmark(Object key)
    Moves this cursor to the location after its current position where a
    bookmark with the given key exists.

    public int
    toNextChar(int maxCharacterCount)
    Moves the cursor forward by the specified number of characters, and
    stops at the next non-TEXT token.

public boolean
    toNextSelection()
    Moves this cursor to the next location in the selection, if any.

public boolean
    toNextSibling()
    Moves the cursor to the next sibling element, or returns false and
    does not move the cursor if there is no next sibling element.

public boolean
    toNextSibling(String name)
    Moves the cursor to the next sibling element of the specified name in
    no namespace.

public boolean
    toNextSibling(String namespace, String name)
    Moves the cursor to the next sibling element of the specified name in
    the specified namespace.

public boolean
    toNextSibling(QName name)
```


XMLBeans API Reference

Moves the cursor to the next sibling element of the specified qualified name.

```
public
XmlCursor.TokenType toNextToken()
    Moves the cursor to the next token.

public boolean
    toParent()
    Moves the cursor to the parent element or STARTDOC, or returns
    false and does not move the cursor if there is no parent.

public boolean
    toPrevAttribute()
    Moves the cursor to the previous sibling attribute, or returns false
    and does not move the cursor if there is no previous sibling attribute.

public
XmlCursor.XmlBookmark toPrevBookmark(Object key)
    Moves this cursor to the location before its current position where a
    bookmark with the given key exists.

public int
    toPrevChar(int maxCharacterCount)
    Moves the cursor backwards by the number of characters given.

public boolean
    toPrevSibling()
    Moves the cursor to the previous sibling element, or returns false and
    does not move the cursor if there is no previous sibling element.

public
XmlCursor.TokenType toPrevToken()
    Moves the cursor to the previous token.

public boolean
    toSelection(int i)
    Moves this cursor to the specified location in the selection.

public void
    toStartDoc()
    Moves the cursor to the STARTDOC token, which is the root of the
    document.
```

Methods from interface `com.bea.xml.XmlTokenSource`

```
documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText
```

Method Detail

`addToSelection()` Method

```
public void addToSelection()
```


Appends the current location of the cursor to the selection. See also the `selectPath()` method. You can use this as an alternative to calling the `selectPath` method when you want to define your own selection.

beginElement(QName) Method

```
public void beginElement(QName name)
```

Inserts a new element around this cursor, giving the element the specified qualified name. After the element is inserted, this cursor is between its start and end. This cursor can then be used to insert additional XML into the new element.

Parameters

name

The qualified name for the new element.

beginElement(String) Method

```
public void beginElement(String localName)
```

Inserts a new element around this cursor, giving the element the specified local name. After the element is inserted, this cursor is between its start and end. This cursor can then be used to insert additional XML into the new element.

Parameters

localName

The local name for the new element.

beginElement(String, String) Method

```
public void beginElement(String localName,  
                        String uri)
```

Inserts a new element around this cursor, giving the element the specified local name and associating it with the specified namespace. After the element is inserted, this cursor is between its start and end. This cursor can then be used to insert additional XML into the new element.

Parameters

localName

The local name for the new element.

uri

The URI for the new element's namespace.

clearBookmark(Object) Method

```
public void clearBookmark(Object key)
```

Clears the bookmark whose key is specified, if the bookmark exists at this cursor's location.

Parameters

key

The for the bookmark to clear.

clearSelections() Method

```
public void clearSelections()
```

Clears this cursor's selection, but does not modify the document.

comparePosition(XmlCursor) Method

```
public int comparePosition(XmlCursor cursor)
```

Returns an integer indicating whether this cursor is before, after, or at the same position as the specified cursor. `a.comparePosition(b) < 0` means a is to the left of b. `a.comparePosition(b) == 0` means a is at the same position as b. `a.comparePosition(b) > 0` means a is to the right of b. The sort order of cursors in the document is the token order. For example, if cursor "a" is at a START token and the cursor "b" is at a token within the contents of the same element, then `a.comparePosition(b)` will return `-1`, meaning that the position of a is before b.

Parameters

cursor

The cursor whose position should be compared with this cursor.

Returns

1 if this cursor is after the specified cursor; 0 if this cursor is at the same position as the specified cursor; -1 if this cursor is before the specified cursor.

copyChars(int, XmlCursor) Method

```
public int copyChars(int maxCharacterCount,
                    XmlCursor toHere)
```

Copies characters to the position immediately after the specified cursor. Characters are counted to the right up to the specified maximum number. XML after the destination cursor is shifted to the right to make room.

Parameters

maxCharacterCount

The maximum number of characters after this cursor's location to copy.

toHere

The cursor to which the characters should be copied.

Returns

The actual number of characters copied.

copyXml(XmlCursor) Method

```
public boolean copyXml(XmlCursor toHere)
```

Copies the XML immediately after this cursor to the location specified by the *toHere* cursor. For the TEXT, ATTR, NAMESPACE, COMMENT and PROCINST tokens, a single token is copied. For a start token, the element and all of its contents are copied. For all other tokens, this is a no-op. The cursors and bookmarks located in the XML that was copied are also copied to the new location.

Parameters

toHere

The cursor at the location to which the XML should be copied.

Returns

true if anything was copied; false if the token supports the operation, but nothing was copied.

copyXmlContents(XmlCursor) Method

```
public boolean copyXmlContents(XmlCursor toHere)
```

Copies the contents of the container (STARTDOC OR START) immediately to the right of the cursor to the location specified by the *toHere* cursor. For all other situations, returns false. Does not copy attributes or namespaces.

Parameters

toHere

The cursor at the location to which the XML should be copied.

Returns

true if anything was copied; otherwise, false.

currentTokenType() Method

```
public XmlCursor.TokenType currentTokenType()
```

Returns the type of the current token. By definition, the current token is the token immediately to the right of the cursor. If you're in the middle of text, before a character, you get TEXT. You can't dive into the text of an ATTR, COMMENT or PROCINST. As an alternative, it may be more convenient for you to use one of the methods that test for a particular token type. These include the methods isStart(), isStartdoc(), isText(), isAttr(), and so on. Each returns a boolean value indicating whether the token that follows the cursor is the type in question.

Returns

The TokenType instance for the token at the cursor's current location.

dispose() Method

```
public void dispose()
```

Deallocates resources needed to manage the cursor, rendering this cursor inoperable. Because cursors are managed by a mechanism which stores the XML, simply letting a cursor go out of scope and having the garbage collector attempt to reclaim it may not produce desirable performance. So, explicitly disposing a cursor allows the underlying implementation to release its responsibility of maintaining its position. After a cursor has been disposed, it may not be used again. It can throw IllegalStateException or NullPointerException if used after disposal.

execQuery(String) Method

```
public XmlCursor execQuery(String query)
```

Executes the specified XQuery expression against the XML this cursor is in. The query may be a String or a compiled query. You can precompile an XQuery expression using the XmlBeans.compileQuery method. The root referred to by the expression should be given as a dot. The following is an example path expression:

```
XmlCursor results = cursor.execQuery("purchase-order/line-item[price <= 20.00]");
```

Parameters

query

The XQuery expression to execute.

Returns

A cursor containing the results of the query.

execQuery(String, XmlOptions) Method

```
public XmlCursor execQuery(String query,
                           XmlOptions options)
```

Executes the specified XQuery expression against the XML this cursor is in, and using the specified options.

Parameters

query

The XQuery expression to execute.

options

Options for the query. For example, you can call the `XmlOptions.setXqueryCurrentNodeVar(String)` method to specify a particular name for the query expression variable that indicates the context node.

getAllBookmarkRefs(Collection) Method

```
public void getAllBookmarkRefs(Collection listToFill)
```

Retrieves all the bookmarks at this location, adding them to the specified collection. Bookmarks held by weak references are added to this collection as Weak referenced objects pointing to the bookmark.

Parameters

listToFill

The collection that will contain bookmarks returned by this method.

getAllNamespaces(Map) Method

```
public void getAllNamespaces(Map addToThis)
```

Adds to the specified map, all the namespaces in scope at the container where this cursor is positioned. This method is useful for container tokens only.

Parameters

addToThis

The Map to add the namespaces to.

getAttributeText(QName) Method

```
public String getAttributeText(QName attrName)
```

When at a START or STARTDOC, returns the attribute text for the given attribute. When not at a START or STARTDOC or the attribute does not exist, returns null.

Parameters*attrName*

The name of the attribute whose value is requested.

Returns*The attribute's value if it has one; otherwise, null.*

getBookmark(Object) Method

```
public XmlCursor.XmlBookmark getBookmark(Object key)
```

Retrieves the bookmark with the specified key at this cursor's location. If there is no bookmark whose key is given by the specified key at the current position, null is returned. If the `getKey` method is not overridden on the bookmark, then the bookmark's class is used as the key.

Parameters*key*

The key for the bookmark to retrieve.

Returns*The requested bookmark; null if there is no bookmark corresponding to the specified key.*

getChars() Method

```
public String getChars()
```

Returns characters to the right of the cursor up to the next token.

getChars(char[], int, int) Method

```
public int getChars(char[] returnedChars,
                    int offset,
                    int maxCharacterCount)
```

Copies characters up to the specified maximum number, counting right from this cursor's location to the character at *maxCharacterCount*. The returned characters are added to *returnedChars*, with the first character copied to the *offset* position. The *maxCharacterCount* parameter should be less than or equal to the length of *returnedChars* minus *offset*. Copies a number of characters, which is either *maxCharacterCount* or the number of characters up to the next token, whichever is less.

Parameters*returnedChars*

A character array to hold the returned characters.

offset

The position within returnedChars at which the first of the returned characters should be added.

maxCharacterCount

The maximum number of characters after this cursor's location to return.

Returns

The actual number of characters returned; 0 if no characters were returned or if the current token is not TEXT.

getDocChangeStamp() Method

```
public XmlCursor.ChangeStamp getDocChangeStamp()
```

Returns the current change stamp for the document the current cursor is in. This change stamp can be queried at a later point in time to find out if the document has changed.

Returns

The change stamp for the document the current cursor is in.

getName() Method

```
public QName getName()
```

Returns the name of the current token. Names may be associated with START, ATTR, NAMESPACE or PROCINST. Returns null if there is no name associated with the current token. For START and ATTR, the name returned identifies the name of the element or attribute. For NAMESPACE, the local part of the name is the prefix, while the URI is the namespace defined. For PROCINST, the local part is the target and the uri is "".

Returns

The name of the XML at this cursor's location; null if there is no name.

getObject() Method

```
public XmlObject getObject()
```

Returns the strongly-typed XmlObject at the current START, STARTDOC, or ATTR. The strongly-typed object can be cast to the strongly-typed XBean interface corresponding to the XML Schema Type given by result.getSchemaType(). If a more specific type cannot be determined, an XmlObject whose schema type is anyType will be returned.

Returns

The strongly-typed object at the cursor's current location; null if the current location is not a START, STARTDOC, or ATTR.

getSelectionCount() Method

```
public int getSelectionCount()
```

Returns the count of the current selection. See also the selectPath() and addToSelection() methods. You may experience better performance if you use the iteration model using the toNextSelection method, rather than the indexing model using the getSelectionCount and toSelection methods.

Returns

A number indicating the size of the current selection.

getTextValue() Method

```
public String getTextValue()
```

Gets the text value of the current document, element, attribute, comment, procinst or text token. When getting the text value of an element, non-text content such as comments and processing instructions are ignored and text is concatenated. For elements that have nested element children, this returns the concatenated text of all mixed content and the text of all the element children, recursing in first-to-last depthfirst order. For attributes, this returns the attribute value. For comments and processing instructions, this returns the text contents of the comment or PI, not including the delimiting sequences <!-- -->, <? ?>. If the current token is not a START, STARTDOC, TEXT, ATTR, COMMENT, or PROCINST, this returns null. The value of an empty tag is the empty string.

Returns

The text value of the current token, if the token's type is START, STARTDOC, TEXT, ATTR, COMMENT, or PROCINST; null if the type is END, ENDDOC, NONE, or NAMESPACE.

getTextValue(char[], int, int) Method

```
public int getTextValue(char[] returnedChars,
                        int offset,
                        int maxCharacterCount)
```

Copies the text value of the current document, element, attribute, comment, processing instruction or text token, counting right from this cursor's location up to *maxCharacterCount*, and copies the returned text into *returnedChars*. When getting the text value of an element, non-text content such as comments and processing instructions are ignored and text is concatenated. For elements that have nested element children, this returns the concatenated text of all mixed content and the text of all the element children, recursing in first-to-last depthfirst order. For attributes, this returns the attribute value. For comments and processing instructions, this returns the text contents of the comment or PI, not including the delimiting sequences <!-- -->, <? ?>. If the

current token is END, ENDDOC, or NAMESPACE, this returns 0. The value of an empty tag is the empty string.

Parameters

returnedChars

A character array to hold the returned characters.

offset

The position within returnedChars to which the first of the returned characters should be copied.

maxCharacterCount

The maximum number of characters after this cursor's location to copy.

Returns

The actual number of characters copied; 0 if no characters were copied.

hasNextSelection() Method

```
public boolean hasNextSelection()
```

Returns whether or not there is a next selection.

Returns

true if there is a next selection; otherwise, false.

hasNextToken() Method

```
public boolean hasNextToken()
```

True if there is a next token. When this is false, as when the cursor is at the ENDDOC token, the toNextToken() method returns NONE and does not move the cursor.

Returns

true if there is a next token; otherwise, false.

hasPrevToken() Method

```
public boolean hasPrevToken()
```

True if there is a previous token. When this is false, toPrevToken returns NONE and does not move the cursor.

Returns

true if there is a previous token; otherwise, false.

insertAttribute(String) Method

```
public void insertAttribute(String localName)
```

Inserts a new attribute immediately before this cursor's location, giving it the specified local name.

Parameters

localName

The local name for the new attribute.

insertAttribute(String, String) Method

```
public void insertAttribute(String localName,  
                           String uri)
```

Inserts a new attribute immediately before this cursor's location, giving it the specified local name and associating it with the specified namespace.

Parameters

localName

The local name for the new attribute.

uri

The URI for the new attribute's namespace.

insertAttribute(QName) Method

```
public void insertAttribute(QName name)
```

Inserts a new attribute immediately before this cursor's location, giving it the specified name.

Parameters

name

The local name for the new attribute.

insertAttributeWithValue(String, String) Method

```
public void insertAttributeWithValue(String name,  
                                    String value)
```


Inserts a new attribute immediately before this cursor's location, giving it the specified value and name.

Parameters

Name

The local name for the new attribute.

value

The value for the new attribute.

insertAttributeWithValue(String, String, String) Method

```
public void insertAttributeWithValue(String name,  
                                     String uri,  
                                     String value)
```

Inserts an attribute immediately before the cursor's location, giving it the specified name and value, and associating it with the specified namespace.

Parameters

name

The name for the new attribute.

uri

The URI for the new attribute's namespace.

value

The value for the new attribute.

insertAttributeWithValue(QName, String) Method

```
public void insertAttributeWithValue(QName name,  
                                     String value)
```

Inserts an attribute immediately before the cursor's location, giving it the specified name and value.

Parameters

name

The name for the new attribute.

value

The value for the new attribute.

insertChars(String) Method

```
public void insertChars(String text)
```

Inserts the specified text immediately before this cursor's location.

Parameters

text

The text to insert.

insertComment(String) Method

```
public void insertComment(String text)
```

Inserts an XML comment immediately before the cursor's location, giving it the specified content.

Parameters

text

The new comment's content.

insertElement(QName) Method

```
public void insertElement(QName name)
```

Inserts an element immediately before this cursor's location, giving the element the specified qualified name.

Parameters

name

The qualified name for the element.

insertElement(String) Method

```
public void insertElement(String localName)
```

Inserts an element immediately before this cursor's location, giving the element the specified local name.

Parameters

localName

The local name for the new element.

insertElement(String, String) Method

```
public void insertElement(String localName,  
                          String uri)
```

Inserts a new element immediately before this cursor's location, giving the element the specified local name and associating it with specified namespace

Parameters

localName

The local name for the new element.

uri

The URI for the new element's namespace.

insertElementWithText(QName, String) Method

```
public void insertElementWithText(QName name,  
                                  String text)
```

Inserts a new element immediately before this cursor's location, giving the element the specified qualified name and content.

Parameters

name

The qualified name for the new element.

text

The content for the new element.

insertElementWithText(String, String) Method

```
public void insertElementWithText(String localName,  
                                  String text)
```

Inserts a new element immediately before this cursor's location, giving the element the specified local name and content.

Parameters

localName

The local name for the new element.

text

The content for the new element.

insertElementWithText(String, String, String) Method

```
public void insertElementWithText(String localName,  
                                  String uri,  
                                  String text)
```

Inserts a new element immediately before this cursor's location, giving the element the specified local name, associating it with the specified namespace, and giving it the specified content.

Parameters

localName

The local name for the new element.

uri

The URI for the new element's namespace.

text

The content for the new element.

insertNamespace(String, String) Method

```
public void insertNamespace(String prefix,  
                             String namespace)
```

Inserts a namespace declaration immediately before the cursor's location, giving it the specified prefix and URI.

Parameters

prefix

The prefix for the namespace.

namespace

The URI for the namespace.

insertProcInst(String, String) Method

```
public void insertProcInst(String target,  
                            String text)
```

Inserts an XML processing instruction immediately before the cursor's location, giving it the specified target and text.

Parameters

target

The target for the processing instruction.

text

The new processing instruction's text.

isAnyAttr() Method

```
public boolean isAnyAttr()
```

True if this token is any attribute. This includes an ATTR token type and the NAMESPACE token type attribute.

Returns

true if the current cursor is at any attribute; otherwise, false.

isAtSamePositionAs(XmlCursor) Method

```
public boolean isAtSamePositionAs(XmlCursor cursor)
```

Determines if this cursor is at the same position as the specified cursor. Note that this is the same as `a.comparePosition(b) == 0`

Parameters

cursor

The cursor whose position should be compared with this cursor.

Returns

true if this cursor is at the same position as the specified cursor; otherwise, false.

isAttr() Method

```
public boolean isAttr()
```

True if this token is an ATTR token type, meaning just before an attribute.

Returns

true if this token is an ATTR token type; otherwise, false.

isComment() Method

```
public boolean isComment()
```

True if this token is a COMMENT token type, meaning just before a comment.

Returns

true if this token is a COMMENT token type; otherwise, false.

isContainer() Method

```
public boolean isContainer()
```

True if this token is a container token. The STARTDOC and START token types are containers. Containers, including documents and elements, have the same content model. In other words, a document and an element may have the same contents. For example, a document may contain attributes or text, without any child elements.

Returns

true if this token is a container token; otherwise, false.

isEnd() Method

```
public boolean isEnd()
```

True if this token is an END token type, meaning just before an element's end.

Returns

true if this token is an END token type; otherwise, false.

isEnddoc() Method

```
public boolean isEnddoc()
```

True if this token is an ENDDOC token type, meaning at the very end of the document.

Returns

true if this token is an ENDDOC token type; otherwise, false.

isFinish() Method

```
public boolean isFinish()
```

True if this token is a finish token. A finish token can be an ENDDOC or END token type.

Returns

true if this token is a finish token; otherwise, false.

isInSameDocument(XmlCursor) Method

```
public boolean isInSameDocument(XmlCursor cursor)
```

Determines if the specified cursor is in the same document as this cursor.

Parameters

cursor

The cursor that may be in the same document as this cursor.

Returns

true if the specified cursor is in the same document; otherwise, false.

isLeftOf(XmlCursor) Method

```
public boolean isLeftOf(XmlCursor cursor)
```

Determines if this cursor is to the left of (or before) the specified cursor. Note that this is the same as `a.comparePosition(b) < 0`

Parameters

cursor

The cursor whose position should be compared with this cursor.

Returns

true if this cursor is to the left of the specified cursor; otherwise, false.

isNamespace() Method

```
public boolean isNamespace()
```

True if this token is a NAMESPACE token type, meaning just before a namespace declaration.

Returns

true if this token is a NAMESPACE token type; otherwise, false.

isProcinst() Method

```
public boolean isProcinst()
```

True if this token is a PROCINST token type, meaning just before a processing instruction.

Returns

true if this token is a PROCINST token type; otherwise, false.

isRightOf(XmlCursor) Method

```
public boolean isRightOf(XmlCursor cursor)
```

Determines if this cursor is to the right of (or after) the specified cursor. Note that this is the same as `a.comparePosition(b) > 0`

Parameters

cursor

The cursor whose position should be compared with this cursor.

Returns

true if this cursor is to the right of the specified cursor; otherwise, false.

isStart() Method

```
public boolean isStart()
```

True if this token is a START token type, meaning just before an element's start.

Returns

true if this token is a START token type; otherwise, false.

isStartdoc() Method

```
public boolean isStartdoc()
```

True if the current token is a STARTDOC token type, meaning at the very root of the document.

Returns

true if this token is a STARTDOC token type; otherwise, false.

isText() Method

```
public boolean isText()
```

True if the this token is a TEXT token type, meaning just before or inside text.

Returns

true if this token is a TEXT token type; otherwise, false.

moveChars(int, XmlCursor) Method

```
public int moveChars(int maxCharacterCount,  
                    XmlCursor toHere)
```

Moves characters immediately after this cursor to the position immediately after the specified cursor. Characters are counted to the right up to the specified maximum number. XML after the destination cursor is shifted to the right to make room. The space remaining from moving the characters collapses up to this cursor.

Parameters

maxCharacterCount

The maximum number of characters after this cursor's location to move.

toHere

The cursor to which the characters should be moved.

Returns

The actual number of characters moved.

moveXml(XmlCursor) Method

```
public boolean moveXml(XmlCursor toHere)
```

Moves the XML immediately after this cursor to the location specified by the *toHere* cursor, shifting XML at that location to the right to make room. For the TEXT, ATTR, NAMESPACE, COMMENT and PROCINST tokens, a single token is moved. For a start token, the element and all of its contents are moved. For all other tokens, this is a no-op. The bookmarks located in the XML that was moved also move to the new location; the cursors don't move with the content.

Parameters

toHere

The cursor at the location to which the XML should be moved.

Returns

true if anything was moved; false only if the cursor is just before END or ENDDOC token.

moveXmlContents(XmlCursor) Method

```
public boolean moveXmlContents(XmlCursor toHere)
```

Moves the contents of the container (STARTDOC OR START) immediately after this cursor to the location specified by the *toHere* cursor. For all other situations, returns false. Does not move attributes or namespaces.

Parameters

toHere

The cursor at the location to which the XML should be moved.

Returns

true if anything was moved; otherwise, false.

namespaceForPrefix(String) Method

```
public String namespaceForPrefix(String prefix)
```

Returns the namespace URI indicated by the given prefix. The current context must be at a START or STARTDOC. Namespace prefix mappings are queried for the mappings defined at the current container first, then parents are queried. The prefix can be "" or null to indicate a search for the default namespace. To conform with the XML spec, the default namespace will return the no-namespace (") if it is not mapped. Note that this queries the current state of the document. When the document is persisted, the saving mechanism may synthesize namespaces (ns1, ns2, and so on) for the purposes of persistence. These namespaces are only present in the serialized form, and are not reflected back into the document being saved.

Parameters

prefix

The namespace prefix for the requested namespace.

Returns

The URI for corresponding to the specified prefix if it exists; otherwise, null.

pop() Method

```
public boolean pop()
```

Restores the cursor location most recently saved with the push() method.

Returns

true if there was a location to restore; otherwise, false.

prefixForNamespace(String) Method

```
public String prefixForNamespace(String namespaceURI)
```

Returns a prefix that can be used to indicate a namespace URI. The current context must be at a START or STARTDOC. If there is an existing prefix that indicates the URI in the current context, that prefix may be returned. Otherwise, a new prefix for the URI will be defined by adding an xmlns attribute to the current container or a parent container. Note that this queries the current state of the document. When the document is persisted, the saving mechanism may synthesize namespaces (ns1, ns2, and so on) for the purposes of persistence. These namespaces are only present in the serialized form, and are not reflected back into the document being saved.

Parameters

namespaceURI

The namespace URI corresponding to the requested prefix.

Returns

The prefix corresponding to the specified URI if it exists; otherwise, a newly generated prefix.

prevTokenType() Method

```
public XmlCursor.TokenType prevTokenType()
```

Returns the type of the previous token. By definition, the previous token is the token immediately to the left of the cursor. If you're in the middle of text, after a character, you get TEXT.

Returns

The TokenType instance for the token immediately before the token at the cursor's current location.

push() Method

```
public void push()
```

Saves the current location of this cursor on an internal stack of saved positions (independent of selection). This location may be restored later by calling the pop() method.

removeAttribute(QName) Method

```
public boolean removeAttribute(QName attrName)
```

When at a START or STARTDOC, removes the attribute with the given name.

Parameters

attrName

The name of the attribute that should be removed.

Returns

true if the attribute was removed; otherwise, false.

removeChars(int) Method

```
public int removeChars(int maxCharacterCount)
```

Removes characters up to the specified maximum number, counting right from this cursor's location to the character at *maxCharacterCount*. The space remaining from removing the characters collapses up to this cursor.

Parameters

maxCharacterCount

The maximum number of characters after this cursor's location to remove.

Returns

The actual number of characters removed.

removeXml() Method

```
public boolean removeXml()
```

Removes the XML that is immediately after this cursor. For the TEXT, ATTR, NAMESPACE, COMMENT and PROCINST tokens, a single token is removed. For a START token, the corresponding element and all of its contents are removed. For all other tokens, this is a no-op. You cannot remove a STARTDOC. The cursors located in the XML that was removed all collapse to the same location. All bookmarks in this XML will be orphaned.

Returns

true if anything was removed; false only if the cursor is just before END or ENDDOC token.

removeXmlContents() Method

```
public boolean removeXmlContents()
```

Removes the contents of the container (STARTDOC OR START) immediately after this cursor. For all other situations, returns false. Does not remove attributes or namespaces.

Returns

true if anything was copied; otherwise, false.

selectPath(String) Method

```
public void selectPath(String path)
```

Executes the specified XPath expression against the XML that this cursor is in. The cursor's position does not change. To navigate to the selections, use `hasNextSelection` and `toNextSelection` (similar to `java.util.Iterator`). The root referred to by the expression should be given as a dot. The following is an example path expression:

```
cursor.selectPath("./purchase-order/line-item[price <= 20.00]");
```

Parameters

path

The path expression to execute.

selectPath(String, XmlOptions) Method

```
public void selectPath(String path,
                      XmlOptions options)
```

Executes the specified XPath expression against the XML that this cursor is in. The cursor's position does not change. To navigate to the selections, use `hasNextSelection` and `toNextSelection` (similar to `java.util.Iterator`). The root referred to by the expression should be given as a dot. The following is an example path expression:

```
cursor.selectPath("./purchase-order/line-item[price <= 20.00]");
```

Parameters

path

The path expression to execute.

options

Options for the query. For example, you can call the `XmlOptions.setXqueryCurrentNodeVar(String)` method to specify a particular name for the query expression variable that indicates the context node.

setAttributeText(QName, String) Method

```
public boolean setAttributeText(QName attrName,  
                               String value)
```

When at a START or STARTDOC, sets the attribute text for the given attribute. When not at a START or STARTDOC returns false. If the attribute does not exist, one is created.

Parameters

attrName

The name of the attribute whose value is being set.

value

The new value for the attribute.

Returns

true if the new value was set; otherwise, false.

setBookmark(XmlCursor.XmlBookmark) Method

```
public void setBookmark(XmlCursor.XmlBookmark bookmark)
```

Sets a bookmark to the document at this cursor's location. The bookmark is attached to the token in the tree immediately after the cursor. If the tree is manipulated to move that object to a different place, the bookmark moves with it. If the tree is manipulated to delete that token from the tree, the bookmark is orphaned. Copy operations do not copy bookmarks.

Parameters

bookmark

The bookmark to set.

setName(QName) Method

```
public void setName(QName name)
```

Sets the name of the current token. This token can be START, NAMESPACE, ATTR or PROCINST.

Parameters

name

The new name for the current token.

setTextValue(String) Method

```
public void setTextValue(String text)
```

Sets the text value of the XML at this cursor's location if that XML's token type is START, STARTDOC, ATTR, COMMENT or PROCINST. For elements that have nested children this first removes all the content of the element and replaces it with the given text.

Parameters

text

The text to use as a new value.

setTextValue(char[], int, int) Method

```
public void setTextValue(char[] sourceChars,  
                        int offset,  
                        int length)
```

Sets the text value of the XML at this cursor's location (if that XML's token type is START, STARTDOC, ATTR, COMMENT or PROCINST) to the contents of the specified character array. For elements that have nested children this first removes all the content of the element and replaces it with the given text.

Parameters

sourceChars

A character array containing the XML's new value.

offset

The position within sourceChars from which the first of the source characters should be copied.

length

The maximum number of characters to set as the XML's new value.

toBookmark(XmlCursor.XmlBookmark) Method

```
public boolean toBookmark(XmlCursor.XmlBookmark bookmark)
```

Moves this cursor to the same position as the bookmark. If the bookmark is in a different document from this cursor or if the bookmark is orphaned, this cursor will not be moved, and false will be returned.

Parameters

bookmark

The bookmark at the location to which this cursor should be moved.

Returns

true if the cursor moved; otherwise, false.

toChild(String) Method

```
public boolean toChild(String name)
```

Moves the cursor to the first child element of the specified name in no namespace.

Parameters

name

The name of the element to move the cursor to.

Returns

true if the cursor was moved; otherwise, false.

toChild(String, String) Method

```
public boolean toChild(String namespace,
                      String name)
```

Moves the cursor to the first child element of the specified name in the specified namespace.

Parameters

namespace

The namespace URI for the element to move the cursor to.

name

The name of the element to move to.

Returns

true if the cursor was moved; otherwise, false.

toChild(QName) Method

```
public boolean toChild(QName name)
```

Moves the cursor to the first child element of the specified qualified name.

Parameters

name

The name of the element to move the cursor to.

toChild(int) Method

```
public boolean toChild(int index)
```

Moves the cursor to the child element specified by *index*.

Parameters

index

The position of the element in the sequence of child elements.

Returns

true if the cursor was moved; otherwise, false.

toChild(QName, int) Method

```
public boolean toChild(QName name,  
                      int index)
```

Moves the cursor to the specified *index* child element of the specified name, where that element is the .

Parameters

name

The name of the child element to move the cursor to.

index

The position of the element in the sequence of child elements.

Returns

true if the cursor was moved; otherwise, false.

toCursor(XmlCursor) Method

```
public boolean toCursor(XmlCursor moveTo)
```

Moves this cursor to the same position as the *moveTo* cursor. if the *moveTo* cursor is in a different document from this cursor, this cursor will not be moved, and false returned.

Parameters

moveTo

The cursor at the location to which this cursor should be moved.

Returns

true if the cursor moved; otherwise, false.

toEndDoc() Method

```
public void toEndDoc()
```

Moves the cursor to the ENDDOC token, which is the end of the document.

toEndToken() Method

```
public XmlCursor.TokenType toEndToken()
```

Moves the cursor to the END or ENDDOC token corresponding to the current START or STARTDOC, and returns END or ENDDOC. If the current token is not a START or STARTDOC, the cursor is not moved and NONE is returned.

Returns

The new current token type.

toFirstAttribute() Method

```
public boolean toFirstAttribute()
```

Moves the cursor to the first attribute of this element, or returns false and does not move the cursor if there are no attributes. The order of attributes is arbitrary, but stable. xmlns attributes (namespace declarations) are not considered attributes by this function. The cursor must be on a START or STARTDOC for this method to succeed.

Returns

true if the cursor was moved; otherwise, false.

toFirstChild() Method

```
public boolean toFirstChild()
```

Moves the cursor to the first child element, or returns false and does not move the cursor if there are no element children. If the cursor is not currently in an element, it moves into the first child element of the next element.

Returns

true if the cursor was moved; otherwise, false.

toFirstContentToken() Method

```
public XmlCursor.TokenType toFirstContentToken()
```

Moves the cursor to the first token in the content of the current START or STARTDOC. That is, the first token after all ATTR and NAMESPACE tokens associated with this START. If the current token is not a START or STARTDOC, the cursor is not moved and NONE is returned. If the current START or STARTDOC has no content, the cursor is moved to the END or ENDDOC token.

Returns

The new current token type.

toLastAttribute() Method

```
public boolean toLastAttribute()
```

Moves the cursor to the last attribute of this element, or returns false and does not move the cursor if there are no attributes. The order of attributes is arbitrary, but stable. xmlns attributes (namespace declarations) are not considered attributes by this function. The cursor must be on a START or STARTDOC for this method to succeed.

Returns

true if the cursor was moved; otherwise, false.

toLastChild() Method

```
public boolean toLastChild()
```

Moves the cursor to the last element child, or returns false and does not move the cursor if there are no element children.

Returns

true if the cursor was moved; otherwise, false.

toNextAttribute() Method

```
public boolean toNextAttribute()
```

Moves the cursor to the next sibling attribute, or returns false and does not move the cursor if there is no next

sibling attribute. The order of attributes is arbitrary, but stable. xmlns attributes (namespace declarations) are not considered attributes by this function. The cursor must be on an attribute for this method to succeed.

Returns

true if the cursor was moved; otherwise, false.

toNextBookmark(Object) Method

```
public XmlCursor.XmlBookmark toNextBookmark(Object key)
```

Moves this cursor to the location after its current position where a bookmark with the given key exists. Returns false if no such bookmark exists.

Parameters

key

The key held by the next bookmark at the location to which this cursor should be moved.

Returns

The next corresponding bookmark, if it exists; null if there is no next bookmark with the specified key.

toNextChar(int) Method

```
public int toNextChar(int maxCharacterCount)
```

Moves the cursor forward by the specified number of characters, and stops at the next non-TEXT token. Returns the number of characters actually moved across, which is guaranteed to be less than or equal to *maxCharacterCount*. If there is no further text, or if there is no text at all, returns zero. Note this does not dive into attribute values, comment contents, processing instruction contents, etc., but only content text. You can pass *maxCharacterCount* < 0 to move over all the text to the right. This has the same effect as *toNextToken*, but returns the amount of text moved over.

Parameters

maxCharacterCount

The maximum number of characters by which the cursor should be moved.

Returns

The actual number of characters by which the cursor was moved; 0 if the cursor was not moved.

toNextSelection() Method

```
public boolean toNextSelection()
```


Moves this cursor to the next location in the selection, if any. See the `selectPath()` and `addToSelection()` methods.

Returns

true if the cursor moved; otherwise, false.

toNextSibling() Method

```
public boolean toNextSibling()
```

Moves the cursor to the next sibling element, or returns false and does not move the cursor if there is no next sibling element. (By definition the position of an element is the same as the position of its START token.) If the current token is not a START, the cursor will be moved to the next START without moving out of the scope of the current element.

Returns

true if the cursor was moved; otherwise, false.

toNextSibling(String) Method

```
public boolean toNextSibling(String name)
```

Moves the cursor to the next sibling element of the specified name in no namespace.

Parameters

name

The name of the element to move the cursor to.

Returns

true if the cursor was moved; otherwise, false.

toNextSibling(String, String) Method

```
public boolean toNextSibling(String namespace ,  
                             String name)
```

Moves the cursor to the next sibling element of the specified name in the specified namespace.

Parameters

namespace

The namespace URI for the element to move the cursor to.

name

The name of the element to move the cursor to.

Returns

true if the cursor was moved; otherwise, false.

toNextSibling(QName) Method

```
public boolean toNextSibling(QName name)
```

Moves the cursor to the next sibling element of the specified qualified name.

Parameters

name

The name of the element to move the cursor to.

Returns

true if the cursor was moved; otherwise, false.

toNextToken() Method

```
public XmlCursor.TokenType toNextToken()
```

Moves the cursor to the next token. When there are no more tokens available, `hasNextToken` returns false and `toNextToken()` returns `NONE` and does not move the cursor. Returns the token type of the token to the right of the cursor upon a successful move.

Returns

The token type for the next token if the cursor was moved; otherwise, NONE.

toParent() Method

```
public boolean toParent()
```

Moves the cursor to the parent element or `STARTDOC`, or returns false and does not move the cursor if there is no parent. Works if you're in attributes or content. Returns false only if at `STARTDOC`. Note that the parent of an `END` token is the corresponding `START` token.

Returns

true if the cursor was moved; false if the cursor is at the STARTDOC token.

toPrevAttribute() Method

```
public boolean toPrevAttribute()
```

Moves the cursor to the previous sibling attribute, or returns false and does not move the cursor if there is no previous sibling attribute. The order of attributes is arbitrary, but stable. xmlns attributes (namespace declarations) are not considered attributes by this function. The cursor must be on an attribute for this method to succeed.

Returns

true if the cursor was moved; otherwise, false.

toPrevBookmark(Object) Method

```
public XmlCursor.XmlBookmark toPrevBookmark(Object key)
```

Moves this cursor to the location before its current position where a bookmark with the given key exists. Returns false if no such bookmark exists.

Parameters

key

The key held by the previous bookmark at the location to which this cursor should be moved.

Returns

The previous corresponding bookmark, if it exists; null if there is no previous bookmark with the specified key.

toPrevChar(int) Method

```
public int toPrevChar(int maxCharacterCount)
```

Moves the cursor backwards by the number of characters given. Has similar characteristics to the toNextChar method.

Parameters

maxCharacterCount

The maximum number of characters by which the cursor should be moved.

Returns

The actual number of characters by which the cursor was moved; 0 if the cursor was not moved.

toPrevSibling() Method

```
public boolean toPrevSibling()
```

Moves the cursor to the previous sibling element, or returns false and does not move the cursor if there is no previous sibling element. (By definition the position of an element is the same as the position of its START token.)

Returns

true if the cursor was moved; otherwise, false.

toPrevToken() Method

```
public XmlCursor.TokenType toPrevToken()
```

Moves the cursor to the previous token. When there is no previous token, returns NONE, otherwise returns the token to the left of the new position of the cursor.

Returns

The token type for the previous token if the cursor was moved; otherwise, NONE.

toSelection(int) Method

```
public boolean toSelection(int i)
```

Moves this cursor to the specified location in the selection. If *i* is less than zero or greater than or equal to the selection count, this method returns false. See also the `selectPath()` and `addToSelection()` methods.

Parameters

i
The index of the desired location.

Returns

true if the cursor was moved; otherwise, false.

toStartDoc() Method

```
public void toStartDoc()
```

Moves the cursor to the STARTDOC token, which is the root of the document.

XmlCursor.ChangeStamp Interface

public static interface XmlCursor.ChangeStamp

Represents the state of a document at a particular point in time. It is used to determine if a document has been changed since that point in time.

Enclosing interface

XmlCursor

Method

Summary

```
public  
boolean hasChanged()
```

Returns whether or not the document associated with this ChangeStamp has been altered since the ChangeStamp had been created.

Method Detail

hasChanged() Method

```
public boolean hasChanged()
```

Returns whether or not the document associated with this ChangeStamp has been altered since the ChangeStamp had been created.

XmlCursor.TokenType Class

public static final class XmlCursor.TokenType

extends Object

An enumeration that identifies the type of an XML token.

Hierarchy

```
Object
  XmlCursor.TokenType
```

Enclosing interface

```
XmlCursor
```

Field Summary

```

    public static
final XmlCursor.TokenType ATTR
    The singleton attribute token type

    public static
final XmlCursor.TokenType COMMENT
    The singleton comment token type

    public static
final XmlCursor.TokenType END
    The singleton end–element token type

    public static
final XmlCursor.TokenType ENDDOC
    The singleton start–document token type

    public static
    final int INT_ATTR
    The attribute token.

    public static
    final int INT_COMMENT
    The comment token.

    public static
    final int INT_END
    The end–element token.

    public static
    final int INT_ENDDOC
    The end–document token.
```



```

    public static INT_NAMESPACE
        final int
            The namespace declaration token.

    public static
        final int INT_NONE
            No token.

    public static
        final int INT_PROCINST
            The processing instruction token.

    public static
        final int INT_START
            The start–element token.

    public static
        final int INT_STARTDOC
            The start–document token.

    public static
        final int INT_TEXT
            The text token.

    public static
final XmlCursor.TokenType NAMESPACE
            The singleton namespace declaration token type

    public static
final XmlCursor.TokenType NONE
            The singleton no–token type

    public static
final XmlCursor.TokenType PROCINST
            The singleton processing instruction token type

    public static
final XmlCursor.TokenType START
            The singleton start–element token type

    public static
final XmlCursor.TokenType STARTDOC
            The singleton start–document token type

    public static
final XmlCursor.TokenType TEXT
            The singleton text token type

```

Method

Summary

```

    public
        int intValue()
            Returns one of the INT_ values defined in this
            class.

    public
    boolean isAnyAttr()
        True if is attribute or namespace declaration token

```



```

    public isAttr()
    boolean      True if is attribute token.

    public
    boolean isComment()
                True if is comment token.

    public
    boolean isContainer()
                True if is start–document or start–element token

    public
    boolean isEnd()
                True if is end–element token.

    public
    boolean isEnddoc()
                True if is end–document token.

    public
    boolean isFinish()
                True if is end–document or end–element token

    public
    boolean isNamespace()
                True if is namespace declaration token.

    public
    boolean isNone()
                True if no token.

    public
    boolean isProcinst()
                True if is processing instruction token.

    public
    boolean isStart()
                True if is start–element token.

    public
    boolean isStartdoc()
                True if is start–document token.

    public
    boolean isText()
                True if is text token.

    public
    String toString()

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `wait`, `wait`, `wait`

Field Detail

ATTR

```
public static final XmlCursor.TokenType ATTR
```

The singleton attribute token type

COMMENT

```
public static final XmlCursor.TokenType COMMENT
```

The singleton comment token type

END

```
public static final XmlCursor.TokenType END
```

The singleton end–element token type

ENDDOC

```
public static final XmlCursor.TokenType ENDDOC
```

The singleton start–document token type

INT_ATTR

```
public static final int INT_ATTR
```

The attribute token. See `XmlCursor.TokenType.intValue()`.

INT_COMMENT

```
public static final int INT_COMMENT
```

The comment token. See `XmlCursor.TokenType.intValue()`.

INT_END

```
public static final int INT_END
```

The end–element token. See `XmlCursor.TokenType.intValue()`.

INT_ENDDOC

```
public static final int INT_ENDDOC
```

The end-document token. See `XmlCursor.TokenType.intValue()`.

INT_NAMESPACE

```
public static final int INT_NAMESPACE
```

The namespace declaration token. See `XmlCursor.TokenType.intValue()`.

INT_NONE

```
public static final int INT_NONE
```

No token. See `XmlCursor.TokenType.intValue()`.

INT_PROCIINST

```
public static final int INT_PROCIINST
```

The processing instruction token. See `XmlCursor.TokenType.intValue()`.

INT_START

```
public static final int INT_START
```

The start-element token. See `XmlCursor.TokenType.intValue()`.

INT_STARTDOC

```
public static final int INT_STARTDOC
```

The start-document token. See `XmlCursor.TokenType.intValue()`.

INT_TEXT

```
public static final int INT_TEXT
```

The text token. See `XmlCursor.TokenType.intValue()`.

NAMESPACE

```
public static final XmlCursor.TokenType NAMESPACE
```

The singleton namespace declaration token type

NONE

```
public static final XmlCursor.TokenType NONE
```

The singleton no-token type

PROCINST

```
public static final XmlCursor.TokenType PROCINST
```

The singleton processing instruction token type

START

```
public static final XmlCursor.TokenType START
```

The singleton start-element token type

STARTDOC

```
public static final XmlCursor.TokenType STARTDOC
```

The singleton start-document token type

TEXT

```
public static final XmlCursor.TokenType TEXT
```

The singleton text token type

Method Detail

intValue() Method

```
public int intValue()
```


Returns one of the INT_ values defined in this class.

isAnyAttr() Method

```
public boolean isAnyAttr()
```

True if is attribute or namespace declaration token

isAttr() Method

```
public boolean isAttr()
```

True if is attribute token.

isComment() Method

```
public boolean isComment()
```

True if is comment token.

isContainer() Method

```
public boolean isContainer()
```

True if is start–document or start–element token

isEnd() Method

```
public boolean isEnd()
```

True if is end–element token.

isEnddoc() Method

```
public boolean isEnddoc()
```

True if is end–document token.

isFinish() Method

```
public boolean isFinish()
```

True if is end–document or end–element token

isNamespace() Method

```
public boolean isNamespace()
```

True if is namespace declaration token.

isNone() Method

```
public boolean isNone()
```

True if no token.

isProcinst() Method

```
public boolean isProcinst()
```

True if is processing instruction token.

isStart() Method

```
public boolean isStart()
```

True if is start–element token.

isStartdoc() Method

```
public boolean isStartdoc()
```

True if is start–document token.

isText() Method

```
public boolean isText()
```

True if is text token.

toString() Method

```
public String toString()
```

Overrides

```
Object.toString()
```


XmlCursor.XmlBookmark Class

public abstract static class XmlCursor.XmlBookmark

extends Object

Subclasses of XmlBookmark can be used to annotate an XML document. This class is abstract to prevent parties from inadvertently interfering with each others' bookmarks without explicitly sharing a bookmark class.

Hierarchy

```
Object
  XmlCursor.XmlBookmark
```

Direct Known Subclasses

```
XmlLineNumber
```

Enclosing interface

```
XmlCursor
```

Field Summary

```
public XmlCursor.XmlMark
```

```
    _currentMark
```

The mark is set by the host document; it is capable of returning an XmlCursor implementation at the location of the bookmark.

```
    public
    final Reference _ref
```

If non-null, the ref is used by the host document to maintain a reference to the bookmark.

Constructor Summary

XmlCursor.XmlBookmark()

Constructs a strongly-referenced bookmark.

XmlCursor.XmlBookmark(boolean weak)

Constructs a bookmark.

Method Summary

```

public
    final createCursor()
XmlCursor      Call the createCursor method to create a new cursor which is positioned at the same
                splace as the bookmark.

public
    Object getKey()
                The default key for bookmarks is the class which implements them.

public
    final toBookmark(XmlCursor c)
XmlCursor      Moves the given cursor to this bookmark, and returns it.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Field Detail

`_currentMark`

```
public XmlCursor.XmlMark _currentMark
```

The mark is set by the host document; it is capable of returning an XmlCursor implementation at the location of the bookmark.

`_ref`

```
public final Reference _ref
```

If non-null, the ref is used by the host document to maintain a reference to the bookmark. If it is a weak reference, the host document will not prevent the Bookmark from being garbage collected.

Constructor Detail

`XmlCursor.XmlBookmark`

```
public XmlCursor.XmlBookmark()
```

Constructs a strongly-referenced bookmark.

XmlCursor.XmlBookmark

```
public XmlCursor.XmlBookmark(boolean weak)
```

Constructs a bookmark.

Method Detail

createCursor() Method

```
public final XmlCursor createCursor()
```

Call the createCursor method to create a new cursor which is positioned at the same place as the bookmark. It is much more efficient to call toBookmark on an existing cursor than it is to create a new cursor. However, toBookmark may fail if the bookmark is in a different document than the cursor. It is under these circumstances where createCursor needs to be called on the bookmark. Subsequent navigations to bookmark positions should attempt to reuse the last cursor to improve performance.

getKey() Method

```
public Object getKey()
```

The default key for bookmarks is the class which implements them. This way, multiple parties using bookmarks in the same instance document will not interfere with eachother. One can, however, override getKey() to use a key other than the class.

toBookmark(XmlCursor) Method

```
public final XmlCursor toBookmark(XmlCursor c)
```

Moves the given cursor to this bookmark, and returns it.

XmlCursor.XmlMark Interface

public static interface XmlCursor.XmlMark

An abstract XmlCursor factory. Implementations of XmlCursor implement XmlMark to be able to reconstitute a cursor from a bookmark. When content moves between implementations, the XmlMark is set to the implementation's which receives the new content.

Enclosing interface

XmlCursor

Method

Summary

```
public  
XmlCursor createCursor()
```

Method Detail

createCursor() Method

```
public XmlCursor createCursor()
```


XmlDate Interface

public interface XmlDate

extends XmlAnySimpleType

Corresponds to the XML Schema xs:date type.

Convertible to Calendar, Date, and GDate.

Related Topics

XmlCalendar

GDate

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
    public static final class XmlDate.Factory
    {
        A class with methods for creating instances of XmlDate.
    }
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
    public static final SchemaType type
    {
        The constant SchemaType object representing this schema type.
    }
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

    public
    Calendar calendarValue()
        Returns this value as a Calendar

    public
    Date dateValue()
        Returns this value as a Date

    public
    GDate gDateValue()
        Returns this value as a GDate

    public
    Calendar getCalendarValue()
        Returns this value as a Calendar

    public
    Date getDateValue()
        Returns this value as a Date

    public
    GDate getGDateValue()
        Returns this value as a GDate

    public
    void set(Calendar c)
        Sets this value as a Calendar

    public
    void set(GDateSpecification gd)
        Sets this value as a
        GDateSpecification

    public
    void set(Date d)
        Sets this value as a Date

    public
    void setCalendarValue(Calendar c)
        Sets this value as a Calendar

    public
    void setDateValue(Date d)
        Sets this value as a Date

    public
    void setGDateValue(GDate gd)
        Sets this value as a
        GDateSpecification

```

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface `com.bea.xml.XmlObject`

changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode

Methods from interface `com.bea.xml.XmlTokenSource`

documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Method Detail

calendarValue() Method

DEPRECATED replaced with `com.bea.xml.XmlDate.getCalendarValue()`

```
public Calendar calendarValue()
```

Returns this value as a Calendar

dateValue() Method

DEPRECATED replaced with `com.bea.xml.XmlDate.getDateValue()`

```
public Date dateValue()
```

Returns this value as a Date

gDateValue() Method

DEPRECATED replaced with `com.bea.xml.XmlDate.getGDateValue()`


```
public GDate gDateValue()
```

Returns this value as a GDate

getCalendarValue() Method

```
public Calendar getCalendarValue()
```

Returns this value as a Calendar

getDateValue() Method

```
public Date getDateValue()
```

Returns this value as a Date

getGDateValue() Method

```
public GDate getGDateValue()
```

Returns this value as a GDate

set(Calendar) Method

DEPRECATED replaced with

`com.bea.xml.XmlDate.setCalendarValue(java.util.Calendar)`

```
public void set(Calendar c)
```

Sets this value as a Calendar

set(GDateSpecification) Method

DEPRECATED replaced with `com.bea.xml.XmlDate.setGDateValue(com.bea.xml.GDate)`

```
public void set(GDateSpecification gd)
```

Sets this value as a GDateSpecification

set(Date) Method

DEPRECATED replaced with `com.bea.xml.XmlDate.setDateValue(java.util.Date)`

```
public void set(Date d)
```


Sets this value as a Date

setCalendarValue(Calendar) Method

```
public void setCalendarValue(Calendar c)
```

Sets this value as a Calendar

setDateValue(Date) Method

```
public void setDateValue(Date d)
```

Sets this value as a Date

setGDateValue(GDate) Method

```
public void setGDateValue(GDate gd)
```

Sets this value as a GDateSpecification

XmlDate.Factory Class

public static final class XmlDate.Factory

extends Object

A class with methods for creating instances of XmlDate.

Hierarchy

```
Object
  XmlDate.Factory
```

Enclosing interface

```
XmlDate
```

Method Summary

```
public static
    XmlDate newInstance()
        Creates an empty instance of XmlDate

public static
    XmlDate newInstance(XmlOptions options)
        Creates an empty instance of XmlDate

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlDate newValue(Object obj)
        Creates an immutable XmlDate value

public static
    XmlDate parse(String s)
        Parses a XmlDate fragment from a String.

public static
    XmlDate parse(String s, XmlOptions options)
        Parses a XmlDate fragment from a String.

public static
    XmlDate parse(File f)
        Parses a XmlDate fragment from a File.
```


XMLBeans API Reference

```
public static parse(File f, XmlOptions options)
    XmlDate      Parses a XmlDate fragment from a File.
public static
    XmlDate parse(URL u)
    Parses a XmlDate fragment from a URL.
public static
    XmlDate parse(URL u, XmlOptions options)
    Parses a XmlDate fragment from a URL.
public static
    XmlDate parse(InputStream is)
    Parses a XmlDate fragment from an InputStream.
public static
    XmlDate parse(InputStream is, XmlOptions options)
    Parses a XmlDate fragment from an InputStream.
public static
    XmlDate parse(Reader r)
    Parses a XmlDate fragment from a Reader.
public static
    XmlDate parse(Reader r, XmlOptions options)
    Parses a XmlDate fragment from a Reader.
public static
    XmlDate parse(Node node)
    Parses a XmlDate fragment from a DOM Node.
public static
    XmlDate parse(Node node, XmlOptions options)
    Parses a XmlDate fragment from a DOM Node.
public static
    XmlDate parse(XMLInputStream xis)
    Parses a XmlDate fragment from an XMLInputStream.
public static
    XmlDate parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlDate fragment from an XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlDate newInstance()
```

Creates an empty instance of `XmlDate`

newInstance(XmlOptions) Method

```
public static XmlDate newInstance(XmlOptions options)
```

Creates an empty instance of XmlDate

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlDate newValue(Object obj)
```

Creates an immutable XmlDate value

parse(String) Method

```
public static XmlDate parse(String s)
    throws XmlException
```


Parses a `XmlDate` fragment from a `String`. For example:
"<xml-fragment>2003-06-14</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlDate parse(String s,  
                             XmlOptions options)  
    throws XmlException
```

Parses a `XmlDate` fragment from a `String`. For example:
"<xml-fragment>2003-06-14</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlDate parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlDate` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlDate parse(File f,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlDate` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlDate parse(URL u)
    throws XmlException, IOException
```

Parses a `XmlDate` fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlDate parse(URL u,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlDate` fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlDate parse(InputStream is)
    throws XmlException, IOException
```

Parses a `XmlDate` fragment from an `InputStream`.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlDate parse(InputStream is,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlDate` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlDate parse(Reader r)
    throws XmlException, IOException
```

Parses a `XmlDate` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlDate parse(Reader r,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlDate` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlDate parse(Node node)
    throws XmlException
```

Parses a `XmlDate` fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlDate parse(Node node,
                             XmlOptions options)
    throws XmlException
```


Parses a `XmlDate` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlDate parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlDate` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlDate parse(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlDate` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlDateTime Interface

public interface XmlDateTime

extends XmlAnySimpleType

Corresponds to the XML Schema xs:dateTime type.

Convertible to Calendar, Date, and GDate.

Related Topics

XmlCalendar

GDate

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
public static final class XmlDateTime.Factory
    A class with methods for creating instances of XmlDateTime.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
public static final SchemaType type
    The constant SchemaType object representing this schema type.
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

    public
    Calendar calendarValue()
        Returns this value as a Calendar

    public
    Date dateValue()
        Returns this value as a Date

    public
    GDate gDateValue()
        Returns this value as a GDate

    public
    Calendar getCalendarValue()
        Returns this value as a Calendar

    public
    Date getDateValue()
        Returns this value as a Date

    public
    GDate getGDateValue()
        Returns this value as a GDate

    public
    void set(Calendar c)
        Sets this value as a Calendar

    public
    void set(GDateSpecification gd)
        Sets this value as a
        GDateSpecification

    public
    void set(Date d)
        Sets this value as a Date

    public
    void setCalendarValue(Calendar c)
        Sets this value as a Calendar

    public
    void setDateValue(Date d)
        Sets this value as a Date

    public
    void setGDateValue(GDate gd)
        Sets this value as a
        GDateSpecification

```

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface `com.bea.xml.XmlObject`

changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode

Methods from interface `com.bea.xml.XmlTokenSource`

documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Method Detail

calendarValue() Method

DEPRECATED replaced with `com.bea.xml.XmlDateTime.getCalendarValue()`

```
public Calendar calendarValue()
```

Returns this value as a Calendar

dateValue() Method

DEPRECATED replaced with `com.bea.xml.XmlDateTime.getDateValue()`

```
public Date dateValue()
```

Returns this value as a Date

gDateValue() Method

DEPRECATED replaced with `com.bea.xml.XmlDateTime.getGDateValue()`


```
public GDate gDateValue()
```

Returns this value as a GDate

getCalendarValue() Method

```
public Calendar getCalendarValue()
```

Returns this value as a Calendar

getDateValue() Method

```
public Date getDateValue()
```

Returns this value as a Date

getGDateValue() Method

```
public GDate getGDateValue()
```

Returns this value as a GDate

set(Calendar) Method

DEPRECATED replaced with

```
com.bea.xml.XmlDateTime.setCalendarValue(java.util.Calendar)
```

```
public void set(Calendar c)
```

Sets this value as a Calendar

set(GDateSpecification) Method

DEPRECATED replaced with

```
com.bea.xml.XmlDateTime.setGDateValue(com.bea.xml.GDate)
```

```
public void set(GDateSpecification gd)
```

Sets this value as a GDateSpecification

set(Date) Method

DEPRECATED replaced with `com.bea.xml.XmlDateTime.setDateValue(java.util.Date)`


```
public void set(Date d)
```

Sets this value as a Date

setCalendarValue(Calendar) Method

```
public void setCalendarValue(Calendar c)
```

Sets this value as a Calendar

setDateValue(Date) Method

```
public void setDateValue(Date d)
```

Sets this value as a Date

setGDateValue(GDate) Method

```
public void setGDateValue(GDate gd)
```

Sets this value as a GDateSpecification

XmlDateTime.Factory Class

public static final class XmlDateTime.Factory

extends Object

A class with methods for creating instances of XmlDateTime.

Hierarchy

```
Object
  XmlDateTime.Factory
```

Enclosing interface

```
XmlDateTime
```

Method Summary

```
public static
  XmlDateTime newInstance()
    Creates an empty instance of XmlDateTime
```

```
public static
  XmlDateTime newInstance(XmlOptions options)
    Creates an empty instance of XmlDateTime
```

```
public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.
```

```
public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
  options)
    Returns a validating XMLInputStream.
```

```
public static
  XmlDateTime newValue(Object obj)
    Creates an immutable XmlDateTime value
```

```
public static
  XmlDateTime parse(String s)
    Parses a XmlDateTime fragment from a String.
```

```
public static
  XmlDateTime parse(String s, XmlOptions options)
    Parses a XmlDateTime fragment from a String.
```

```
public static
  XmlDateTime parse(File f)
    Parses a XmlDateTime fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlDateTime      Parses a XmlDateTime fragment from a File.
public static
    XmlDateTime parse(URL u)
    Parses a XmlDateTime fragment from a URL.
public static
    XmlDateTime parse(URL u, XmlOptions options)
    Parses a XmlDateTime fragment from a URL.
public static
    XmlDateTime parse(InputStream is)
    Parses a XmlDateTime fragment from an InputStream.
public static
    XmlDateTime parse(InputStream is, XmlOptions options)
    Parses a XmlDateTime fragment from an InputStream.
public static
    XmlDateTime parse(Reader r)
    Parses a XmlDateTime fragment from a Reader.
public static
    XmlDateTime parse(Reader r, XmlOptions options)
    Parses a XmlDateTime fragment from a Reader.
public static
    XmlDateTime parse(Node node)
    Parses a XmlDateTime fragment from a DOM Node.
public static
    XmlDateTime parse(Node node, XmlOptions options)
    Parses a XmlDateTime fragment from a DOM Node.
public static
    XmlDateTime parse(XMLInputStream xis)
    Parses a XmlDateTime fragment from an XMLInputStream.
public static
    XmlDateTime parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlDateTime fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlDateTime newInstance()
```

Creates an empty instance of `XmlDateTime`

newInstance(XmlOptions) Method

```
public static XmlDateTime newInstance(XmlOptions options)
```

Creates an empty instance of XmlDateTime

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlDateTime newValue(Object obj)
```

Creates an immutable XmlDateTime value

parse(String) Method

```
public static XmlDateTime parse(String s)
    throws XmlException
```


Parses a `XmlDateTime` fragment from a `String`. For example:
"<xml-fragment>2003-06-14T12:00:00</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlDateTime parse(String s,  
                                XmlOptions options)  
    throws XmlException
```

Parses a `XmlDateTime` fragment from a `String`. For example:
"<xml-fragment>2003-06-14T12:00:00</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlDateTime parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlDateTime` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlDateTime parse(File f,  
                                XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlDateTime` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlDateTime parse(URL u)
    throws XmlException, IOException
```

Parses a `XmlDateTime` fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlDateTime parse(URL u,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlDateTime` fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlDateTime parse(InputStream is)
    throws XmlException, IOException
```

Parses a `XmlDateTime` fragment from an `InputStream`.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlDateTime parse(InputStream is,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlDateTime` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlDateTime parse(Reader r)
    throws XmlException, IOException
```

Parses a `XmlDateTime` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlDateTime parse(Reader r,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlDateTime` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlDateTime parse(Node node)
    throws XmlException
```

Parses a `XmlDateTime` fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlDateTime parse(Node node,
                                XmlOptions options)
    throws XmlException
```


Parses a `XmlDateTime` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XmlDateTime parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlDateTime` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlDateTime parse(XMLInputStream xis,
                                XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlDateTime` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlDecimal Interface

public interface XmlDecimal

extends XmlAnySimpleType

Corresponds to the XML Schema xs:decimal type.

Convertible to BigDecimal.

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

All Known Subinterfaces

XmlByte, XmlInt, XmlInteger, XmlLong, XmlNegativeInteger,
XmlNonNegativeInteger, XmlNonPositiveInteger, XmlPositiveInteger,
XmlShort, XmlUnsignedByte, XmlUnsignedInt, XmlUnsignedLong,
XmlUnsignedShort

Nested Class Summary

```
public static final class XmlDecimal.Factory
    A class with methods for creating instances of XmlDecimal.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
public static final SchemaType type
    The constant SchemaType object representing this schema type.
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

    public
    BigDecimal bigDecimalValue()
        Returns this value as a BigDecimal

    public
    BigDecimal getBigDecimalValue()
        Returns this value as a BigDecimal

    public
    void set(BigDecimal bd)
        Sets this value as a BigDecimal

    public
    void setBigDecimalValue(BigDecimal bd)
        Sets this value as a BigDecimal

```

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface com.bea.xml.XmlObject

changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode

Methods from interface com.bea.xml.XmlTokenSource

documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Method Detail

bigDecimalValue() Method

DEPRECATED replaced with `com.bea.xml.XmlDecimal.getBigDecimalValue()`

```
public BigDecimal bigDecimalValue()
```

Returns this value as a `BigDecimal`

getBigDecimalValue() Method

```
public BigDecimal getBigDecimalValue()
```

Returns this value as a `BigDecimal`

set(BigDecimal) Method

DEPRECATED replaced with

`com.bea.xml.XmlDecimal.setBigDecimalValue(java.math.BigDecimal)`

```
public void set(BigDecimal bd)
```

Sets this value as a `BigDecimal`

setBigDecimalValue(BigDecimal) Method

```
public void setBigDecimalValue(BigDecimal bd)
```

Sets this value as a `BigDecimal`

XmlDecimal.Factory Class

public static final class XmlDecimal.Factory

extends Object

A class with methods for creating instances of XmlDecimal.

Hierarchy

```
Object
  XmlDecimal.Factory
```

Enclosing interface

```
XmlDecimal
```

Method Summary

```
public static
    XmlDecimal newInstance()
        Creates an empty instance of XmlDecimal

public static
    XmlDecimal newInstance(XmlOptions options)
        Creates an empty instance of XmlDecimal

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlDecimal newValue(Object obj)
        Creates an immutable XmlDecimal value

public static
    XmlDecimal parse(String s)
        Parses a XmlDecimal fragment from a String.

public static
    XmlDecimal parse(String s, XmlOptions options)
        Parses a XmlDecimal fragment from a String.

public static
    XmlDecimal parse(File f)
        Parses a XmlDecimal fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlDecimal      Parses a XmlDecimal fragment from a File.
public static
    XmlDecimal parse(URL u)
    Parses a XmlDecimal fragment from a URL.
public static
    XmlDecimal parse(URL u, XmlOptions options)
    Parses a XmlDecimal fragment from a URL.
public static
    XmlDecimal parse(InputStream is)
    Parses a XmlDecimal fragment from an InputStream.
public static
    XmlDecimal parse(InputStream is, XmlOptions options)
    Parses a XmlDecimal fragment from an InputStream.
public static
    XmlDecimal parse(Reader r)
    Parses a XmlDecimal fragment from a Reader.
public static
    XmlDecimal parse(Reader r, XmlOptions options)
    Parses a XmlDecimal fragment from a Reader.
public static
    XmlDecimal parse(Node node)
    Parses a XmlDecimal fragment from a DOM Node.
public static
    XmlDecimal parse(Node node, XmlOptions options)
    Parses a XmlDecimal fragment from a DOM Node.
public static
    XmlDecimal parse(XMLInputStream xis)
    Parses a XmlDecimal fragment from an XMLInputStream.
public static
    XmlDecimal parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlDecimal fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlDecimal newInstance()
```

Creates an empty instance of `XmlDecimal`

newInstance(XmlOptions) Method

```
public static XmlDecimal newInstance(XmlOptions options)
```

Creates an empty instance of XmlDecimal

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlDecimal newValue(Object obj)
```

Creates an immutable XmlDecimal value

parse(String) Method

```
public static XmlDecimal parse(String s)
    throws XmlException
```


Parses a `XmlDecimal` fragment from a String. For example:
"<xml-fragment>1234.56789</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlDecimal parse(String s,  
                               XmlOptions options)  
    throws XmlException
```

Parses a `XmlDecimal` fragment from a String. For example:
"<xml-fragment>1234.56789</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlDecimal parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlDecimal` fragment from a File.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlDecimal parse(File f,  
                               XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlDecimal` fragment from a File.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlDecimal parse(URL u)
    throws XmlException, IOException
```

Parses a XmlDecimal fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlDecimal parse(URL u,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlDecimal fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlDecimal parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlDecimal fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlDecimal parse(InputStream is,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlDecimal fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlDecimal parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlDecimal fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlDecimal parse(Reader r,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlDecimal fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlDecimal parse(Node node)
    throws XmlException
```

Parses a XmlDecimal fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlDecimal parse(Node node,
                               XmlOptions options)
    throws XmlException
```


Parses a `XmlDecimal` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlDecimal parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlDecimal` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlDecimal parse(XMLInputStream xis,
                               XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlDecimal` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlDocumentProperties Class

public abstract class XmlDocumentProperties

extends Object

This class is used to attach arbitrary information to an XML document. It also defines several well-known types of information that can be attached or found on a document.

For example, suppose you wanted to associate a filename with the document containing an xml object "xobj". This could be done via the following code:

```
tokenSource.documentProperties().set(XmlDocumentProperties.NAME, "MyFilename.xml");
```

To fetch the filename later, given an xobj2 anywhere in the same document, you can write:

```
filename = (String)tokenSource.documentProperties().get(XmlDocumentProperties.NAME);
```

Hierarchy

```

Object
  XmlDocumentProperties

```

Field Summary

```

public
static DOCTYPE_NAME
final Object          Doc type name

public
static DOCTYPE_PUBLIC_ID
final Object          Doc type public id

public
static DOCTYPE_SYSTEM_ID
final Object          Doc type system id

public
static ENCODING
final Object          Document encoding

public
static MESSAGE_DIGEST
final Object          SHA message digest

public
static SOURCE_NAME
final Object          Used to store the original name (a String) for the source from which the XML
                        document was loaded.

```



```

public VERSION
static
final Object      Document version

```

Constructor Summary

XmlDocumentProperties()

Method Summary

```

public
abstract get(Object key)
Object      Returns a value previously attached to a document using set.

public
String getDoctypeName()
           Returns the DOCTYPE name used in the DOCTYPE> declaration.

public
String getDoctypePublicId()
           Returns the DOCTYPE public ID used in the DOCTYPE> declaration.

public
String getDoctypeSystemId()
           Returns the DOCTYPE system ID used in the DOCTYPE> declaration.

public
String getEncoding()
           Returns the encoding used for the XML document, as an ISO encoding name.

public
byte[] getMessageDigest()
           Returns the message digest used to summarize the document.

public
String getSourceName()
           Returns the name of the XML document file.

public
String getVersion()
           Returns the XML version string used in the xml?> declaration.

public
abstract put(Object key, Object value)
Object      Attaches a value to the root of the document containing the given token source.

public
abstract remove(Object key)
Object      Removes a value previously attached to a document using set.

public
void setDoctypeName(String doctypename)
           Sets the DOCTYPE name use in the DOCTYPE> declaration.

```



```

public setDoctypePublicId(String publicid)
    void          Sets the DOCTYPE public ID to use in the DOCTYPE> declaration.
public
    void setDoctypeSystemId(String systemid)
        Sets the DOCTYPE system ID to use in the DOCTYPE> declaration.
public
    void setEncoding(String encoding)
        Sets the encoding to use for the XML document.
public
    void setMessageDigest(byte[] digest)
        Sets the message digest used to summarize the document.
public
    void setSourceName(String sourceName)
        Sets the name of the XML document file.
public
    void setVersion(String version)
        Sets the XML version string to use in the xml?> declaration.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Field Detail

DOCTYPE_NAME

```
public static final Object DOCTYPE_NAME
```

Doc type name

DOCTYPE_PUBLIC_ID

```
public static final Object DOCTYPE_PUBLIC_ID
```

Doc type public id

DOCTYPE_SYSTEM_ID

```
public static final Object DOCTYPE_SYSTEM_ID
```

Doc type system id

ENCODING

```
public static final Object ENCODING
```

Document encoding

MESSAGE_DIGEST

```
public static final Object MESSAGE_DIGEST
```

SHA message digest

SOURCE_NAME

```
public static final Object SOURCE_NAME
```

Used to store the original name (a String) for the source from which the XML document was loaded. This name, if present, is used to identify the document when reporting validation or compilation errors. `XmlObject.Factory.parse(File)` and `SchemaTypeLoader.loadInstance(File)` both automatically set this value to the filename.

VERSION

```
public static final Object VERSION
```

Document version

Constructor Detail

XmlDocumentProperties

```
public XmlDocumentProperties()
```

Method Detail

get(Object) Method

```
public abstract Object get(Object key)
```

Returns a value previously attached to a document using set.

Parameters

key

The key: this is the key that was previously passed to set to store the value.

Returns

The saved value, or null if none is found.

getDoctypeName() Method

```
public String getDoctypeName()
```

Returns the DOCTYPE name used in the DOCTYPE> declaration.

getDoctypePublicId() Method

```
public String getDoctypePublicId()
```

Returns the DOCTYPE public ID used in the DOCTYPE> declaration.

getDoctypeSystemId() Method

```
public String getDoctypeSystemId()
```

Returns the DOCTYPE system ID used in the DOCTYPE> declaration.

getEncoding() Method

```
public String getEncoding()
```

Returns the encoding used for the XML document, as an ISO encoding name.

Related Topics

```
XmlOptions.setCharacterEncoding(String)
```

getMessageDigest() Method

```
public byte[] getMessageDigest()
```

Returns the message digest used to summarize the document.

Related Topics


```
XmlOptions.setLoadMessageDigest()
```

getSourceName() Method

```
public String getSourceName()
```

Returns the name of the XML document file. Typically a URL, but may be any String.

Related Topics

```
XmlOptions.setDocumentSourceName(String)
```

getVersion() Method

```
public String getVersion()
```

Returns the XML version string used in the `xml?>` declaration.

put(Object, Object) Method

```
public abstract Object put(Object key,  
                           Object value)
```

Attaches a value to the root of the document containing the given token source.

Parameters

key

The key: there can be one value for each key.

value

The value to attach to the document.

remove(Object) Method

```
public abstract Object remove(Object key)
```

Removes a value previously attached to a document using set.

Parameters

key

The key: this is the key that was previously passed to set to store the value.

setDoctypeName(String) Method

```
public void setDoctypeName(String doctypename)
```

Sets the DOCTYPE name use in the DOCTYPE> declaration.

Parameters

doctypename
the doctypename

setDoctypePublicId(String) Method

```
public void setDoctypePublicId(String publicid)
```

Sets the DOCTYPE public ID to use in the DOCTYPE> declaration.

Parameters

publicid
the public ID

setDoctypeSystemId(String) Method

```
public void setDoctypeSystemId(String systemid)
```

Sets the DOCTYPE system ID to use in the DOCTYPE> declaration.

Parameters

systemid
the system ID

setEncoding(String) Method

```
public void setEncoding(String encoding)
```

Sets the encoding to use for the XML document. Should be a valid XML encoding string.

Parameters

encoding
the ISO encoding name

Related Topics

`XmlOptions.setCharacterEncoding(String)`

setMessageDigest(byte[]) Method

```
public void setMessageDigest(byte[] digest)
```

Sets the message digest used to summarize the document.

Parameters

digest

the bytes of the digest

Related Topics

```
XmlOptions.setLoadMessageDigest()
```

setSourceName(String) Method

```
public void setSourceName(String sourceName)
```

Sets the name of the XML document file. Typically a URL, but may be any String.

Parameters

sourceName

the name to set

Related Topics

```
XmlOptions.setDocumentSourceName(String)
```

setVersion(String) Method

```
public void setVersion(String version)
```

Sets the XML version string to use in the `xml?>` declaration. (The XML specification is quite stable at "1.0".)

Parameters

version

the XML version string

XmlDouble Interface

public interface XmlDouble

extends XmlAnySimpleType

Corresponds to the XML Schema xs:double type.

Naturally, convertible to a Java double.

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
public static final class XmlDouble.Factory
```

A class with methods for creating instances of XmlDouble.

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

public
double doubleValue()
    Returns this value as a
    double

public
double getDoubleValue()
    Returns this value as a
    double

public
void set(double v)
    Sets this value as a double

public
void setDoubleValue(double v)
    Sets this value as a double

```

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`,
`isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`,
`toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`,
`newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`,
`newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`,
`xmlText`, `xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

Method Detail

doubleValue() Method

DEPRECATED replaced with `com.bea.xml.XmlDouble.getDoubleValue()`

```
public double doubleValue()
```

Returns this value as a double

getDoubleValue() Method

```
public double getDoubleValue()
```

Returns this value as a double

set(double) Method

DEPRECATED replaced with `com.bea.xml.XmlDouble.setDoubleValue(double)`

```
public void set(double v)
```

Sets this value as a double

setDoubleValue(double) Method

```
public void setDoubleValue(double v)
```

Sets this value as a double

XmlDouble.Factory Class

public static final class XmlDouble.Factory

extends Object

A class with methods for creating instances of XmlDouble.

Hierarchy

```
Object
  XmlDouble.Factory
```

Enclosing interface

```
XmlDouble
```

Method Summary

```
public static
  XmlDouble newInstance()
    Creates an empty instance of XmlDouble

public static
  XmlDouble newInstance(XmlOptions options)
    Creates an empty instance of XmlDouble

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
  options)
    Returns a validating XMLInputStream.

public static
  XmlDouble newValue(Object obj)
    Creates an immutable XmlDouble value

public static
  XmlDouble parse(String s)
    Parses a XmlDouble fragment from a String.

public static
  XmlDouble parse(String s, XmlOptions options)
    Parses a XmlDouble fragment from a String.

public static
  XmlDouble parse(File f)
    Parses a XmlDouble fragment from a File.
```


XMLBeans API Reference

```
public static parse(File f, XmlOptions options)
    XmlDouble      Parses a XmlDouble fragment from a File.
public static
    XmlDouble parse(URL u)
    Parses a XmlDouble fragment from a URL.
public static
    XmlDouble parse(URL u, XmlOptions options)
    Parses a XmlDouble fragment from a URL.
public static
    XmlDouble parse(InputStream is)
    Parses a XmlDouble fragment from an InputStream.
public static
    XmlDouble parse(InputStream is, XmlOptions options)
    Parses a XmlDouble fragment from an InputStream.
public static
    XmlDouble parse(Reader r)
    Parses a XmlDouble fragment from a Reader.
public static
    XmlDouble parse(Reader r, XmlOptions options)
    Parses a XmlDouble fragment from a Reader.
public static
    XmlDouble parse(Node node)
    Parses a XmlDouble fragment from a DOM Node.
public static
    XmlDouble parse(Node node, XmlOptions options)
    Parses a XmlDouble fragment from a DOM Node.
public static
    XmlDouble parse(XMLInputStream xis)
    Parses a XmlDouble fragment from an XMLInputStream.
public static
    XmlDouble parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlDouble fragment from an XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlDouble newInstance()
```

Creates an empty instance of `XmlDouble`

newInstance(XmlOptions) Method

```
public static XmlDouble newInstance(XmlOptions options)
```

Creates an empty instance of XmlDouble

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlDouble newValue(Object obj)
```

Creates an immutable XmlDouble value

parse(String) Method

```
public static XmlDouble parse(String s)
    throws XmlException
```


Parses a `XmlDouble` fragment from a `String`. For example:
"<xml-fragment>123.34e+57</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlDouble parse(String s,  
                               XmlOptions options)  
    throws XmlException
```

Parses a `XmlDouble` fragment from a `String`. For example:
"<xml-fragment>123.34e+57</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlDouble parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlDouble` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlDouble parse(File f,  
                               XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlDouble` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlDouble parse(URL u)
    throws XmlException, IOException
```

Parses a XmlDouble fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlDouble parse(URL u,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlDouble fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlDouble parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlDouble fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlDouble parse(InputStream is,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlDouble fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlDouble parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlDouble fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlDouble parse(Reader r,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlDouble fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlDouble parse(Node node)
    throws XmlException
```

Parses a XmlDouble fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlDouble parse(Node node,
                               XmlOptions options)
    throws XmlException
```


Parses a `XmlDouble` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XmlDouble parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlDouble` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlDouble parse(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlDouble` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlDuration Interface

public interface XmlDuration

extends XmlAnySimpleType

Corresponds to the XML Schema xs:duration type.

Convertible to a GDuration.

Related Topics

GDuration

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
public static final class XmlDuration.Factory
    A class with methods for creating instances of XmlDuration.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
public static final SchemaType type
    The constant SchemaType object representing this schema type.
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

    public
    GDuration gDurationValue()
        Returns this value as a GDuration

    public
    GDuration getGDurationValue()
        Returns this value as a GDuration

    public
    void set(GDurationSpecification gd)
        Sets this value as a GDuration

    public
    void setGDurationValue(GDuration gd)
        Sets this value as a GDuration

```

Methods from interface `com.bea.xml.XmlAnySimpleType`

getStringValue, set, setStringValue, stringValue

Methods from interface `com.bea.xml.XmlObject`

changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode

Methods from interface `com.bea.xml.XmlTokenSource`

documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Method Detail

gDurationValue() Method

DEPRECATED replaced with `com.bea.xml.XmlDuration.getGDurationValue()`

```
public GDuration gDurationValue()
```

Returns this value as a `GDuration`

getGDurationValue() Method

```
public GDuration getGDurationValue()
```

Returns this value as a `GDuration`

set(GDurationSpecification) Method

DEPRECATED replaced with

`com.bea.xml.XmlDuration.setGDurationValue(com.bea.xml.GDuration)`

```
public void set(GDurationSpecification gd)
```

Sets this value as a `GDuration`

setGDurationValue(GDuration) Method

```
public void setGDurationValue(GDuration gd)
```

Sets this value as a `GDuration`

XmlDuration.Factory Class

public static final class XmlDuration.Factory

extends Object

A class with methods for creating instances of XmlDuration.

Hierarchy

```
Object
  XmlDuration.Factory
```

Enclosing interface

```
XmlDuration
```

Method Summary

```
public static
  XmlDuration newInstance()
    Creates an empty instance of XmlDuration
```

```
public static
  XmlDuration newInstance(XmlOptions options)
    Creates an empty instance of XmlDuration
```

```
public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.
```

```
public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
  options)
    Returns a validating XMLInputStream.
```

```
public static
  XmlDuration newValue(Object obj)
    Creates an immutable XmlDuration value
```

```
public static
  XmlDuration parse(String s)
    Parses a XmlDuration fragment from a String.
```

```
public static
  XmlDuration parse(String s, XmlOptions options)
    Parses a XmlDuration fragment from a String.
```

```
public static
  XmlDuration parse(File f)
    Parses a XmlDuration fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlDuration      Parses a XmlDuration fragment from a File.
public static
    XmlDuration parse(URL u)
    Parses a XmlDuration fragment from a URL.
public static
    XmlDuration parse(URL u, XmlOptions options)
    Parses a XmlDuration fragment from a URL.
public static
    XmlDuration parse(InputStream is)
    Parses a XmlDuration fragment from an InputStream.
public static
    XmlDuration parse(InputStream is, XmlOptions options)
    Parses a XmlDuration fragment from an InputStream.
public static
    XmlDuration parse(Reader r)
    Parses a XmlDuration fragment from a Reader.
public static
    XmlDuration parse(Reader r, XmlOptions options)
    Parses a XmlDuration fragment from a Reader.
public static
    XmlDuration parse(Node node)
    Parses a XmlDuration fragment from a DOM Node.
public static
    XmlDuration parse(Node node, XmlOptions options)
    Parses a XmlDuration fragment from a DOM Node.
public static
    XmlDuration parse(XMLInputStream xis)
    Parses a XmlDuration fragment from an XMLInputStream.
public static
    XmlDuration parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlDuration fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlDuration newInstance()
```

Creates an empty instance of `XmlDuration`

newInstance(XmlOptions) Method

```
public static XmlDuration newInstance(XmlOptions options)
```

Creates an empty instance of `XmlDuration`

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlDuration newValue(Object obj)
```

Creates an immutable `XmlDuration` value

parse(String) Method

```
public static XmlDuration parse(String s)
    throws XmlException
```


Parses a `XmlDuration` fragment from a `String`. For example:
"<xml-fragment>PLY2MT2H</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlDuration parse(String s,  
                                XmlOptions options)  
    throws XmlException
```

Parses a `XmlDuration` fragment from a `String`. For example:
"<xml-fragment>PLY2MT2H</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlDuration parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlDuration` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlDuration parse(File f,  
                                XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlDuration` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlDuration parse(URL u)
    throws XmlException, IOException
```

Parses a `XmlDuration` fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlDuration parse(URL u,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlDuration` fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlDuration parse(InputStream is)
    throws XmlException, IOException
```

Parses a `XmlDuration` fragment from an `InputStream`.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlDuration parse(InputStream is,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlDuration` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlDuration parse(Reader r)
    throws XmlException, IOException
```

Parses a `XmlDuration` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlDuration parse(Reader r,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlDuration` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlDuration parse(Node node)
    throws XmlException
```

Parses a `XmlDuration` fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlDuration parse(Node node,
                                XmlOptions options)
    throws XmlException
```


Parses a `XmlDuration` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XmlDuration parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlDuration` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlDuration parse(XMLInputStream xis,
                                XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlDuration` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlENTITIES Interface

public interface **XmlENTITIES**

extends XmlAnySimpleType

Corresponds to the XML Schema xs:ENTITIES type, a list type.

A list type.

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
public static final class XmlENTITIES.Factory
    A class with methods for creating instances of XmlENTITIES.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
public static final SchemaType type
    The constant SchemaType object representing this schema type.
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

public
    List getListValue()
        Returns the value as a List of String values

public
    List listValue()
        Returns the value as a List of String values

public
    void set(List l)
        Sets the value as a List

public
    void setListValue(List l)
        Sets the value as a List

public
    List xgetListValue()
        Returns the value as a List of XmlENTITY
        values

public
    List xlistValue()
        Returns the value as a List of XmlENTITY
        values

```

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`,
`isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`,
`toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`,
`newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`,
`newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`,
`xmlText`, `xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Method Detail

getListValue() Method

```
public List getListValue()
```

Returns the value as a List of String values

listValue() Method

DEPRECATED replaced by `com.bea.xml.XmlENTITIES.getListValue()`

```
public List listValue()
```

Returns the value as a List of String values

set(List) Method

DEPRECATED replaced by `com.bea.xml.XmlENTITIES.getListValue()`

```
public void set(List l)
```

Sets the value as a List

setListValue(List) Method

```
public void setListValue(List l)
```

Sets the value as a List

xgetListValue() Method

```
public List xgetListValue()
```

Returns the value as a List of XmlENTITY values

xlistValue() Method

DEPRECATED replaced by `com.bea.xml.XmlENTITIES.getListValue()`

```
public List xlistValue()
```


Returns the value as a List of XmlENTITY values

XmlENTITIES.Factory Class

public static final class XmlENTITIES.Factory

extends Object

A class with methods for creating instances of XmlENTITIES.

Hierarchy

```
Object
  XmlENTITIES.Factory
```

Enclosing interface

```
XmlENTITIES
```

Method Summary

```
public static
  XmlENTITIES newInstance()
    Creates an empty instance of XmlENTITIES
```

```
public static
  XmlENTITIES newInstance(XmlOptions options)
    Creates an empty instance of XmlENTITIES
```

```
public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.
```

```
public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
  options)
    Returns a validating XMLInputStream.
```

```
public static
  XmlENTITIES newValue(Object obj)
    Creates an immutable XmlENTITIES value
```

```
public static
  XmlENTITIES parse(String s)
    Parses a XmlENTITIES fragment from a String.
```

```
public static
  XmlENTITIES parse(String s, XmlOptions options)
    Parses a XmlENTITIES fragment from a String.
```

```
public static
  XmlENTITIES parse(File f)
    Parses a XmlENTITIES fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlENTITIES      Parses a XmlENTITIES fragment from a File.
public static
    XmlENTITIES parse(URL u)
    Parses a XmlENTITIES fragment from a URL.
public static
    XmlENTITIES parse(URL u, XmlOptions options)
    Parses a XmlENTITIES fragment from a URL.
public static
    XmlENTITIES parse(InputStream is)
    Parses a XmlENTITIES fragment from an InputStream.
public static
    XmlENTITIES parse(InputStream is, XmlOptions options)
    Parses a XmlENTITIES fragment from an InputStream.
public static
    XmlENTITIES parse(Reader r)
    Parses a XmlENTITIES fragment from a Reader.
public static
    XmlENTITIES parse(Reader r, XmlOptions options)
    Parses a XmlENTITIES fragment from a Reader.
public static
    XmlENTITIES parse(Node node)
    Parses a XmlENTITIES fragment from a DOM Node.
public static
    XmlENTITIES parse(Node node, XmlOptions options)
    Parses a XmlENTITIES fragment from a DOM Node.
public static
    XmlENTITIES parse(XMLInputStream xis)
    Parses a XmlENTITIES fragment from an XMLInputStream.
public static
    XmlENTITIES parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlENTITIES fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlENTITIES newInstance()
```

Creates an empty instance of `XmlENTITIES`

newInstance(XmlOptions) Method

```
public static XmlENTITIES newInstance(XmlOptions options)
```

Creates an empty instance of XmlENTITIES

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlENTITIES newValue(Object obj)
```

Creates an immutable XmlENTITIES value

parse(String) Method

```
public static XmlENTITIES parse(String s)
    throws XmlException
```

Parses a XmlENTITIES fragment from a String.

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlENTITIES parse(String s,  
                                XmlOptions options)  
    throws XmlException
```

Parses a XmlENTITIES fragment from a String.

Exceptions

XmlException

parse(File) Method

```
public static XmlENTITIES parse(File f)  
    throws XmlException, IOException
```

Parses a XmlENTITIES fragment from a File.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlENTITIES parse(File f,  
                                XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlENTITIES fragment from a File.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlENTITIES parse(URL u)  
    throws XmlException, IOException
```

Parses a XmlENTITIES fragment from a URL.

Exceptions

XmlException

IOException

parse(URL, XmlOptions) Method

```
public static XmlENTITIES parse(URL u,  
                                XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlENTITIES fragment from a URL.

Exceptions

XmlException

IOException

parse(InputStream) Method

```
public static XmlENTITIES parse(InputStream is)  
    throws XmlException, IOException
```

Parses a XmlENTITIES fragment from an InputStream.

Exceptions

XmlException

IOException

parse(InputStream, XmlOptions) Method

```
public static XmlENTITIES parse(InputStream is,  
                                XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlENTITIES fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlENTITIES parse(Reader r)  
    throws XmlException, IOException
```


Parses a `XmlENTITIES` fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlENTITIES parse(Reader r,  
                                XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlENTITIES` fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlENTITIES parse(Node node)  
    throws XmlException
```

Parses a `XmlENTITIES` fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlENTITIES parse(Node node,  
                                XmlOptions options)  
    throws XmlException
```

Parses a `XmlENTITIES` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superseded by JSR 173


```
public static XmlENTITIES parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlENTITIES fragment from an XMLInputStream.

Exceptions

XmlException
XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlENTITIES parse(XMLInputStream xis,
                                XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlENTITIES fragment from an XMLInputStream.

Exceptions

XmlException
XMLStreamException

XmlENTITY Interface

public interface XmlENTITY

extends XmlNCName

Corresponds to the XML Schema xs:ENTITY type.

Convertible to `String`.

All Superinterfaces

XmlAnySimpleType, XmlName, XmlNCName, XmlNormalizedString, XmlObject, XmlString, XmlToken, XmlTokenSource

Nested Class Summary

```
public static final class XmlENTITY.Factory
    A class with methods for creating instances of XmlENTITY.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlName

XmlName.Factory

Nested classes from interface com.bea.xml.XmlNCName

XmlNCName.Factory

Nested classes from interface com.bea.xml.XmlNormalizedString

XmlNormalizedString.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Nested classes from interface com.bea.xml.XmlString

XmlString.Factory

Nested classes from interface `com.bea.xml.XmlToken``XmlToken.Factory`

Field Summary

```

    public
    static type
final SchemaType

```

The constant `SchemaType` object representing this schema type.**Fields from interface `com.bea.xml.XmlAnySimpleType`**`type`**Fields from interface `com.bea.xml.XmlName`**`type`**Fields from interface `com.bea.xml.XmlNCName`**`type`**Fields from interface `com.bea.xml.XmlNormalizedString`**`type`**Fields from interface `com.bea.xml.XmlObject`**`EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type`**Fields from interface `com.bea.xml.XmlString`**`type`**Fields from interface `com.bea.xml.XmlToken`**`type`

Method Summary

Methods from interface `com.bea.xml.XmlAnySimpleType``getStringValue, set, setStringValue, stringValue`**Methods from interface `com.bea.xml.XmlObject`**`changeType, compareTo, compareValue, copy, execQuery, execQuery, isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,`

toString, validate, validate, valueEquals, valueHashCode

Methods from interface `com.bea.xml.XmlTokenSource`

documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

XmlENTITY.Factory Class

public static final class XmlENTITY.Factory

extends Object

A class with methods for creating instances of XmlENTITY.

Hierarchy

```
Object
  XmlENTITY.Factory
```

Enclosing interface

```
XmlENTITY
```

Method Summary

```
public static
    XmlENTITY newInstance()
        Creates an empty instance of XmlENTITY

public static
    XmlENTITY newInstance(XmlOptions options)
        Creates an empty instance of XmlENTITY

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlENTITY newValue(Object obj)
        Creates an immutable XmlENTITY value

public static
    XmlENTITY parse(String s)
        Parses a XmlENTITY fragment from a String.

public static
    XmlENTITY parse(String s, XmlOptions options)
        Parses a XmlENTITY fragment from a String.

public static
    XmlENTITY parse(File f)
        Parses a XmlENTITY fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlENTITY      Parses a XmlENTITY fragment from a File.
public static
    XmlENTITY parse(URL u)
    Parses a XmlENTITY fragment from a URL.
public static
    XmlENTITY parse(URL u, XmlOptions options)
    Parses a XmlENTITY fragment from a URL.
public static
    XmlENTITY parse(InputStream is)
    Parses a XmlENTITY fragment from an InputStream.
public static
    XmlENTITY parse(InputStream is, XmlOptions options)
    Parses a XmlENTITY fragment from an InputStream.
public static
    XmlENTITY parse(Reader r)
    Parses a XmlENTITY fragment from a Reader.
public static
    XmlENTITY parse(Reader r, XmlOptions options)
    Parses a XmlENTITY fragment from a Reader.
public static
    XmlENTITY parse(Node node)
    Parses a XmlENTITY fragment from a DOM Node.
public static
    XmlENTITY parse(Node node, XmlOptions options)
    Parses a XmlENTITY fragment from a DOM Node.
public static
    XmlENTITY parse(XMLInputStream xis)
    Parses a XmlENTITY fragment from an XMLInputStream.
public static
    XmlENTITY parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlENTITY fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlENTITY newInstance()
```

Creates an empty instance of `XmlENTITY`

newInstance(XmlOptions) Method

```
public static XmlENTITY newInstance(XmlOptions options)
```

Creates an empty instance of XmlENTITY

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlENTITY newValue(Object obj)
```

Creates an immutable XmlENTITY value

parse(String) Method

```
public static XmlENTITY parse(String s)
    throws XmlException
```

Parses a XmlENTITY fragment from a String.

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlENTITY parse(String s,  
                               XmlOptions options)  
    throws XmlException
```

Parses a XmlENTITY fragment from a String.

Exceptions

XmlException

parse(File) Method

```
public static XmlENTITY parse(File f)  
    throws XmlException, IOException
```

Parses a XmlENTITY fragment from a File.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlENTITY parse(File f,  
                               XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlENTITY fragment from a File.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlENTITY parse(URL u)  
    throws XmlException, IOException
```

Parses a XmlENTITY fragment from a URL.

Exceptions

XmlException

IOException

parse(URL, XmlOptions) Method

```
public static XmlENTITY parse(URL u,  
                               XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlENTITY fragment from a URL.

Exceptions

XmlException

IOException

parse(InputStream) Method

```
public static XmlENTITY parse(InputStream is)  
    throws XmlException, IOException
```

Parses a XmlENTITY fragment from an InputStream.

Exceptions

XmlException

IOException

parse(InputStream, XmlOptions) Method

```
public static XmlENTITY parse(InputStream is,  
                               XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlENTITY fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlENTITY parse(Reader r)  
    throws XmlException, IOException
```


Parses a `XmlENTITY` fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlENTITY parse(Reader r,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlENTITY` fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlENTITY parse(Node node)  
    throws XmlException
```

Parses a `XmlENTITY` fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlENTITY parse(Node node,  
                             XmlOptions options)  
    throws XmlException
```

Parses a `XmlENTITY` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173


```
public static XmlENTITY parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlENTITY fragment from an XMLInputStream.

Exceptions

XmlException
XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlENTITY parse(XMLInputStream xis,
                               XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlENTITY fragment from an XMLInputStream.

Exceptions

XmlException
XMLStreamException

XmlError Class

public class XmlError

extends Object
implements Serializable

Represents a message at a specific XML location.

The message can be an error, warning, or simple information, and it may optionally be associated with a specific location in an XML document. The class includes methods for extracting the location as a line number, XmlCursor, or XmlObject, as well as for obtaining and message and severity of the error.

Related Topics

XmlOptions.setErrorListener(Collection)
XmlException

Hierarchy

```

Object
  XmlError
  
```

All Implemented Interfaces

```

Serializable
  
```

Field Summary

```

public
static final int SEVERITY_ERROR
    An error.

public
static final int SEVERITY_INFO
    An informational message.

public
static final int SEVERITY_WARNING
    A warning.
  
```

Constructor Summary

XmlError(XmlError src)

Copy constructor.

Method Summary

```

public
static forCursor(String message, XmlCursor cursor)
XmlError      Returns an XmlError for the given message, located at the XmlCursor, with
                XmlError.SEVERITY_ERROR.

public
static forCursor(String message, int severity, XmlCursor cursor)
XmlError      Returns an XmlError for the given message, with the given severity, located at the
                XmlCursor.

public
static forLocation(String message, String sourceName, int line, int column, int offset)
XmlError      Returns an XmlError for the given message, located at a specific point in the given file
                and XmlError.SEVERITY_ERROR.

public
static forLocation(String message, int severity, String sourceName, int line, int column, int
XmlError offset)
                Returns an XmlError for the given message, with the given severity, located at a
                specific point in the given file.

public
static forLocationAndCursor(String message, int severity, String sourceName, int line,
XmlError int column, int offset, XmlCursor cursor)
                Returns an XmlError for the given message, with the given severity, located at the
                given physical location and XmlCursor.

protected
static formattedFileName(String rawString, URI base)
String        Tries to produce a nicely formatted filename from the given string.

public
static forMessage(String message)
XmlError      Returns an XmlError for the given message, with no location and
                XmlError.SEVERITY_ERROR.

public
static forMessage(String message, int severity)
XmlError      Returns an XmlError for the given message, with no location and the given severity.

public
static forObject(String message, XmlObject xobj)
XmlError      Returns an XmlError for the given message, located at the XmlObject, with
                XmlError.SEVERITY_ERROR.

public
static forObject(String message, int severity, XmlObject xobj)
XmlError      Returns an XmlError for the given message, with the given severity, located at the
                XmlObject.

public
static forSource(String message, String sourceName)

```


XMLBeans API Reference

XmlError Returns an **XmlError** for the given message, located in the given file and **XmlError.SEVERITY_ERROR**.

```
public
static forSource(String message, int severity, String sourceName)
XmlError Returns an XmlError for the given message, with the given severity, located in the
given file.
```

```
public
    int getColumn()
        Returns the column number of the error, if available, -1 if not.
```

```
public
XmlCursor getCursorLocation()
    Returns a location of the error as an XmlCursor, null if not available.
```

```
public
    int getLine()
        Returns the line number of the error, if available, -1 if not.
```

```
public
    Object getLocation(Object type)
        Returns a location object of the given type.
```

```
public
    String getMessage()
        Returns the error message without location information.
```

```
public
XmlObject getObjectLocation()
    Returns a location of the error as an XmlObject, null if not available.
```

```
public
    int getOffset()
        Returns the file character offset of the error, if available, -1 if not.
```

```
public
    int getSeverity()
        Returns the severity.
```

```
public
    String getSourceName()
        Returns the URL (or other name) of the file with the error, if available.
```

```
public
    String toString()
        Produces a standard string for the error message, complete with filename and location
        offsets if available.
```

```
public
    String toString(URI base)
        Produces a standard string with the error message.
```

Methods from class **java.lang.Object**

clone, **equals**, **finalize**, **getClass**, **hashCode**, **notify**, **notifyAll**, **wait**, **wait**, **wait**

Field Detail

SEVERITY_ERROR

```
public static final int SEVERITY_ERROR
```

An error. See `XmlError.getSeverity()`.

SEVERITY_INFO

```
public static final int SEVERITY_INFO
```

An informational message. See `XmlError.getSeverity()`.

SEVERITY_WARNING

```
public static final int SEVERITY_WARNING
```

A warning. See `XmlError.getSeverity()`.

Constructor Detail

XmlError

```
public XmlError(XmlError src)
```

Copy constructor.

Method Detail

forCursor(String, XmlCursor) Method

```
public static XmlError forCursor(String message,
                                XmlCursor cursor)
```

Returns an `XmlError` for the given message, located at the `XmlCursor`, with `XmlError.SEVERITY_ERROR`.

Parameters

message
the error message

cursor

the XmlCursor representing the location of the error

forCursor(String, int, XmlCursor) Method

```
public static XmlError forCursor(String message,  
                                int severity,  
                                XmlCursor cursor)
```

Returns an XmlError for the given message, with the given severity, located at the XmlCursor.

Parameters

message

the error message

severity

the severity (XmlError.SEVERITY_ERROR, XmlError.SEVERITY_WARNING, or XmlError.SEVERITY_INFO)

cursor

the XmlCursor representing the location of the error

forLocation(String, String, int, int, int) Method

```
public static XmlError forLocation(String message,  
                                   String sourceName,  
                                   int line,  
                                   int column,  
                                   int offset)
```

Returns an XmlError for the given message, located at a specific point in the given file and XmlError.SEVERITY_ERROR.

Parameters

message

the error message

sourceName

the URL or other name for the file

line

the 1-based line number, or -1 if not known

column

the 1-based column number, or -1 if not known

offset

the 0-base file character offset, or -1 if not known

forLocation(String, int, String, int, int, int) Method

```
public static XmlError forLocation(String message,
                                   int severity,
                                   String sourceName,
                                   int line,
                                   int column,
                                   int offset)
```

Returns an XmlError for the given message, with the given severity, located at a specific point in the given file.

Parameters

message

the error message

severity

the severity (XmlError.SEVERITY_ERROR, XmlError.SEVERITY_WARNING, or XmlError.SEVERITY_INFO)

sourceName

the URL or other name for the file

line

the 1-based line number, or -1 if not known

column

the 1-based column number, or -1 if not known

offset

the 0-base file character offset, or -1 if not known

forLocationAndCursor(String, int, String, int, int, int, XmlCursor) Method

```
public static XmlError forLocationAndCursor(String message,
                                             int severity,
                                             String sourceName,
                                             int line,
                                             int column,
                                             int offset,
                                             XmlCursor cursor)
```

Returns an XmlError for the given message, with the given severity, located at the given physical location and XmlCursor.

Parameters*message*

the error message

*severity*the severity (`XmlError.SEVERITY_ERROR`, `XmlError.SEVERITY_WARNING`, or `XmlError.SEVERITY_INFO`)*sourceName*

the URL or other name for the file

line

the 1-based line number, or -1 if not known

column

the 1-based column number, or -1 if not known

offset

the 0-base file character offset, or -1 if not known

*cursor*the `XmlCursor` representing the location of the error**formattedFileName(String, URI) Method**

```
protected static String formattedFileName(String rawString,
                                         URI base)
```

Tries to produce a nicely formatted filename from the given string.

forMessage(String) Method

```
public static XmlError forMessage(String message)
```

Returns an `XmlError` for the given message, with no location and `XmlError.SEVERITY_ERROR`.

Parameters*message*

the error message

forMessage(String, int) Method

```
public static XmlError forMessage(String message,
                                   int severity)
```

Returns an `XmlError` for the given message, with no location and the given severity.

Parameters

message

the error message

severity

the severity (`XmlError.SEVERITY_ERROR`, `XmlError.SEVERITY_WARNING`, or `XmlError.SEVERITY_INFO`)

forObject(String, XmlObject) Method

```
public static XmlError forObject(String message,
                                XmlObject xobj)
```

Returns an `XmlError` for the given message, located at the `XmlObject`, with `XmlError.SEVERITY_ERROR`.

Parameters

message

the error message

xobj

the `XmlObject` representing the location of the error

forObject(String, int, XmlObject) Method

```
public static XmlError forObject(String message,
                                int severity,
                                XmlObject xobj)
```

Returns an `XmlError` for the given message, with the given severity, located at the `XmlObject`.

Parameters

message

the error message

severity

the severity (`XmlError.SEVERITY_ERROR`, `XmlError.SEVERITY_WARNING`, or `XmlError.SEVERITY_INFO`)

xobj

the `XmlObject` representing the location of the error

forSource(String, String) Method

```
public static XmlError forSource(String message,  
                                String sourceName)
```

Returns an `XmlError` for the given message, located in the given file and `XmlError.SEVERITY_ERROR`.

Parameters

message
the error message

sourceName
the URL or other name for the file

forSource(String, int, String) Method

```
public static XmlError forSource(String message,  
                                int severity,  
                                String sourceName)
```

Returns an `XmlError` for the given message, with the given severity, located in the given file.

Parameters

message
the error message

severity
the severity (`XmlError.SEVERITY_ERROR`, `XmlError.SEVERITY_WARNING`, or `XmlError.SEVERITY_INFO`)

sourceName
the URL or other name for the file

getColumn() Method

```
public int getColumn()
```

Returns the column number of the error, if available, -1 if not.

getCursorLocation() Method

```
public XmlCursor getCursorLocation()
```

Returns a location of the error as an `XmlCursor`, null if not available.

getLine() Method

```
public int getLine()
```

Returns the line number of the error, if available, -1 if not.

getLocation(Object) Method

```
public Object getLocation(Object type)
```

Returns a location object of the given type. `XmlCursor.class` and `XmlObject.class` can be passed, for example. Null if not available.

getMessage() Method

```
public String getMessage()
```

Returns the error message without location information.

getObjectLocation() Method

```
public XmlObject getObjectLocation()
```

Returns a location of the error as an `XmlObject`, null if not available.

getOffset() Method

```
public int getOffset()
```

Returns the file character offset of the error, if available, -1 if not.

getSeverity() Method

```
public int getSeverity()
```

Returns the severity. Either `XmlError.SEVERITY_ERROR`, `XmlError.SEVERITY_WARNING`, or `XmlError.SEVERITY_INFO`.

getSourceName() Method

```
public String getSourceName()
```

Returns the URL (or other name) of the file with the error, if available.

toString() Method

```
public String toString()
```

Produces a standard string for the error message, complete with filename and location offsets if available.

Overrides

```
Object.toString()
```

toString(URI) Method

```
public String toString(URI base)
```

Produces a standard string with the error message. If a non-null URI is supplied, source names are relativized against the given URI.

XmlException Class

public class XmlException

extends `Exception`

A checked exception that can be thrown while processing, parsing, or compiling XML. May contain any number of `XmlError` objects.

Related Topics

`XmlError`

`XmlRuntimeException`

Hierarchy

`Object`
`Throwable`
`Exception`
`XmlException`

All Implemented Interfaces

`Serializable`

Constructor Summary

`XmlException(XmlError error)`

Constructs an `XmlException` from an `XmlError`.

`XmlException(XmlRuntimeException xmlRuntimeException)`

Constructs an `XmlException` from an `XmlRuntimeException`.

`XmlException(String m, Throwable t, XmlError error)`

Constructs an `XmlException` from a message, a cause, and an `XmlError`.

`XmlException(String m, Throwable t, Collection errors)`

Constructs an `XmlException` from a message, a cause, and a collection of `XmlError`.

XmlException(*String m*, *Throwable t*)

Constructs an XmlException from a message and a cause.

XmlException(*String m*)

Constructs an XmlException from a message.

XmlException(*Throwable t*)

Constructs an XmlException from a cause.

Method Summary

```
public
XmlError getError()
    Returns the first XmlError that caused the exception, if any.

public
Collection getErrors()
    Returns the collection of XmlError that caused the exception, if any.
```

Methods from `java.lang.Throwable`

`fillInStackTrace`, `getCause`, `getLocalizedMessage`, `getMessage`,
`getStackTrace`, `initCause`, `printStackTrace`, `printStackTrace`,
`printStackTrace`, `setStackTrace`, `toString`

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Constructor Detail

XmlException

```
public XmlException(XmlError error)
```

Constructs an XmlException from an XmlError.

XmlException

```
public XmlException(XmlRuntimeException xmlRuntimeException)
```

Constructs an XmlException from an XmlRuntimeException.

XmlException

```
public XmlException(String m,  
                    Throwable t,  
                    XmlError error)
```

Constructs an XmlException from a message, a cause, and an XmlError.

XmlException

```
public XmlException(String m,  
                    Throwable t,  
                    Collection errors)
```

Constructs an XmlException from a message, a cause, and a collection of XmlError.

XmlException

```
public XmlException(String m,  
                    Throwable t)
```

Constructs an XmlException from a message and a cause.

XmlException

```
public XmlException(String m)
```

Constructs an XmlException from a message.

XmlException

```
public XmlException(Throwable t)
```

Constructs an XmlException from a cause.

Method Detail

getError() Method

```
public XmlError getError()
```

Returns the first XmlError that caused the exception, if any.

getErrors() Method

```
public Collection getErrors()
```

Returns the collection of `XmlError` that caused the exception, if any.

XmlFactoryHook.ThreadContext Class

public static final class XmlFactoryHook.ThreadContext

extends `Object`

Used to manage the `XmlFactoryHook` for the current thread.

Hierarchy

`Object`
`XmlFactoryHook.ThreadContext`

Enclosing interface

`XmlFactoryHook`

Method Summary

```
public static
XmlFactoryHook getHook()
    Returns the current thread's hook, or null if none.

public static
    void setHook(XmlFactoryHook hook)
    Sets the hook for the current thread.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

getHook() Method

```
public static XmlFactoryHook getHook()
```

Returns the current thread's hook, or null if none.

setHook(XmlFactoryHook) Method

```
public static void setHook(XmlFactoryHook hook)
```

Sets the hook for the current thread.

XmlFactoryHook Interface

public interface XmlFactoryHook

A hook for the XML Bean Factory mechanism. Provided for advanced users who wish to provide their own implementation of the Factory.parse methods. This is used, for example, to defer reading XML streams until needed.

To use the hook, call XmlFactoryHook.ThreadContext.setHook(), passing your own XmlFactoryHook implementation. Then every call to a Factory method will be delegated to your hook.

```
MyHook hook = new MyHook();
XmlFactoryHook.ThreadContext.setHook(hook);
// this results in a call to hook.parse(...)
XmlObject.Factory.parse(new File("test.xml"));
```

If the hook needs to turn around and invoke the built-in parsers, then it should do so by calling the appropriate method on the passed SchemaTypeLoader. Since SchemaTypeLoader.parse() methods delegate to the registered hook, a hook that wishes to actually invoke the default parser without having itself called back again should unregister itself before calling loader.parse(), and then re-register itself again after the call.

```
void parse(SchemaTypeLoader loader, ...)
{
    XmlFactoryHook remember = XmlFactoryHook.ThreadContext.getHook();
    XmlFactoryHook.ThreadContext.setHook(null);
    loader.parse(...); // isn't hooked.
    XmlFactoryHook.ThreadContext.setHook(remember);
}
```

Nested Class Summary

```
public static final class XmlFactoryHook.ThreadContext
    Used to manage the XmlFactoryHook for the current thread.
```

Method Summary

```
public XmlObject newInstance(SchemaTypeLoader loader, SchemaType type, XmlOptions options)
    Hooks Factory.newInstance calls

public XmlSaxHandler newXmlSaxHandler(SchemaTypeLoader loader, SchemaType type,
    XmlOptions options)
```


XMLBeans API Reference

Hooks Factory.newXmlSaxHandler calls

```
public  
XmlObject parse(SchemaTypeLoader loader, String xmlText, SchemaType type,  
                XmlOptions options)
```

Hooks Factory.parse calls

```
public  
XmlObject parse(SchemaTypeLoader loader, InputStream jiois, SchemaType type,  
                XmlOptions options)
```

Hooks Factory.parse calls

```
public  
XmlObject parse(SchemaTypeLoader loader, Reader jior, SchemaType type,  
                XmlOptions options)
```

Hooks Factory.parse calls

```
public  
XmlObject parse(SchemaTypeLoader loader, Node node, SchemaType type, XmlOptions  
                options)
```

Hooks Factory.parse calls

```
public  
XmlObject parse(SchemaTypeLoader loader, XMLInputStream xis, SchemaType type,  
                XmlOptions options)
```

Hooks Factory.parse calls

Method Detail

newInstance(SchemaTypeLoader, SchemaType, XmlOptions) Method

```
public XmlObject newInstance(SchemaTypeLoader loader,  
                             SchemaType type,  
                             XmlOptions options)
```

Hooks Factory.newInstance calls

newXmlSaxHandler(SchemaTypeLoader, SchemaType, XmlOptions) Method

```
public XmlSaxHandler newXmlSaxHandler(SchemaTypeLoader loader,  
                                       SchemaType type,  
                                       XmlOptions options)
```

Hooks Factory.newXmlSaxHandler calls

parse(SchemaTypeLoader, String, SchemaType, XmlOptions) Method

```
public XmlObject parse(SchemaTypeLoader loader,  
                       String xmlText,  
                       SchemaType type,  
                       XmlOptions options)  
    throws XmlException
```

Hooks Factory.parse calls

Exceptions*XmlException***parse(SchemaTypeLoader, InputStream, SchemaType, XmlOptions) Method**

```
public XmlObject parse(SchemaTypeLoader loader,
                      InputStream jiois,
                      SchemaType type,
                      XmlOptions options)
    throws XmlException, IOException
```

Hooks Factory.parse calls

Exceptions*XmlException**IOException***parse(SchemaTypeLoader, Reader, SchemaType, XmlOptions) Method**

```
public XmlObject parse(SchemaTypeLoader loader,
                      Reader jior,
                      SchemaType type,
                      XmlOptions options)
    throws XmlException, IOException
```

Hooks Factory.parse calls

Exceptions*XmlException**IOException***parse(SchemaTypeLoader, Node, SchemaType, XmlOptions) Method**

```
public XmlObject parse(SchemaTypeLoader loader,
                      Node node,
                      SchemaType type,
                      XmlOptions options)
    throws XmlException
```

Hooks Factory.parse calls

Exceptions*XmlException*

parse(SchemaTypeLoader, XMLInputStream, SchemaType, XmlOptions) **Method**

```
public XmlObject parse(SchemaTypeLoader loader,  
                      XMLInputStream xis,  
                      SchemaType type,  
                      XmlOptions options)  
    throws XmlException, XMLStreamException
```

Hooks Factory.parse calls

Exceptions

XmlException

XMLStreamException

XmlFloat Interface

public interface XmlFloat

extends XmlAnySimpleType

Corresponds to the XML Schema xs:float type.

Naturally, convertible to a Java float.

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
public static final class XmlFloat.Factory
```

A class with methods for creating instances of XmlFloat.

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```
public
    float floatValue()
        Returns this value as a
        float

public
    float getFloatValue()
        Returns this value as a
        float

public
    void set(float v)
        Sets this value as a float

public
    void setFloatValue(float v)
        Sets this value as a float
```

Methods from interface `com.bea.xml.XmlAnySimpleType`

```
getStringValue, set, setStringValue, stringValue
```

Methods from interface `com.bea.xml.XmlObject`

```
changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode
```

Methods from interface `com.bea.xml.XmlTokenSource`

```
documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText
```

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Method Detail

floatValue() Method

DEPRECATED replaced by `com.bea.xml.XmlFloat.getFloatValue()`

```
public float floatValue()
```

Returns this value as a float

getFloatValue() Method

```
public float getFloatValue()
```

Returns this value as a float

set(float) Method

DEPRECATED replaced by `com.bea.xml.XmlFloat.setFloatValue(float)`

```
public void set(float v)
```

Sets this value as a float

setFloatValue(float) Method

```
public void setFloatValue(float v)
```

Sets this value as a float

XmlFloat.Factory Class

public static final class XmlFloat.Factory

extends Object

A class with methods for creating instances of XmlFloat.

Hierarchy

```
Object
  XmlFloat.Factory
```

Enclosing interface

```
XmlFloat
```

Method Summary

```
public static
    XmlFloat newInstance()
        Creates an empty instance of XmlFloat

public static
    XmlFloat newInstance(XmlOptions options)
        Creates an empty instance of XmlFloat

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlFloat newValue(Object obj)
        Creates an immutable XmlFloat value

public static
    XmlFloat parse(String s)
        Parses a XmlFloat fragment from a String.

public static
    XmlFloat parse(String s, XmlOptions options)
        Parses a XmlFloat fragment from a String.

public static
    XmlFloat parse(File f)
        Parses a XmlFloat fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlFloat      Parses a XmlFloat fragment from a File.
public static
    XmlFloat parse(URL u)
    Parses a XmlFloat fragment from a URL.
public static
    XmlFloat parse(URL u, XmlOptions options)
    Parses a XmlFloat fragment from a URL.
public static
    XmlFloat parse(InputStream is)
    Parses a XmlFloat fragment from an InputStream.
public static
    XmlFloat parse(InputStream is, XmlOptions options)
    Parses a XmlFloat fragment from an InputStream.
public static
    XmlFloat parse(Reader r)
    Parses a XmlFloat fragment from a Reader.
public static
    XmlFloat parse(Reader r, XmlOptions options)
    Parses a XmlFloat fragment from a Reader.
public static
    XmlFloat parse(Node node)
    Parses a XmlFloat fragment from a DOM Node.
public static
    XmlFloat parse(Node node, XmlOptions options)
    Parses a XmlFloat fragment from a DOM Node.
public static
    XmlFloat parse(XMLInputStream xis)
    Parses a XmlFloat fragment from an XMLInputStream.
public static
    XmlFloat parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlFloat fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlFloat newInstance()
```

Creates an empty instance of `XmlFloat`

newInstance(XmlOptions) Method

```
public static XmlFloat newInstance(XmlOptions options)
```

Creates an empty instance of XmlFloat

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlFloat newValue(Object obj)
```

Creates an immutable XmlFloat value

parse(String) Method

```
public static XmlFloat parse(String s)
    throws XmlException
```


Parses a `XmlFloat` fragment from a `String`. For example:
"<xml-fragment>12.34e+5</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlFloat parse(String s,  
                             XmlOptions options)  
    throws XmlException
```

Parses a `XmlFloat` fragment from a `String`. For example:
"<xml-fragment>12.34e+5</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlFloat parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlFloat` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlFloat parse(File f,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlFloat` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlFloat parse(URL u)
    throws XmlException, IOException
```

Parses a XmlFloat fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlFloat parse(URL u,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlFloat fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlFloat parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlFloat fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlFloat parse(InputStream is,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlFloat fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlFloat parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlFloat fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlFloat parse(Reader r,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlFloat fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlFloat parse(Node node)
    throws XmlException
```

Parses a XmlFloat fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlFloat parse(Node node,
                             XmlOptions options)
    throws XmlException
```


Parses a `XmlFloat` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlFloat parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlFloat` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlFloat parse(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlFloat` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlGDay Interface

public interface **XmlGDay**

extends `XmlAnySimpleType`

Corresponds to the XML Schema `xs:gDay` type. A `gDay` specifies only a day-of-month.

Convertible to `Calendar`, `GDate`, or an `int`.

Related Topics

`XmlCalendar`

`GDate`

All Superinterfaces

`XmlAnySimpleType`, `XmlObject`, `XmlTokenSource`

Nested Class Summary

```
public static final class XmlGDay.Factory
    A class with methods for creating instances of XmlGDay.
```

Nested classes from interface `com.bea.xml.XmlAnySimpleType`

`XmlAnySimpleType.Factory`

Nested classes from interface `com.bea.xml.XmlObject`

`XmlObject.Factory`

Field Summary

```
public static final SchemaType type
    The constant SchemaType object representing this schema type.
```

Fields from interface `com.bea.xml.XmlAnySimpleType`

`type`

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

    public
    Calendar calendarValue()
        Returns this value as a Calendar

    public
    GDate gDateValue()
        Returns this value as a GDate

    public
    Calendar getCalendarValue()
        Returns this value as a Calendar

    public
    GDate getGDateValue()
        Returns this value as a GDate

    public
    int getIntValue()
        Returns this value as an int from 1–31

    public
    int intValue()
        Returns this value as an int from 1–31

    public
    void set(Calendar c)
        Sets this value as a Calendar

    public
    void set(GDateSpecification gd)
        Sets this value as a
        GDateSpecification

    public
    void set(int v)
        Sets this value as an int from 1–31

    public
    void setCalendarValue(Calendar c)
        Sets this value as a Calendar

    public
    void setGDateValue(GDate gd)
        Sets this value as a
        GDateSpecification

    public
    void setIntValue(int v)
        Sets this value as an int from 1–31

```

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface `com.bea.xml.XmlObject`

changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode

Methods from interface `com.bea.xml.XmlTokenSource`

documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Method Detail

calendarValue() Method

DEPRECATED replaced with `com.bea.xml.XmlGDay.getCalendarValue()`

```
public Calendar calendarValue()
```

Returns this value as a Calendar

gDateValue() Method

DEPRECATED replaced with `com.bea.xml.XmlGDay.getGDateValue()`

```
public GDate gDateValue()
```

Returns this value as a GDate

getCalendarValue() Method

```
public Calendar getCalendarValue()
```


Returns this value as a Calendar

getGDateValue() Method

```
public GDate getGDateValue()
```

Returns this value as a GDate

getIntValue() Method

```
public int getIntValue()
```

Returns this value as an int from 1–31

intValue() Method

DEPRECATED replaced with `com.bea.xml.XmlGDay.getIntValue()`

```
public int intValue()
```

Returns this value as an int from 1–31

set(Calendar) Method

DEPRECATED replaced with
`com.bea.xml.XmlGDay.setCalendarValue(java.util.Calendar)`

```
public void set(Calendar c)
```

Sets this value as a Calendar

set(GDateSpecification) Method

DEPRECATED replaced with `com.bea.xml.XmlGDay.setGDateValue(com.bea.xml.GDate)`

```
public void set(GDateSpecification gd)
```

Sets this value as a GDateSpecification

set(int) Method

DEPRECATED replaced with `com.bea.xml.XmlGDay.setIntValue(int)`

```
public void set(int v)
```


Sets this value as an int from 1–31

setCalendarValue(Calendar) Method

```
public void setCalendarValue(Calendar c)
```

Sets this value as a Calendar

setGDateValue(GDate) Method

```
public void setGDateValue(GDate gd)
```

Sets this value as a GDateSpecification

setIntValue(int) Method

```
public void setIntValue(int v)
```

Sets this value as an int from 1–31

XmlGDay.Factory Class

public static final class XmlGDay.Factory

extends Object

A class with methods for creating instances of XmlGDay.

Hierarchy

```
Object
  XmlGDay.Factory
```

Enclosing interface

```
XmlGDay
```

Method Summary

```
public static
    XmlGDay newInstance()
        Creates an empty instance of XmlGDay

public static
    XmlGDay newInstance(XmlOptions options)
        Creates an empty instance of XmlGDay

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlGDay newValue(Object obj)
        Creates an immutable XmlGDay value

public static
    XmlGDay parse(String s)
        Parses a XmlGDay fragment from a String.

public static
    XmlGDay parse(String s, XmlOptions options)
        Parses a XmlGDay fragment from a String.

public static
    XmlGDay parse(File f)
        Parses a XmlGDay fragment from a File.
```


XMLBeans API Reference

```
public static parse(File f, XmlOptions options)
    XmlGDay      Parses a XmlGDay fragment from a File.
public static
    XmlGDay parse(URL u)
    Parses a XmlGDay fragment from a URL.
public static
    XmlGDay parse(URL u, XmlOptions options)
    Parses a XmlGDay fragment from a URL.
public static
    XmlGDay parse(InputStream is)
    Parses a XmlGDay fragment from an InputStream.
public static
    XmlGDay parse(InputStream is, XmlOptions options)
    Parses a XmlGDay fragment from an InputStream.
public static
    XmlGDay parse(Reader r)
    Parses a XmlGDay fragment from a Reader.
public static
    XmlGDay parse(Reader r, XmlOptions options)
    Parses a XmlGDay fragment from a Reader.
public static
    XmlGDay parse(Node node)
    Parses a XmlGDay fragment from a DOM Node.
public static
    XmlGDay parse(Node node, XmlOptions options)
    Parses a XmlGDay fragment from a DOM Node.
public static
    XmlGDay parse(XMLInputStream xis)
    Parses a XmlGDay fragment from an XMLInputStream.
public static
    XmlGDay parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlGDay fragment from an XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlGDay newInstance()
```

Creates an empty instance of `XmlGDay`

newInstance(XmlOptions) Method

```
public static XmlGDay newInstance(XmlOptions options)
```

Creates an empty instance of XmlGDay

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlGDay newValue(Object obj)
```

Creates an immutable XmlGDay value

parse(String) Method

```
public static XmlGDay parse(String s)
    throws XmlException
```


Parses a XmlGDay fragment from a String. For example:
"<xml-fragment>---14</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlGDay parse(String s,  
                             XmlOptions options)  
    throws XmlException
```

Parses a XmlGDay fragment from a String. For example:
"<xml-fragment>---14</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlGDay parse(File f)  
    throws XmlException, IOException
```

Parses a XmlGDay fragment from a File.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlGDay parse(File f,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlGDay fragment from a File.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlGDay parse(URL u)
    throws XmlException, IOException
```

Parses a XmlGDay fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlGDay parse(URL u,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlGDay fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlGDay parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlGDay fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlGDay parse(InputStream is,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlGDay fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlGDay parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlGDay fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlGDay parse(Reader r,
                           XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlGDay fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlGDay parse(Node node)
    throws XmlException
```

Parses a XmlGDay fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlGDay parse(Node node,
                           XmlOptions options)
    throws XmlException
```


Parses a XmlGDay fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlGDay parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlGDay fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlGDay parse(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlGDay fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

XmlGMonth Interface

public interface **XmlGMonth**

extends XmlAnySimpleType

Corresponds to the XML Schema xs:gMonth type. A gMonth specifies only a month-of-year.

Convertible to Calendar, GDate, or an int.

Related Topics

XmlCalendar

GDate

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
    public static final class XmlGMonth.Factory
    {
        A class with methods for creating instances of XmlGMonth.
    }
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
    public static final SchemaType type
    {
        The constant SchemaType object representing this schema type.
    }
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

    public
    Calendar calendarValue()
        Returns this value as a Calendar

    public
    GDate gDateValue()
        Returns this value as a GDate

    public
    Calendar getCalendarValue()
        Returns this value as a Calendar

    public
    GDate getGDateValue()
        Returns this value as a GDate

    public
    int getIntValue()
        Returns this value as an int from 1–12

    public
    int intValue()
        Returns this value as an int from 1–12

    public
    void set(Calendar c)
        Sets this value as a Calendar

    public
    void set(GDateSpecification gd)
        Sets this value as a
        GDateSpecification

    public
    void set(int v)
        Sets this value as an int from 1–12

    public
    void setCalendarValue(Calendar c)
        Sets this value as a Calendar

    public
    void setGDateValue(GDate gd)
        Sets this value as a
        GDateSpecification

    public
    void setIntValue(int v)
        Sets this value as an int from 1–12

```

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface `com.bea.xml.XmlObject`

changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode

Methods from interface `com.bea.xml.XmlTokenSource`

documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Method Detail

calendarValue() Method

DEPRECATED replaced with `com.bea.xml.XmlGMonth.getCalendarValue()`

```
public Calendar calendarValue()
```

Returns this value as a Calendar

gDateValue() Method

DEPRECATED replaced with `com.bea.xml.XmlGMonth.getGDateValue()`

```
public GDate gDateValue()
```

Returns this value as a GDate

getCalendarValue() Method

```
public Calendar getCalendarValue()
```


Returns this value as a Calendar

getGDateValue() Method

```
public GDate getGDateValue()
```

Returns this value as a GDate

getIntValue() Method

```
public int getIntValue()
```

Returns this value as an int from 1–12

intValue() Method

DEPRECATED replaced with `com.bea.xml.XmlGMonth.getIntValue()`

```
public int intValue()
```

Returns this value as an int from 1–12

set(Calendar) Method

DEPRECATED replaced with
`com.bea.xml.XmlGMonth.setCalendarValue(java.util.Calendar)`

```
public void set(Calendar c)
```

Sets this value as a Calendar

set(GDateSpecification) Method

DEPRECATED replaced with
`com.bea.xml.XmlGMonth.setGDateValue(com.bea.xml.GDate)`

```
public void set(GDateSpecification gd)
```

Sets this value as a GDateSpecification

set(int) Method

DEPRECATED replaced with `com.bea.xml.XmlGMonth.setIntValue(int)`


```
public void set(int v)
```

Sets this value as an int from 1–12

setCalendarValue(Calendar) Method

```
public void setCalendarValue(Calendar c)
```

Sets this value as a Calendar

setGDateValue(GDate) Method

```
public void setGDateValue(GDate gd)
```

Sets this value as a GDateSpecification

setIntValue(int) Method

```
public void setIntValue(int v)
```

Sets this value as an int from 1–12

XmlGMonth.Factory Class

public static final class XmlGMonth.Factory

extends Object

A class with methods for creating instances of XmlGMonth.

Hierarchy

```
Object
  XmlGMonth.Factory
```

Enclosing interface

```
XmlGMonth
```

Method Summary

```
public static
    XmlGMonth newInstance()
        Creates an empty instance of XmlGMonth

public static
    XmlGMonth newInstance(XmlOptions options)
        Creates an empty instance of XmlGMonth

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlGMonth newValue(Object obj)
        Creates an immutable XmlGMonth value

public static
    XmlGMonth parse(String s)
        Parses a XmlGMonth fragment from a String.

public static
    XmlGMonth parse(String s, XmlOptions options)
        Parses a XmlGMonth fragment from a String.

public static
    XmlGMonth parse(File f)
        Parses a XmlGMonth fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlGMonth      Parses a XmlGMonth fragment from a File.
public static
    XmlGMonth parse(URL u)
    Parses a XmlGMonth fragment from a URL.
public static
    XmlGMonth parse(URL u, XmlOptions options)
    Parses a XmlGMonth fragment from a URL.
public static
    XmlGMonth parse(InputStream is)
    Parses a XmlGMonth fragment from an InputStream.
public static
    XmlGMonth parse(InputStream is, XmlOptions options)
    Parses a XmlGMonth fragment from an InputStream.
public static
    XmlGMonth parse(Reader r)
    Parses a XmlGMonth fragment from a Reader.
public static
    XmlGMonth parse(Reader r, XmlOptions options)
    Parses a XmlGMonth fragment from a Reader.
public static
    XmlGMonth parse(Node node)
    Parses a XmlGMonth fragment from a DOM Node.
public static
    XmlGMonth parse(Node node, XmlOptions options)
    Parses a XmlGMonth fragment from a DOM Node.
public static
    XmlGMonth parse(XMLInputStream xis)
    Parses a XmlGMonth fragment from an XMLInputStream.
public static
    XmlGMonth parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlGMonth fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlGMonth newInstance()
```

Creates an empty instance of `XmlGMonth`

newInstance(XmlOptions) Method

```
public static XmlGMonth newInstance(XmlOptions options)
```

Creates an empty instance of XmlGMonth

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlGMonth newValue(Object obj)
```

Creates an immutable XmlGMonth value

parse(String) Method

```
public static XmlGMonth parse(String s)
    throws XmlException
```


Parses a `XmlGMonth` fragment from a `String`. For example:
"<xml-fragment>--06</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlGMonth parse(String s,  
                               XmlOptions options)  
    throws XmlException
```

Parses a `XmlGMonth` fragment from a `String`. For example:
"<xml-fragment>--06</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlGMonth parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlGMonth` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlGMonth parse(File f,  
                               XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlGMonth` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlGMonth parse(URL u)
    throws XmlException, IOException
```

Parses a XmlGMonth fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlGMonth parse(URL u,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlGMonth fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlGMonth parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlGMonth fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlGMonth parse(InputStream is,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlGMonth fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlGMonth parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlGMonth fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlGMonth parse(Reader r,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlGMonth fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlGMonth parse(Node node)
    throws XmlException
```

Parses a XmlGMonth fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlGMonth parse(Node node,
                               XmlOptions options)
    throws XmlException
```


Parses a XmlGMonth fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlGMonth parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlGMonth fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlGMonth parse(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlGMonth fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

XmlGMonthDay Interface

public interface **XmlGMonthDay**

extends XmlAnySimpleType

Corresponds to the XML Schema xs:gMonthDay type. A gMonthDay specifies a day of a specific month without specifying the year.

Convertible to Calendar or GDate.

Related Topics

XmlCalendar

GDate

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
public static final class XmlGMonthDay.Factory
    A class with methods for creating instances of XmlGMonthDay.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
public static final SchemaType type
    The constant SchemaType object representing this schema type.
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

    public
    Calendar calendarValue()
        Returns this value as a Calendar

    public
    GDate gDateValue()
        Returns this value as a GDate

    public
    Calendar getCalendarValue()
        Returns this value as a Calendar

    public
    GDate getGDateValue()
        Returns this value as a GDate

    public
    void set(Calendar c)
        Sets this value as a Calendar

    public
    void set(GDateSpecification gd)
        Sets this value as a
        GDateSpecification

    public
    void setCalendarValue(Calendar c)
        Sets this value as a Calendar

    public
    void setGDateValue(GDate gd)
        Sets this value as a
        GDateSpecification

```

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface com.bea.xml.XmlObject

changeType, compareTo, compareValue, copy, execQuery, execQuery,
 isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
 toString, validate, validate, valueEquals, valueHashCode

Methods from interface com.bea.xml.XmlTokenSource

documentProperties, monitor, newCursor, newDomNode, newDomNode,
 newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
 newXMLInputStream, save, save, save, save, save, save, save, save,

`xmlText, xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

Method Detail

calendarValue() Method

DEPRECATED replaced with `com.bea.xml.XmlGMonthDay.getCalendarValue()`

```
public Calendar calendarValue()
```

Returns this value as a `Calendar`

gDateValue() Method

DEPRECATED replaced with `com.bea.xml.XmlGMonthDay.getGDateValue()`

```
public GDate gDateValue()
```

Returns this value as a `GDate`

getCalendarValue() Method

```
public Calendar getCalendarValue()
```

Returns this value as a `Calendar`

getGDateValue() Method

```
public GDate getGDateValue()
```

Returns this value as a `GDate`

set(Calendar) Method

DEPRECATED replaced with

`com.bea.xml.XmlGMonthDay.setCalendarValue(java.util.Calendar)`

```
public void set(Calendar c)
```

Sets this value as a Calendar

set(GDateSpecification) Method

DEPRECATED replaced with

`com.bea.xml.XmlGMonthDay.setGDateValue(com.bea.xml.GDate)`

```
public void set(GDateSpecification gd)
```

Sets this value as a GDateSpecification

setCalendarValue(Calendar) Method

```
public void setCalendarValue(Calendar c)
```

Sets this value as a Calendar

setGDateValue(GDate) Method

```
public void setGDateValue(GDate gd)
```

Sets this value as a GDateSpecification

XmlGMonthDay.Factory Class

public static final class XmlGMonthDay.Factory

extends Object

A class with methods for creating instances of XmlGMonthDay.

Hierarchy

```

Object
  XmlGMonthDay.Factory
  
```

Enclosing interface

```

XmlGMonthDay
  
```

Method Summary

```

public static
  XmlGMonthDay newInstance()
    Creates an empty instance of XmlGMonthDay

public static
  XmlGMonthDay newInstance(XmlOptions options)
    Creates an empty instance of XmlGMonthDay

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
  options)
    Returns a validating XMLInputStream.

public static
  XmlGMonthDay newValue(Object obj)
    Creates an immutable XmlGMonthDay value

public static
  XmlGMonthDay parse(String s)
    Parses a XmlGMonthDay fragment from a String.

public static
  XmlGMonthDay parse(String s, XmlOptions options)
    Parses a XmlGMonthDay fragment from a String.

public static
  XmlGMonthDay parse(File f)
    Parses a XmlGMonthDay fragment from a File.
  
```



```

public static parse(File f, XmlOptions options)
    XmlGMonthDay      Parses a XmlGMonthDay fragment from a File.
public static
    XmlGMonthDay parse(URL u)
                        Parses a XmlGMonthDay fragment from a URL.
public static
    XmlGMonthDay parse(URL u, XmlOptions options)
                        Parses a XmlGMonthDay fragment from a URL.
public static
    XmlGMonthDay parse(InputStream is)
                        Parses a XmlGMonthDay fragment from an InputStream.
public static
    XmlGMonthDay parse(InputStream is, XmlOptions options)
                        Parses a XmlGMonthDay fragment from an InputStream.
public static
    XmlGMonthDay parse(Reader r)
                        Parses a XmlGMonthDay fragment from a Reader.
public static
    XmlGMonthDay parse(Reader r, XmlOptions options)
                        Parses a XmlGMonthDay fragment from a Reader.
public static
    XmlGMonthDay parse(Node node)
                        Parses a XmlGMonthDay fragment from a DOM Node.
public static
    XmlGMonthDay parse(Node node, XmlOptions options)
                        Parses a XmlGMonthDay fragment from a DOM Node.
public static
    XmlGMonthDay parse(XMLInputStream xis)
                        Parses a XmlGMonthDay fragment from an XMLInputStream.
public static
    XmlGMonthDay parse(XMLInputStream xis, XmlOptions options)
                        Parses a XmlGMonthDay fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlGMonthDay newInstance()
```

Creates an empty instance of `XmlGMonthDay`

newInstance(XmlOptions) Method

```
public static XmlGMonthDay newInstance(XmlOptions options)
```

Creates an empty instance of XmlGMonthDay

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlGMonthDay newValue(Object obj)
```

Creates an immutable XmlGMonthDay value

parse(String) Method

```
public static XmlGMonthDay parse(String s)
    throws XmlException
```


Parses a `XmlGMonthDay` fragment from a String. For example:
"<xml-fragment>--06-14</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlGMonthDay parse(String s,  
                                XmlOptions options)  
    throws XmlException
```

Parses a `XmlGMonthDay` fragment from a String. For example:
"<xml-fragment>--06-14</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlGMonthDay parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlGMonthDay` fragment from a File.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlGMonthDay parse(File f,  
                                XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlGMonthDay` fragment from a File.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlGMonthDay parse(URL u)
    throws XmlException, IOException
```

Parses a XmlGMonthDay fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlGMonthDay parse(URL u,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlGMonthDay fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlGMonthDay parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlGMonthDay fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlGMonthDay parse(InputStream is,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlGMonthDay fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlGMonthDay parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlGMonthDay fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlGMonthDay parse(Reader r,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlGMonthDay fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlGMonthDay parse(Node node)
    throws XmlException
```

Parses a XmlGMonthDay fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlGMonthDay parse(Node node,
                                XmlOptions options)
    throws XmlException
```


Parses a `XmlGMonthDay` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XmlGMonthDay parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlGMonthDay` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlGMonthDay parse(XMLInputStream xis,
                                XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlGMonthDay` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlGYear Interface

public interface **XmlGYear**

extends XmlAnySimpleType

Corresponds to the XML Schema xs:gYear type. A gYear specifies a Gregorian year (AD).

Convertible to Calendar, GDate, or an int.

Related Topics

XmlCalendar

GDate

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
public static final class XmlGYear.Factory
    A class with methods for creating instances of XmlGYear.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
public static final SchemaType type
    The constant SchemaType object representing this schema type.
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

    public
    Calendar calendarValue()
        Returns this value as a Calendar

    public
    GDate gDateValue()
        Returns this value as a GDate

    public
    Calendar getCalendarValue()
        Returns this value as a Calendar

    public
    GDate getGDateValue()
        Returns this value as a GDate

    public
    int getIntValue()
        Returns this value as an int from 1–31

    public
    int intValue()
        Returns this value as an int from 1–31

    public
    void set(Calendar c)
        Sets this value as a Calendar

    public
    void set(GDateSpecification gd)
        Sets this value as a
        GDateSpecification

    public
    void set(int v)
        Sets this value as an int from 1–31

    public
    void setCalendarValue(Calendar c)
        Sets this value as a Calendar

    public
    void setGDateValue(GDate gd)
        Sets this value as a
        GDateSpecification

    public
    void setIntValue(int v)
        Sets this value as an int from 1–31

```

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface `com.bea.xml.XmlObject`

changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode

Methods from interface `com.bea.xml.XmlTokenSource`

documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Method Detail

calendarValue() Method

DEPRECATED replaced with `com.bea.xml.XmlGYear.getCalendarValue()`

```
public Calendar calendarValue()
```

Returns this value as a Calendar

gDateValue() Method

DEPRECATED replaced with `com.bea.xml.XmlGYear.getGDateValue()`

```
public GDate gDateValue()
```

Returns this value as a GDate

getCalendarValue() Method

```
public Calendar getCalendarValue()
```


Returns this value as a Calendar

getGDateValue() Method

```
public GDate getGDateValue()
```

Returns this value as a GDate

getIntValue() Method

```
public int getIntValue()
```

Returns this value as an int from 1–31

intValue() Method

DEPRECATED replaced with `com.bea.xml.XmlGYear.getIntValue()`

```
public int intValue()
```

Returns this value as an int from 1–31

set(Calendar) Method

DEPRECATED replaced with
`com.bea.xml.XmlGYear.setCalendarValue(java.util.Calendar)`

```
public void set(Calendar c)
```

Sets this value as a Calendar

set(GDateSpecification) Method

DEPRECATED replaced with
`com.bea.xml.XmlGYear.setGDateValue(com.bea.xml.GDate)`

```
public void set(GDateSpecification gd)
```

Sets this value as a GDateSpecification

set(int) Method

DEPRECATED replaced with `com.bea.xml.XmlGYear.setIntValue(int)`


```
public void set(int v)
```

Sets this value as an int from 1–31

setCalendarValue(Calendar) Method

```
public void setCalendarValue(Calendar c)
```

Sets this value as a Calendar

setGDateValue(GDate) Method

```
public void setGDateValue(GDate gd)
```

Sets this value as a GDateSpecification

setIntValue(int) Method

```
public void setIntValue(int v)
```

Sets this value as an int from 1–31

XmlGYear.Factory Class

public static final class XmlGYear.Factory

extends Object

A class with methods for creating instances of XmlGYear.

Hierarchy

```
Object
  XmlGYear.Factory
```

Enclosing interface

```
XmlGYear
```

Method Summary

```
public static
    XmlGYear newInstance()
        Creates an empty instance of XmlGYear

public static
    XmlGYear newInstance(XmlOptions options)
        Creates an empty instance of XmlGYear

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlGYear newValue(Object obj)
        Creates an immutable XmlGYear value

public static
    XmlGYear parse(String s)
        Parses a XmlGYear fragment from a String.

public static
    XmlGYear parse(String s, XmlOptions options)
        Parses a XmlGYear fragment from a String.

public static
    XmlGYear parse(File f)
        Parses a XmlGYear fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlGYear      Parses a XmlGYear fragment from a File.
public static
    XmlGYear parse(URL u)
    Parses a XmlGYear fragment from a URL.
public static
    XmlGYear parse(URL u, XmlOptions options)
    Parses a XmlGYear fragment from a URL.
public static
    XmlGYear parse(InputStream is)
    Parses a XmlGYear fragment from an InputStream.
public static
    XmlGYear parse(InputStream is, XmlOptions options)
    Parses a XmlGYear fragment from an InputStream.
public static
    XmlGYear parse(Reader r)
    Parses a XmlGYear fragment from a Reader.
public static
    XmlGYear parse(Reader r, XmlOptions options)
    Parses a XmlGYear fragment from a Reader.
public static
    XmlGYear parse(Node node)
    Parses a XmlGYear fragment from a DOM Node.
public static
    XmlGYear parse(Node node, XmlOptions options)
    Parses a XmlGYear fragment from a DOM Node.
public static
    XmlGYear parse(XMLInputStream xis)
    Parses a XmlGYear fragment from an XMLInputStream.
public static
    XmlGYear parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlGYear fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlGYear newInstance()
```

Creates an empty instance of `XmlGYear`

newInstance(XmlOptions) Method

```
public static XmlGYear newInstance(XmlOptions options)
```

Creates an empty instance of XmlGYear

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlGYear newValue(Object obj)
```

Creates an immutable XmlGYear value

parse(String) Method

```
public static XmlGYear parse(String s)
    throws XmlException
```


Parses a `XmlGYear` fragment from a `String`. For example:
"<xml-fragment>2003</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlGYear parse(String s,  
                             XmlOptions options)  
    throws XmlException
```

Parses a `XmlGYear` fragment from a `String`. For example:
"<xml-fragment>2003</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlGYear parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlGYear` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlGYear parse(File f,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlGYear` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlGYear parse(URL u)
    throws XmlException, IOException
```

Parses a XmlGYear fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlGYear parse(URL u,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlGYear fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlGYear parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlGYear fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlGYear parse(InputStream is,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlGYear fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlGYear parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlGYear fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlGYear parse(Reader r,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlGYear fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlGYear parse(Node node)
    throws XmlException
```

Parses a XmlGYear fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlGYear parse(Node node,
                             XmlOptions options)
    throws XmlException
```


Parses a XmlGYear fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlGYear parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlGYear fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlGYear parse(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlGYear fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

XmlGYearMonth Interface

public interface **XmlGYearMonth**

extends XmlAnySimpleType

Corresponds to the XML Schema xs:gYearMonth type. A gYearMonth specifies a month in a specific year.

Convertible to Calendar, GDate.

Related Topics

XmlCalendar

GDate

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
public static final class XmlGYearMonth.Factory
    A class with methods for creating instances of XmlGYearMonth.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
public static final SchemaType type
    The constant SchemaType object representing this schema type.
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

    public
    Calendar calendarValue()
        Returns this value as a Calendar

    public
    GDate gDateValue()
        Returns this value as a GDate

    public
    Calendar getCalendarValue()
        Returns this value as a Calendar

    public
    GDate getGDateValue()
        Returns this value as a GDate

    public
    void set(Calendar c)
        Sets this value as a Calendar

    public
    void set(GDateSpecification gd)
        Sets this value as a
        GDateSpecification

    public
    void setCalendarValue(Calendar c)
        Sets this value as a Calendar

    public
    void setGDateValue(GDate gd)
        Sets this value as a
        GDateSpecification

```

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface com.bea.xml.XmlObject

changeType, compareTo, compareValue, copy, execQuery, execQuery, isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil, toString, validate, validate, valueEquals, valueHashCode

Methods from interface com.bea.xml.XmlTokenSource

documentProperties, monitor, newCursor, newDomNode, newDomNode, newInputStream, newInputStream, newReader, newReader, newXMLInputStream, newXMLInputStream, save, save, save, save, save, save, save, save,

`xmlText, xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

Method Detail

calendarValue() Method

DEPRECATED replaced with `com.bea.xml.XmlGYearMonth.getCalendarValue()`

```
public Calendar calendarValue()
```

Returns this value as a `Calendar`

gDateValue() Method

DEPRECATED replaced with `com.bea.xml.XmlGYearMonth.getGDateValue()`

```
public GDate gDateValue()
```

Returns this value as a `GDate`

getCalendarValue() Method

```
public Calendar getCalendarValue()
```

Returns this value as a `Calendar`

getGDateValue() Method

```
public GDate getGDateValue()
```

Returns this value as a `GDate`

set(Calendar) Method

DEPRECATED replaced with

```
com.bea.xml.XmlGYearMonth.setCalendarValue(java.util.Calendar)
```

```
public void set(Calendar c)
```

Sets this value as a Calendar

set(GDateSpecification) Method

DEPRECATED replaced with

```
com.bea.xml.XmlGYearMonth.setGDateValue(com.bea.xml.GDate)
```

```
public void set(GDateSpecification gd)
```

Sets this value as a GDateSpecification

setCalendarValue(Calendar) Method

```
public void setCalendarValue(Calendar c)
```

Sets this value as a Calendar

setGDateValue(GDate) Method

```
public void setGDateValue(GDate gd)
```

Sets this value as a GDateSpecification

XmlGYearMonth.Factory Class

public static final class XmlGYearMonth.Factory

extends Object

A class with methods for creating instances of XmlGYearMonth.

Hierarchy

```
Object
  XmlGYearMonth.Factory
```

Enclosing interface

```
XmlGYearMonth
```

Method Summary

```
public static
XmlGYearMonth newInstance()
    Creates an empty instance of XmlGYearMonth

public static
XmlGYearMonth newInstance(XmlOptions options)
    Creates an empty instance of XmlGYearMonth

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
options)
    Returns a validating XMLInputStream.

public static
XmlGYearMonth newValue(Object obj)
    Creates an immutable XmlGYearMonth value

public static
XmlGYearMonth parse(String s)
    Parses a XmlGYearMonth fragment from a String.

public static
XmlGYearMonth parse(String s, XmlOptions options)
    Parses a XmlGYearMonth fragment from a String.

public static
XmlGYearMonth parse(File f)
    Parses a XmlGYearMonth fragment from a File.
```



```

public static parse(File f, XmlOptions options)
XmlGYearMonth      Parses a XmlGYearMonth fragment from a File.

public static
XmlGYearMonth parse(URL u)
                  Parses a XmlGYearMonth fragment from a URL.

public static
XmlGYearMonth parse(URL u, XmlOptions options)
                  Parses a XmlGYearMonth fragment from a URL.

public static
XmlGYearMonth parse(InputStream is)
                  Parses a XmlGYearMonth fragment from an InputStream.

public static
XmlGYearMonth parse(InputStream is, XmlOptions options)
                  Parses a XmlGYearMonth fragment from an InputStream.

public static
XmlGYearMonth parse(Reader r)
                  Parses a XmlGYearMonth fragment from a Reader.

public static
XmlGYearMonth parse(Reader r, XmlOptions options)
                  Parses a XmlGYearMonth fragment from a Reader.

public static
XmlGYearMonth parse(Node node)
                  Parses a XmlGYearMonth fragment from a DOM Node.

public static
XmlGYearMonth parse(Node node, XmlOptions options)
                  Parses a XmlGYearMonth fragment from a DOM Node.

public static
XmlGYearMonth parse(XMLInputStream xis)
                  Parses a XmlGYearMonth fragment from an XMLInputStream.

public static
XmlGYearMonth parse(XMLInputStream xis, XmlOptions options)
                  Parses a XmlGYearMonth fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlGYearMonth newInstance()
```

Creates an empty instance of `XmlGYearMonth`

newInstance(XmlOptions) Method

```
public static XmlGYearMonth newInstance(XmlOptions options)
```

Creates an empty instance of XmlGYearMonth

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlGYearMonth newValue(Object obj)
```

Creates an immutable XmlGYearMonth value

parse(String) Method

```
public static XmlGYearMonth parse(String s)
    throws XmlException
```


Parses a `XmlGYearMonth` fragment from a `String`. For example:
"<xml-fragment>2003-06</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlGYearMonth parse(String s,  
                                   XmlOptions options)  
    throws XmlException
```

Parses a `XmlGYearMonth` fragment from a `String`. For example:
"<xml-fragment>2003-06</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlGYearMonth parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlGYearMonth` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlGYearMonth parse(File f,  
                                   XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlGYearMonth` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlGYearMonth parse(URL u)
    throws XmlException, IOException
```

Parses a XmlGYearMonth fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlGYearMonth parse(URL u,
                                   XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlGYearMonth fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlGYearMonth parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlGYearMonth fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlGYearMonth parse(InputStream is,
                                   XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlGYearMonth fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlGYearMonth parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlGYearMonth fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlGYearMonth parse(Reader r,
                                   XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlGYearMonth fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlGYearMonth parse(Node node)
    throws XmlException
```

Parses a XmlGYearMonth fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlGYearMonth parse(Node node,
                                   XmlOptions options)
    throws XmlException
```


Parses a XmlGYearMonth fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlGYearMonth parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlGYearMonth fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlGYearMonth parse(XMLInputStream xis,
                                   XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlGYearMonth fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

XmlHexBinary Interface

public interface XmlHexBinary

extends XmlAnySimpleType

Corresponds to the XML Schema xs:hexBinary type.

Convertible to a byte array.

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
public static final class XmlHexBinary.Factory
    A class with methods for creating instances of XmlHexBinary.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
public static final SchemaType type
    The constant SchemaType object representing this schema type.
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

public
byte[] byteArrayValue()
    Returns this value as a byte array.

public
byte[] getByteArrayValue()
    Returns this value as a byte array.

public
void set(byte[] ba)
    Sets this value as a byte array.

public
void setByteArrayValue(byte[] ba)
    Sets this value as a byte array.

```

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`, `isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`, `toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`, `newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`, `newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `xmlText`, `xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

Method Detail

byteArrayValue() Method

DEPRECATED replaced by `com.bea.xml.XmlHexBinary.getBytesArrayValue()`

```
public byte[] byteArrayValue()
```

Returns this value as a byte array.

getBytesArrayValue() Method

```
public byte[] getBytesArrayValue()
```

Returns this value as a byte array.

set(byte[]) Method

DEPRECATED replaced by `com.bea.xml.XmlHexBinary.setBytesArrayValue(byte[])`

```
public void set(byte[] ba)
```

Sets this value as a byte array.

setBytesArrayValue(byte[]) Method

```
public void setBytesArrayValue(byte[] ba)
```

Sets this value as a byte array.

XmlHexBinary.Factory Class

public static final class XmlHexBinary.Factory

extends Object

A class with methods for creating instances of XmlHexBinary.

Hierarchy

```

Object
  XmlHexBinary.Factory
  
```

Enclosing interface

```

XmlHexBinary
  
```

Method Summary

```

public static
  XmlHexBinary newInstance()
      Creates an empty instance of XmlHexBinary

public static
  XmlHexBinary newInstance(XmlOptions options)
      Creates an empty instance of XmlHexBinary

public static
  XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
      Returns a validating XMLInputStream.

public static
  XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
      options)
      Returns a validating XMLInputStream.

public static
  XmlHexBinary newValue(Object obj)
      Creates an immutable XmlHexBinary value

public static
  XmlHexBinary parse(String s)
      Parses a XmlHexBinary fragment from a String.

public static
  XmlHexBinary parse(String s, XmlOptions options)
      Parses a XmlHexBinary fragment from a String.

public static
  XmlHexBinary parse(File f)
      Parses a XmlHexBinary fragment from a File.
  
```



```

public static parse(File f, XmlOptions options)
    XmlHexBinary      Parses a XmlHexBinary fragment from a File.
public static
    XmlHexBinary parse(URL u)
                        Parses a XmlHexBinary fragment from a URL.
public static
    XmlHexBinary parse(URL u, XmlOptions options)
                        Parses a XmlHexBinary fragment from a URL.
public static
    XmlHexBinary parse(InputStream is)
                        Parses a XmlHexBinary fragment from an InputStream.
public static
    XmlHexBinary parse(InputStream is, XmlOptions options)
                        Parses a XmlHexBinary fragment from an InputStream.
public static
    XmlHexBinary parse(Reader r)
                        Parses a XmlHexBinary fragment from a Reader.
public static
    XmlHexBinary parse(Reader r, XmlOptions options)
                        Parses a XmlHexBinary fragment from a Reader.
public static
    XmlHexBinary parse(Node node)
                        Parses a XmlHexBinary fragment from a DOM Node.
public static
    XmlHexBinary parse(Node node, XmlOptions options)
                        Parses a XmlHexBinary fragment from a DOM Node.
public static
    XmlHexBinary parse(XMLInputStream xis)
                        Parses a XmlHexBinary fragment from an XMLInputStream.
public static
    XmlHexBinary parse(XMLInputStream xis, XmlOptions options)
                        Parses a XmlHexBinary fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlHexBinary newInstance()
```

Creates an empty instance of `XmlHexBinary`

newInstance(XmlOptions) Method

```
public static XmlHexBinary newInstance(XmlOptions options)
```

Creates an empty instance of XmlHexBinary

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlHexBinary newValue(Object obj)
```

Creates an immutable XmlHexBinary value

parse(String) Method

```
public static XmlHexBinary parse(String s)
    throws XmlException
```


Parses a `XmlHexBinary` fragment from a `String`. For example:
"<xml-fragment>68656c6c6f</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlHexBinary parse(String s,  
                                XmlOptions options)  
    throws XmlException
```

Parses a `XmlHexBinary` fragment from a `String`. For example:
"<xml-fragment>68656c6c6f</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlHexBinary parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlHexBinary` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlHexBinary parse(File f,  
                                XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlHexBinary` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlHexBinary parse(URL u)
    throws XmlException, IOException
```

Parses a XmlHexBinary fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlHexBinary parse(URL u,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlHexBinary fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlHexBinary parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlHexBinary fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlHexBinary parse(InputStream is,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlHexBinary fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlHexBinary parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlHexBinary fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlHexBinary parse(Reader r,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlHexBinary fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlHexBinary parse(Node node)
    throws XmlException
```

Parses a XmlHexBinary fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlHexBinary parse(Node node,
                                XmlOptions options)
    throws XmlException
```


Parses a XmlHexBinary fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XmlHexBinary parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlHexBinary fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlHexBinary parse(XMLInputStream xis,
                                XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlHexBinary fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

XmlID Interface

public interface XmlID

extends XmlNCName

Corresponds to the XML Schema xs:ID type.

When validated, IDs must be unique within a document. An element may not have more than one attribute whose type is ID.

Convertible to a String.

All Superinterfaces

XmlAnySimpleType, XmlName, XmlNCName, XmlNormalizedString, XmlObject, XmlString, XmlToken, XmlTokenSource

Nested Class Summary

```
public static final class XmlID.Factory
    A class with methods for creating instances of XmlID.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlName

XmlName.Factory

Nested classes from interface com.bea.xml.XmlNCName

XmlNCName.Factory

Nested classes from interface com.bea.xml.XmlNormalizedString

XmlNormalizedString.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Nested classes from interface com.bea.xml.XmlString

XmlString.Factory

Nested classes from interface com.bea.xml.XmlToken

XmlToken.Factory

Field Summary

<pre> public static final SchemaType </pre>	<pre> type </pre>	<p>The constant SchemaType object representing this schema type.</p>
---	---------------------------	--

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlName

type

Fields from interface com.bea.xml.XmlNCName

type

Fields from interface com.bea.xml.XmlNormalizedString

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Fields from interface com.bea.xml.XmlString

type

Fields from interface com.bea.xml.XmlToken

type

Method Summary

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface com.bea.xml.XmlObject

`changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

XmlID.Factory Class

public static final class XmlID.Factory

extends Object

A class with methods for creating instances of XmlID.

Hierarchy

```

Object
  XmlID.Factory
  
```

Enclosing interface

```

XmlID
  
```

Method Summary

```

public static
    XmlID newInstance()
        Creates an empty instance of XmlID

public static
    XmlID newInstance(XmlOptions options)
        Creates an empty instance of XmlID

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlID newValue(Object obj)
        Creates an immutable XmlID value

public static
    XmlID parse(String s)
        Parses a XmlID fragment from a String.

public static
    XmlID parse(String s, XmlOptions options)
        Parses a XmlID fragment from a String.

public static
    XmlID parse(File f)
        Parses a XmlID fragment from a File.
  
```



```

public static parse(File f, XmlOptions options)
    XmlID      Parses a XmlID fragment from a File.
public static
    XmlID parse(URL u)
    Parses a XmlID fragment from a URL.
public static
    XmlID parse(URL u, XmlOptions options)
    Parses a XmlID fragment from a URL.
public static
    XmlID parse(InputStream is)
    Parses a XmlID fragment from an InputStream.
public static
    XmlID parse(InputStream is, XmlOptions options)
    Parses a XmlID fragment from an InputStream.
public static
    XmlID parse(Reader r)
    Parses a XmlID fragment from a Reader.
public static
    XmlID parse(Reader r, XmlOptions options)
    Parses a XmlID fragment from a Reader.
public static
    XmlID parse(Node node)
    Parses a XmlID fragment from a DOM Node.
public static
    XmlID parse(Node node, XmlOptions options)
    Parses a XmlID fragment from a DOM Node.
public static
    XmlID parse(XMLInputStream xis)
    Parses a XmlID fragment from an XMLInputStream.
public static
    XmlID parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlID fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlID newInstance()
```

Creates an empty instance of XmlID

newInstance(XmlOptions) Method

```
public static XmlID newInstance(XmlOptions options)
```

Creates an empty instance of XmlID

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlID newValue(Object obj)
```

Creates an immutable XmlID value

parse(String) Method

```
public static XmlID parse(String s)
    throws XmlException
```

Parses a XmlID fragment from a String. For example: "<xml-fragment>n1</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlID parse(String s,  
                           XmlOptions options)  
    throws XmlException
```

Parses a XmlID fragment from a String. For example: "<xml-fragment>n1</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlID parse(File f)  
    throws XmlException, IOException
```

Parses a XmlID fragment from a File.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlID parse(File f,  
                           XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlID fragment from a File.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlID parse(URL u)  
    throws XmlException, IOException
```

Parses a XmlID fragment from a URL.

Exceptions

XmlException

IOException

parse(URL, XmlOptions) Method

```
public static XmlID parse(URL u,  
                           XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlID fragment from a URL.

Exceptions

XmlException

IOException

parse(InputStream) Method

```
public static XmlID parse(InputStream is)  
    throws XmlException, IOException
```

Parses a XmlID fragment from an InputStream.

Exceptions

XmlException

IOException

parse(InputStream, XmlOptions) Method

```
public static XmlID parse(InputStream is,  
                           XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlID fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlID parse(Reader r)  
    throws XmlException, IOException
```


Parses a XmlID fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlID parse(Reader r,  
                          XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlID fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlID parse(Node node)  
    throws XmlException
```

Parses a XmlID fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlID parse(Node node,  
                          XmlOptions options)  
    throws XmlException
```

Parses a XmlID fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173


```
public static XmlID parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlID` fragment from an `XMLInputStream`.

Exceptions

XmlException
XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlID parse(XMLInputStream xis,
                          XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlID` fragment from an `XMLInputStream`.

Exceptions

XmlException
XMLStreamException

XmlIDREF Interface

public interface XmlIDREF

extends XmlNCName

Corresponds to the XML Schema xs:IDREF type.

When validated, IDREF values must match an ID value that is present within the document. This rule is only verified when a whole document is validated at once.

Convertible to a String.

All Superinterfaces

XmlAnySimpleType, XmlName, XmlNCName, XmlNormalizedString, XmlObject, XmlString, XmlToken, XmlTokenSource

Nested Class Summary

```
    public static final class XmlIDREF.Factory
    {
        A class with methods for creating instances of XmlIDREF.
    }
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlName

XmlName.Factory

Nested classes from interface com.bea.xml.XmlNCName

XmlNCName.Factory

Nested classes from interface com.bea.xml.XmlNormalizedString

XmlNormalizedString.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Nested classes from interface com.bea.xml.XmlString

`XmlString.Factory`**Nested classes from interface `com.bea.xml.XmlToken`**`XmlToken.Factory`

Field Summary

```

    public
    static type
final SchemaType

```

The constant `SchemaType` object representing this schema type.

Fields from interface `com.bea.xml.XmlAnySimpleType``type`**Fields from interface `com.bea.xml.XmlName`**`type`**Fields from interface `com.bea.xml.XmlNCName`**`type`**Fields from interface `com.bea.xml.XmlNormalizedString`**`type`**Fields from interface `com.bea.xml.XmlObject`**`EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type`**Fields from interface `com.bea.xml.XmlString`**`type`**Fields from interface `com.bea.xml.XmlToken`**`type`

Method Summary

Methods from interface `com.bea.xml.XmlAnySimpleType``getStringValue, set, setStringValue, stringValue`**Methods from interface `com.bea.xml.XmlObject`**

XMLBeans API Reference

`changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

XmlIDREF.Factory Class

public static final class XmlIDREF.Factory

extends Object

A class with methods for creating instances of XmlIDREF.

Hierarchy

```
Object
  XmlIDREF.Factory
```

Enclosing interface

```
XmlIDREF
```

Method Summary

```
public static
    XmlIDREF newInstance()
        Creates an empty instance of XmlIDREF

public static
    XmlIDREF newInstance(XmlOptions options)
        Creates an empty instance of XmlIDREF

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlIDREF newValue(Object obj)
        Creates an immutable XmlIDREF value

public static
    XmlIDREF parse(String s)
        Parses a XmlIDREF fragment from a String.

public static
    XmlIDREF parse(String s, XmlOptions options)
        Parses a XmlIDREF fragment from a String.

public static
    XmlIDREF parse(File f)
        Parses a XmlIDREF fragment from a File.
```


XMLBeans API Reference

```
public static parse(File f, XmlOptions options)
    XmlIDREF      Parses a XmlIDREF fragment from a File.
public static
    XmlIDREF parse(URL u)
    Parses a XmlIDREF fragment from a URL.
public static
    XmlIDREF parse(URL u, XmlOptions options)
    Parses a XmlIDREF fragment from a URL.
public static
    XmlIDREF parse(InputStream is)
    Parses a XmlIDREF fragment from an InputStream.
public static
    XmlIDREF parse(InputStream is, XmlOptions options)
    Parses a XmlIDREF fragment from an InputStream.
public static
    XmlIDREF parse(Reader r)
    Parses a XmlIDREF fragment from a Reader.
public static
    XmlIDREF parse(Reader r, XmlOptions options)
    Parses a XmlIDREF fragment from a Reader.
public static
    XmlIDREF parse(Node node)
    Parses a XmlIDREF fragment from a DOM Node.
public static
    XmlIDREF parse(Node node, XmlOptions options)
    Parses a XmlIDREF fragment from a DOM Node.
public static
    XmlIDREF parse(XMLInputStream xis)
    Parses a XmlIDREF fragment from an XMLInputStream.
public static
    XmlIDREF parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlIDREF fragment from an XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlIDREF newInstance()
```

Creates an empty instance of `XmlIDREF`

newInstance(XmlOptions) Method

```
public static XmlIDREF newInstance(XmlOptions options)
```

Creates an empty instance of `XmlIDREF`

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlIDREF newValue(Object obj)
```

Creates an immutable `XmlIDREF` value

parse(String) Method

```
public static XmlIDREF parse(String s)
    throws XmlException
```

Parses a `XmlIDREF` fragment from a `String`.

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlIDREF parse(String s,  
                             XmlOptions options)  
    throws XmlException
```

Parses a `XmlIDREF` fragment from a `String`.

Exceptions

XmlException

parse(File) Method

```
public static XmlIDREF parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlIDREF` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlIDREF parse(File f,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlIDREF` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlIDREF parse(URL u)  
    throws XmlException, IOException
```

Parses a `XmlIDREF` fragment from a `URL`.

Exceptions

XmlException

IOException

parse(URL, XmlOptions) Method

```
public static XmlIDREF parse(URL u,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlIDREF` fragment from a URL.

Exceptions

XmlException

IOException

parse(InputStream) Method

```
public static XmlIDREF parse(InputStream is)  
    throws XmlException, IOException
```

Parses a `XmlIDREF` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(InputStream, XmlOptions) Method

```
public static XmlIDREF parse(InputStream is,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlIDREF` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlIDREF parse(Reader r)  
    throws XmlException, IOException
```


Parses a XmlIDREF fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlIDREF parse(Reader r,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlIDREF fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlIDREF parse(Node node)  
    throws XmlException
```

Parses a XmlIDREF fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlIDREF parse(Node node,  
                             XmlOptions options)  
    throws XmlException
```

Parses a XmlIDREF fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173


```
public static XmlIDREF parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlIDREF` fragment from an `XMLInputStream`.

Exceptions

XmlException
XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlIDREF parse(XMLInputStream xis,
                             XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlIDREF` fragment from an `XMLInputStream`.

Exceptions

XmlException
XMLStreamException

XmlIDREFS Interface

public interface **XmlIDREFS**

extends XmlAnySimpleType

Corresponds to the XML Schema xs:IDREFS type, a list type.

When validated, IDREF values must match an ID value that is present within the document. This rule is only verified when a whole document is validated at once.

Convertible to a List.

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
    public static final class XmlIDREFS.Factory
    A class with methods for creating instances of XmlIDREFS.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
    public static final SchemaType type
    The constant SchemaType object representing this schema type.
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

public
    List getListValue()
        Returns the value as a List of String values

public
    List listValue()
        Returns the value as a List of String values

public
    void set(List l)
        Sets the value as a List

public
    void setListValue(List l)
        Sets the value as a List

public
    List xgetListValue()
        Returns the value as a List of XmlIDREF
        values

public
    List xlistValue()
        Returns the value as a List of XmlIDREF
        values

```

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`,
`isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`,
`toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`,
`newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`,
`newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`,
`xmlText`, `xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

Method Detail

getListValue() Method

```
public List getListValue()
```

Returns the value as a List of String values

listValue() Method

DEPRECATED replaced by `com.bea.xml.XmlIDREFS.getListValue()`

```
public List listValue()
```

Returns the value as a List of String values

set(List) Method

DEPRECATED replaced by `com.bea.xml.XmlIDREFS.getListValue()`

```
public void set(List l)
```

Sets the value as a List

setListValue(List) Method

```
public void setListValue(List l)
```

Sets the value as a List

xgetListValue() Method

```
public List xgetListValue()
```

Returns the value as a List of XmlIDREF values

xlistValue() Method

DEPRECATED replaced by `com.bea.xml.XmlIDREFS.getListValue()`

```
public List xlistValue()
```


Returns the value as a List of XmlIDREF values

XmlIDREFS.Factory Class

public static final class XmlIDREFS.Factory

extends Object

A class with methods for creating instances of XmlIDREFS.

Hierarchy

```
Object
  XmlIDREFS.Factory
```

Enclosing interface

```
XmlIDREFS
```

Method Summary

```
public static
    XmlIDREFS newInstance()
        Creates an empty instance of XmlIDREFS

public static
    XmlIDREFS newInstance(XmlOptions options)
        Creates an empty instance of XmlIDREFS

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlIDREFS newValue(Object obj)
        Creates an immutable XmlIDREFS value

public static
    XmlIDREFS parse(String s)
        Parses a XmlIDREFS fragment from a String.

public static
    XmlIDREFS parse(String s, XmlOptions options)
        Parses a XmlIDREFS fragment from a String.

public static
    XmlIDREFS parse(File f)
        Parses a XmlIDREFS fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlIDREFS      Parses a XmlIDREFS fragment from a File.
public static
    XmlIDREFS parse(URL u)
    Parses a XmlIDREFS fragment from a URL.
public static
    XmlIDREFS parse(URL u, XmlOptions options)
    Parses a XmlIDREFS fragment from a URL.
public static
    XmlIDREFS parse(InputStream is)
    Parses a XmlIDREFS fragment from an InputStream.
public static
    XmlIDREFS parse(InputStream is, XmlOptions options)
    Parses a XmlIDREFS fragment from an InputStream.
public static
    XmlIDREFS parse(Reader r)
    Parses a XmlIDREFS fragment from a Reader.
public static
    XmlIDREFS parse(Reader r, XmlOptions options)
    Parses a XmlIDREFS fragment from a Reader.
public static
    XmlIDREFS parse(Node node)
    Parses a XmlIDREFS fragment from a DOM Node.
public static
    XmlIDREFS parse(Node node, XmlOptions options)
    Parses a XmlIDREFS fragment from a DOM Node.
public static
    XmlIDREFS parse(XMLInputStream xis)
    Parses a XmlIDREFS fragment from an XMLInputStream.
public static
    XmlIDREFS parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlIDREFS fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlIDREFS newInstance()
```

Creates an empty instance of `XmlIDREFS`

newInstance(XmlOptions) Method

```
public static XmlIDREFS newInstance(XmlOptions options)
```

Creates an empty instance of XmlIDREFS

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlIDREFS newValue(Object obj)
```

Creates an immutable XmlIDREFS value

parse(String) Method

```
public static XmlIDREFS parse(String s)
    throws XmlException
```

Parses a XmlIDREFS fragment from a String.

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlIDREFS parse(String s,  
                               XmlOptions options)  
    throws XmlException
```

Parses a XmlIDREFS fragment from a String.

Exceptions

XmlException

parse(File) Method

```
public static XmlIDREFS parse(File f)  
    throws XmlException, IOException
```

Parses a XmlIDREFS fragment from a File.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlIDREFS parse(File f,  
                               XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlIDREFS fragment from a File.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlIDREFS parse(URL u)  
    throws XmlException, IOException
```

Parses a XmlIDREFS fragment from a URL.

Exceptions

XmlException

IOException

parse(URL, XmlOptions) Method

```
public static XmlIDREFS parse(URL u,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlIDREFS fragment from a URL.

Exceptions

XmlException

IOException

parse(InputStream) Method

```
public static XmlIDREFS parse(InputStream is)  
    throws XmlException, IOException
```

Parses a XmlIDREFS fragment from an InputStream.

Exceptions

XmlException

IOException

parse(InputStream, XmlOptions) Method

```
public static XmlIDREFS parse(InputStream is,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlIDREFS fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlIDREFS parse(Reader r)  
    throws XmlException, IOException
```


Parses a XmlIDREFS fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlIDREFS parse(Reader r,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlIDREFS fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlIDREFS parse(Node node)  
    throws XmlException
```

Parses a XmlIDREFS fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlIDREFS parse(Node node,  
                             XmlOptions options)  
    throws XmlException
```

Parses a XmlIDREFS fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173


```
public static XmlIDREFS parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlIDREFS fragment from an XMLInputStream.

Exceptions

XmlException
XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlIDREFS parse(XMLInputStream xis,
                               XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlIDREFS fragment from an XMLInputStream.

Exceptions

XmlException
XMLStreamException

XmlInt Interface

public interface XmlInt

extends XmlLong

Corresponds to the XML Schema xs:int type. One of the derived types based on xs:decimal.

Naturally, convertible to a Java int.

All Superinterfaces

XmlAnySimpleType, XmlDecimal, XmlInteger, XmlLong, XmlObject,
XmlTokenSource

All Known Subinterfaces

XmlByte, XmlShort

Nested Class Summary

```
    public static final class XmlInt.Factory
    {
        A class with methods for creating instances of XmlInt.
    }
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlDecimal

XmlDecimal.Factory

Nested classes from interface com.bea.xml.XmlInteger

XmlInteger.Factory

Nested classes from interface com.bea.xml.XmlLong

XmlLong.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```

    public
    static type
final SchemaType

```

The constant SchemaType object representing this schema type.

Fields from interface `com.bea.xml.XmlAnySimpleType`

`type`

Fields from interface `com.bea.xml.XmlDecimal`

`type`

Fields from interface `com.bea.xml.XmlInteger`

`type`

Fields from interface `com.bea.xml.XmlLong`

`type`

Fields from interface `com.bea.xml.XmlObject`

`EQUAL`, `GREATER_THAN`, `LESS_THAN`, `NOT_EQUAL`, `type`

Method Summary

```

public
    int getIntValue()
        Returns this value as an
        int

```

```

public
    int intValue()
        Returns this value as an
        int

```

```

public
    void set(int v)
        Sets this value as an int

```

```

public
    void setIntValue(int v)
        Sets this value as an int

```

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlDecimal`

`bigDecimalValue`, `getBigDecimalValue`, `set`, `setBigDecimalValue`

Methods from interface `com.bea.xml.XmlInteger`

`bigIntegerValue`, `getBigIntegerValue`, `set`, `setBigIntegerValue`

Methods from interface `com.bea.xml.XmlLong`

`getLongValue`, `longValue`, `set`, `setLongValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`, `isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`, `toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`, `newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`, `newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `xmlText`, `xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

Method Detail

`getIntValue()` Method

```
public int getIntValue()
```

Returns this value as an int

`intValue()` Method

DEPRECATED replaced with `com.bea.xml.XmlInt.getIntValue()`

```
public int intValue()
```


Returns this value as an int

set(int) Method

DEPRECATED replaced with `com.bea.xml.XmlInt.setIntValue(int)`

```
public void set(int v)
```

Sets this value as an int

setIntValue(int) Method

```
public void setIntValue(int v)
```

Sets this value as an int

XmlInt.Factory Class

public static final class XmlInt.Factory

extends Object

A class with methods for creating instances of XmlInt.

Hierarchy

```
Object
  XmlInt.Factory
```

Enclosing interface

```
XmlInt
```

Method Summary

```
public static
    XmlInt newInstance()
        Creates an empty instance of XmlInt

public static
    XmlInt newInstance(XmlOptions options)
        Creates an empty instance of XmlInt

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlInt newValue(Object obj)
        Creates an immutable XmlInt value

public static
    XmlInt parse(String s)
        Parses a XmlInt fragment from a String.

public static
    XmlInt parse(String s, XmlOptions options)
        Parses a XmlInt fragment from a String.

public static
    XmlInt parse(File f)
        Parses a XmlInt fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlInt      Parses a XmlInt fragment from a File.
public static
    XmlInt parse(URL u)
    Parses a XmlInt fragment from a URL.
public static
    XmlInt parse(URL u, XmlOptions options)
    Parses a XmlInt fragment from a URL.
public static
    XmlInt parse(InputStream is)
    Parses a XmlInt fragment from an InputStream.
public static
    XmlInt parse(InputStream is, XmlOptions options)
    Parses a XmlInt fragment from an InputStream.
public static
    XmlInt parse(Reader r)
    Parses a XmlInt fragment from a Reader.
public static
    XmlInt parse(Reader r, XmlOptions options)
    Parses a XmlInt fragment from a Reader.
public static
    XmlInt parse(Node node)
    Parses a XmlInt fragment from a DOM Node.
public static
    XmlInt parse(Node node, XmlOptions options)
    Parses a XmlInt fragment from a DOM Node.
public static
    XmlInt parse(XMLInputStream xis)
    Parses a XmlInt fragment from an XMLInputStream.
public static
    XmlInt parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlInt fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlInt newInstance()
```

Creates an empty instance of `XmlInt`

newInstance(XmlOptions) Method

```
public static XmlInt newInstance(XmlOptions options)
```

Creates an empty instance of `XmlInt`

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlInt newValue(Object obj)
```

Creates an immutable `XmlInt` value

parse(String) Method

```
public static XmlInt parse(String s)
    throws XmlException
```


Parses a `XmlInt` fragment from a `String`. For example:
"<xml-fragment>1234567</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlInt parse(String s,  
                           XmlOptions options)  
    throws XmlException
```

Parses a `XmlInt` fragment from a `String`. For example:
"<xml-fragment>1234567</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlInt parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlInt` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlInt parse(File f,  
                           XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlInt` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlInt parse(URL u)
    throws XmlException, IOException
```

Parses a `XmlInt` fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlInt parse(URL u,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlInt` fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlInt parse(InputStream is)
    throws XmlException, IOException
```

Parses a `XmlInt` fragment from an `InputStream`.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlInt parse(InputStream is,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlInt` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlInt parse(Reader r)
    throws XmlException, IOException
```

Parses a `XmlInt` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlInt parse(Reader r,
                           XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlInt` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlInt parse(Node node)
    throws XmlException
```

Parses a `XmlInt` fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlInt parse(Node node,
                           XmlOptions options)
    throws XmlException
```


Parses a `XmlInt` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XmlInt parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlInt` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlInt parse(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlInt` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlInteger Interface

public interface **XmlInteger**

extends XmlDecimal

Corresponds to the XML Schema xs:integer type. One of the derived types based on xs:decimal.

This type should not be confused with xs:int or Java Integer. This type represents an arbitrary-precision integer with any number of digits, while a Java int or an xs:int is a 32-bit finite-precision integer.

Convertible to a Java BigInteger.

All Superinterfaces

XmlAnySimpleType, XmlDecimal, XmlObject, XmlTokenSource

All Known Subinterfaces

XmlByte, XmlInt, XmlLong, XmlNegativeInteger, XmlNonNegativeInteger, XmlNonPositiveInteger, XmlPositiveInteger, XmlShort, XmlUnsignedByte, XmlUnsignedInt, XmlUnsignedLong, XmlUnsignedShort

Nested Class Summary

```
public static final class XmlInteger.Factory
    A class with methods for creating instances of XmlInteger.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlDecimal

XmlDecimal.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```

    public
    static type
final SchemaType

```

The constant SchemaType object representing this schema type.

Fields from interface `com.bea.xml.XmlAnySimpleType`

`type`

Fields from interface `com.bea.xml.XmlDecimal`

`type`

Fields from interface `com.bea.xml.XmlObject`

`EQUAL`, `GREATER_THAN`, `LESS_THAN`, `NOT_EQUAL`, `type`

Method Summary

```

    public
BigInteger bigIntegerValue()
    Returns this value as a BigInteger

    public
BigInteger getBigIntegerValue()
    Returns this value as a BigInteger

    public
    void set(BigInteger bi)
    Sets this value as a BigInteger

    public
    void setBigIntegerValue(BigInteger bi)
    Sets this value as a BigInteger

```

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlDecimal`

`bigDecimalValue`, `getBigDecimalValue`, `set`, `setBigDecimalValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`, `isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`, `toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`,
`newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`,
`newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`,
`xmlText`, `xmlText`

Field Detail**type**

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

Method Detail**`bigIntegerValue()` Method**

DEPRECATED replaced with `com.bea.xml.XmlInteger.getBigIntegerValue()`

```
public BigInteger bigIntegerValue()
```

Returns this value as a `BigInteger`

`getBigIntegerValue()` Method

```
public BigInteger getBigIntegerValue()
```

Returns this value as a `BigInteger`

`set(BigInteger)` Method

DEPRECATED replaced with
`com.bea.xml.XmlInteger.setBigIntegerValue(java.math.BigInteger)`

```
public void set(BigInteger bi)
```

Sets this value as a `BigInteger`

`setBigIntegerValue(BigInteger)` Method

```
public void setBigIntegerValue(BigInteger bi)
```


Sets this value as a `BigInteger`

XmlInteger.Factory Class

public static final class XmlInteger.Factory

extends Object

A class with methods for creating instances of XmlInteger.

Hierarchy

```
Object
  XmlInteger.Factory
```

Enclosing interface

```
XmlInteger
```

Method Summary

```
public static
    XmlInteger newInstance()
        Creates an empty instance of XmlInteger

public static
    XmlInteger newInstance(XmlOptions options)
        Creates an empty instance of XmlInteger

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlInteger newValue(Object obj)
        Creates an immutable XmlInteger value

public static
    XmlInteger parse(String s)
        Parses a XmlInteger fragment from a String.

public static
    XmlInteger parse(String s, XmlOptions options)
        Parses a XmlInteger fragment from a String.

public static
    XmlInteger parse(File f)
        Parses a XmlInteger fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlInteger      Parses a XmlInteger fragment from a File.
public static
    XmlInteger parse(URL u)
    Parses a XmlInteger fragment from a URL.
public static
    XmlInteger parse(URL u, XmlOptions options)
    Parses a XmlInteger fragment from a URL.
public static
    XmlInteger parse(InputStream is)
    Parses a XmlInteger fragment from an InputStream.
public static
    XmlInteger parse(InputStream is, XmlOptions options)
    Parses a XmlInteger fragment from an InputStream.
public static
    XmlInteger parse(Reader r)
    Parses a XmlInteger fragment from a Reader.
public static
    XmlInteger parse(Reader r, XmlOptions options)
    Parses a XmlInteger fragment from a Reader.
public static
    XmlInteger parse(Node node)
    Parses a XmlInteger fragment from a DOM Node.
public static
    XmlInteger parse(Node node, XmlOptions options)
    Parses a XmlInteger fragment from a DOM Node.
public static
    XmlInteger parse(XMLInputStream xis)
    Parses a XmlInteger fragment from an XMLInputStream.
public static
    XmlInteger parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlInteger fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlInteger newInstance()
```

Creates an empty instance of `XmlInteger`

newInstance(XmlOptions) Method

```
public static XmlInteger newInstance(XmlOptions options)
```

Creates an empty instance of `XmlInteger`

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlInteger newValue(Object obj)
```

Creates an immutable `XmlInteger` value

parse(String) Method

```
public static XmlInteger parse(String s)
    throws XmlException
```


Parses a `XmlInteger` fragment from a String. For example:
"<xml-fragment>1234567890</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlInteger parse(String s,  
                               XmlOptions options)  
    throws XmlException
```

Parses a `XmlInteger` fragment from a String. For example:
"<xml-fragment>1234567890</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlInteger parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlInteger` fragment from a File.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlInteger parse(File f,  
                               XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlInteger` fragment from a File.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlInteger parse(URL u)
    throws XmlException, IOException
```

Parses a `XmlInteger` fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlInteger parse(URL u,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlInteger` fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlInteger parse(InputStream is)
    throws XmlException, IOException
```

Parses a `XmlInteger` fragment from an `InputStream`.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlInteger parse(InputStream is,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlInteger` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlInteger parse(Reader r)
    throws XmlException, IOException
```

Parses a `XmlInteger` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlInteger parse(Reader r,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlInteger` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlInteger parse(Node node)
    throws XmlException
```

Parses a `XmlInteger` fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlInteger parse(Node node,
                               XmlOptions options)
    throws XmlException
```


Parses a `XmlInteger` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlInteger parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlInteger` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlInteger parse(XMLInputStream xis,
                               XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlInteger` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlLanguage Interface

public interface XmlLanguage

extends XmlToken

Corresponds to the XML Schema xs:language type.

This type is intended to represent an standard ISO language code string.

Convertible to a Java String.

All Superinterfaces

XmlAnySimpleType, XmlNormalizedString, XmlObject, XmlString, XmlToken, XmlTokenSource

Nested Class Summary

```
public static final class XmlLanguage.Factory
    A class with methods for creating instances of XmlLanguage.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlNormalizedString

XmlNormalizedString.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Nested classes from interface com.bea.xml.XmlString

XmlString.Factory

Nested classes from interface com.bea.xml.XmlToken

XmlToken.Factory

Field Summary

```

    public
    static type
final SchemaType

```

The constant SchemaType object representing this schema type.

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlNormalizedString

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Fields from interface com.bea.xml.XmlString

type

Fields from interface com.bea.xml.XmlToken

type

Method Summary

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface com.bea.xml.XmlObject

changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode

Methods from interface com.bea.xml.XmlTokenSource

documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

XmlLanguage.Factory Class

public static final class XmlLanguage.Factory

extends Object

A class with methods for creating instances of XmlLanguage.

Hierarchy

```
Object
  XmlLanguage.Factory
```

Enclosing interface

```
XmlLanguage
```

Method Summary

```
public static
  XmlLanguage newInstance()
    Creates an empty instance of XmlLanguage
```

```
public static
  XmlLanguage newInstance(XmlOptions options)
    Creates an empty instance of XmlLanguage
```

```
public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.
```

```
public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
  options)
    Returns a validating XMLInputStream.
```

```
public static
  XmlLanguage newValue(Object obj)
    Creates an immutable XmlLanguage value
```

```
public static
  XmlLanguage parse(String s)
    Parses a XmlLanguage fragment from a String.
```

```
public static
  XmlLanguage parse(String s, XmlOptions options)
    Parses a XmlLanguage fragment from a String.
```

```
public static
  XmlLanguage parse(File f)
    Parses a XmlLanguage fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlLanguage      Parses a XmlLanguage fragment from a File.
public static
    XmlLanguage parse(URL u)
    Parses a XmlLanguage fragment from a URL.
public static
    XmlLanguage parse(URL u, XmlOptions options)
    Parses a XmlLanguage fragment from a URL.
public static
    XmlLanguage parse(InputStream is)
    Parses a XmlLanguage fragment from an InputStream.
public static
    XmlLanguage parse(InputStream is, XmlOptions options)
    Parses a XmlLanguage fragment from an InputStream.
public static
    XmlLanguage parse(Reader r)
    Parses a XmlLanguage fragment from a Reader.
public static
    XmlLanguage parse(Reader r, XmlOptions options)
    Parses a XmlLanguage fragment from a Reader.
public static
    XmlLanguage parse(Node node)
    Parses a XmlLanguage fragment from a DOM Node.
public static
    XmlLanguage parse(Node node, XmlOptions options)
    Parses a XmlLanguage fragment from a DOM Node.
public static
    XmlLanguage parse(XMLInputStream xis)
    Parses a XmlLanguage fragment from an XMLInputStream.
public static
    XmlLanguage parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlLanguage fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlLanguage newInstance()
```

Creates an empty instance of `XmlLanguage`

newInstance(XmlOptions) Method

```
public static XmlLanguage newInstance(XmlOptions options)
```

Creates an empty instance of XmlLanguage

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlLanguage newValue(Object obj)
```

Creates an immutable XmlLanguage value

parse(String) Method

```
public static XmlLanguage parse(String s)
    throws XmlException
```


Parses a `XmlLanguage` fragment from a `String`. For example:
"<xml-fragment>en-us</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlLanguage parse(String s,  
                                XmlOptions options)  
    throws XmlException
```

Parses a `XmlLanguage` fragment from a `String`. For example:
"<xml-fragment>en-us</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlLanguage parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlLanguage` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlLanguage parse(File f,  
                                XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlLanguage` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlLanguage parse(URL u)
    throws XmlException, IOException
```

Parses a XmlLanguage fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlLanguage parse(URL u,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlLanguage fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlLanguage parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlLanguage fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlLanguage parse(InputStream is,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlLanguage fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlLanguage parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlLanguage fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlLanguage parse(Reader r,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlLanguage fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlLanguage parse(Node node)
    throws XmlException
```

Parses a XmlLanguage fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlLanguage parse(Node node,
                                XmlOptions options)
    throws XmlException
```


Parses a XmlLanguage fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlLanguage parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlLanguage fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlLanguage parse(XMLInputStream xis,
                                XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlLanguage fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

XmlLineNumber Class

public class XmlLineNumber

extends `XmlCursor.XmlBookmark`

A subclass of `XmlBookmark` that holds line number information. If a document is parsed with line numbers enabled, these bookmarks will be placed at appropriate locations within the document.

Related Topics

`XmlOptions.setLoadLineNumbers()`

Hierarchy

Object
 `XmlCursor.XmlBookmark`
 `XmlLineNumber`

Field Summary

Fields from `com.bea.xml.XmlCursor.XmlBookmark`

`_currentMark`, `_ref`

Constructor Summary

`XmlLineNumber(int line, int column, int offset)`

Constructs a line number and column with no file offset information.

`XmlLineNumber(int line, int column)`

Constructs a line number and column with no file offset information.

`XmlLineNumber(int line)`

Constructs a line number with no column or offset information.

Method Summary

```
public
    int getColumn()
        Returns the 1-based column number, or -1 if not
        known.

public
    int getLine()
        Returns the 1-based line number, or -1 if not known.

public
    int getOffset()
        Returns the 0-based file offset number, or -1 if not
        known.
```

Methods from `com.bea.xml.XmlCursor.XmlBookmark`

`createCursor`, `getKey`, `toBookmark`

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Constructor Detail

XmlLineNumber

```
public XmlLineNumber(int line,
                    int column,
                    int offset)
```

Constructs a line number and column with no file offset information.

XmlLineNumber

```
public XmlLineNumber(int line,
                    int column)
```

Constructs a line number and column with no file offset information.

XmlLineNumber

```
public XmlLineNumber(int line)
```

Constructs a line number with no column or offset information.

Method Detail

getColumn() Method

```
public int getColumn()
```

Returns the 1-based column number, or -1 if not known.

getLine() Method

```
public int getLine()
```

Returns the 1-based line number, or -1 if not known.

getOffset() Method

```
public int getOffset()
```

Returns the 0-based file offset number, or -1 if not known.

XmlLong Interface

public interface XmlLong

extends XmlInteger

Corresponds to the XML Schema xs:long type. One of the derived types based on xs:decimal.

Naturally, convertible to a Java long.

All Superinterfaces

XmlAnySimpleType, XmlDecimal, XmlInteger, XmlObject, XmlTokenSource

All Known Subinterfaces

XmlByte, XmlInt, XmlShort

Nested Class Summary

```
public static final class XmlLong.Factory
    A class with methods for creating instances of XmlLong.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlDecimal

XmlDecimal.Factory

Nested classes from interface com.bea.xml.XmlInteger

XmlInteger.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
public static type
```


`final SchemaType` The constant `SchemaType` object representing this schema type.

Fields from interface `com.bea.xml.XmlAnySimpleType`

`type`

Fields from interface `com.bea.xml.XmlDecimal`

`type`

Fields from interface `com.bea.xml.XmlInteger`

`type`

Fields from interface `com.bea.xml.XmlObject`

`EQUAL`, `GREATER_THAN`, `LESS_THAN`, `NOT_EQUAL`, `type`

Method Summary

```
public
    long getLongValue()
        Returns this value as a
        long

public
    long longValue()
        Returns this value as a
        long

public
    void set(long v)
        Sets this value as a long

public
    void setLongValue(long v)
        Sets this value as a long
```

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlDecimal`

`bigDecimalValue`, `getBigDecimalValue`, `set`, `setBigDecimalValue`

Methods from interface `com.bea.xml.XmlInteger`

`bigIntegerValue`, `getBigIntegerValue`, `set`, `setBigIntegerValue`

Methods from interface `com.bea.xml.XmlObject`

changeType, compareTo, compareValue, copy, execQuery, execQuery,
 isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
 toString, validate, validate, valueEquals, valueHashCode

Methods from interface `com.bea.xml.XmlTokenSource`

documentProperties, monitor, newCursor, newDomNode, newDomNode,
 newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
 newXMLInputStream, save, save, save, save, save, save, save, save,
 xmlText, xmlText

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Method Detail

getLongValue() Method

```
public long getLongValue()
```

Returns this value as a long

longValue() Method

DEPRECATED replaced with `com.bea.xml.XmlLong.getLongValue()`

```
public long longValue()
```

Returns this value as a long

set(long) Method

DEPRECATED replaced with `com.bea.xml.XmlLong.setLongValue(long)`

```
public void set(long v)
```

Sets this value as a long

setLongValue(long) Method

```
public void setLongValue(long v)
```

Sets this value as a long

XmlLong.Factory Class

public static final class XmlLong.Factory

extends Object

A class with methods for creating instances of XmlLong.

Hierarchy

```
Object
  XmlLong.Factory
```

Enclosing interface

```
XmlLong
```

Method Summary

```
public static
    XmlLong newInstance()
        Creates an empty instance of XmlLong

public static
    XmlLong newInstance(XmlOptions options)
        Creates an empty instance of XmlLong

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlLong newValue(Object obj)
        Creates an immutable XmlLong value

public static
    XmlLong parse(String s)
        Parses a XmlLong fragment from a String.

public static
    XmlLong parse(String s, XmlOptions options)
        Parses a XmlLong fragment from a String.

public static
    XmlLong parse(File f)
        Parses a XmlLong fragment from a File.
```


XMLBeans API Reference

```
public static parse(File f, XmlOptions options)
    XmlLong      Parses a XmlLong fragment from a File.
public static
    XmlLong parse(URL u)
    Parses a XmlLong fragment from a URL.
public static
    XmlLong parse(URL u, XmlOptions options)
    Parses a XmlLong fragment from a URL.
public static
    XmlLong parse(InputStream is)
    Parses a XmlLong fragment from an InputStream.
public static
    XmlLong parse(InputStream is, XmlOptions options)
    Parses a XmlLong fragment from an InputStream.
public static
    XmlLong parse(Reader r)
    Parses a XmlLong fragment from a Reader.
public static
    XmlLong parse(Reader r, XmlOptions options)
    Parses a XmlLong fragment from a Reader.
public static
    XmlLong parse(Node node)
    Parses a XmlLong fragment from a DOM Node.
public static
    XmlLong parse(Node node, XmlOptions options)
    Parses a XmlLong fragment from a DOM Node.
public static
    XmlLong parse(XMLInputStream xis)
    Parses a XmlLong fragment from an XMLInputStream.
public static
    XmlLong parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlLong fragment from an XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlLong newInstance()
```

Creates an empty instance of `XmlLong`

newInstance(XmlOptions) Method

```
public static XmlLong newInstance(XmlOptions options)
```

Creates an empty instance of XmlLong

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlLong newValue(Object obj)
```

Creates an immutable XmlLong value

parse(String) Method

```
public static XmlLong parse(String s)
    throws XmlException
```


Parses a XmlLong fragment from a String. For example:
"<xml-fragment>123456789</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlLong parse(String s,  
                             XmlOptions options)  
    throws XmlException
```

Parses a XmlLong fragment from a String. For example:
"<xml-fragment>123456789</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlLong parse(File f)  
    throws XmlException, IOException
```

Parses a XmlLong fragment from a File.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlLong parse(File f,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlLong fragment from a File.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlLong parse(URL u)
    throws XmlException, IOException
```

Parses a XmlLong fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlLong parse(URL u,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlLong fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlLong parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlLong fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlLong parse(InputStream is,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlLong fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlLong parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlLong fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlLong parse(Reader r,
                           XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlLong fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlLong parse(Node node)
    throws XmlException
```

Parses a XmlLong fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlLong parse(Node node,
                           XmlOptions options)
    throws XmlException
```


Parses a XmlLong fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlLong parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlLong fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlLong parse(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlLong fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

XmlName Interface

public interface XmlName

extends XmlToken

Corresponds to the XML Schema xs:Name type. One of the derived types based on xs:string.

This kind of string is the same as the lexical representation used for XML 1.0 element and attribute names, e.g., "pre:a-b.cdef". It is just a physical string, however, and it should NOT be confused with XmlQName, which is a logical combination of localname and namespace URI.

Convertible to String.

All Superinterfaces

XmlAnySimpleType, XmlNormalizedString, XmlObject, XmlString, XmlToken, XmlTokenSource

All Known Subinterfaces

XmlENTITY, XmlID, XmlIDREF, XmlNCName

Nested Class Summary

```

    public static final class XmlName.Factory
        A class with methods for creating instances of XmlName.

```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlNormalizedString

XmlNormalizedString.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Nested classes from interface com.bea.xml.XmlString

XmlString.Factory

Nested classes from interface `com.bea.xml.XmlToken``XmlToken.Factory`**Field Summary**

```

    public
    static type
final SchemaType

```

The constant `SchemaType` object representing this schema type.**Fields from interface `com.bea.xml.XmlAnySimpleType`**`type`**Fields from interface `com.bea.xml.XmlNormalizedString`**`type`**Fields from interface `com.bea.xml.XmlObject`**`EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type`**Fields from interface `com.bea.xml.XmlString`**`type`**Fields from interface `com.bea.xml.XmlToken`**`type`**Method Summary****Methods from interface `com.bea.xml.XmlAnySimpleType`**`getStringValue, set, setStringValue, stringValue`**Methods from interface `com.bea.xml.XmlObject`**`changeType, compareTo, compareValue, copy, execQuery, execQuery, isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil, toString, validate, validate, valueEquals, valueHashCode`**Methods from interface `com.bea.xml.XmlTokenSource`**`documentProperties, monitor, newCursor, newDomNode, newDomNode, newInputStream, newInputStream, newReader, newReader, newXMLInputStream, newXMLInputStream, save, save, save, save, save, save, save, save, save, save, xmlText, xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

XmlName.Factory Class

public static final class XmlName.Factory

extends Object

A class with methods for creating instances of XmlName.

Hierarchy

```
Object
  XmlName.Factory
```

Enclosing interface

```
XmlName
```

Method Summary

```
public static
    XmlName newInstance()
        Creates an empty instance of XmlName

public static
    XmlName newInstance(XmlOptions options)
        Creates an empty instance of XmlName

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlName newValue(Object obj)
        Creates an immutable XmlName value

public static
    XmlName parse(String s)
        Parses a XmlName fragment from a String.

public static
    XmlName parse(String s, XmlOptions options)
        Parses a XmlName fragment from a String.

public static
    XmlName parse(File f)
        Parses a XmlName fragment from a File.
```


XMLBeans API Reference

```
public static parse(File f, XmlOptions options)
    XmlName      Parses a XmlName fragment from a File.
public static
    XmlName parse(URL u)
    Parses a XmlName fragment from a URL.
public static
    XmlName parse(URL u, XmlOptions options)
    Parses a XmlName fragment from a URL.
public static
    XmlName parse(InputStream is)
    Parses a XmlName fragment from an InputStream.
public static
    XmlName parse(InputStream is, XmlOptions options)
    Parses a XmlName fragment from an InputStream.
public static
    XmlName parse(Reader r)
    Parses a XmlName fragment from a Reader.
public static
    XmlName parse(Reader r, XmlOptions options)
    Parses a XmlName fragment from a Reader.
public static
    XmlName parse(Node node)
    Parses a XmlName fragment from a DOM Node.
public static
    XmlName parse(Node node, XmlOptions options)
    Parses a XmlName fragment from a DOM Node.
public static
    XmlName parse(XMLInputStream xis)
    Parses a XmlName fragment from an XMLInputStream.
public static
    XmlName parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlName fragment from an XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlName newInstance()
```

Creates an empty instance of `XmlName`

newInstance(XmlOptions) Method

```
public static XmlName newInstance(XmlOptions options)
```

Creates an empty instance of XmlName

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlName newValue(Object obj)
```

Creates an immutable XmlName value

parse(String) Method

```
public static XmlName parse(String s)
    throws XmlException
```


Parses a `XmlName` fragment from a `String`. For example:
"<xml-fragment>My:Name</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlName parse(String s,  
                             XmlOptions options)  
    throws XmlException
```

Parses a `XmlName` fragment from a `String`. For example:
"<xml-fragment>My:Name</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlName parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlName` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlName parse(File f,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlName` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlName parse(URL u)
    throws XmlException, IOException
```

Parses a XmlName fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlName parse(URL u,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlName fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlName parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlName fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlName parse(InputStream is,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlName fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlName parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlName fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlName parse(Reader r,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlName fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlName parse(Node node)
    throws XmlException
```

Parses a XmlName fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlName parse(Node node,
                             XmlOptions options)
    throws XmlException
```


Parses a `XmlName` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XmlName parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlName` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlName parse(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlName` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlNCName Interface

public interface XmlNCName

extends XmlName

Corresponds to the XML Schema xs:Name type. One of the derived types based on xs:string.

This kind of string is the same as the non-colonized strings that are used for XML localnames and prefixes, "my-href.2". It is just a physical string, however, and it should NOT be confused with XmlQName, which is a logical combination of localname and namespace URI.

Convertible to String.

All Superinterfaces

XmlAnySimpleType, XmlName, XmlNormalizedString, XmlObject, XmlString, XmlToken, XmlTokenSource

All Known Subinterfaces

XmlENTITY, XmlID, XmlIDREF

Nested Class Summary

```

    public static final class XmlNCName.Factory
    A class with methods for creating instances of XmlNCName.

```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlName

XmlName.Factory

Nested classes from interface com.bea.xml.XmlNormalizedString

XmlNormalizedString.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Nested classes from interface com.bea.xml.XmlString

XmlString.Factory

Nested classes from interface com.bea.xml.XmlToken

XmlToken.Factory

Field Summary

```

    public
    static type
final SchemaType

```

The constant SchemaType object representing this schema type.

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlName

type

Fields from interface com.bea.xml.XmlNormalizedString

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Fields from interface com.bea.xml.XmlString

type

Fields from interface com.bea.xml.XmlToken

type

Method Summary

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface com.bea.xml.XmlObjectchangeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,

`toString, validate, validate, valueEquals, valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText`

Field Detail

type

`public static final SchemaType type`

The constant `SchemaType` object representing this schema type.

XmlNCName.Factory Class

public static final class XmlNCName.Factory

extends Object

A class with methods for creating instances of XmlNCName.

Hierarchy

```
Object
  XmlNCName.Factory
```

Enclosing interface

```
XmlNCName
```

Method Summary

```
public static
    XmlNCName newInstance()
        Creates an empty instance of XmlNCName

public static
    XmlNCName newInstance(XmlOptions options)
        Creates an empty instance of XmlNCName

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlNCName newValue(Object obj)
        Creates an immutable XmlNCName value

public static
    XmlNCName parse(String s)
        Parses a XmlNCName fragment from a String.

public static
    XmlNCName parse(String s, XmlOptions options)
        Parses a XmlNCName fragment from a String.

public static
    XmlNCName parse(File f)
        Parses a XmlNCName fragment from a File.
```


XMLBeans API Reference

```
public static parse(File f, XmlOptions options)
    XmlNCName      Parses a XmlNCName fragment from a File.
public static
    XmlNCName parse(URL u)
    Parses a XmlNCName fragment from a URL.
public static
    XmlNCName parse(URL u, XmlOptions options)
    Parses a XmlNCName fragment from a URL.
public static
    XmlNCName parse(InputStream is)
    Parses a XmlNCName fragment from an InputStream.
public static
    XmlNCName parse(InputStream is, XmlOptions options)
    Parses a XmlNCName fragment from an InputStream.
public static
    XmlNCName parse(Reader r)
    Parses a XmlNCName fragment from a Reader.
public static
    XmlNCName parse(Reader r, XmlOptions options)
    Parses a XmlNCName fragment from a Reader.
public static
    XmlNCName parse(Node node)
    Parses a XmlNCName fragment from a DOM Node.
public static
    XmlNCName parse(Node node, XmlOptions options)
    Parses a XmlNCName fragment from a DOM Node.
public static
    XmlNCName parse(XMLInputStream xis)
    Parses a XmlNCName fragment from an XMLInputStream.
public static
    XmlNCName parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlNCName fragment from an XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlNCName newInstance()
```

Creates an empty instance of `XmlNCName`

newInstance(XmlOptions) Method

```
public static XmlNCName newInstance(XmlOptions options)
```

Creates an empty instance of XmlNCName

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlNCName newValue(Object obj)
```

Creates an immutable XmlNCName value

parse(String) Method

```
public static XmlNCName parse(String s)
    throws XmlException
```


Parses a `XmlNCName` fragment from a `String`. For example:
"<xml-fragment>My-Name</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlNCName parse(String s,  
                               XmlOptions options)  
    throws XmlException
```

Parses a `XmlNCName` fragment from a `String`. For example:
"<xml-fragment>My-Name</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlNCName parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlNCName` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlNCName parse(File f,  
                               XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlNCName` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlNCName parse(URL u)
    throws XmlException, IOException
```

Parses a XmlNCName fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlNCName parse(URL u,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlNCName fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlNCName parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlNCName fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlNCName parse(InputStream is,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlNCName fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlNCName parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlNCName fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlNCName parse(Reader r,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlNCName fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlNCName parse(Node node)
    throws XmlException
```

Parses a XmlNCName fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlNCName parse(Node node,
                               XmlOptions options)
    throws XmlException
```


Parses a `XmlNCName` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlNCName parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlNCName` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlNCName parse(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlNCName` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlNegativeInteger Interface

public interface XmlNegativeInteger

extends XmlNonPositiveInteger

Corresponds to the XML Schema xs:negativeInteger type. One of the derived types based on xs:decimal.

Verified to be negative when validating.

Convertible to BigInteger.

All Superinterfaces

XmlAnySimpleType, XmlDecimal, XmlInteger, XmlNonPositiveInteger, XmlObject, XmlTokenSource

Nested Class Summary

```
public static final class XmlNegativeInteger.Factory
    A class with methods for creating instances of XmlNegativeInteger.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlDecimal

XmlDecimal.Factory

Nested classes from interface com.bea.xml.XmlInteger

XmlInteger.Factory

Nested classes from interface com.bea.xml.XmlNonPositiveInteger

XmlNonPositiveInteger.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```

    public
    static type
final SchemaType

```

The constant SchemaType object representing this schema type.

Fields from interface `com.bea.xml.XmlAnySimpleType`

`type`

Fields from interface `com.bea.xml.XmlDecimal`

`type`

Fields from interface `com.bea.xml.XmlInteger`

`type`

Fields from interface `com.bea.xml.XmlNonPositiveInteger`

`type`

Fields from interface `com.bea.xml.XmlObject`

`EQUAL`, `GREATER_THAN`, `LESS_THAN`, `NOT_EQUAL`, `type`

Method Summary

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlDecimal`

`bigDecimalValue`, `getBigDecimalValue`, `set`, `setBigDecimalValue`

Methods from interface `com.bea.xml.XmlInteger`

`bigIntegerValue`, `getBigIntegerValue`, `set`, `setBigIntegerValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`, `isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`, `toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText`

Field Detail

type

`public static final SchemaType type`

The constant `SchemaType` object representing this schema type.

XmlNegativeInteger.Factory Class

public static final class XmlNegativeInteger.Factory

extends Object

A class with methods for creating instances of XmlNegativeInteger.

Hierarchy

```
Object
  XmlNegativeInteger.Factory
```

Enclosing interface

```
XmlNegativeInteger
```

Method Summary

```
public static
XmlNegativeInteger newInstance()
    Creates an empty instance of XmlNegativeInteger

public static
XmlNegativeInteger newInstance(XmlOptions options)
    Creates an empty instance of XmlNegativeInteger

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
options)
    Returns a validating XMLInputStream.

public static
XmlNegativeInteger newValue(Object obj)
    Creates an immutable XmlNegativeInteger value

public static
XmlNegativeInteger parse(String s)
    Parses a XmlNegativeInteger fragment from a String.

public static
XmlNegativeInteger parse(String s, XmlOptions options)
    Parses a XmlNegativeInteger fragment from a String.

public static
XmlNegativeInteger parse(File f)
    Parses a XmlNegativeInteger fragment from a File.
```


XMLBeans API Reference

```
    public static parse(File f, XmlOptions options)
XmlNegativeInteger      Parses a XmlNegativeInteger fragment from a File.

    public static
XmlNegativeInteger parse(URL u)
                        Parses a XmlNegativeInteger fragment from a URL.

    public static
XmlNegativeInteger parse(URL u, XmlOptions options)
                        Parses a XmlNegativeInteger fragment from a URL.

    public static
XmlNegativeInteger parse(InputStream is)
                        Parses a XmlNegativeInteger fragment from an InputStream.

    public static
XmlNegativeInteger parse(InputStream is, XmlOptions options)
                        Parses a XmlNegativeInteger fragment from an InputStream.

    public static
XmlNegativeInteger parse(Reader r)
                        Parses a XmlNegativeInteger fragment from a Reader.

    public static
XmlNegativeInteger parse(Reader r, XmlOptions options)
                        Parses a XmlNegativeInteger fragment from a Reader.

    public static
XmlNegativeInteger parse(Node node)
                        Parses a XmlNegativeInteger fragment from a DOM Node.

    public static
XmlNegativeInteger parse(Node node, XmlOptions options)
                        Parses a XmlNegativeInteger fragment from a DOM Node.

    public static
XmlNegativeInteger parse(XMLInputStream xis)
                        Parses a XmlNegativeInteger fragment from an XMLInputStream.

    public static
XmlNegativeInteger parse(XMLInputStream xis, XmlOptions options)
                        Parses a XmlNegativeInteger fragment from an XMLInputStream.
```

Methods from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll,
toString, wait, wait, wait

Method Detail

newInstance() Method

```
public static XmlNegativeInteger newInstance()
```

Creates an empty instance of XmlNegativeInteger

newInstance(XmlOptions) Method

```
public static XmlNegativeInteger newInstance(XmlOptions options)
```

Creates an empty instance of XmlNegativeInteger

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlNegativeInteger newValue(Object obj)
```

Creates an immutable XmlNegativeInteger value

parse(String) Method

```
public static XmlNegativeInteger parse(String s)
    throws XmlException
```


Parses a `XmlNegativeInteger` fragment from a String. For example:
"<xml-fragment>-1234567890</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlNegativeInteger parse(String s,  
                                     XmlOptions options)  
    throws XmlException
```

Parses a `XmlNegativeInteger` fragment from a String. For example:
"<xml-fragment>-1234567890</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlNegativeInteger parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlNegativeInteger` fragment from a File.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlNegativeInteger parse(File f,  
                                     XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlNegativeInteger` fragment from a File.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlNegativeInteger parse(URL u)
    throws XmlException, IOException
```

Parses a `XmlNegativeInteger` fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlNegativeInteger parse(URL u,
                                       XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlNegativeInteger` fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlNegativeInteger parse(InputStream is)
    throws XmlException, IOException
```

Parses a `XmlNegativeInteger` fragment from an `InputStream`.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlNegativeInteger parse(InputStream is,
                                       XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlNegativeInteger` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlNegativeInteger parse(Reader r)
    throws XmlException, IOException
```

Parses a `XmlNegativeInteger` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlNegativeInteger parse(Reader r,
                                       XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlNegativeInteger` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlNegativeInteger parse(Node node)
    throws XmlException
```

Parses a `XmlNegativeInteger` fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlNegativeInteger parse(Node node,
                                       XmlOptions options)
    throws XmlException
```


Parses a `XmlNegativeInteger` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XmlNegativeInteger parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlNegativeInteger` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlNegativeInteger parse(XMLInputStream xis,
                                       XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlNegativeInteger` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlNMTOKEN Interface

public interface **XmlNMTOKEN**

extends XmlToken

Corresponds to the XML Schema xs:NMTOKEN type. One of the derived types based on xs:string.

An NMTOKEN is XML's closest concept to an "identifier"; for example, it does not permit spaces and only limited punctuation. So NMTOKEN is commonly used to describe a single token or enumerated string value.

Convertible to String.

All Superinterfaces

XmlAnySimpleType, XmlNormalizedString, XmlObject, XmlString, XmlToken, XmlTokenSource

Nested Class Summary

```

    public static final class XmlNMTOKEN.Factory
    A class with methods for creating instances of XmlNMTOKEN.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlNormalizedString

XmlNormalizedString.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Nested classes from interface com.bea.xml.XmlString

XmlString.Factory

Nested classes from interface com.bea.xml.XmlToken

XmlToken.Factory

Field Summary

```

    public
    static type
final SchemaType

```

The constant SchemaType object representing this schema type.

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlNormalizedString

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Fields from interface com.bea.xml.XmlString

type

Fields from interface com.bea.xml.XmlToken

type

Method Summary

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface com.bea.xml.XmlObject

changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode

Methods from interface com.bea.xml.XmlTokenSource

documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

XmlNMToken.Factory Class

public static final class XmlNMToken.Factory

extends Object

A class with methods for creating instances of XmlNMToken.

Hierarchy

```
Object
  XmlNMToken.Factory
```

Enclosing interface

```
XmlNMToken
```

Method Summary

```
public static
  XmlNMToken newInstance()
    Creates an empty instance of XmlNMToken

public static
  XmlNMToken newInstance(XmlOptions options)
    Creates an empty instance of XmlNMToken

public static
  XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
  XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
  XmlNMToken newValue(Object obj)
    Creates an immutable XmlNMToken value

public static
  XmlNMToken parse(String s)
    Parses a XmlNMToken fragment from a String.

public static
  XmlNMToken parse(String s, XmlOptions options)
    Parses a XmlNMToken fragment from a String.

public static
  XmlNMToken parse(File f)
    Parses a XmlNMToken fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlNMToken      Parses a XmlNMToken fragment from a File.
public static
    XmlNMToken parse(URL u)
    Parses a XmlNMToken fragment from a URL.
public static
    XmlNMToken parse(URL u, XmlOptions options)
    Parses a XmlNMToken fragment from a URL.
public static
    XmlNMToken parse(InputStream is)
    Parses a XmlNMToken fragment from an InputStream.
public static
    XmlNMToken parse(InputStream is, XmlOptions options)
    Parses a XmlNMToken fragment from an InputStream.
public static
    XmlNMToken parse(Reader r)
    Parses a XmlNMToken fragment from a Reader.
public static
    XmlNMToken parse(Reader r, XmlOptions options)
    Parses a XmlNMToken fragment from a Reader.
public static
    XmlNMToken parse(Node node)
    Parses a XmlNMToken fragment from a DOM Node.
public static
    XmlNMToken parse(Node node, XmlOptions options)
    Parses a XmlNMToken fragment from a DOM Node.
public static
    XmlNMToken parse(XMLInputStream xis)
    Parses a XmlNMToken fragment from an XMLInputStream.
public static
    XmlNMToken parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlNMToken fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlNMToken newInstance()
```

Creates an empty instance of `XmlNMToken`

newInstance(XmlOptions) Method

```
public static XmlNMToken newInstance(XmlOptions options)
```

Creates an empty instance of XmlNMToken

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlNMToken newValue(Object obj)
```

Creates an immutable XmlNMToken value

parse(String) Method

```
public static XmlNMToken parse(String s)
    throws XmlException
```


Parses a XmlNMToken fragment from a String. For example:
"<xml-fragment>sample-1.2</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlNMToken parse(String s,  
                               XmlOptions options)  
    throws XmlException
```

Parses a XmlNMToken fragment from a String. For example:
"<xml-fragment>sample-1.2</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlNMToken parse(File f)  
    throws XmlException, IOException
```

Parses a XmlNMToken fragment from a File.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlNMToken parse(File f,  
                               XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlNMToken fragment from a File.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlNMToken parse(URL u)
    throws XmlException, IOException
```

Parses a XmlNMToken fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlNMToken parse(URL u,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlNMToken fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlNMToken parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlNMToken fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlNMToken parse(InputStream is,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlNMToken fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlNMToken parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlNMToken fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlNMToken parse(Reader r,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlNMToken fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlNMToken parse(Node node)
    throws XmlException
```

Parses a XmlNMToken fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlNMToken parse(Node node,
                               XmlOptions options)
    throws XmlException
```


Parses a XmlNMToken fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XmlNMToken parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlNMToken fragment from an XMLInputStream.

Exceptions

XmlException
XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlNMToken parse(XMLInputStream xis,
                               XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlNMToken fragment from an XMLInputStream.

Exceptions

XmlException
XMLStreamException

XmlNMTOKENS Interface

public interface **XmlNMTOKENS**

extends XmlAnySimpleType

Corresponds to the XML Schema xs:NMTOKENS type, a list type.

Convertible to List.

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
public static final class XmlNMTOKENS.Factory
    A class with methods for creating instances of XmlNMTOKENS.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
public static final SchemaType type
    The constant SchemaType object representing this schema type.
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

public
    List getListValue()
        Returns the value as a List of String values

public
    List listValue()
        Returns the value as a List of String values

public
    void set(List l)
        Sets the value as a List

public
    void setListValue(List l)
        Sets the value as a List

public
    List xgetListValue()
        Returns the value as a List of XmlNMToken
        values

public
    List xlistValue()
        Returns the value as a List of XmlNMToken
        values

```

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`,
`isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`,
`toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`,
`newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`,
`newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`,
`xmlText`, `xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Method Detail

getListValue() Method

```
public List getListValue()
```

Returns the value as a List of String values

listValue() Method

DEPRECATED replaced by `com.bea.xml.XmlNMOKENS.getListValue()`

```
public List listValue()
```

Returns the value as a List of String values

set(List) Method

DEPRECATED replaced by `com.bea.xml.XmlNMOKENS.getListValue()`

```
public void set(List l)
```

Sets the value as a List

setListValue(List) Method

```
public void setListValue(List l)
```

Sets the value as a List

xgetListValue() Method

```
public List xgetListValue()
```

Returns the value as a List of XmlNMOKEN values

xlistValue() Method

DEPRECATED replaced by `com.bea.xml.XmlNMOKENS.getListValue()`

```
public List xlistValue()
```


Returns the value as a List of XmlNMToken values

XmlNMTOKENS.Factory Class

public static final class XmlNMTOKENS.Factory

extends Object

A class with methods for creating instances of XmlNMTOKENS.

Hierarchy

```
Object
  XmlNMTOKENS.Factory
```

Enclosing interface

```
XmlNMTOKENS
```

Method Summary

```
public static
  XmlNMTOKENS newInstance()
    Creates an empty instance of XmlNMTOKENS

public static
  XmlNMTOKENS newInstance(XmlOptions options)
    Creates an empty instance of XmlNMTOKENS

public static
  XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
  XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
  XmlNMTOKENS newValue(Object obj)
    Creates an immutable XmlNMTOKENS value

public static
  XmlNMTOKENS parse(String s)
    Parses a XmlNMTOKENS fragment from a String.

public static
  XmlNMTOKENS parse(String s, XmlOptions options)
    Parses a XmlNMTOKENS fragment from a String.

public static
  XmlNMTOKENS parse(File f)
    Parses a XmlNMTOKENS fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlNMTOKENS      Parses a XmlNMTOKENS fragment from a File.
public static
    XmlNMTOKENS parse(URL u)
    Parses a XmlNMTOKENS fragment from a URL.
public static
    XmlNMTOKENS parse(URL u, XmlOptions options)
    Parses a XmlNMTOKENS fragment from a URL.
public static
    XmlNMTOKENS parse(InputStream is)
    Parses a XmlNMTOKENS fragment from an InputStream.
public static
    XmlNMTOKENS parse(InputStream is, XmlOptions options)
    Parses a XmlNMTOKENS fragment from an InputStream.
public static
    XmlNMTOKENS parse(Reader r)
    Parses a XmlNMTOKENS fragment from a Reader.
public static
    XmlNMTOKENS parse(Reader r, XmlOptions options)
    Parses a XmlNMTOKENS fragment from a Reader.
public static
    XmlNMTOKENS parse(Node node)
    Parses a XmlNMTOKENS fragment from a DOM Node.
public static
    XmlNMTOKENS parse(Node node, XmlOptions options)
    Parses a XmlNMTOKENS fragment from a DOM Node.
public static
    XmlNMTOKENS parse(XMLInputStream xis)
    Parses a XmlNMTOKENS fragment from an XMLInputStream.
public static
    XmlNMTOKENS parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlNMTOKENS fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlNMTOKENS newInstance()
```

Creates an empty instance of `XmlNMTOKENS`

newInstance(XmlOptions) Method

```
public static XmlNMOKENS newInstance(XmlOptions options)
```

Creates an empty instance of XmlNMOKENS

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlNMOKENS newValue(Object obj)
```

Creates an immutable XmlNMOKENS value

parse(String) Method

```
public static XmlNMOKENS parse(String s)
    throws XmlException
```


Parses a XmlNMTOKENS fragment from a String. For example: "<xml-fragment>sample-1.1 sample-1.2 sample-1.3</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlNMTOKENS parse(String s,
                                XmlOptions options)
    throws XmlException
```

Parses a XmlNMTOKENS fragment from a String. For example: "<xml-fragment>sample-1.1 sample-1.2 sample-1.3</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlNMTOKENS parse(File f)
    throws XmlException, IOException
```

Parses a XmlNMTOKENS fragment from a File.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlNMTOKENS parse(File f,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlNMTOKENS fragment from a File.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlNMOKENS parse(URL u)
    throws XmlException, IOException
```

Parses a XmlNMOKENS fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlNMOKENS parse(URL u,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlNMOKENS fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlNMOKENS parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlNMOKENS fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlNMOKENS parse(InputStream is,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlNMOKENS fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlNMOKENS parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlNMOKENS fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlNMOKENS parse(Reader r,
                                XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlNMOKENS fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlNMOKENS parse(Node node)
    throws XmlException
```

Parses a XmlNMOKENS fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlNMOKENS parse(Node node,
                                XmlOptions options)
    throws XmlException
```


Parses a XmlNMTOKENS fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlNMTOKENS parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlNMTOKENS fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlNMTOKENS parse(XMLInputStream xis,
                                XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlNMTOKENS fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

XmlNonNegativeInteger Interface

public interface XmlNonNegativeInteger

extends XmlInteger

Corresponds to the XML Schema xs:nonNegativeInteger type. One of the derived types based on xs:decimal.

Verified to be zero or positive when validating.

Convertible to BigInteger.

All Superinterfaces

XmlAnySimpleType, XmlDecimal, XmlInteger, XmlObject, XmlTokenSource

All Known Subinterfaces

XmlPositiveInteger, XmlUnsignedByte, XmlUnsignedInt, XmlUnsignedLong, XmlUnsignedShort

Nested

Class

Summary

```
public
static XmlNonNegativeInteger.Factory
final class      A class with methods for creating instances of XmlNonNegativeInteger.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlDecimal

XmlDecimal.Factory

Nested classes from interface com.bea.xml.XmlInteger

XmlInteger.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```

    public
    static type
final SchemaType

```

The constant SchemaType object representing this schema type.

Fields from interface `com.bea.xml.XmlAnySimpleType`

`type`

Fields from interface `com.bea.xml.XmlDecimal`

`type`

Fields from interface `com.bea.xml.XmlInteger`

`type`

Fields from interface `com.bea.xml.XmlObject`

`EQUAL`, `GREATER_THAN`, `LESS_THAN`, `NOT_EQUAL`, `type`

Method Summary

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlDecimal`

`bigDecimalValue`, `getBigDecimalValue`, `set`, `setBigDecimalValue`

Methods from interface `com.bea.xml.XmlInteger`

`bigIntegerValue`, `getBigIntegerValue`, `set`, `setBigIntegerValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`, `isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`, `toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`, `newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`, `newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `xmlText`, `xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

XmlNonNegativeInteger.Factory Class

public static final class XmlNonNegativeInteger.Factory

extends Object

A class with methods for creating instances of XmlNonNegativeInteger.

Hierarchy

```

Object
  XmlNonNegativeInteger.Factory
  
```

Enclosing interface

```

XmlNonNegativeInteger
  
```

Method Summary

```

    public static
    XmlNonNegativeInteger newInstance()
        Creates an empty instance of XmlNonNegativeInteger

    public static
    XmlNonNegativeInteger newInstance(XmlOptions options)
        Creates an empty instance of XmlNonNegativeInteger

    public static
    XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
        Returns a validating XMLInputStream.

    public static
    XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
        XmlOptions options)
        Returns a validating XMLInputStream.

    public static
    XmlNonNegativeInteger newValue(Object obj)
        Creates an immutable XmlNonNegativeInteger value

    public static
    XmlNonNegativeInteger parse(String s)
        Parses a XmlNonNegativeInteger fragment from a String.

    public static
    XmlNonNegativeInteger parse(String s, XmlOptions options)
        Parses a XmlNonNegativeInteger fragment from a String.

    public static
    XmlNonNegativeInteger parse(File f)
        Parses a XmlNonNegativeInteger fragment from a File.
  
```


XMLBeans API Reference

```
public static parse(File f, XmlOptions options)
XmlNonNegativeInteger      Parses a XmlNonNegativeInteger fragment from a File.

public static
XmlNonNegativeInteger parse(URL u)
                           Parses a XmlNonNegativeInteger fragment from a URL.

public static
XmlNonNegativeInteger parse(URL u, XmlOptions options)
                           Parses a XmlNonNegativeInteger fragment from a URL.

public static
XmlNonNegativeInteger parse(InputStream is)
                           Parses a XmlNonNegativeInteger fragment from an
                           InputStream.

public static
XmlNonNegativeInteger parse(InputStream is, XmlOptions options)
                           Parses a XmlNonNegativeInteger fragment from an
                           InputStream.

public static
XmlNonNegativeInteger parse(Reader r)
                           Parses a XmlNonNegativeInteger fragment from a Reader.

public static
XmlNonNegativeInteger parse(Reader r, XmlOptions options)
                           Parses a XmlNonNegativeInteger fragment from a Reader.

public static
XmlNonNegativeInteger parse(Node node)
                           Parses a XmlNonNegativeInteger fragment from a DOM
                           Node.

public static
XmlNonNegativeInteger parse(Node node, XmlOptions options)
                           Parses a XmlNonNegativeInteger fragment from a DOM
                           Node.

public static
XmlNonNegativeInteger parse(XMLInputStream xis)
                           Parses a XmlNonNegativeInteger fragment from an
                           XMLInputStream.

public static
XmlNonNegativeInteger parse(XMLInputStream xis, XmlOptions options)
                           Parses a XmlNonNegativeInteger fragment from an
                           XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

newInstance() Method

```
public static XmlNonNegativeInteger newInstance()
```

Creates an empty instance of `XmlNonNegativeInteger`

newInstance(XmlOptions) Method

```
public static XmlNonNegativeInteger newInstance(XmlOptions options)
```

Creates an empty instance of `XmlNonNegativeInteger`

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating `XMLInputStream`.

Exceptions

`XmlException`
`XMLStreamException`

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating `XMLInputStream`.

Exceptions

`XmlException`
`XMLStreamException`

newValue(Object) Method

```
public static XmlNonNegativeInteger newValue(Object obj)
```

Creates an immutable `XmlNonNegativeInteger` value

parse(String) Method

```
public static XmlNonNegativeInteger parse(String s)
    throws XmlException
```

Parses a `XmlNonNegativeInteger` fragment from a `String`. For example:
"<xml-fragment>1234567890</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlNonNegativeInteger parse(String s,
                                           XmlOptions options)
    throws XmlException
```

Parses a `XmlNonNegativeInteger` fragment from a `String`. For example:
"<xml-fragment>1234567890</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlNonNegativeInteger parse(File f)
    throws XmlException, IOException
```

Parses a `XmlNonNegativeInteger` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlNonNegativeInteger parse(File f,
                                           XmlOptions options)
```


`throws XmlException, IOException`

Parses a `XmlNonNegativeInteger` fragment from a File.

Exceptions

XmlException

IOException

parse(URL) Method

```
public static XmlNonNegativeInteger parse(URL u)
    throws XmlException, IOException
```

Parses a `XmlNonNegativeInteger` fragment from a URL.

Exceptions

XmlException

IOException

parse(URL, XmlOptions) Method

```
public static XmlNonNegativeInteger parse(URL u,
                                           XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlNonNegativeInteger` fragment from a URL.

Exceptions

XmlException

IOException

parse(InputStream) Method

```
public static XmlNonNegativeInteger parse(InputStream is)
    throws XmlException, IOException
```

Parses a `XmlNonNegativeInteger` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(InputStream, XmlOptions) Method

```
public static XmlNonNegativeInteger parse(InputStream is,  
                                           XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlNonNegativeInteger` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlNonNegativeInteger parse(Reader r)  
    throws XmlException, IOException
```

Parses a `XmlNonNegativeInteger` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlNonNegativeInteger parse(Reader r,  
                                           XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlNonNegativeInteger` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlNonNegativeInteger parse(Node node)  
    throws XmlException
```

Parses a `XmlNonNegativeInteger` fragment from a DOM Node.

Exceptions*XmlException*

parse(Node, XmlOptions) Method

```
public static XmlNonNegativeInteger parse(Node node,
                                           XmlOptions options)
    throws XmlException
```

Parses a `XmlNonNegativeInteger` fragment from a DOM Node.

Exceptions*XmlException*

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlNonNegativeInteger parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlNonNegativeInteger` fragment from an `XMLInputStream`.

Exceptions*XmlException**XMLStreamException*

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlNonNegativeInteger parse(XMLInputStream xis,
                                           XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlNonNegativeInteger` fragment from an `XMLInputStream`.

Exceptions*XmlException**XMLStreamException*

XmlNonPositiveInteger Interface

public interface XmlNonPositiveInteger

extends XmlInteger

Corresponds to the XML Schema xs:nonPositiveInteger type. One of the derived types based on xs:decimal.

Verified to be zero or negative when validating.

Convertible to BigInteger.

All Superinterfaces

XmlAnySimpleType, XmlDecimal, XmlInteger, XmlObject, XmlTokenSource

All Known Subinterfaces

XmlNegativeInteger

Nested Class Summary

```
public static final class XmlNonPositiveInteger.Factory
    A class with methods for creating instances of XmlNonPositiveInteger.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlDecimal

XmlDecimal.Factory

Nested classes from interface com.bea.xml.XmlInteger

XmlInteger.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```

    public
    static type
final SchemaType

```

The constant SchemaType object representing this schema type.

Fields from interface `com.bea.xml.XmlAnySimpleType`

`type`

Fields from interface `com.bea.xml.XmlDecimal`

`type`

Fields from interface `com.bea.xml.XmlInteger`

`type`

Fields from interface `com.bea.xml.XmlObject`

`EQUAL`, `GREATER_THAN`, `LESS_THAN`, `NOT_EQUAL`, `type`

Method Summary

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlDecimal`

`bigDecimalValue`, `getBigDecimalValue`, `set`, `setBigDecimalValue`

Methods from interface `com.bea.xml.XmlInteger`

`bigIntegerValue`, `getBigIntegerValue`, `set`, `setBigIntegerValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`, `isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`, `toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`, `newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`, `newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `xmlText`, `xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

XmlNonPositiveInteger.Factory Class

public static final class XmlNonPositiveInteger.Factory

extends Object

A class with methods for creating instances of XmlNonPositiveInteger.

Hierarchy

```
Object
  XmlNonPositiveInteger.Factory
```

Enclosing interface

```
XmlNonPositiveInteger
```

Method Summary

```
public static
XmlNonPositiveInteger newInstance()
    Creates an empty instance of XmlNonPositiveInteger

public static
XmlNonPositiveInteger newInstance(XmlOptions options)
    Creates an empty instance of XmlNonPositiveInteger

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    Returns a validating XMLInputStream.

public static
XmlNonPositiveInteger newValue(Object obj)
    Creates an immutable XmlNonPositiveInteger value

public static
XmlNonPositiveInteger parse(String s)
    Parses a XmlNonPositiveInteger fragment from a String.

public static
XmlNonPositiveInteger parse(String s, XmlOptions options)
    Parses a XmlNonPositiveInteger fragment from a String.

public static
XmlNonPositiveInteger parse(File f)
    Parses a XmlNonPositiveInteger fragment from a File.
```


XMLBeans API Reference

```
public static parse(File f, XmlOptions options)
XmlNonPositiveInteger      Parses a XmlNonPositiveInteger fragment from a File.

public static
XmlNonPositiveInteger parse(URL u)
                           Parses a XmlNonPositiveInteger fragment from a URL.

public static
XmlNonPositiveInteger parse(URL u, XmlOptions options)
                           Parses a XmlNonPositiveInteger fragment from a URL.

public static
XmlNonPositiveInteger parse(InputStream is)
                           Parses a XmlNonPositiveInteger fragment from an
                           InputStream.

public static
XmlNonPositiveInteger parse(InputStream is, XmlOptions options)
                           Parses a XmlNonPositiveInteger fragment from an
                           InputStream.

public static
XmlNonPositiveInteger parse(Reader r)
                           Parses a XmlNonPositiveInteger fragment from a Reader.

public static
XmlNonPositiveInteger parse(Reader r, XmlOptions options)
                           Parses a XmlNonPositiveInteger fragment from a Reader.

public static
XmlNonPositiveInteger parse(Node node)
                           Parses a XmlNonPositiveInteger fragment from a DOM
                           Node.

public static
XmlNonPositiveInteger parse(Node node, XmlOptions options)
                           Parses a XmlNonPositiveInteger fragment from a DOM
                           Node.

public static
XmlNonPositiveInteger parse(XMLInputStream xis)
                           Parses a XmlNonPositiveInteger fragment from an
                           XMLInputStream.

public static
XmlNonPositiveInteger parse(XMLInputStream xis, XmlOptions options)
                           Parses a XmlNonPositiveInteger fragment from an
                           XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

newInstance() Method

```
public static XmlNonPositiveInteger newInstance()
```

Creates an empty instance of `XmlNonPositiveInteger`

newInstance(XmlOptions) Method

```
public static XmlNonPositiveInteger newInstance(XmlOptions options)
```

Creates an empty instance of `XmlNonPositiveInteger`

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating `XMLInputStream`.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating `XMLInputStream`.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlNonPositiveInteger newValue(Object obj)
```

Creates an immutable `XmlNonPositiveInteger` value

parse(String) Method

```
public static XmlNonPositiveInteger parse(String s)
    throws XmlException
```

Parses a `XmlNonPositiveInteger` fragment from a `String`. For example:
"<xml-fragment>-1234567890</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlNonPositiveInteger parse(String s,
                                           XmlOptions options)
    throws XmlException
```

Parses a `XmlNonPositiveInteger` fragment from a `String`. For example:
"<xml-fragment>-1234567890</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlNonPositiveInteger parse(File f)
    throws XmlException, IOException
```

Parses a `XmlNonPositiveInteger` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlNonPositiveInteger parse(File f,
                                           XmlOptions options)
```


throws `XmlException`, `IOException`

Parses a `XmlNonPositiveInteger` fragment from a File.

Exceptions

XmlException

IOException

parse(URL) Method

```
public static XmlNonPositiveInteger parse(URL u)
    throws XmlException, IOException
```

Parses a `XmlNonPositiveInteger` fragment from a URL.

Exceptions

XmlException

IOException

parse(URL, XmlOptions) Method

```
public static XmlNonPositiveInteger parse(URL u,
                                           XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlNonPositiveInteger` fragment from a URL.

Exceptions

XmlException

IOException

parse(InputStream) Method

```
public static XmlNonPositiveInteger parse(InputStream is)
    throws XmlException, IOException
```

Parses a `XmlNonPositiveInteger` fragment from an InputStream.

Exceptions

XmlException

IOException

parse(InputStream, XmlOptions) Method

```
public static XmlNonPositiveInteger parse(InputStream is,  
                                         XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlNonPositiveInteger` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlNonPositiveInteger parse(Reader r)  
    throws XmlException, IOException
```

Parses a `XmlNonPositiveInteger` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlNonPositiveInteger parse(Reader r,  
                                         XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlNonPositiveInteger` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlNonPositiveInteger parse(Node node)  
    throws XmlException
```

Parses a `XmlNonPositiveInteger` fragment from a DOM Node.

Exceptions*XmlException*

parse(Node, XmlOptions) Method

```
public static XmlNonPositiveInteger parse(Node node,
                                           XmlOptions options)
    throws XmlException
```

Parses a `XmlNonPositiveInteger` fragment from a DOM Node.

Exceptions*XmlException*

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlNonPositiveInteger parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlNonPositiveInteger` fragment from an `XMLInputStream`.

Exceptions*XmlException**XMLStreamException*

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlNonPositiveInteger parse(XMLInputStream xis,
                                           XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlNonPositiveInteger` fragment from an `XMLInputStream`.

Exceptions*XmlException**XMLStreamException*

XmlNormalizedString Interface

public interface XmlNormalizedString

extends XmlString

Corresponds to the XML Schema xs:normalizedString type. One of the derived types based on xs:string.

An normalizedString simply is a string where all the carriage return, linefeed, and tab characters have been normalized (switched to) ordinary space characters. Use normalizedString for long strings to make them insensitive to line breaking. If you wish to often be insensitive to runs of whitespace (as is often the case), use xs:token (aka XmlToken) instead.

Convertible to String. When obtaining the stringValue, the whitespace-normalized value is returned.

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlString, XmlTokenSource

All Known Subinterfaces

XmlENTITY, XmlID, XmlIDREF, XmlLanguage, XmlName, XmlNCName, XmlNMTOKEN, XmlToken

Nested Class Summary

```

    public static final class XmlNormalizedString.Factory
    A class with methods for creating instances of XmlNormalizedString.
  
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Nested classes from interface com.bea.xml.XmlString

XmlString.Factory

Field Summary

```

    public
    static type
final SchemaType

```

The constant SchemaType object representing this schema type.

Fields from interface `com.bea.xml.XmlAnySimpleType`

`type`

Fields from interface `com.bea.xml.XmlObject`

`EQUAL`, `GREATER_THAN`, `LESS_THAN`, `NOT_EQUAL`, `type`

Fields from interface `com.bea.xml.XmlString`

`type`

Method Summary

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`, `isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`, `toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`, `newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`, `newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `xmlText`, `xmlText`

Field Detail

`type`

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

XmlNormalizedString.Factory Class

public static final class XmlNormalizedString.Factory

extends Object

A class with methods for creating instances of XmlNormalizedString.

Hierarchy

```
Object
  XmlNormalizedString.Factory
```

Enclosing interface

```
XmlNormalizedString
```

Method Summary

```
public static
XmlNormalizedString newInstance()
    Creates an empty instance of XmlNormalizedString

public static
XmlNormalizedString newInstance(XmlOptions options)
    Creates an empty instance of XmlNormalizedString

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    Returns a validating XMLInputStream.

public static
XmlNormalizedString newValue(Object obj)
    Creates an immutable XmlNormalizedString value

public static
XmlNormalizedString parse(String s)
    Parses a XmlNormalizedString fragment from a String.

public static
XmlNormalizedString parse(String s, XmlOptions options)
    Parses a XmlNormalizedString fragment from a String.

public static
XmlNormalizedString parse(File f)
    Parses a XmlNormalizedString fragment from a File.
```


XMLBeans API Reference

```
    public static parse(File f, XmlOptions options)
XmlNormalizedString      Parses a XmlNormalizedString fragment from a File.
    public static
XmlNormalizedString parse(URL u)
                        Parses a XmlNormalizedString fragment from a URL.
    public static
XmlNormalizedString parse(URL u, XmlOptions options)
                        Parses a XmlNormalizedString fragment from a URL.
    public static
XmlNormalizedString parse(InputStream is)
                        Parses a XmlNormalizedString fragment from an InputStream.
    public static
XmlNormalizedString parse(InputStream is, XmlOptions options)
                        Parses a XmlNormalizedString fragment from an InputStream.
    public static
XmlNormalizedString parse(Reader r)
                        Parses a XmlNormalizedString fragment from a Reader.
    public static
XmlNormalizedString parse(Reader r, XmlOptions options)
                        Parses a XmlNormalizedString fragment from a Reader.
    public static
XmlNormalizedString parse(Node node)
                        Parses a XmlNormalizedString fragment from a DOM Node.
    public static
XmlNormalizedString parse(Node node, XmlOptions options)
                        Parses a XmlNormalizedString fragment from a DOM Node.
    public static
XmlNormalizedString parse(XMLInputStream xis)
                        Parses a XmlNormalizedString fragment from an
                        XMLInputStream.
    public static
XmlNormalizedString parse(XMLInputStream xis, XmlOptions options)
                        Parses a XmlNormalizedString fragment from an
                        XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlNormalizedString newInstance()
```

Creates an empty instance of `XmlNormalizedString`

newInstance(XmlOptions) Method

```
public static XmlNormalizedString newInstance(XmlOptions options)
```

Creates an empty instance of XmlNormalizedString

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlNormalizedString newValue(Object obj)
```

Creates an immutable XmlNormalizedString value

parse(String) Method

```
public static XmlNormalizedString parse(String s)
    throws XmlException
```


Parses a `XmlNormalizedString` fragment from a `String`. For example: "<xml-fragment> string to normalize </xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlNormalizedString parse(String s,  
                                       XmlOptions options)  
    throws XmlException
```

Parses a `XmlNormalizedString` fragment from a `String`. For example: "<xml-fragment> string to normalize </xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlNormalizedString parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlNormalizedString` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlNormalizedString parse(File f,  
                                       XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlNormalizedString` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlNormalizedString parse(URL u)
    throws XmlException, IOException
```

Parses a `XmlNormalizedString` fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlNormalizedString parse(URL u,
                                       XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlNormalizedString` fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlNormalizedString parse(InputStream is)
    throws XmlException, IOException
```

Parses a `XmlNormalizedString` fragment from an `InputStream`.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlNormalizedString parse(InputStream is,
                                       XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlNormalizedString` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlNormalizedString parse(Reader r)
    throws XmlException, IOException
```

Parses a `XmlNormalizedString` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlNormalizedString parse(Reader r,
                                       XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlNormalizedString` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlNormalizedString parse(Node node)
    throws XmlException
```

Parses a `XmlNormalizedString` fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlNormalizedString parse(Node node,
                                       XmlOptions options)
    throws XmlException
```


Parses a `XmlNormalizedString` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XmlNormalizedString parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlNormalizedString` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlNormalizedString parse(XMLInputStream xis,
                                       XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlNormalizedString` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlNOTATION Interface

public interface **XmlNOTATION**

extends XmlAnySimpleType

Corresponds to the XML Schema xs:NOTATION type.

NOTATIONs are a mechanism in XML Schema that is provided for partial backward compatibility with NOTATIONs in DTDs. XML Schema users should almost never have any reason to use this data type.

Convertible to String.

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
    public static final class XmlNOTATION.Factory
    {
        A class with methods for creating instances of XmlNOTATION.
    }
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
    public static final SchemaType type
    {
        The constant SchemaType object representing this schema type.
    }
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`, `isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`, `toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`, `newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`, `newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `xmlText`, `xmlText`

Field Detail

`type`

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

XmlNOTATION.Factory Class

public static final class XmlNOTATION.Factory

extends Object

A class with methods for creating instances of XmlNOTATION.

Hierarchy

```
Object
  XmlNOTATION.Factory
```

Enclosing interface

```
XmlNOTATION
```

Method Summary

```
public static
  XmlNOTATION newInstance()
    Creates an empty instance of XmlNOTATION
```

```
public static
  XmlNOTATION newInstance(XmlOptions options)
    Creates an empty instance of XmlNOTATION
```

```
public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.
```

```
public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
  options)
    Returns a validating XMLInputStream.
```

```
public static
  XmlNOTATION newValue(Object obj)
    Creates an immutable XmlNOTATION value
```

```
public static
  XmlNOTATION parse(String s)
    Parses a XmlNOTATION fragment from a String.
```

```
public static
  XmlNOTATION parse(String s, XmlOptions options)
    Parses a XmlNOTATION fragment from a String.
```

```
public static
  XmlNOTATION parse(File f)
    Parses a XmlNOTATION fragment from a File.
```


XMLBeans API Reference

```
public static parse(File f, XmlOptions options)
    XmlNOTATION      Parses a XmlNOTATION fragment from a File.

public static
    XmlNOTATION parse(URL u)
    Parses a XmlNOTATION fragment from a URL.

public static
    XmlNOTATION parse(URL u, XmlOptions options)
    Parses a XmlNOTATION fragment from a URL.

public static
    XmlNOTATION parse(InputStream is)
    Parses a XmlNOTATION fragment from an InputStream.

public static
    XmlNOTATION parse(InputStream is, XmlOptions options)
    Parses a XmlNOTATION fragment from an InputStream.

public static
    XmlNOTATION parse(Reader r)
    Parses a XmlNOTATION fragment from a Reader.

public static
    XmlNOTATION parse(Reader r, XmlOptions options)
    Parses a XmlNOTATION fragment from a Reader.

public static
    XmlNOTATION parse(Node node)
    Parses a XmlNOTATION fragment from a DOM Node.

public static
    XmlNOTATION parse(Node node, XmlOptions options)
    Parses a XmlNOTATION fragment from a DOM Node.

public static
    XmlNOTATION parse(XMLInputStream xis)
    Parses a XmlNOTATION fragment from an XMLInputStream.

public static
    XmlNOTATION parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlNOTATION fragment from an XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlNOTATION newInstance()
```

Creates an empty instance of `XmlNOTATION`

newInstance(XmlOptions) Method

```
public static XmlNOTATION newInstance(XmlOptions options)
```

Creates an empty instance of XmlNOTATION

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlNOTATION newValue(Object obj)
```

Creates an immutable XmlNOTATION value

parse(String) Method

```
public static XmlNOTATION parse(String s)
    throws XmlException
```

Parses a XmlNOTATION fragment from a String.

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlNOTATION parse(String s,  
                                XmlOptions options)  
    throws XmlException
```

Parses a XmlNOTATION fragment from a String.

Exceptions

XmlException

parse(File) Method

```
public static XmlNOTATION parse(File f)  
    throws XmlException, IOException
```

Parses a XmlNOTATION fragment from a File.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlNOTATION parse(File f,  
                                XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlNOTATION fragment from a File.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlNOTATION parse(URL u)  
    throws XmlException, IOException
```

Parses a XmlNOTATION fragment from a URL.

Exceptions

XmlException

IOException

parse(URL, XmlOptions) Method

```
public static XmlNOTATION parse(URL u,  
                                XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlNOTATION fragment from a URL.

Exceptions

XmlException

IOException

parse(InputStream) Method

```
public static XmlNOTATION parse(InputStream is)  
    throws XmlException, IOException
```

Parses a XmlNOTATION fragment from an InputStream.

Exceptions

XmlException

IOException

parse(InputStream, XmlOptions) Method

```
public static XmlNOTATION parse(InputStream is,  
                                XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlNOTATION fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlNOTATION parse(Reader r)  
    throws XmlException, IOException
```


Parses a XmlNOTATION fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlNOTATION parse(Reader r,  
                                XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlNOTATION fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlNOTATION parse(Node node)  
    throws XmlException
```

Parses a XmlNOTATION fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlNOTATION parse(Node node,  
                                XmlOptions options)  
    throws XmlException
```

Parses a XmlNOTATION fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173


```
public static XmlNOTATION parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlNOTATION fragment from an XMLInputStream.

Exceptions

XmlException
XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlNOTATION parse(XMLInputStream xis,
                                XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlNOTATION fragment from an XMLInputStream.

Exceptions

XmlException
XMLStreamException

XmlObject Interface

public interface XmlObject

extends XmlTokenSource

Corresponds to the XML Schema `xs:anyType`, the base type for all XML Beans.

Since all XML Schema types are translated into corresponding XML Bean classes, and all Schema type derivation corresponds to Java class inheritance, the fact that all Schema types derive from `xs:anyType` means that all XML Bean classes derive from `XmlObject`.

On this base class you will find a number of common facilities that all XML Bean classes provide:

- Every XML Bean class has an inner `Factory` class for creating and parsing instances, including `XmlObject`. Use `XmlObject.Factory` itself to produce untyped XML trees or XML trees that implement specific subtypes of `XmlObject` depending on a recognized root document element. If you depend on the automatic type inference, you will want to understand the type inference issues described below.
- To write out an accurate XML file for the XML tree under this `XmlObject`, use one of the `XmlObject.save(ContentHandler, LexicalHandler)` methods, or `XmlObject.newInputStream()` or `XmlObject.newReader()`. Use `XmlObject.toString()` to produce a pretty-printed representation of the XML subtree under this XML Object. If you save interior portions of an XML document, you will want to understand the inner contents versus outer container issues described below.
- It is also simple to copy an `XmlObject` instance to or from a standard DOM tree or SAX stream. Use `XmlObject.Factory.parse(Node)`, for example, to load from DOM; use `XmlObject.Factory.newXmlSaxHandler()` to load from SAX; use `XmlObject.newDomNode()` to save to DOM; and use `XmlObject.save(ContentHandler, LexicalHandler)` to save to SAX.
- Use `XmlObject.validate()` to validate the subtree of XML under this XML Object. If you wish to get information about the location and reason for validation errors, see `XmlOptions.setErrorListener(Collection)`, and use `XmlObject.validate(XmlOptions)`.
- Use `XmlObject.newCursor()` to access the full XML infoset, for example, if you need to determine interleaved element order or manipulate annotations, comments, or mixed content. See `XmlCursor`.
- Use `XmlObject.selectPath(String)` to find other `XmlObjects` in the subtree underneath this `XmlObject` using relative XPaths. (In `selectPath`, "." indicates the current element or attribute.)

Type inference. When using `XmlObject.Factory` to parse XML documents, the actual document type is not `XmlObject.type` itself, but a subtype based on the contents of the parsed document. If the parsed document contains a recognized root document element, then the actual type of the loaded instance will be the matching Document type. For example:

```
XmlObject xobj = XmlObject.Factory.parse(myDocument);
if (xobj instanceof MyOrderDocument) // starts w/ <my-order>
{
```


XMLBeans API Reference

```
MyOrderDocument mydoc = (MyOrderDocument)xobj;
if (!xobj.validate())
    System.out.println("Not a valid my-order document");
}
else
{
    System.out.println("Not a my-order document");
}
```

Every XML Bean class has its own inner Factory class, so if you actually know exactly which XML Bean document type you want to load as in the example above, you should use the the specific XML Bean Factory class instead. For example:

```
MyOrderDocument mydoc = MyOrderDocument.Factory.parse(myDocument);
```

The code above will throw an exception if the parsed document does not begin with the proper (my-order) element.

Inner versus outer. An *XmlObject* represents the *contents* of an element or attribute, *not* the element or attribute itself. So when you validate or save an *XmlObject*, you are validating or saving its contents, not its container. For example, if the *XmlObject* represents the contents of an element which happens to itself be in the wrong order relative to its siblings, validate will not complain about the misplacement of the element itself. On the other hand, if elements *within* the *XmlObject* are in the wrong order, validate will complain. Similarly, when saving the contents of an interior *XmlObject*, it is the contents of an element, not the element itself, which is saved by default.

Reading and writing fragments. When reading or writing the contents of a whole XML document, the standard XML representation for a document is used. However, there is no standard concrete XML representation for "just the contents" of an interior element or attribute. So when one is needed, the tag `<xml-fragment>` is used to wrap the contents. This tag is used can also be used to load just the contents for an *XmlObject* document fragment of arbitrary type. If you wish to save out the *XmlObject*'s container element along with its contents, use `XmlOptions.setSaveOuter()`.

Implementing *XmlObject*. The XMLBeans library does not support arbitrary implementations of *XmlObject* – in almost all cases, you should only use the implementations of *XmlObject* provided by the XMLBeans compiler itself. If you need to implement *XmlObject* yourself, you should subclass *FilterXmlObject* in order to delegate to another underlying *XmlObject* implementation. This technique will allow you to use your code unchanged with future versions of XMLBeans that add additional methods on *XmlObject*.

All Known Implementing Classes

`FilterXmlObject`

All Superinterfaces

`XmlTokenSource`

All Known Subinterfaces

`SimpleValue`, `XmlAnySimpleType`, `XmlAnyURI`, `XmlBase64Binary`, `XmlBoolean`,
`XmlByte`, `XmlDate`, `XmlDateTime`, `XmlDecimal`, `XmlDouble`, `XmlDuration`,

XmlENTITIES, XmlENTITY, XmlFloat, XmlGDay, XmlGMonth, XmlGMonthDay, XmlGYear, XmlGYearMonth, XmlHexBinary, XmlID, XmlIDREF, XmlIDREFS, XmlInt, XmlInteger, XmlLanguage, XmlLong, XmlName, XmlNCName, XmlNegativeInteger, XmlNMTOKEN, XmlNMTOKENS, XmlNonNegativeInteger, XmlNonPositiveInteger, XmlNormalizedString, XmlNOTATION, XmlPositiveInteger, XmlQName, XmlShort, XmlString, XmlTime, XmlToken, XmlUnsignedByte, XmlUnsignedInt, XmlUnsignedLong, XmlUnsignedShort

Nested Class Summary

```

    public
    static XmlObject.Factory
final class      Static factory class for creating new instances.

```

Field Summary

```

    public
    static EQUAL
final int      EQUAL is 0.

    public
    static GREATER_THAN
final int      GREATER_THAN is 1.

    public
    static LESS_THAN
final int      LESS_THAN is -1.

    public
    static NOT_EQUAL
final int      NOT_EQUAL is 2.

    public
    static type
final SchemaType  The constant SchemaType object representing this schema type.

```

Method Summary

```

    public
    XmlObject changeType(SchemaType newType)
        Changes the schema type associated with this data and returns a new XmlObject
        instance whose schemaType is the new type.

    public
    int compareTo(Object obj)
        Impelements the Comparable interface by comparing two simple xml values based on
        their standard XML schema ordering.

    public
    int compareValue(XmlObject obj)

```


XMLBeans API Reference

This comparison method is similar to `compareTo`, but rather than throwing a `ClassCastException` when two values are incomparable, it returns the number 2.

```
public
XmlObject copy()
    Returns a deep copy of this XmlObject.

public
XmlObject[] execQuery(String query)
    Executes a query.

public
XmlObject[] execQuery(String query, XmlOptions options)
    Executes a query with options.

public
boolean isImmutable()
    True if the value is an immutable value.

public
boolean isNil()
    True if the value is nil.

public
SchemaType schemaType()
    The schema type for this instance.

public
XmlObject[] selectPath(String path)
    Selects a path.

public
XmlObject[] selectPath(String path, XmlOptions options)
    Selects a path, applying options.

public
XmlObject set(XmlObject srcObj)
    Set the value/type of this XmlObject to be a copy of the source XmlObject.

public
void setNil()
    Sets the value to nil.

public
String toString()
    Returns an XML string for this XML object.

public
boolean validate()
    Returns true if the contents of this object are valid accoring to schemaType().

public
boolean validate(XmlOptions options)
    Just like validate(), but with options.

public
boolean valueEquals(XmlObject obj)
    True if the xml values are equal.

public
int valueHashCode()
```


Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`,
`newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`,
`newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`,
`xmlText`, `xmlText`

Field Detail**EQUAL**

```
public static final int EQUAL
```

EQUAL is 0. See `XmlObject.compareValue(XmlObject)`.

GREATER_THAN

```
public static final int GREATER_THAN
```

GREATER_THAN is 1. See `XmlObject.compareValue(XmlObject)`.

LESS_THAN

```
public static final int LESS_THAN
```

LESS_THAN is -1. See `XmlObject.compareValue(XmlObject)`.

NOT_EQUAL

```
public static final int NOT_EQUAL
```

NOT_EQUAL is 2. See `XmlObject.compareValue(XmlObject)`.

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

Method Detail

changeType(SchemaType) Method

```
public XmlObject changeType(SchemaType newType)
```

Changes the schema type associated with this data and returns a new XmlObject instance whose schemaType is the new type.

Returns null if the type change is not allowed. Certain type changes may be prohibited on the interior of an xml tree due to schema type system constraints (that is, due to a parent container within which the newly specified type is not permissible), but there are no constraints at the root type changes are never prohibited at the root of an xml tree.

If the type change is allowed, then the new XmlObject should be used rather than the old one. The old XmlObject instance and any other XmlObject instances in the subtree are permanently invalidated and should not be used. (They will return InvalidStateException if you try to use them.) If a type change is done on the interior of an Xml tree, then xsi:type attributes are updated as needed.

compareTo(Object) Method

```
public int compareTo(Object obj)
```

Implements the Comparable interface by comparing two simple xml values based on their standard XML schema ordering. Throws a ClassCastException if no standard ordering applies, or if the two values are incomparable within a partial order.

compareValue(XmlObject) Method

```
public int compareValue(XmlObject obj)
```

This comparison method is similar to compareTo, but rather than throwing a ClassCastException when two values are incomparable, it returns the number 2. The result codes are -1 if this object is less than obj, 1 if this object is greater than obj, zero if the objects are equal, and 2 if the objects are incomparable.

copy() Method

```
public XmlObject copy()
```

Returns a deep copy of this XmlObject. The returned object has the same type as the current object, and has all the content of the XML document underneath the current object. Note that any parts of the XML document above or outside this XmlObject are not copied.

execQuery(String) Method

```
public XmlObject[] execQuery(String query)
```

Executes a query. Query can be a string or precompiled query String.

An XQuery is very similar to an XPath, except that it also permits construction of new XML. As a result, the XmlObjects that are returned from execQuery are in newly created documents, separate from the XmlObject on which the query is executed.

Syntax and usage is otherwise similar to selectPath.

Related Topics

```
XmlObject.selectPath(String)
```

execQuery(String, XmlOptions) Method

```
public XmlObject[] execQuery(String query,
                             XmlOptions options)
```

Executes a query with options. Use the *options* parameter to specify the following:

To specify this	Use this method
The document type for the root element.	<code>XmlOptions.setDocumentType(SchemaType)</code>
To replace the document element with the specified QName when constructing the resulting document.	<code>XmlOptions.setLoadReplaceDocumentElement(QName)</code>
To strip all insignificant whitespace when constructing a document.	<code>XmlOptions.setLoadStripWhitespace()</code>
To strip all comments when constructing a document.	<code>XmlOptions.setLoadStripComments()</code>
To strip all processing instructions when constructing a document.	<code>XmlOptions.setLoadStripProcinsts()</code>
A map of namespace URI substitutions to use when constructing a document.	<code>XmlOptions.setLoadSubstituteNamespaces(Map)</code>
Additional namespace mappings to be added when constructing a document.	<code>XmlOptions.setLoadAdditionalNamespaces(Map)</code>
To trim the underlying XML text buffer immediately after constructing a document, resulting in a smaller memory footprint.	<code>XmlOptions.setLoadTrimTextBuffer()</code>
Whether value facets should be checked as they are set.	<code>XmlOptions.setValidateOnSet()</code>

Parameters*query*

The XQuery expression.

options

Options as described.

Related Topics`XmlObject.execQuery(String)`

isImmutable() Method

```
public boolean isImmutable()
```

True if the value is an immutable value. Immutable values do not have a position in a tree; rather, they are stand-alone simple type values. If the object is immutable, the `equals()` methods tests for value equality, and the object can be used as the key for a hash.

isNil() Method

```
public boolean isNil()
```

True if the value is nil. Note that in order to be nil, the value must be in an element, and the element containing the value must be marked as nillable in the schema.

schemaType() Method

```
public SchemaType schemaType()
```

The schema type for this instance. This is a permanent, unchanging property of the instance.

selectPath(String) Method

```
public XmlObject[] selectPath(String path)
```

Selects a path. Path can be a string or precompiled path String.

The path must be a relative path, where "." represents the element or attribute containing this `XmlObject`, and it must select only other elements or attributes. If a non-element or non-attribute is selected, an unchecked exception is thrown.

The array that is returned contains all the selected `XmlObjects`, within the same document, listed in document order. The actual array type of the result is inferred from the closest common base type of selected results.

Here is an example of usage. Suppose we have a global element definition for "owner" whose type is "person":

```
<schema targetNamespace="http://openuri.org/sample">
  <element name="owner" type="person"/>
  <complexType name="person">
    [...]
  </complexType>
</schema>
```

and suppose "owner" tags can be scattered throughout the document. Then we can write the following code to find them all:

```
import org.openuri.sample.Person;
import com.bea.xml.*;
[...]
XmlObject xobj = XmlObject.Factory.parse(myFile);
Person[] results;
results = (Person[])xobj.selectPath(
    "declare namespace s='http://www.openuri.org/sample' " +
    "s:owner");
```

Notice the way in which namespace declarations are done in XPath 2.0. Since XPath can only navigate within an XML document – it cannot construct new XML – the resulting XmlObjects all reside in the same XML document as this XmlObject itself.

selectPath(String, XmlOptions) Method

```
public XmlObject[] selectPath(String path,
                               XmlOptions options)
```

Selects a path, applying options.

Related Topics

`XmlObject.selectPath(String)`

set(XmlObject) Method

```
public XmlObject set(XmlObject srcObj)
```

Set the value/type of this XmlObject to be a copy of the source XmlObject. Because the type of the source may be different than this target, this XmlObject may become defunct. In this case the new XmlObject is returned. If no type change happens, the same this will be returned.

setNil() Method

```
public void setNil()
```

Sets the value to nil. The element containing the value must be marked as nillable in the schema.

toString() Method

```
public String toString()
```

Returns an XML string for this XML object.

The string is pretty-printed. If you want a non-pretty-printed string, or if you want to control options precisely, use the `xmlText()` methods.

Note that when producing XML any object other than very root of the document, then you are guaranteed to be looking at only a fragment of XML, i.e., just the contents of an element or attribute, and we will produce a string that starts with an `<xml-fragment>` tag. The `XmlOptions.setSaveOuter()` option on `xmlText` can be used to produce the actual element name above the object if you wish.

Overrides

```
Object.toString()
```

validate() Method

```
public boolean validate()
```

Returns true if the contents of this object are valid according to `schemaType()`.

Does a deep validation of the entire subtree under the object, but does not validate the parents or siblings of the object if the object is in the interior of an xml tree.

validate(XmlOptions) Method

```
public boolean validate(XmlOptions options)
```

Just like `validate()`, but with options.

If you wish to collect error messages and locations while validating, use the `XmlOptions.setErrorListener(Collection)` method. With that method, you can specify an object in which to store messages related to validation. The following is a simple example.

```
// Create an XmlOptions instance and set the error listener.
XmlOptions validateOptions = new XmlOptions();
ArrayList errorList = new ArrayList();
validateOptions.setErrorListener(errorList);

// Validate the XML.
boolean isValid = newEmp.validate(validateOptions);
```



```
// If the XML isn't valid, loop through the listener's contents,
// printing contained messages.
if (!isValid)
{
    for (int i = 0; i <errorList.size(); i++)
    {
        XmlError error = (XmlError)errorList.get(i);

        System.out.println("\n");
        System.out.println("Message: " + error.getMessage() + "\n");
        System.out.println("Location of invalid XML: " +
            error.getCursorLocation().xmlText() + "\n");
    }
}
```

Parameters

options

An object that implements the `Collection` interface.

valueEquals(XmlObject) Method

```
public boolean valueEquals(XmlObject obj)
```

True if the xml values are equal. Two different objects (which are distinguished by `equals(obj) == false`) may of course have equal values (`valueEquals(obj) == true`).

Usually this method can be treated as an ordinary equivalence relation, but actually it is not is not transitive. Here is a precise specification:

There are two categories of XML object: objects with a known instance type, and objects whose only known type is one of the ur-types (either `AnyType` or `AnySimpleType`). The first category is compared in terms of logical value spaces, and the second category is compared lexically.

Within each of these two categories, `valueEquals` is a well-behaved equivalence relation. However, when comparing an object of known type with an object with ur-type, the comparison is done by attempting to convert the lexical form of the ur-typed object into the other type, and then comparing the results. Ur-typed objects are therefore treated as lexical wildcards and may be equal to objects in different value spaces, even though the objects in different value spaces are not equal to each other.

For example, the `anySimpleType` value "1" will compare as an `equalValue` to the string "1", the float value "1.0", the double value "1.0", the decimal "1", and the `GYear` "1", even though all these objects will compare unequal to each other since they lie in different value spaces.

valueHashCode() Method

```
public int valueHashCode()
```


XmlObject.Factory Class

public static final class XmlObject.Factory

extends Object

Static factory class for creating new instances. Note that if a type can be inferred from the XML being loaded (for example, by recognizing the document element QName), then the instance returned by a factory will have the inferred type. Otherwise the Factory will returned an untyped document.

Hierarchy

```
Object
  XmlObject.Factory
```

Enclosing interface

```
XmlObject
```

Method Summary

```
public static
    XmlObject newInstance()
        Creates a new, completely empty instance.

public static
    XmlObject newInstance(XmlOptions options)
        Creates a new, completely empty instance, specifying options for the root
        element's document type and/or whether to validate value facets as they are set.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a new validating XMLInputStream that throws exceptions when the
    input is not valid.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a new validating XMLInputStream that throws exceptions when the
    input is not valid, specifying options for the root element's document type
    and/or the collection object to use as an error listener while validating.

public static
    XmlObject newValue(Object obj)
        Creates an immutable XmlObject value

public static
XMLSaxHandler newXmlSaxHandler()
    Returns an XmlSaxHandler that can load an XmlObject from SAX events.
```


XMLBeans API Reference

```
public static newXmlSaxHandler(XmlOptions options)
    XmlSaxHandler          Returns an XmlSaxHandler that can load an XmlObject from SAX events.

public static
    XmlObject parse(String s)
        Parses the given String as XML.

public static
    XmlObject parse(String s, XmlOptions options)
        Parses the given String as XML.

public static
    XmlObject parse(File f)
        Parses the given File as XML.

public static
    XmlObject parse(File f, XmlOptions options)
        Parses the given File as XML.

public static
    XmlObject parse(URL u)
        Downloads the given URL as XML.

public static
    XmlObject parse(URL u, XmlOptions options)
        Downloads the given URL as XML.

public static
    XmlObject parse(InputStream is)
        Decodes and parses the given InputStream as XML.

public static
    XmlObject parse(InputStream is, XmlOptions options)
        Decodes and parses the given InputStream as XML.

public static
    XmlObject parse(Reader r)
        Parses the given Reader as XML.

public static
    XmlObject parse(Reader r, XmlOptions options)
        Parses the given Reader as XML.

public static
    XmlObject parse(Node node)
        Converts the given DOM Node into an XmlObject.

public static
    XmlObject parse(Node node, XmlOptions options)
        Converts the given DOM Node into an XmlObject.

public static
    XmlObject parse(XMLInputStream xis)
        Loads the given XMLInputStream into an XmlObject.

public static
    XmlObject parse(XMLInputStream xis, XmlOptions options)
        Loads the given XMLInputStream into an XmlObject.
```

Methods from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Method Detail

newInstance() Method

```
public static XmlObject newInstance()
```

Creates a new, completely empty instance.

newInstance(XmlOptions) Method

```
public static XmlObject newInstance(XmlOptions options)
```

Creates a new, completely empty instance, specifying options for the root element's document type and/or whether to validate value facets as they are set.

Use the *options* parameter to specify the following:

To specify this	Use this method
The document type for the root element.	<code>XmlOptions.setDocumentType(SchemaType)</code>
Whether value facets should be checked as they are set.	<code>XmlOptions.setValidateOnSet()</code>

Parameters

options

Options specifying root document type and/or value facet checking.

Returns

A new, empty instance of XmlObject.

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a new validating `XMLInputStream` that throws exceptions when the input is not valid.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,  
                                                         XmlOptions options)  
    throws XmlException, XMLStreamException
```

Returns a new validating `XMLInputStream` that throws exceptions when the input is not valid, specifying options for the root element's document type and/or the collection object to use as an error listener while validating.

Use the *options* parameter to specify the following:

- A collection instance that should be used as an error listener during compilation, as described in `XmlOptions.setErrorListener(Collection)`.
- The document type for the root element, as described in `XmlOptions.setDocumentType(SchemaType)`.

Parameters

xis

The basis for the new `XMLInputStream`.

options

Options specifying root document type and/or an error listener.

Returns

A new validating `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlObject newValue(Object obj)
```

Creates an immutable `XmlObject` value

newXmlSaxHandler() Method

```
public static XmlSaxHandler newXmlSaxHandler()
```

Returns an `XmlSaxHandler` that can load an `XmlObject` from SAX events.

newXmlSaxHandler(XmlOptions) Method

```
public static XmlSaxHandler newXmlSaxHandler(XmlOptions options)
```

Returns an XmlSaxHandler that can load an XmlObject from SAX events.

parse(String) Method

```
public static XmlObject parse(String s)
    throws XmlException
```

Parses the given String as XML.

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlObject parse(String s,
                               XmlOptions options)
    throws XmlException
```

Parses the given String as XML. Use the *options* parameter to specify the following:

To specify this	Use this method
The document type for the root element.	<code>XmlOptions.setDocumentType(SchemaType)</code>
To place line number annotations in the store when parsing a document.	<code>XmlOptions.setLoadLineNumbers()</code>
To replace the document element with the specified QName when parsing.	<code>XmlOptions.setLoadReplaceDocumentElement(QName)</code>
To strip all insignificant whitespace when parsing a document.	<code>XmlOptions.setLoadStripWhitespace()</code>
To strip all comments when parsing a document.	<code>XmlOptions.setLoadStripComments()</code>
To strip all processing instructions when parsing a document.	<code>XmlOptions.setLoadStripProcinsts()</code>
A map of namespace URI substitutions to use when parsing a document.	<code>XmlOptions.setLoadSubstituteNamespaces(Map)</code>
Additional namespace mappings to be added when parsing a document.	<code>XmlOptions.setLoadAdditionalNamespaces(Map)</code>
To trim the underlying XML text buffer immediately after parsing a	<code>XmlOptions.setLoadTrimTextBuffer()</code>

document, resulting in a smaller memory footprint.

Parameters

s

The string to parse.

options

Options as specified.

Returns

A new instance containing the specified XML.

Exceptions

XmlException

parse(File) Method

```
public static XmlObject parse(File f)
    throws XmlException, IOException
```

Parses the given File as XML.

Exceptions

XmlException

IOException

parse(File, XmlOptions) Method

```
public static XmlObject parse(File f,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses the given File as XML.

Exceptions

XmlException

IOException

parse(URL) Method

```
public static XmlObject parse(URL u)
    throws XmlException, IOException
```


Downloads the given URL as XML.

Exceptions

XmlException

IOException

parse(URL, XmlOptions) Method

```
public static XmlObject parse(URL u,
                              XmlOptions options)
    throws XmlException, IOException
```

Downloads the given URL as XML.

Exceptions

XmlException

IOException

parse(InputStream) Method

```
public static XmlObject parse(InputStream is)
    throws XmlException, IOException
```

Decodes and parses the given InputStream as XML.

Exceptions

XmlException

IOException

parse(InputStream, XmlOptions) Method

```
public static XmlObject parse(InputStream is,
                              XmlOptions options)
    throws XmlException, IOException
```

Decodes and parses the given InputStream as XML. Use the *options* parameter to specify the following:

To specify this	Use this method
The character encoding to use when parsing or writing a document.	<code>XmlOptions.setCharacterEncoding(String)</code>
The document type for the root element.	<code>XmlOptions.setDocumentType(SchemaType)</code>
Place line number annotations in the store when parsing a document.	<code>XmlOptions.setLoadLineNumbers()</code>

Replace the document element with the specified QName when parsing.	<code>XmlOptions.setLoadReplaceDocumentElement(QName)</code>
Strip all insignificant whitespace when parsing a document.	<code>XmlOptions.setLoadStripWhitespace()</code>
Strip all comments when parsing a document.	<code>XmlOptions.setLoadStripComments()</code>
Strip all processing instructions when parsing a document.	<code>XmlOptions.setLoadStripProcinsts()</code>
Set a map of namespace URI substitutions to use when parsing a document.	<code>XmlOptions.setLoadSubstituteNamespaces(Map)</code>
Set additional namespace mappings to be added when parsing a document.	<code>XmlOptions.setLoadAdditionalNamespaces(Map)</code>
Trim the underlying XML text buffer immediately after parsing a document, resulting in a smaller memory footprint.	<code>XmlOptions.setLoadTrimTextBuffer()</code>

Exceptions

XmlException
IOException

parse(Reader) Method

```
public static XmlObject parse(Reader r)
    throws XmlException, IOException
```

Parses the given Reader as XML.

Exceptions

XmlException
IOException

parse(Reader, XmlOptions) Method

```
public static XmlObject parse(Reader r,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses the given Reader as XML.

Exceptions

XmlException
IOException

parse(Node) Method

```
public static XmlObject parse(Node node)
    throws XmlException
```

Converts the given DOM Node into an XmlObject.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlObject parse(Node node,
                               XmlOptions options)
    throws XmlException
```

Converts the given DOM Node into an XmlObject.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlObject parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Loads the given XMLInputStream into an XmlObject.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlObject parse(XMLInputStream xis,
                               XmlOptions options)
    throws XmlException, XMLStreamException
```

Loads the given XMLInputStream into an XmlObject.

Exceptions

XmlException

XMLStreamException

XmlOptions Class

public class XmlOptions

extends Object
implements Serializable

Used to supply options for loading, saving, and compiling, and validating.

There are two styles for using XmlOptions: multiline setup, and single-line use. Here are two examples. First, multiline style:

```
XmlOptions opts = new XmlOptions();  
opts.setSavePrettyPrint();  
opts.setSavePrettyPrintIndent(4);  
System.out.println(xobj.xmlText(opts));
```

The alternative is single-line usage:

```
System.out.println(xobj.xmlText(  
    new XmlOptions().setSavePrettyPrint().setSavePrettyPrintIndent(4)));
```

Hierarchy

Object
 XmlOptions

All Implemented Interfaces

Serializable

Field Summary

Constructor Summary

XmlOptions()

Construct a new blank XmlOptions.

XmlOptions(XmlOptions other)

Construct a new XmlOptions, copying the options.

Method Summary

```

public
Object get(Object option)
    Used to get a generic option

public
boolean hasOption(Object option)
    Used to test a generic option

public
static maskNull(XmlOptions o)
    If passed null, returns an empty options object.
XmlOptions

public
void put(Object option)
    Used to set a generic option

public
void put(Object option, Object value)
    Used to set a generic option

public
void put(Object option, int value)
    Used to set a generic option

public
static safeGet(XmlOptions o, Object option)
Object
    Used to test a generic option on an options object that may be null

public
XmlOptions setCharacterEncoding(String encoding)
    When parsing or writing a document, this sets the character encoding to use.

public
XmlOptions setCompileDownloadUrls()
    If this option is set, then the schema compiler will try to download schemas that
    appear in imports and includes from network based URLs.

public
XmlOptions setCompileMdefNamespaces(Set mdefNamespaces)
    If this option is set, then the schema compiler will permit and ignore multiple
    definitions of the same component (element, attribute, type, etc) names in the given
    namespaces.

public
XmlOptions setCompileNoPvrRule()
    If this option is set, the particle valid (restriciton) rule is not enforced when building a
    SchemaTypeSystem.

public
XmlOptions setCompileNoUpaRule()
    If this option is set, the unique particle attribution rule is not enforced when building
    a SchemaTypeSystem.

```


XMLBeans API Reference

`public setCompileNoValidation()`
XmlOptions If this option is set, validation is not done on the Schema XmlBeans when building a SchemaTypeSystem

`public`
XmlOptions `setCompileSubstituteNames(Map nameMap)`
This option allows for QName substitution during schema compilation.

`public`
XmlOptions `setDocumentSourceName(String documentSourceName)`
This option sets the document source name into the xml store when parsing a document.

`public`
XmlOptions `setDocumentType(SchemaType type)`
When parsing a document, this sets the type of the root element.

`public`
XmlOptions `setEntityResolver(EntityResolver resolver)`
If this option is set when compiling a schema, then the given EntityResolver will be consulted in order to resolve any URIs while downloading imported schemas.

`public`
XmlOptions `setErrorListener(Collection c)`
Sets a collection object for collecting XmlError objects during parsing, validation, and compilation.

`public`
XmlOptions `setLoadAdditionalNamespaces(Map nses)`
Set additional namespace mappings to be added when parsing a document.

`public`
XmlOptions `setLoadLineNumbers()`
If this option is set, line number annotations are placed in the store when parsing a document.

`public`
XmlOptions `setLoadMessageDigest()`
If this option is set when loading from an InputStream or File, then the loader will compute a 160-bit SHA-1 message digest of the XML file while loading it and make it available via XmlObject.documentProperties().getMessageDigest();
The schema compiler uses message digests to detect and eliminate duplicate imported xsd files.

`public`
XmlOptions `setLoadReplaceDocumentElement(QName replacement)`
If this option is set, the document element is replaced with the given QName when parsing.

`public`
XmlOptions `setLoadStripComments()`
If this option is set, all comments are stripped when parsing a document.

`public`
XmlOptions `setLoadStripProcinsts()`
If this option is set, all processing instructions are stripped when parsing a document.

`public`
XmlOptions `setLoadStripWhitespace()`
If this option is set, all insignificant whitespace is stripped when parsing a document.

XMLBeans API Reference

`public` ***setLoadSubstituteNamespaces***(*Map substNamespaces*)
XmlOptions This option sets a map of namespace uri substitutions that happen when parsing a document.

`public`
XmlOptions ***setLoadTrimTextBuffer***()
If this option is set, the underlying xml text buffer is trimmed immediately after parsing a document resulting in a smaller memory footprint.

`public`
XmlOptions ***setSaveAggressiveNamespaces***()
Causes the saver to reduce the number of namespace prefix declarations.

`public`
XmlOptions ***setSaveFilterProcinst***(*String filterProcinst*)
This option causes the saver to filter a Processing Instruction with the given target

`public`
XmlOptions ***setSaveImplicitNamespaces***(*Map implicitNamespaces*)
If namespaces have already been declared outside the scope of the fragment being saved, this allows those mappings to be passed down to the saver, so the prefixes are not re-declared.

`public`
XmlOptions ***setSaveInner***()
This option controls whether saving begins on the element or its contents

`public`
XmlOptions ***setSaveNamespacesFirst***()
This option will cause the saver to save namespace attributes first.

`public`
XmlOptions ***setSaveOuter***()
This option controls whether saving begins on the element or its contents

`public`
XmlOptions ***setSavePrettyPrint***()
This option will cause the saver to reformat white space for easier reading.

`public`
XmlOptions ***setSavePrettyPrintIndent***(*int indent*)
When used with `setSavePrettyPrint` this sets the indent amount to use.

`public`
XmlOptions ***setSavePrettyPrintOffset***(*int offset*)
When used with `setSavePrettyPrint` this sets the offset amount to use.

`public`
XmlOptions ***setSaveSuggestedPrefixes***(*Map suggestedPrefixes*)
A map of hints to pass to the saver for which prefixes to use for which namespace URI.

`public`
XmlOptions ***setSaveSyntheticDocumentElement***(*QName name*)
This option causes the saver to wrap the current fragment in an element with the given name.

`public`
XmlOptions ***setSaveUseOpenFrag***()
When saving a fragment, this option changes the qname of the synthesized root element.


```

    public setUseDefaultNamespace()
    XmlOptions      If this option is set, the saver will try to use the default namespace for the most
                     commonly used URI.

    public
    XmlOptions setValidateOnSet()
                     If this option is set when an instance is created, then value facets will be checked on
                     each call to a setter or getter method on instances of XmlObject within the instance
                     document.

    public
    XmlOptions setXqueryCurrentNodeVar(String varName)
                     Sets the name of the variable that represents the current node in a query expression.

    public
    XmlOptions setXqueryVariables(Map varMap)
                     Map the names and values of external variables in an xquery expression.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Field Detail

Constructor Detail

XmlOptions

```
public XmlOptions()
```

Construct a new blank XmlOptions.

XmlOptions

```
public XmlOptions(XmlOptions other)
```

Construct a new XmlOptions, copying the options.

Method Detail

get(Object) Method

```
public Object get(Object option)
```

Used to get a generic option

hasOption(Object) Method

```
public boolean hasOption(Object option)
```

Used to test a generic option

maskNull(XmlOptions) Method

```
public static XmlOptions maskNull(XmlOptions o)
```

If passed null, returns an empty options object. Otherwise, returns its argument.

put(Object) Method

```
public void put(Object option)
```

Used to set a generic option

put(Object, Object) Method

```
public void put(Object option,  
                Object value)
```

Used to set a generic option

put(Object, int) Method

```
public void put(Object option,  
                int value)
```

Used to set a generic option

safeGet(XmlOptions, Object) Method

```
public static Object safeGet(XmlOptions o,  
                             Object option)
```

Used to test a generic option on an options object that may be null

setCharacterEncoding(String) Method

```
public XmlOptions setCharacterEncoding(String encoding)
```

When parsing or writing a document, this sets the character encoding to use.

Parameters*encoding*

the character encoding

Related Topics

```
XmlObject.Factory.parse(File, XmlOptions)
XmlTokenSource.save(File, XmlOptions)
```

setCompileDownloadUrls() Method

```
public XmlOptions setCompileDownloadUrls()
```

If this option is set, then the schema compiler will try to download schemas that appear in imports and includes from network based URLs.

Related Topics

```
XmlBeans.compileXsd(XmlObject[], SchemaTypeLoader, XmlOptions)
```

setCompileMdefNamespaces(Set) Method

```
public XmlOptions setCompileMdefNamespaces(Set mdefNamespaces)
```

If this option is set, then the schema compiler will permit and ignore multiple definitions of the same component (element, attribute, type, etc) names in the given namespaces. If multiple definitions with the same name appear, the definitions that happen to be processed last will be ignored.

Parameters*mdefNamespaces*

a set of namespace URIs as Strings

Related Topics

```
XmlBeans.compileXsd(XmlObject[], SchemaTypeLoader, XmlOptions)
```

setCompileNoPvrRule() Method

```
public XmlOptions setCompileNoPvrRule()
```

If this option is set, the particle valid (restriciton) rule is not enforced when building a SchemaTypeSystem. See Section 3.9.6 of the XML Schema specification for information on the PVR rule.

Related Topics


```
XmlBeans.compileXsd(XmlObject[], SchemaTypeLoader, XmlOptions)
```

setCompileNoUpaRule() Method

```
public XmlOptions setCompileNoUpaRule()
```

If this option is set, the unique particle attribution rule is not enforced when building a `SchemaTypeSystem`. See Appendix H of the XML Schema specification for information on the UPA rule.

Related Topics

```
XmlBeans.compileXsd(XmlObject[], SchemaTypeLoader, XmlOptions)
```

setCompileNoValidation() Method

```
public XmlOptions setCompileNoValidation()
```

If this option is set, validation is not done on the Schema `XmlBeans` when building a `SchemaTypeSystem`.

Related Topics

```
XmlBeans.compileXsd(XmlObject[], SchemaTypeLoader, XmlOptions)
```

setCompileSubstituteNames(Map) Method

```
public XmlOptions setCompileSubstituteNames(Map nameMap)
```

This option allows for `QName` substitution during schema compilation.

Parameters

nameMap

a map from `QNames` to substitute `QNames`.

Related Topics

```
XmlBeans.compileXsd(XmlObject[], SchemaTypeLoader, XmlOptions)
```

setDocumentSourceName(String) Method

```
public XmlOptions setDocumentSourceName(String documentSourceName)
```

This option sets the document source name into the xml store when parsing a document. If a document is parsed from a `File` or `URI`, it is automatically set to the `URI` of the source; otherwise, for example, when parsing a `String`, you can use this option to specify the source name yourself.

Related Topics

`XmlObject.Factory.parse(String, XmlOptions)`

setDocumentType(SchemaType) Method

```
public XmlOptions setDocumentType(SchemaType type)
```

When parsing a document, this sets the type of the root element. If this is set, the parser will not try to guess the type based on the document's QName.

Parameters

type

The root element's document type.

Related Topics

`XmlObject.Factory.parse(File, XmlOptions)`

setEntityResolver(EntityResolver) Method

```
public XmlOptions setEntityResolver(EntityResolver resolver)
```

If this option is set when compiling a schema, then the given EntityResolver will be consulted in order to resolve any URIs while downloading imported schemas. EntityResolvers are currently only used by `compileXsd`; they are not consulted by other functions, for example, `parse`. This will likely change in the future.

Related Topics

`XmlBeans.compileXsd(XmlObject[], SchemaTypeLoader, XmlOptions)`

setErrorListener(Collection) Method

```
public XmlOptions setErrorListener(Collection c)
```

Sets a collection object for collecting `XmlError` objects during parsing, validation, and compilation. When set, the collection will contain all the errors after the operation takes place. Notice that the errors will only have line numbers if the document was loaded with line numbers enabled.

The following simple example illustrates using an error listener during validation.

```
// Create an XmlOptions instance and set the error listener.
XmlOptions validateOptions = new XmlOptions();
ArrayList errorList = new ArrayList();
validateOptions.setErrorListener(errorList);

// Validate the XML.
```


XMLBeans API Reference

```
boolean isValid = newEmp.validate(validateOptions);

// If the XML isn't valid, loop through the listener's contents,
// printing contained messages.
if (!isValid)
{
    for (int i = 0; i <errorList.size(); i++)
    {
        XmlError error = (XmlError)errorList.get(i);

        System.out.println("\n");
        System.out.println("Message: " + error.getMessage() + "\n");
        System.out.println("Location of invalid XML: " +
            error.getCursorLocation().xmlText() + "\n");
    }
}
```

Parameters

c

A collection that will be filled with `XmlError` objects via `Collection.add(Object)`

Related Topics

`XmlError`
`XmlObject.Factory.parse(File, XmlOptions)`
`XmlObject.validate(XmlOptions)`
`XmlBeans.compileXsd(XmlObject[], SchemaTypeLoader, XmlOptions)`
`XmlOptions.setLoadLineNumbers()`

setLoadAdditionalNamespaces(Map) Method

```
public XmlOptions setLoadAdditionalNamespaces(Map nses)
```

Set additional namespace mappings to be added when parsing a document.

Parameters

nses

additional namespace mappings

Related Topics

`XmlObject.Factory.parse(File, XmlOptions)`

setLoadLineNumbers() Method

```
public XmlOptions setLoadLineNumbers()
```

If this option is set, line number annotations are placed in the store when parsing a document. This is

particularly useful when you want `XmlError` objects to contain line numbers.

Related Topics

`XmlObject.Factory.parse(File, XmlOptions)`
`XmlError`

setLoadMessageDigest() Method

```
public XmlOptions setLoadMessageDigest()
```

If this option is set when loading from an `InputStream` or `File`, then the loader will compute a 160-bit SHA-1 message digest of the XML file while loading it and make it available via `XmlObject.documentProperties().getMessageDigest()`.
The schema compiler uses message digests to detect and eliminate duplicate imported xsd files.

Related Topics

`XmlObject.Factory.parse(File, XmlOptions)`

setLoadReplaceDocumentElement(QName) Method

```
public XmlOptions setLoadReplaceDocumentElement(QName replacement)
```

If this option is set, the document element is replaced with the given `QName` when parsing. If null is supplied, the document element is removed.

Related Topics

`XmlObject.Factory.parse(File, XmlOptions)`

setLoadStripComments() Method

```
public XmlOptions setLoadStripComments()
```

If this option is set, all comments are stripped when parsing a document.

Related Topics

`XmlObject.Factory.parse(File, XmlOptions)`

setLoadStripProcInsts() Method

```
public XmlOptions setLoadStripProcInsts()
```

If this option is set, all processing instructions are stripped when parsing a document.

Related Topics

`XmlObject.Factory.parse(File, XmlOptions)`

setLoadStripWhitespace() Method

```
public XmlOptions setLoadStripWhitespace()
```

If this option is set, all insignificant whitespace is stripped when parsing a document. Can be used to save memory on large documents when you know there is no mixed content.

Related Topics

`XmlObject.Factory.parse(File, XmlOptions)`

setLoadSubstituteNamespaces(Map) Method

```
public XmlOptions setLoadSubstituteNamespaces(Map substNamespaces)
```

This option sets a map of namespace uri substitutions that happen when parsing a document.

This is particularly useful if you have documents that use no namespace, but you wish to avoid the name collision problems that occur when you introduce schema definitions without a target namespace.

By mapping the empty string "" (the absence of a URI) to a specific namespace, you can force the parser to behave as if a no-namespace document were actually in the specified namespace. This allows you to type the instance according to a schema in a nonempty namespace, and therefore avoid the problematic practice of using schema definitions without a target namespace.

Parameters

substNamespaces
a map of document URIs to replacement URIs

Related Topics

`XmlObject.Factory.parse(File, XmlOptions)`

setLoadTrimTextBuffer() Method

```
public XmlOptions setLoadTrimTextBuffer()
```

If this option is set, the underlying xml text buffer is trimmed immediately after parsing a document resulting in a smaller memory footprint. Use this option if you are loading a large number of unchanging documents that will stay in memory for some time.

Related Topics


```
XmlObject.Factory.parse(File, XmlOptions)
```

setSaveAggressiveNamespaces() Method

```
public XmlOptions setSaveAggressiveNamespaces()
```

Causes the saver to reduce the number of namespace prefix declarations. The saver will do this by passing over the document twice, first to collect the set of needed namespace declarations, and then second to actually save the document with the declarations collected at the root.

Related Topics

```
XmlTokenSource.save(File, XmlOptions)  
XmlTokenSource.xmlText(XmlOptions)
```

setSaveFilterProcinst(String) Method

```
public XmlOptions setSaveFilterProcinst(String filterProcinst)
```

This option causes the saver to filter a Processing Instruction with the given target

Parameters

filterProcinst
the name of a Processing Instruction to filter on save

Related Topics

```
XmlTokenSource.save(File, XmlOptions)  
XmlTokenSource.xmlText(XmlOptions)
```

setSaveImplicitNamespaces(Map) Method

```
public XmlOptions setSaveImplicitNamespaces(Map implicitNamespaces)
```

If namespaces have already been declared outside the scope of the fragment being saved, this allows those mappings to be passed down to the saver, so the prefixes are not re-declared.

Parameters

implicitNamespaces
a map of prefixes to uris that can be used by the saver without being declared

Related Topics

```
XmlTokenSource.save(File, XmlOptions)  
XmlTokenSource.xmlText(XmlOptions)
```


setSaveInner() Method

```
public XmlOptions setSaveInner()
```

This option controls whether saving begins on the element or its contents

Related Topics

```
XmlTokenSource.save(File, XmlOptions)  
XmlTokenSource.xmlText(XmlOptions)
```

setSaveNamespacesFirst() Method

```
public XmlOptions setSaveNamespacesFirst()
```

This option will cause the saver to save namespace attributes first.

Related Topics

```
XmlTokenSource.save(File, XmlOptions)  
XmlTokenSource.xmlText(XmlOptions)
```

setSaveOuter() Method

```
public XmlOptions setSaveOuter()
```

This option controls whether saving begins on the element or its contents

Related Topics

```
XmlTokenSource.save(File, XmlOptions)  
XmlTokenSource.xmlText(XmlOptions)
```

setSavePrettyPrint() Method

```
public XmlOptions setSavePrettyPrint()
```

This option will cause the saver to reformat white space for easier reading.

Related Topics

```
XmlTokenSource.save(File, XmlOptions)  
XmlTokenSource.xmlText(XmlOptions)
```

setSavePrettyPrintIndent(int) Method

```
public XmlOptions setSavePrettyPrintIndent(int indent)
```

When used with `setSavePrettyPrint` this sets the indent amount to use.

Parameters

indent

the indent amount to use

Related Topics

```
XmlOptions.setSavePrettyPrint()  
XmlTokenSource.save(File, XmlOptions)  
XmlTokenSource.xmlText(XmlOptions)
```

setSavePrettyPrintOffset(int) Method

```
public XmlOptions setSavePrettyPrintOffset(int offset)
```

When used with `setSavePrettyPrint` this sets the offset amount to use.

Parameters

offset

the offset amount to use

Related Topics

```
XmlOptions.setSavePrettyPrint()  
XmlTokenSource.save(File, XmlOptions)  
XmlTokenSource.xmlText(XmlOptions)
```

setSaveSuggestedPrefixes(Map) Method

```
public XmlOptions setSaveSuggestedPrefixes(Map suggestedPrefixes)
```

A map of hints to pass to the saver for which prefixes to use for which namespace URI.

Parameters

suggestedPrefixes

a map from URIs to prefixes

Related Topics

```
XmlTokenSource.save(File, XmlOptions)  
XmlTokenSource.xmlText(XmlOptions)
```


setSaveSyntheticDocumentElement(QName) Method

```
public XmlOptions setSaveSyntheticDocumentElement(QName name)
```

This option causes the saver to wrap the current fragment in an element with the given name.

Parameters

name

the name to use for the top level element

Related Topics

```
XmlTokenSource.save(File, XmlOptions)  
XmlTokenSource.xmlText(XmlOptions)
```

setSaveUseOpenFrag() Method

```
public XmlOptions setSaveUseOpenFrag()
```

When saving a fragment, this option changes the qname of the synthesized root element. Normally <xml-fragment> is used.

Related Topics

```
XmlTokenSource.save(File, XmlOptions)  
XmlTokenSource.xmlText(XmlOptions)
```

setUseDefaultNamespace() Method

```
public XmlOptions setUseDefaultNamespace()
```

If this option is set, the saver will try to use the default namespace for the most commonly used URI. If it is not set the saver will always created named prefixes.

Related Topics

```
XmlTokenSource.save(File, XmlOptions)  
XmlTokenSource.xmlText(XmlOptions)
```

setValidateOnSet() Method

```
public XmlOptions setValidateOnSet()
```

If this option is set when an instance is created, then value facets will be checked on each call to a setter or

getter method on instances of `XmlObject` within the instance document. If the facets are not satisfied, then an unchecked exception is thrown immediately. This option is useful for finding code that is introducing invalid values in an XML document, but it slows performance.

Related Topics

`XmlObject.Factory.parse(File, XmlOptions)`

setXqueryCurrentNodeVar(String) Method

```
public XmlOptions setXqueryCurrentNodeVar(String varName)
```

Sets the name of the variable that represents the current node in a query expression.

Parameters

varName

The new variable name to use for the query.

Related Topics

`XmlObject.executeQuery(String)`

`XmlCursor.executeQuery(String)`

setXqueryVariables(Map) Method

```
public XmlOptions setXqueryVariables(Map varMap)
```

Map the names and values of external variables in an xquery expression. The keys of the map are the variable names in the query without the '\$' prefix. The values of the map are objects and can be any of the primitive wrapper classes, `String`, `XmlObject`, or `XmlCursor`. The mapping only applies to xquery and has no effect on xpath expressions.

Parameters

varMap

a map from `Strings` to variable instances.

Related Topics

`XmlObject.executeQuery(String)`

`XmlCursor.executeQuery(String)`

XmlPositiveInteger Interface

public interface XmlPositiveInteger

extends XmlNonNegativeInteger

Corresponds to the XML Schema xs:positiveInteger type. One of the derived types based on xs:decimal.

Verified to be positive when validating.

Convertible to BigInteger.

All Superinterfaces

XmlAnySimpleType, XmlDecimal, XmlInteger, XmlNonNegativeInteger, XmlObject, XmlTokenSource

Nested Class Summary

```
public static final class XmlPositiveInteger.Factory
    A class with methods for creating instances of XmlPositiveInteger.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlDecimal

XmlDecimal.Factory

Nested classes from interface com.bea.xml.XmlInteger

XmlInteger.Factory

Nested classes from interface com.bea.xml.XmlNonNegativeInteger

XmlNonNegativeInteger.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```

    public
    static type
final SchemaType

```

The constant SchemaType object representing this schema type.

Fields from interface `com.bea.xml.XmlAnySimpleType`

`type`

Fields from interface `com.bea.xml.XmlDecimal`

`type`

Fields from interface `com.bea.xml.XmlInteger`

`type`

Fields from interface `com.bea.xml.XmlNonNegativeInteger`

`type`

Fields from interface `com.bea.xml.XmlObject`

`EQUAL`, `GREATER_THAN`, `LESS_THAN`, `NOT_EQUAL`, `type`

Method Summary

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlDecimal`

`bigDecimalValue`, `getBigDecimalValue`, `set`, `setBigDecimalValue`

Methods from interface `com.bea.xml.XmlInteger`

`bigIntegerValue`, `getBigIntegerValue`, `set`, `setBigIntegerValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`, `isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`, `toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

XmlPositiveInteger.Factory Class

public static final class XmlPositiveInteger.Factory

extends Object

A class with methods for creating instances of XmlPositiveInteger.

Hierarchy

```
Object
  XmlPositiveInteger.Factory
```

Enclosing interface

```
XmlPositiveInteger
```

Method Summary

```
public static
XmlPositiveInteger newInstance()
    Creates an empty instance of XmlPositiveInteger

public static
XmlPositiveInteger newInstance(XmlOptions options)
    Creates an empty instance of XmlPositiveInteger

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
options)
    Returns a validating XMLInputStream.

public static
XmlPositiveInteger newValue(Object obj)
    Creates an immutable XmlPositiveInteger value

public static
XmlPositiveInteger parse(String s)
    Parses a XmlPositiveInteger fragment from a String.

public static
XmlPositiveInteger parse(String s, XmlOptions options)
    Parses a XmlPositiveInteger fragment from a String.

public static
XmlPositiveInteger parse(File f)
    Parses a XmlPositiveInteger fragment from a File.
```


XMLBeans API Reference

```
    public static parse(File f, XmlOptions options)
XmlPositiveInteger      Parses a XmlPositiveInteger fragment from a File.

    public static
XmlPositiveInteger parse(URL u)
                        Parses a XmlPositiveInteger fragment from a URL.

    public static
XmlPositiveInteger parse(URL u, XmlOptions options)
                        Parses a XmlPositiveInteger fragment from a URL.

    public static
XmlPositiveInteger parse(InputStream is)
                        Parses a XmlPositiveInteger fragment from an InputStream.

    public static
XmlPositiveInteger parse(InputStream is, XmlOptions options)
                        Parses a XmlPositiveInteger fragment from an InputStream.

    public static
XmlPositiveInteger parse(Reader r)
                        Parses a XmlPositiveInteger fragment from a Reader.

    public static
XmlPositiveInteger parse(Reader r, XmlOptions options)
                        Parses a XmlPositiveInteger fragment from a Reader.

    public static
XmlPositiveInteger parse(Node node)
                        Parses a XmlPositiveInteger fragment from a DOM Node.

    public static
XmlPositiveInteger parse(Node node, XmlOptions options)
                        Parses a XmlPositiveInteger fragment from a DOM Node.

    public static
XmlPositiveInteger parse(XMLInputStream xis)
                        Parses a XmlPositiveInteger fragment from an XMLInputStream.

    public static
XmlPositiveInteger parse(XMLInputStream xis, XmlOptions options)
                        Parses a XmlPositiveInteger fragment from an XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlPositiveInteger newInstance()
```

Creates an empty instance of `XmlPositiveInteger`

newInstance(XmlOptions) Method

```
public static XmlPositiveInteger newInstance(XmlOptions options)
```

Creates an empty instance of XmlPositiveInteger

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlPositiveInteger newValue(Object obj)
```

Creates an immutable XmlPositiveInteger value

parse(String) Method

```
public static XmlPositiveInteger parse(String s)
    throws XmlException
```


Parses a `XmlPositiveInteger` fragment from a `String`. For example:
"<xml-fragment>1234567890</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlPositiveInteger parse(String s,  
                                     XmlOptions options)  
    throws XmlException
```

Parses a `XmlPositiveInteger` fragment from a `String`. For example:
"<xml-fragment>1234567890</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlPositiveInteger parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlPositiveInteger` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlPositiveInteger parse(File f,  
                                     XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlPositiveInteger` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlPositiveInteger parse(URL u)
    throws XmlException, IOException
```

Parses a `XmlPositiveInteger` fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlPositiveInteger parse(URL u,
                                       XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlPositiveInteger` fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlPositiveInteger parse(InputStream is)
    throws XmlException, IOException
```

Parses a `XmlPositiveInteger` fragment from an `InputStream`.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlPositiveInteger parse(InputStream is,
                                       XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlPositiveInteger` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlPositiveInteger parse(Reader r)
    throws XmlException, IOException
```

Parses a `XmlPositiveInteger` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlPositiveInteger parse(Reader r,
                                       XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlPositiveInteger` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlPositiveInteger parse(Node node)
    throws XmlException
```

Parses a `XmlPositiveInteger` fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlPositiveInteger parse(Node node,
                                       XmlOptions options)
    throws XmlException
```


Parses a `XmlPositiveInteger` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XmlPositiveInteger parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlPositiveInteger` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlPositiveInteger parse(XMLInputStream xis,
                                       XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlPositiveInteger` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlQName Interface

public interface XmlQName

extends XmlAnySimpleType

Corresponds to the XML Schema xs:QName type.

A QName is the logical combination of an XML namespace URI and a localName. Although in an XML instance document, a QName appears as "prefix:localName", the logical value of a QName does NOT contain any information about the prefix, only the namespace URI to which the prefix maps. For example, two QNames "a:hello" and "b:hello" are perfectly equivalent if "a:" in the first instance maps to the same URI as "b:" in the second instance.

Convertible to QName.

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```

    public static final class XmlQName.Factory
    {
        A class with methods for creating instances of XmlQName.
    }

```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```

    public static final SchemaType type
    {
        The constant SchemaType object representing this schema type.
    }

```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```
public
    QName getQNameValue()
        Returns this value as a QName

public
    QName qNameValue()
        Returns this value as a QName

public
    void set(QName name)
        Sets this value as a QName

public
    void setQNameValue(QName name)
        Sets this value as a QName
```

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface com.bea.xml.XmlObject

changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode

Methods from interface com.bea.xml.XmlTokenSource

documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Method Detail

getQNameValue() Method

```
public QName getQNameValue()
```

Returns this value as a QName

qNameValue() Method

DEPRECATED replaced with `com.bea.xml.XmlQName.getQNameValue()`

```
public QName qNameValue()
```

Returns this value as a QName

set(QName) Method

DEPRECATED replaced with
`com.bea.xml.XmlQName.setQNameValue(javax.xml.namespace.QName)`

```
public void set(QName name)
```

Sets this value as a QName

setQNameValue(QName) Method

```
public void setQNameValue(QName name)
```

Sets this value as a QName

XmlQName.Factory Class

public static final class XmlQName.Factory

extends Object

A class with methods for creating instances of XmlQName.

Hierarchy

```
Object
  XmlQName.Factory
```

Enclosing interface

```
XmlQName
```

Method Summary

```
public static
    XmlQName newInstance()
        Creates an empty instance of XmlQName

public static
    XmlQName newInstance(XmlOptions options)
        Creates an empty instance of XmlQName

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlQName newValue(Object obj)
        Creates an immutable XmlQName value

public static
    XmlQName parse(String s)
        Parses a XmlQName fragment from a String.

public static
    XmlQName parse(String s, XmlOptions options)
        Parses a XmlQName fragment from a String.

public static
    XmlQName parse(File f)
        Parses a XmlQName fragment from a File.
```


XMLBeans API Reference

```
public static parse(File f, XmlOptions options)
    XmlQName      Parses a XmlQName fragment from a File.
public static
    XmlQName parse(URL u)
    Parses a XmlQName fragment from a URL.
public static
    XmlQName parse(URL u, XmlOptions options)
    Parses a XmlQName fragment from a URL.
public static
    XmlQName parse(InputStream is)
    Parses a XmlQName fragment from an InputStream.
public static
    XmlQName parse(InputStream is, XmlOptions options)
    Parses a XmlQName fragment from an InputStream.
public static
    XmlQName parse(Reader r)
    Parses a XmlQName fragment from a Reader.
public static
    XmlQName parse(Reader r, XmlOptions options)
    Parses a XmlQName fragment from a Reader.
public static
    XmlQName parse(Node node)
    Parses a XmlQName fragment from a DOM Node.
public static
    XmlQName parse(Node node, XmlOptions options)
    Parses a XmlQName fragment from a DOM Node.
public static
    XmlQName parse(XMLInputStream xis)
    Parses a XmlQName fragment from an XMLInputStream.
public static
    XmlQName parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlQName fragment from an XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlQName newInstance()
```

Creates an empty instance of `XmlQName`

newInstance(XmlOptions) Method

```
public static XmlQName newInstance(XmlOptions options)
```

Creates an empty instance of XmlQName

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlQName newValue(Object obj)
```

Creates an immutable XmlQName value

parse(String) Method

```
public static XmlQName parse(String s)
    throws XmlException
```


Parses a XmlQName fragment from a String. For example: "<xml-fragment xmlns:x='http://openuri.org/'>x:sample</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlQName parse(String s,  
                             XmlOptions options)  
    throws XmlException
```

Parses a XmlQName fragment from a String. For example: "<xml-fragment xmlns:x='http://openuri.org/'>x:sample</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlQName parse(File f)  
    throws XmlException, IOException
```

Parses a XmlQName fragment from a File.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlQName parse(File f,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a XmlQName fragment from a File.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlQName parse(URL u)
    throws XmlException, IOException
```

Parses a XmlQName fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlQName parse(URL u,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlQName fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlQName parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlQName fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlQName parse(InputStream is,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlQName fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlQName parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlQName fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlQName parse(Reader r,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlQName fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlQName parse(Node node)
    throws XmlException
```

Parses a XmlQName fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlQName parse(Node node,
                             XmlOptions options)
    throws XmlException
```


Parses a XmlQName fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlQName parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a XmlQName fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlQName parse(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a XmlQName fragment from an XMLInputStream.

Exceptions

XmlException

XMLStreamException

XmlRuntimeException Class

public class XmlRuntimeException

extends RuntimeException

An unchecked XML exception. May contain any number of XmlError objects.

Related Topics

XmlError
XmlException

Hierarchy

Object
 Throwable
 Exception
 RuntimeException
 XmlRuntimeException

All Implemented Interfaces

Serializable

Direct Known Subclasses

SchemaTypeLoaderException

Constructor Summary

XmlRuntimeException(XmlError error)

Constructs an XmlRuntimeException from an XmlError.

XmlRuntimeException(XmlException xmlException)

Constructs an XmlRuntimeException from an XmlException.

XmlRuntimeException(String m, Throwable t, XmlError error)

Constructs an XmlRuntimeException from a message, a cause, and an XmlError.

***XmlRuntimeException**(String m, Throwable t, Collection errors)*

Constructs an XmlRuntimeException from a message, a cause, and a collection of XmlErrors.

***XmlRuntimeException**(String m, Throwable t)*

Constructs an XmlRuntimeException from a message and a cause.

***XmlRuntimeException**(String m)*

Constructs an XmlRuntimeException from a message.

***XmlRuntimeException**(Throwable t)*

Constructs an XmlRuntimeException from a cause.

Method Summary

```
public
XmlError getError()
```

Returns the first XmlError that caused this exception, if any.

```
public
Collection getErrors()
```

Returns the collection of XmlError that caused this exception, if any.

Methods from java.lang.Throwable

fillInStackTrace, getCause, getLocalizedMessage, getMessage, getStackTrace, initCause, printStackTrace, printStackTrace, printStackTrace, setStackTrace, toString

Methods from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructor Detail

XmlRuntimeException

```
public XmlRuntimeException(XmlError error)
```

Constructs an XmlRuntimeException from an XmlError.

XmlRuntimeException

```
public XmlRuntimeException(XmlException xmlException)
```

Constructs an XmlRuntimeException from an XmlException.

XmlRuntimeException

```
public XmlRuntimeException(String m,  
                           Throwable t,  
                           XmlError error)
```

Constructs an XmlRuntimeException from a message, a cause, and an XmlError.

XmlRuntimeException

```
public XmlRuntimeException(String m,  
                           Throwable t,  
                           Collection errors)
```

Constructs an XmlRuntimeException from a message, a cause, and a collection of XmlErrors.

XmlRuntimeException

```
public XmlRuntimeException(String m,  
                           Throwable t)
```

Constructs an XmlRuntimeException from a message and a cause.

XmlRuntimeException

```
public XmlRuntimeException(String m)
```

Constructs an XmlRuntimeException from a message.

XmlRuntimeException

```
public XmlRuntimeException(Throwable t)
```

Constructs an XmlRuntimeException from a cause.

Method Detail

getError() Method

```
public XmlError getError()
```

Returns the first `XmlError` that caused this exception, if any.

getErrors() Method

```
public Collection getErrors()
```

Returns the collection of `XmlError` that caused this exception, if any.

XmlSaxHandler Interface

public interface XmlSaxHandler

A holder for a SAX `ContentHandler` and `LexicalHandler` that are capable of loading an `XmlObject` instance. Once all the SAX events are pushed to the handlers, call `XmlSaxHandler.getObject()` to get the loaded `XmlObject`.

Related Topics

```
XmlObject.Factory.newXmlSaxHandler()  
SchemaTypeLoader.newXmlSaxHandler(SchemaType, XmlOptions)
```

Method Summary

```
public  
ContentHandler getContentHandler()  
    The ContentHandler expecting SAX content events.  
  
public  
LexicalHandler getLexicalHandler()  
    The LexicalHandler expecting SAX lexical events.  
  
public  
XmlObject getObject()  
    Returns the loaded XmlObject after all the SAX events have been finished
```

Method Detail

getContentHandler() Method

```
public ContentHandler getContentHandler()
```

The ContentHandler expecting SAX content events.

Related Topics

`ContentHandler`

getLexicalHandler() Method

```
public LexicalHandler getLexicalHandler()
```

The LexicalHandler expecting SAX lexical events.

Related Topics

getObject() Method

```
public XmlObject getObject()  
    throws XmlException
```

Returns the loaded XmlObject after all the SAX events have been finished

Exceptions

XmlException

XmlShort Interface

public interface XmlShort

extends XmlInt

Corresponds to the XML Schema xs:short type. One of the derived types based on xs:decimal.

Naturally, convertible to a Java short.

All Superinterfaces

XmlAnySimpleType, XmlDecimal, XmlInt, XmlInteger, XmlLong, XmlObject, XmlTokenSource

All Known Subinterfaces

XmlByte

Nested Class Summary

```
    public static final class XmlShort.Factory
    {
        // ...
    }
```

A class with methods for creating instances of XmlShort.

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlDecimal

XmlDecimal.Factory

Nested classes from interface com.bea.xml.XmlInt

XmlInt.Factory

Nested classes from interface com.bea.xml.XmlInteger

XmlInteger.Factory

Nested classes from interface com.bea.xml.XmlLong

XmlLong.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```

    public
    static type
final SchemaType

```

The constant SchemaType object representing this schema type.

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlDecimal

type

Fields from interface com.bea.xml.XmlInt

type

Fields from interface com.bea.xml.XmlInteger

type

Fields from interface com.bea.xml.XmlLong

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

public
    short getShortValue()
        Returns this value as a
        short
public
    void set(short s)
        Sets this value as a short
public
    void setShortValue(short s)
        Sets this value as a short
public
    short shortValue()

```


Returns this value as a
short

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlDecimal`

`bigDecimalValue`, `getBigDecimalValue`, `set`, `setBigDecimalValue`

Methods from interface `com.bea.xml.XmlInt`

`getIntValue`, `intValue`, `set`, `setIntValue`

Methods from interface `com.bea.xml.XmlInteger`

`bigIntegerValue`, `getBigIntegerValue`, `set`, `setBigIntegerValue`

Methods from interface `com.bea.xml.XmlLong`

`getLongValue`, `longValue`, `set`, `setLongValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`,
`isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`,
`toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`,
`newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`,
`newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`,
`xmlText`, `xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

Method Detail

getShortValue() Method

```
public short getShortValue()
```

Returns this value as a short

set(short) Method

DEPRECATED replaced with `com.bea.xml.XmlShort.setShortValue(short)`

```
public void set(short s)
```

Sets this value as a short

setShortValue(short) Method

```
public void setShortValue(short s)
```

Sets this value as a short

shortValue() Method

DEPRECATED replaced with `com.bea.xml.XmlShort.getShortValue()`

```
public short shortValue()
```

Returns this value as a short

XmlShort.Factory Class

public static final class XmlShort.Factory

extends Object

A class with methods for creating instances of XmlShort.

Hierarchy

```
Object
  XmlShort.Factory
```

Enclosing interface

```
XmlShort
```

Method Summary

```
public static
    XmlShort newInstance()
        Creates an empty instance of XmlShort

public static
    XmlShort newInstance(XmlOptions options)
        Creates an empty instance of XmlShort

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlShort newValue(Object obj)
        Creates an immutable XmlShort value

public static
    XmlShort parse(String s)
        Parses a XmlShort fragment from a String.

public static
    XmlShort parse(String s, XmlOptions options)
        Parses a XmlShort fragment from a String.

public static
    XmlShort parse(File f)
        Parses a XmlShort fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlShort      Parses a XmlShort fragment from a File.
public static
    XmlShort parse(URL u)
    Parses a XmlShort fragment from a URL.
public static
    XmlShort parse(URL u, XmlOptions options)
    Parses a XmlShort fragment from a URL.
public static
    XmlShort parse(InputStream is)
    Parses a XmlShort fragment from an InputStream.
public static
    XmlShort parse(InputStream is, XmlOptions options)
    Parses a XmlShort fragment from an InputStream.
public static
    XmlShort parse(Reader r)
    Parses a XmlShort fragment from a Reader.
public static
    XmlShort parse(Reader r, XmlOptions options)
    Parses a XmlShort fragment from a Reader.
public static
    XmlShort parse(Node node)
    Parses a XmlShort fragment from a DOM Node.
public static
    XmlShort parse(Node node, XmlOptions options)
    Parses a XmlShort fragment from a DOM Node.
public static
    XmlShort parse(XMLInputStream xis)
    Parses a XmlShort fragment from an XMLInputStream.
public static
    XmlShort parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlShort fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlShort newInstance()
```

Creates an empty instance of `XmlShort`

newInstance(XmlOptions) Method

```
public static XmlShort newInstance(XmlOptions options)
```

Creates an empty instance of XmlShort

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlShort newValue(Object obj)
```

Creates an immutable XmlShort value

parse(String) Method

```
public static XmlShort parse(String s)
    throws XmlException
```


Parses a `XmlShort` fragment from a `String`. For example:
"`<xml-fragment>12345</xml-fragment>`".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlShort parse(String s,  
                             XmlOptions options)  
    throws XmlException
```

Parses a `XmlShort` fragment from a `String`. For example:
"`<xml-fragment>12345</xml-fragment>`".

Exceptions

XmlException

parse(File) Method

```
public static XmlShort parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlShort` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlShort parse(File f,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlShort` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlShort parse(URL u)
    throws XmlException, IOException
```

Parses a `XmlShort` fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlShort parse(URL u,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlShort` fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlShort parse(InputStream is)
    throws XmlException, IOException
```

Parses a `XmlShort` fragment from an `InputStream`.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlShort parse(InputStream is,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlShort` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlShort parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlShort fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlShort parse(Reader r,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlShort fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlShort parse(Node node)
    throws XmlException
```

Parses a XmlShort fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlShort parse(Node node,
                             XmlOptions options)
    throws XmlException
```


Parses a `XmlShort` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlShort parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlShort` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlShort parse(XMLInputStream xis,
                             XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlShort` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlSimpleList Class

public class XmlSimpleList

extends Object
implements List, Serializable

The immutable List returned for XML simple list values. XmlSimpleList implements an equals() and hashCode() that compare list contents, so two XmlSimpleLists are the same if they have the same values in the same order.

Hierarchy

Object
 XmlSimpleList

All Implemented Interfaces

Collection, List, Serializable

Constructor Summary

XmlSimpleList(List list)

Constructs an immutable XmlSimpleList that wraps (does not copy) the given List.

Method Summary

```
public
boolean add(Object o)
    Unsupported because this list is immutable.

public void
    add(int index, Object element)
        Unsupported because this list is immutable.

public
boolean addAll(Collection coll)
    Unsupported because this list is immutable.

public
boolean addAll(int index, Collection c)
    Unsupported because this list is immutable.

public void
```



```

        clear()
            Unsupported because this list is immutable.

    public
    boolean contains(Object o)
        True if the list is contains an object equal to o.

    public
    boolean containsAll(Collection coll)
        True if the list is contains all the objects in the given collection.

    public
    boolean equals(Object o)
        Two XmlSimpleLists are equal if all their items are equal.

    public
    Object get(int index)
        Returns the object at the specified position in this list.

public int
    hashCode()
        Combines the hash codes of all the list items.

public int
    indexOf(Object o)
        Returns index of the first occurrence of an object equal to o.

    public
    boolean isEmpty()
        True if the list is empty.

    public
    Iterator iterator()
        Returns an iterator over the elements in this list in proper sequence.

public int
    lastIndexOf(Object o)
        Returns index of the last occurrence of an object equal to o.

    public
    ListIterator listIterator()
        Returns a list iterator of the elements in this list in proper sequence.

    public
    ListIterator listIterator(int index)
        Returns a list iterator of the elements in this list in proper sequence, starting at the
        specified position in this list.

    public
    boolean remove(Object o)
        Unsupported because this list is immutable.

    public
    Object remove(int index)
        Unsupported because this list is immutable.

    public
    boolean removeAll(Collection coll)
        Unsupported because this list is immutable.

    public
    boolean retainAll(Collection coll)

```


XMLBeans API Reference

Unsupported because this list is immutable.

```
public  
Object set(int index, Object element)
```

Unsupported because this list is immutable.

```
public int  
    size()
```

Returns the number of elements in this list.

```
public List  
    subList(int from, int to)
```

Returns a view of the portion of this list between the specified fromIndex, inclusive, and toIndex, exclusive.

```
public  
Object[] toArray()
```

Copies the collection to an array.

```
public  
Object[] toArray(Object[] a)
```

Copies the collection to an array of a specified type.

```
public  
String toString()
```

Returns a space-separated list of the string representations of all the items in the list.

Methods from class `java.lang.Object`

`clone`, `finalize`, `getClass`, `notify`, `notifyAll`, `wait`, `wait`, `wait`

Methods from interface `java.util.Collection`

`add`, `addAll`, `clear`, `contains`, `containsAll`, `equals`, `hashCode`, `isEmpty`, `iterator`, `remove`, `removeAll`, `retainAll`, `size`, `toArray`, `toArray`

Methods from interface `java.util.List`

`add`, `add`, `addAll`, `addAll`, `clear`, `contains`, `containsAll`, `equals`, `get`, `hashCode`, `indexOf`, `isEmpty`, `iterator`, `lastIndexOf`, `listIterator`, `listIterator`, `remove`, `remove`, `removeAll`, `retainAll`, `set`, `size`, `subList`, `toArray`, `toArray`

Constructor Detail

`XmlSimpleList`

```
public XmlSimpleList(List list)
```

Constructs an immutable `XmlSimpleList` that wraps (does not copy) the given `List`. All non-mutating methods delegate to the underlying `List` instance.

Method Detail

add(Object) Method

```
public boolean add(Object o)
```

Unsupported because this list is immutable.

add(int, Object) Method

```
public void add(int index,  
                Object element)
```

Unsupported because this list is immutable.

addAll(Collection) Method

```
public boolean addAll(Collection coll)
```

Unsupported because this list is immutable.

addAll(int, Collection) Method

```
public boolean addAll(int index,  
                      Collection c)
```

Unsupported because this list is immutable.

clear() Method

```
public void clear()
```

Unsupported because this list is immutable.

contains(Object) Method

```
public boolean contains(Object o)
```

True if the list is contains an object equal to o.

containsAll(Collection) Method

```
public boolean containsAll(Collection coll)
```


True if the list is contains all the objects in the given collection.

equals(Object) Method

```
public boolean equals(Object o)
```

Two XmlSimpleLists are equal if all their items are equal. (They must have the same number of items, and the items must be in the same order.)

Overrides

```
Object.equals(Object)
```

get(int) Method

```
public Object get(int index)
```

Returns the object at the specified position in this list.

hashCode() Method

```
public int hashCode()
```

Combines the hash codes of all the list items.

Overrides

```
Object.hashCode()
```

indexOf(Object) Method

```
public int indexOf(Object o)
```

Returns index of the first occurrence of an object equal to o.

isEmpty() Method

```
public boolean isEmpty()
```

True if the list is empty.

iterator() Method

```
public Iterator iterator()
```

Returns an iterator over the elements in this list in proper sequence.

lastIndexOf(Object) Method

```
public int lastIndexOf(Object o)
```

Returns index of the last occurrence of an object equal to o.

listIterator() Method

```
public ListIterator listIterator()
```

Returns a list iterator of the elements in this list in proper sequence.

listIterator(int) Method

```
public ListIterator listIterator(int index)
```

Returns a list iterator of the elements in this list in proper sequence, starting at the specified position in this list.

remove(Object) Method

```
public boolean remove(Object o)
```

Unsupported because this list is immutable.

remove(int) Method

```
public Object remove(int index)
```

Unsupported because this list is immutable.

removeAll(Collection) Method

```
public boolean removeAll(Collection coll)
```

Unsupported because this list is immutable.

retainAll(Collection) Method

```
public boolean retainAll(Collection coll)
```

Unsupported because this list is immutable.

set(int, Object) Method

```
public Object set(int index,  
                  Object element)
```

Unsupported because this list is immutable.

size() Method

```
public int size()
```

Returns the number of elements in this list.

subList(int, int) Method

```
public List subList(int from,  
                    int to)
```

Returns a view of the portion of this list between the specified fromIndex, inclusive, and toIndex, exclusive.

toArray() Method

```
public Object[] toArray()
```

Copies the collection to an array.

toArray(Object[]) Method

```
public Object[] toArray(Object[] a)
```

Copies the collection to an array of a specified type.

toString() Method

```
public String toString()
```

Returns a space-separated list of the string representations of all the items in the list. For most lists, this is a valid xml lexical value for the list. (The notable exception is a list of QNames.)

Overrides

```
Object.toString()
```


DEPRECATED Superceded by JSR 173

XMLStreamValidationException Class

public class XMLStreamValidationException

extends XMLStreamException

An exception thrown from a validating XMLInputStream.

Related Topics

```
XmlObject.Factory.newValidatingXMLInputStream(XMLInputStream)  
SchemaTypeLoader.newValidatingXMLInputStream(XMLInputStream, SchemaType,  
XmlOptions)
```

Hierarchy

```
Object  
  Throwable  
    Exception  
      IOException  
        XMLStreamException  
          XMLStreamValidationException
```

All Implemented Interfaces

```
NestedThrowable, Serializable
```

Field Summary

Fields from `weblogic.xml.stream.XMLStreamException`

th

Constructor Summary

XMLStreamValidationException(*XmlError xmlError*)

Method Summary

```
public
XmlError getXmlError()
```

Methods from `weblogic.xml.stream.XMLStreamException`

```
getMessage, getNested, getNestedException, printStackTrace,
printStackTrace, printStackTrace, superPrintStackTrace,
superPrintStackTrace, superToString, toString
```

Methods from `java.lang.Throwable`

```
fillInStackTrace, getCause, getLocalizedMessage, getMessage,
getStackTrace, initCause, printStackTrace, printStackTrace,
printStackTrace, setStackTrace, toString
```

Methods from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll,
toString, wait, wait, wait
```

Methods from interface `weblogic.utils.NestedThrowable`

```
getNested, superPrintStackTrace, superPrintStackTrace, superToString
```

Constructor Detail

XMLStreamValidationException

```
public XMLStreamValidationException(XmlError xmlError)
```

Method Detail

getXmlError() Method

```
public XmlError getXmlError()
```


XmlString Interface

public interface XmlString

extends XmlAnySimpleType

Corresponds to the XML Schema xs:string type.

A basic string in XML schema is not whitespace normalized. If you want your string type to be insensitive to variations in runs of whitespace, consider using xs:token (aka XmlToken) instead. To forbid whitespace and permit just alphanumeric and other common identifier characters consider xs:NMTOKEN (aka XmlNMTOKEN) instead.

Convertible to String.

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

All Known Subinterfaces

XmlENTITY, XmlID, XmlIDREF, XmlLanguage, XmlName, XmlNCName, XmlNMTOKEN, XmlNormalizedString, XmlToken

Nested Class Summary

```

    public static final class XmlString.Factory
    A class with methods for creating instances of XmlString.
  
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```

    public static final SchemaType type
    The constant SchemaType object representing this schema type.
  
```


Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface com.bea.xml.XmlObject

changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode

Methods from interface com.bea.xml.XmlTokenSource

documentProperties, monitor, newCursor, newDomNode, newDomNode,
newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
newXMLInputStream, save, save, save, save, save, save, save, save,
xmlText, xmlText

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

XmlString.Factory Class

public static final class XmlString.Factory

extends Object

A class with methods for creating instances of XmlString.

Hierarchy

```
Object
  XmlString.Factory
```

Enclosing interface

```
XmlString
```

Method Summary

```
public static
    XmlString newInstance()
        Creates an empty instance of XmlString

public static
    XmlString newInstance(XmlOptions options)
        Creates an empty instance of XmlString

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlString newValue(Object obj)
        Creates an immutable XmlString value

public static
    XmlString parse(String s)
        Parses a XmlString fragment from a String.

public static
    XmlString parse(String s, XmlOptions options)
        Parses a XmlString fragment from a String.

public static
    XmlString parse(File f)
        Parses a XmlString fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlString      Parses a XmlString fragment from a File.
public static
    XmlString parse(URL u)
    Parses a XmlString fragment from a URL.
public static
    XmlString parse(URL u, XmlOptions options)
    Parses a XmlString fragment from a URL.
public static
    XmlString parse(InputStream is)
    Parses a XmlString fragment from an InputStream.
public static
    XmlString parse(InputStream is, XmlOptions options)
    Parses a XmlString fragment from an InputStream.
public static
    XmlString parse(Reader r)
    Parses a XmlString fragment from a Reader.
public static
    XmlString parse(Reader r, XmlOptions options)
    Parses a XmlString fragment from a Reader.
public static
    XmlString parse(Node node)
    Parses a XmlString fragment from a DOM Node.
public static
    XmlString parse(Node node, XmlOptions options)
    Parses a XmlString fragment from a DOM Node.
public static
    XmlString parse(XMLInputStream xis)
    Parses a XmlString fragment from an XMLInputStream.
public static
    XmlString parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlString fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlString newInstance()
```

Creates an empty instance of `XmlString`

newInstance(XmlOptions) Method

```
public static XmlString newInstance(XmlOptions options)
```

Creates an empty instance of XmlString

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlString newValue(Object obj)
```

Creates an immutable XmlString value

parse(String) Method

```
public static XmlString parse(String s)
    throws XmlException
```


Parses a `XmlString` fragment from a `String`. For example: "<xml-fragment> arbitrary string </xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlString parse(String s,  
                             XmlOptions options)  
    throws XmlException
```

Parses a `XmlString` fragment from a `String`. For example: "<xml-fragment> arbitrary string </xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlString parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlString` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlString parse(File f,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlString` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlString parse(URL u)
    throws XmlException, IOException
```

Parses a XmlString fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlString parse(URL u,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlString fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlString parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlString fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlString parse(InputStream is,
                               XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlString fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlString parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlString fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlString parse(Reader r,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlString fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlString parse(Node node)
    throws XmlException
```

Parses a XmlString fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlString parse(Node node,
                             XmlOptions options)
    throws XmlException
```


Parses a `XmlString` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlString parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlString` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlString parse(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlString` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlTime Interface

public interface XmlTime

extends XmlAnySimpleType

Corresponds to the XML Schema xs:time type. A gDay specifies only a day-of-month.

Convertible to Calendar or GDate.

Related Topics

XmlCalendar

GDate

All Superinterfaces

XmlAnySimpleType, XmlObject, XmlTokenSource

Nested Class Summary

```
    public static final class XmlTime.Factory
    {
        A class with methods for creating instances of XmlTime.
    }
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```
    public static final SchemaType type
    {
        The constant SchemaType object representing this schema type.
    }
```

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

```

    public
    Calendar calendarValue()
        Returns this value as a Calendar

    public
    GDate gDateValue()
        Returns this value as a GDate

    public
    Calendar getCalendarValue()
        Returns this value as a Calendar

    public
    GDate getGDateValue()
        Returns this value as a GDate

    public
    void set(Calendar c)
        Sets this value as a Calendar

    public
    void set(GDateSpecification gd)
        Sets this value as a
        GDateSpecification

    public
    void setCalendarValue(Calendar c)
        Sets this value as a Calendar

    public
    void setGDateValue(GDate gd)
        Sets this value as a
        GDateSpecification

```

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface com.bea.xml.XmlObject

changeType, compareTo, compareValue, copy, execQuery, execQuery,
 isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
 toString, validate, validate, valueEquals, valueHashCode

Methods from interface com.bea.xml.XmlTokenSource

documentProperties, monitor, newCursor, newDomNode, newDomNode,
 newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
 newXMLInputStream, save, save, save, save, save, save, save, save,

`xmlText, xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

Method Detail

calendarValue() Method

DEPRECATED replaced with `com.bea.xml.XmlTime.getCalendarValue()`

```
public Calendar calendarValue()
```

Returns this value as a `Calendar`

gDateValue() Method

DEPRECATED replaced with `com.bea.xml.XmlTime.getGDateValue()`

```
public GDate gDateValue()
```

Returns this value as a `GDate`

getCalendarValue() Method

```
public Calendar getCalendarValue()
```

Returns this value as a `Calendar`

getGDateValue() Method

```
public GDate getGDateValue()
```

Returns this value as a `GDate`

set(Calendar) Method

DEPRECATED replaced with

```
com.bea.xml.XmlTime.setCalendarValue(java.util.Calendar)
```

```
public void set(Calendar c)
```

Sets this value as a Calendar

set(GDateSpecification) Method

DEPRECATED replaced with `com.bea.xml.XmlTime.setGDateValue(com.bea.xml.GDate)`

```
public void set(GDateSpecification gd)
```

Sets this value as a GDateSpecification

setCalendarValue(Calendar) Method

```
public void setCalendarValue(Calendar c)
```

Sets this value as a Calendar

setGDateValue(GDate) Method

```
public void setGDateValue(GDate gd)
```

Sets this value as a GDateSpecification

XmlTime.Factory Class

public static final class XmlTime.Factory

extends Object

A class with methods for creating instances of XmlTime.

Hierarchy

```
Object
  XmlTime.Factory
```

Enclosing interface

```
XmlTime
```

Method Summary

```
public static
    XmlTime newInstance()
        Creates an empty instance of XmlTime

public static
    XmlTime newInstance(XmlOptions options)
        Creates an empty instance of XmlTime

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlTime newValue(Object obj)
        Creates an immutable XmlTime value

public static
    XmlTime parse(String s)
        Parses a XmlTime fragment from a String.

public static
    XmlTime parse(String s, XmlOptions options)
        Parses a XmlTime fragment from a String.

public static
    XmlTime parse(File f)
        Parses a XmlTime fragment from a File.
```


XMLBeans API Reference

```
public static parse(File f, XmlOptions options)
    XmlTime      Parses a XmlTime fragment from a File.
public static
    XmlTime parse(URL u)
    Parses a XmlTime fragment from a URL.
public static
    XmlTime parse(URL u, XmlOptions options)
    Parses a XmlTime fragment from a URL.
public static
    XmlTime parse(InputStream is)
    Parses a XmlTime fragment from an InputStream.
public static
    XmlTime parse(InputStream is, XmlOptions options)
    Parses a XmlTime fragment from an InputStream.
public static
    XmlTime parse(Reader r)
    Parses a XmlTime fragment from a Reader.
public static
    XmlTime parse(Reader r, XmlOptions options)
    Parses a XmlTime fragment from a Reader.
public static
    XmlTime parse(Node node)
    Parses a XmlTime fragment from a DOM Node.
public static
    XmlTime parse(Node node, XmlOptions options)
    Parses a XmlTime fragment from a DOM Node.
public static
    XmlTime parse(XMLInputStream xis)
    Parses a XmlTime fragment from an XMLInputStream.
public static
    XmlTime parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlTime fragment from an XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlTime newInstance()
```

Creates an empty instance of `XmlTime`

newInstance(XmlOptions) Method

```
public static XmlTime newInstance(XmlOptions options)
```

Creates an empty instance of XmlTime

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlTime newValue(Object obj)
```

Creates an immutable XmlTime value

parse(String) Method

```
public static XmlTime parse(String s)
    throws XmlException
```


Parses a `XmlTime` fragment from a `String`. For example:
"<xml-fragment>12:00:00</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlTime parse(String s,  
                             XmlOptions options)  
    throws XmlException
```

Parses a `XmlTime` fragment from a `String`. For example:
"<xml-fragment>12:00:00</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlTime parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlTime` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlTime parse(File f,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlTime` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlTime parse(URL u)
    throws XmlException, IOException
```

Parses a XmlTime fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlTime parse(URL u,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlTime fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlTime parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlTime fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlTime parse(InputStream is,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlTime fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlTime parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlTime fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlTime parse(Reader r,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlTime fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlTime parse(Node node)
    throws XmlException
```

Parses a XmlTime fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlTime parse(Node node,
                             XmlOptions options)
    throws XmlException
```


Parses a `XmlTime` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlTime parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlTime` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlTime parse(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlTime` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlToken Interface

public interface XmlToken

extends XmlNormalizedString

Corresponds to the XML Schema xs:token type. One of the derived types based on xs:string.

A token is XML's best representation for a "whitespace insensitive string." All carriage returns, linefeeds, and tabs are converted to ordinary space characters (as with xs:normalizedString), and furthermore, all contiguous runs of space are collapsed to single spaces, and leading and trailing spaces are trimmed.

If you want " high priority " to be equivalent to "high priority", you should consider using xs:token or a subtype of xs:token.

When the XmlToken.stringValue() is obtained from an XmlToken, the normalized, trimmed, whitespace collapsed value is returned.

Convertible to String.

All Superinterfaces

XmlAnySimpleType, XmlNormalizedString, XmlObject, XmlString,
XmlTokenSource

All Known Subinterfaces

XmlENTITY, XmlID, XmlIDREF, XmlLanguage, XmlName, XmlNCName, XmlNMTOKEN

Nested Class Summary

```

    public static final class XmlToken.Factory
    A class with methods for creating instances of XmlToken.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlNormalizedString

XmlNormalizedString.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Nested classes from interface com.bea.xml.XmlString

XmlString.Factory

Field Summary

`public`
`static` *type*
`final` SchemaType The constant SchemaType object representing this schema type.

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlNormalizedString

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Fields from interface com.bea.xml.XmlString

type

Method Summary

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface com.bea.xml.XmlObject

changeType, compareTo, compareValue, copy, execQuery, execQuery,
 isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
 toString, validate, validate, valueEquals, valueHashCode

Methods from interface com.bea.xml.XmlTokenSource

documentProperties, monitor, newCursor, newDomNode, newDomNode,
 newInputStream, newInputStream, newReader, newReader, newXMLInputStream,
 newXMLInputStream, save, save, save, save, save, save, save, save,
 xmlText, xmlText

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

XmlToken.Factory Class

public static final class XmlToken.Factory

extends Object

A class with methods for creating instances of XmlToken.

Hierarchy

```
Object
  XmlToken.Factory
```

Enclosing interface

```
XmlToken
```

Method Summary

```
public static
    XmlToken newInstance()
        Creates an empty instance of XmlToken

public static
    XmlToken newInstance(XmlOptions options)
        Creates an empty instance of XmlToken

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
    options)
    Returns a validating XMLInputStream.

public static
    XmlToken newValue(Object obj)
        Creates an immutable XmlToken value

public static
    XmlToken parse(String s)
        Parses a XmlToken fragment from a String.

public static
    XmlToken parse(String s, XmlOptions options)
        Parses a XmlToken fragment from a String.

public static
    XmlToken parse(File f)
        Parses a XmlToken fragment from a File.
```



```

public static parse(File f, XmlOptions options)
    XmlToken      Parses a XmlToken fragment from a File.
public static
    XmlToken parse(URL u)
    Parses a XmlToken fragment from a URL.
public static
    XmlToken parse(URL u, XmlOptions options)
    Parses a XmlToken fragment from a URL.
public static
    XmlToken parse(InputStream is)
    Parses a XmlToken fragment from an InputStream.
public static
    XmlToken parse(InputStream is, XmlOptions options)
    Parses a XmlToken fragment from an InputStream.
public static
    XmlToken parse(Reader r)
    Parses a XmlToken fragment from a Reader.
public static
    XmlToken parse(Reader r, XmlOptions options)
    Parses a XmlToken fragment from a Reader.
public static
    XmlToken parse(Node node)
    Parses a XmlToken fragment from a DOM Node.
public static
    XmlToken parse(Node node, XmlOptions options)
    Parses a XmlToken fragment from a DOM Node.
public static
    XmlToken parse(XMLInputStream xis)
    Parses a XmlToken fragment from an XMLInputStream.
public static
    XmlToken parse(XMLInputStream xis, XmlOptions options)
    Parses a XmlToken fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlToken newInstance()
```

Creates an empty instance of `XmlToken`

newInstance(XmlOptions) Method

```
public static XmlToken newInstance(XmlOptions options)
```

Creates an empty instance of XmlToken

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlToken newValue(Object obj)
```

Creates an immutable XmlToken value

parse(String) Method

```
public static XmlToken parse(String s)
    throws XmlException
```


Parses a `XmlToken` fragment from a `String`. For example: "<xml-fragment>string to collapse</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlToken parse(String s,  
                             XmlOptions options)  
    throws XmlException
```

Parses a `XmlToken` fragment from a `String`. For example: "<xml-fragment>string to collapse</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlToken parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlToken` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlToken parse(File f,  
                             XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlToken` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlToken parse(URL u)
    throws XmlException, IOException
```

Parses a XmlToken fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlToken parse(URL u,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlToken fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlToken parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlToken fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlToken parse(InputStream is,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlToken fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlToken parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlToken fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlToken parse(Reader r,
                             XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlToken fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlToken parse(Node node)
    throws XmlException
```

Parses a XmlToken fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlToken parse(Node node,
                             XmlOptions options)
    throws XmlException
```


Parses a `XmlToken` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XmlToken parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlToken` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XmlToken parse(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlToken` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlTokenSource Interface

public interface **XmlTokenSource**

Represents a holder of XML that can return an `XmlCursor` or copy itself to various media such as `Writer` or `File`. Both `XmlObject` (and thus all XML Beans) and `XmlCursor` are `XmlTokenSource` implementations.

Related Topics

`XmlObject`
`XmlCursor`

All Known Implementing Classes

`FilterXmlObject`

All Known Subinterfaces

`SimpleValue`, `XmlAnySimpleType`, `XmlAnyURI`, `XmlBase64Binary`, `XmlBoolean`, `XmlByte`, `XmlCursor`, `XmlDate`, `XmlDateTime`, `XmlDecimal`, `XmlDouble`, `XmlDuration`, `XmlENTITIES`, `XmlENTITY`, `XmlFloat`, `XmlGDay`, `XmlGMonth`, `XmlGMonthDay`, `XmlGYear`, `XmlGYearMonth`, `XmlHexBinary`, `XmlID`, `XmlIDREF`, `XmlIDREFS`, `XmlInt`, `XmlInteger`, `XmlLanguage`, `XmlLong`, `XmlName`, `XmlNCName`, `XmlNegativeInteger`, `XmlNMTOKEN`, `XmlNMTOKENS`, `XmlNonNegativeInteger`, `XmlNonPositiveInteger`, `XmlNormalizedString`, `XmlNOTATION`, `XmlObject`, `XmlPositiveInteger`, `XmlQName`, `XmlShort`, `XmlString`, `XmlTime`, `XmlToken`, `XmlUnsignedByte`, `XmlUnsignedInt`, `XmlUnsignedLong`, `XmlUnsignedShort`

Method Summary

```

    public
    XmlDocumentProperties documentProperties()
        Returns the XmlDocumentProperties object for the document this
        token source is associated with.

    public Object
        monitor()
        Returns the synchronization object for the document.

    public XmlCursor
        newCursor()
        Returns a new XML cursor.

    public Node
        newDomNode()
        Returns a W3C DOM Node containing the XML represented by this
        source.

    public Node

```


XMLBeans API Reference

newDomNode(XmlOptions options)
Just like newDomNode() but with options.

public InputStream
newInputStream()
Returns a new stream containing standard XML text, encoded according to the given encoding.

public InputStream
newInputStream(XmlOptions options)
Just like newInputStream(String encoding) but with options.

public Reader
newReader()
Returns a new character reader containing XML text.

public Reader
newReader(XmlOptions options)
Just like newReader() but with options.

public XMLInputStream
newXMLInputStream()
Returns a new XmlInputStream.

public XMLInputStream
newXMLInputStream(XmlOptions options)
Just like newXMLInputStream() but with any of a number of options.

public void
save(ContentHandler ch, LexicalHandler lh)
Writes the XML represented by this source to the given SAX content and lexical handlers.

public void
save(File file)
Writes the XML represented by this source to the given File.

public void
save(OutputStream os)
Writes the XML represented by this source to the given output stream.

public void
save(Writer w)
Writes the XML represented by this source to the given writer.

public void
save(ContentHandler ch, LexicalHandler lh, XmlOptions options)
Writes the XML represented by this source to the given SAX content and lexical handlers.

public void
save(File file, XmlOptions options)
Writes the XML represented by this source to the given File.

public void
save(OutputStream os, XmlOptions options)
Writes the XML represented by this source to the given output stream.


```

    public void save(Writer w, XmlOptions options)
        Writes the XML represented by this source to the given writer.

    public String
        xmlText()
        Returns standard XML text.

    public String
        xmlText(XmlOptions options)
        Just like xmlText() but with options.

```

Method Detail

documentProperties() Method

```
public XmlDocumentProperties documentProperties()
```

Returns the XmlDocumentProperties object for the document this token source is associated with.

monitor() Method

```
public Object monitor()
```

Returns the synchronization object for the document. If concurrent multithreaded access to a document is required, the access should be protected by synchronizing on this monitor() object. There is one monitor per XML document tree.

newCursor() Method

```
public XmlCursor newCursor()
```

Returns a new XML cursor. A cursor provides random access to all the tokens in the XML data, plus the ability to extract strongly-typed XmlObjects for the data. If the data is not read-only, the XML cursor also allows modifications to the data. Using a cursor for the first time typically forces the XML document into memory.

newDomNode() Method

```
public Node newDomNode()
```

Returns a W3C DOM Node containing the XML represented by this source. This is a copy of the XML, it is not a live with the underlying store of this token source. If this is the document node, then a Document is returned, else a DocumentFragment is returned.

newDomNode(XmlOptions) Method

```
public Node newDomNode(XmlOptions options)
```


Just like `newDomNode()` but with options. Options map may be null.

Related Topics

[XmlOptions](#)

`newInputStream()` Method

```
public InputStream newInputStream()
```

Returns a new stream containing standard XML text, encoded according to the given encoding. The byte stream contains contents starting at the current begin-tag or begin-document and ending at the matching end-tag or end-document. The specified encoding is used and also emitted in a PI at the beginning of the stream. This is a fail-fast stream, so if the underlying data is changed while the stream is being read, the stream throws a `ConcurrentModificationException`. Throws an `IllegalStateException` if the `XmlTokenSource` is not positioned at begin-tag or begin-document (e.g., if it is at an attribute).

`newInputStream(XmlOptions)` Method

```
public InputStream newInputStream(XmlOptions options)
```

Just like `newInputStream(String encoding)` but with options. Options map may be null.

Related Topics

[XmlOptions](#)

`newReader()` Method

```
public Reader newReader()
```

Returns a new character reader containing XML text. The contents of the reader represents the document contents starting at the current begin-tag or begin-document and ending at the matching end-tag or end-document. No encoding annotation will be made in the text itself. This is a fail-fast reader, so if the underlying data is changed while the reader is being read, the reader throws a `ConcurrentModificationException`. Throws an `IllegalStateException` if the `XmlTokenSource` is not positioned at begin-tag or begin-document (e.g., if it is at an attribute).

`newReader(XmlOptions)` Method

```
public Reader newReader(XmlOptions options)
```

Just like `newReader()` but with options. Options map may be null.

Related Topics

newXMLInputStream() Method

DEPRECATED Superseded by JSR 173

```
public XMLInputStream newXMLInputStream()
```

Returns a new XmlInputStream. The stream starts at the current begin-tag or begin-document position and ends at the matching end-tag or end-document. This is a fail-fast stream, so if the underlying data is changed while the stream is being read, the stream throws a ConcurrentModificationException. Throws an IllegalStateException if the XmlTokenSource is not positioned at begin-tag or begin-document (e.g., if it is at an attribute).

newXMLInputStream(XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public XMLInputStream newXMLInputStream(XmlOptions options)
```

Just like newXMLInputStream() but with any of a number of options. Use the *options* parameter to specify the following:

To specify this	Use this method
The character encoding to use when converting the character data in the XML to bytes.	<code>XmlOptions.setCharacterEncoding(String)</code>
Prefix-to-namespace mappings that should be assumed when saving this XML. This is useful when the resulting XML will be part of a larger XML document, ensuring that this inner document will take advantage of namespaces defined in the outer document.	<code>XmlOptions.setSaveImplicitNamespaces(Map)</code>
Suggested namespace prefixes to use when saving. Used only when a namespace attribute needs to be synthesized.	<code>XmlOptions.setSaveSuggestedPrefixes(Map)</code>
That namespace attributes should occur first in elements when the XML is saved. By default, they occur last.	<code>XmlOptions.setSaveNamespacesFirst()</code>
The XML should be pretty printed when saved. Note that this should only be used for debugging.	<code>XmlOptions.setSavePrettyPrint()</code>
	<code>XmlOptions.setSavePrettyPrintIndent(int)</code>

The number of spaces to use when indenting for pretty printing. The default is 2.

The additional number of spaces indented from the left for pretty printed XML.

`XmlOptions.setSavePrettyPrintOffset(int)`

To minimize the number of namespace attributes generated for the saved XML. Note that this can reduce performance significantly.

`XmlOptions.setSaveAggressiveNamespaces()`

To reduce the size of the saved document by allowing the use of the default namespace. Note that this can potentially change the semantic meaning of the XML if unprefixed QNames are present as the value of an attribute or element.

`XmlOptions.setUseDefaultNamespace()`

To filter out processing instructions with the specified target name.

`XmlOptions.setSaveFilterProcinst(String)`

Change the QName of the synthesized root element when saving. This replaces "xml-fragment" with "fragment" in the namespace <http://www.openuri.org/fragment>

`XmlOptions.setSaveUseOpenFrag()`

Saving should begin on the element's contents.

`XmlOptions.setSaveInner()`

Saving should begin on the element, rather than its contents.

`XmlOptions.setSaveOuter()`

To rename the document element, or to specify the document element for this XML.

`XmlOptions.setSaveSyntheticDocumentElement(QName)`

Parameters

options

Any of the described options.

Returns

A new validating XMLInputStream.

Related Topics

`XmlOptions`

save(ContentHandler, LexicalHandler) Method

```
public void save(ContentHandler ch,  
                 LexicalHandler lh)  
    throws SAXException
```

Writes the XML represented by this source to the given SAX content and lexical handlers.

Exceptions

SAXException

save(File) Method

```
public void save(File file)  
    throws IOException
```

Writes the XML represented by this source to the given File.

Exceptions

IOException

save(OutputStream) Method

```
public void save(OutputStream os)  
    throws IOException
```

Writes the XML represented by this source to the given output stream.

Exceptions

IOException

save(Writer) Method

```
public void save(Writer w)  
    throws IOException
```

Writes the XML represented by this source to the given writer.

Exceptions

IOException

save(ContentHandler, LexicalHandler, XmlOptions) Method

```
public void save(ContentHandler ch,  
                 LexicalHandler lh,  
                 XmlOptions options)  
    throws SAXException
```

Writes the XML represented by this source to the given SAX content and lexical handlers.

Exceptions

SAXException

save(File, XmlOptions) Method

```
public void save(File file,  
                 XmlOptions options)  
    throws IOException
```

Writes the XML represented by this source to the given File.

Exceptions

IOException

save(OutputStream, XmlOptions) Method

```
public void save(OutputStream os,  
                 XmlOptions options)  
    throws IOException
```

Writes the XML represented by this source to the given output stream.

Exceptions

IOException

save(Writer, XmlOptions) Method

```
public void save(Writer w,  
                 XmlOptions options)  
    throws IOException
```

Writes the XML represented by this source to the given writer.

Exceptions

IOException

xmlText() Method

```
public String xmlText()
```

Returns standard XML text. The text returned represents the document contents starting at the current begin-tag or begin-document and ending at the matching end-tag or end-document. This is same content as newReader, but it is returned as a single string. Throws an IllegalStateException if the XmlTokenSource is not positioned at begin-tag or begin-document (e.g., if it is at an attribute).

xmlText(XmlOptions) Method

```
public String xmlText(XmlOptions options)
```

Just like xmlText() but with options. Options map may be null.

Related Topics

[XmlOptions](#)

XmlUnsignedByte Interface

public interface XmlUnsignedByte

extends XmlUnsignedShort

Corresponds to the XML Schema xs:unsignedByte type. One of the derived types based on xs:decimal.

Verified to be in the range 0..255 when validating.

As suggested by JAXB, convertible to Java short.

All Superinterfaces

XmlAnySimpleType, XmlDecimal, XmlInteger, XmlNonNegativeInteger, XmlObject, XmlTokenSource, XmlUnsignedInt, XmlUnsignedLong, XmlUnsignedShort

Nested Class Summary

```
public static final class XmlUnsignedByte.Factory
    A class with methods for creating instances of XmlUnsignedByte.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlDecimal

XmlDecimal.Factory

Nested classes from interface com.bea.xml.XmlInteger

XmlInteger.Factory

Nested classes from interface com.bea.xml.XmlNonNegativeInteger

XmlNonNegativeInteger.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Nested classes from interface com.bea.xml.XmlUnsignedInt

`XmlUnsignedInt.Factory`

Nested classes from interface `com.bea.xml.XmlUnsignedLong`

`XmlUnsignedLong.Factory`

Nested classes from interface `com.bea.xml.XmlUnsignedShort`

`XmlUnsignedShort.Factory`

Field Summary

<pre> public static final SchemaType </pre>	<pre> <i>type</i> </pre>	<p>The constant <code>SchemaType</code> object representing this schema type.</p>
---	--------------------------	---

Fields from interface `com.bea.xml.XmlAnySimpleType`

`type`

Fields from interface `com.bea.xml.XmlDecimal`

`type`

Fields from interface `com.bea.xml.XmlInteger`

`type`

Fields from interface `com.bea.xml.XmlNonNegativeInteger`

`type`

Fields from interface `com.bea.xml.XmlObject`

`EQUAL`, `GREATER_THAN`, `LESS_THAN`, `NOT_EQUAL`, `type`

Fields from interface `com.bea.xml.XmlUnsignedInt`

`type`

Fields from interface `com.bea.xml.XmlUnsignedLong`

`type`

Fields from interface `com.bea.xml.XmlUnsignedShort`

`type`

Method Summary

```
public
    short getShortValue()
        Returns this value as a
        short

public
    void set(short s)
        Sets this value as a short

public
    void setShortValue(short s)
        Sets this value as a short

public
    short shortValue()
        Returns this value as a
        short
```

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlDecimal`

`bigDecimalValue`, `getBigDecimalValue`, `set`, `setBigDecimalValue`

Methods from interface `com.bea.xml.XmlInteger`

`bigIntegerValue`, `getBigIntegerValue`, `set`, `setBigIntegerValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`,
`isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`,
`toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`,
`newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`,
`newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`,
`xmlText`, `xmlText`

Methods from interface `com.bea.xml.XmlUnsignedInt`

`getLongValue`, `longValue`, `set`, `setLongValue`

Methods from interface `com.bea.xml.XmlUnsignedShort`

`getIntValue`, `intValue`, `set`, `setIntValue`

Field Detail

type

```
public static final SchemaType type
```

The constant SchemaType object representing this schema type.

Method Detail

getShortValue() Method

```
public short getShortValue()
```

Returns this value as a short

set(short) Method

DEPRECATED replaced with `com.bea.xml.XmlUnsignedByte.setShortValue(short)`

```
public void set(short s)
```

Sets this value as a short

setShortValue(short) Method

```
public void setShortValue(short s)
```

Sets this value as a short

shortValue() Method

DEPRECATED replaced with `com.bea.xml.XmlUnsignedByte.getShortValue()`

```
public short shortValue()
```

Returns this value as a short

XmlUnsignedByte.Factory Class

public static final class XmlUnsignedByte.Factory

extends Object

A class with methods for creating instances of XmlUnsignedByte.

Hierarchy

```
Object
  XmlUnsignedByte.Factory
```

Enclosing interface

```
XmlUnsignedByte
```

Method Summary

```
public static
XmlUnsignedByte newInstance()
    Creates an empty instance of XmlUnsignedByte

public static
XmlUnsignedByte newInstance(XmlOptions options)
    Creates an empty instance of XmlUnsignedByte

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
options)
    Returns a validating XMLInputStream.

public static
XmlUnsignedByte newValue(Object obj)
    Creates an immutable XmlUnsignedByte value

public static
XmlUnsignedByte parse(String s)
    Parses a XmlUnsignedByte fragment from a String.

public static
XmlUnsignedByte parse(String s, XmlOptions options)
    Parses a XmlUnsignedByte fragment from a String.

public static
XmlUnsignedByte parse(File f)
    Parses a XmlUnsignedByte fragment from a File.
```


XMLBeans API Reference

```
public static parse(File f, XmlOptions options)
XmlUnsignedByte      Parses a XmlUnsignedByte fragment from a File.

public static
XmlUnsignedByte parse(URL u)
                    Parses a XmlUnsignedByte fragment from a URL.

public static
XmlUnsignedByte parse(URL u, XmlOptions options)
                    Parses a XmlUnsignedByte fragment from a URL.

public static
XmlUnsignedByte parse(InputStream is)
                    Parses a XmlUnsignedByte fragment from an InputStream.

public static
XmlUnsignedByte parse(InputStream is, XmlOptions options)
                    Parses a XmlUnsignedByte fragment from an InputStream.

public static
XmlUnsignedByte parse(Reader r)
                    Parses a XmlUnsignedByte fragment from a Reader.

public static
XmlUnsignedByte parse(Reader r, XmlOptions options)
                    Parses a XmlUnsignedByte fragment from a Reader.

public static
XmlUnsignedByte parse(Node node)
                    Parses a XmlUnsignedByte fragment from a DOM Node.

public static
XmlUnsignedByte parse(Node node, XmlOptions options)
                    Parses a XmlUnsignedByte fragment from a DOM Node.

public static
XmlUnsignedByte parse(XMLInputStream xis)
                    Parses a XmlUnsignedByte fragment from an XMLInputStream.

public static
XmlUnsignedByte parse(XMLInputStream xis, XmlOptions options)
                    Parses a XmlUnsignedByte fragment from an XMLInputStream.
```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlUnsignedByte newInstance()
```

Creates an empty instance of `XmlUnsignedByte`

newInstance(XmlOptions) Method

```
public static XmlUnsignedByte newInstance(XmlOptions options)
```

Creates an empty instance of XmlUnsignedByte

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlUnsignedByte newValue(Object obj)
```

Creates an immutable XmlUnsignedByte value

parse(String) Method

```
public static XmlUnsignedByte parse(String s)
    throws XmlException
```


Parses a `XmlUnsignedByte` fragment from a `String`. For example:
"<xml-fragment>123</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlUnsignedByte parse(String s,  
                                   XmlOptions options)  
    throws XmlException
```

Parses a `XmlUnsignedByte` fragment from a `String`. For example:
"<xml-fragment>123</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlUnsignedByte parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlUnsignedByte` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlUnsignedByte parse(File f,  
                                   XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlUnsignedByte` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlUnsignedByte parse(URL u)
    throws XmlException, IOException
```

Parses a XmlUnsignedByte fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlUnsignedByte parse(URL u,
                                   XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlUnsignedByte fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlUnsignedByte parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlUnsignedByte fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlUnsignedByte parse(InputStream is,
                                   XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlUnsignedByte fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlUnsignedByte parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlUnsignedByte fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlUnsignedByte parse(Reader r,
                                   XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlUnsignedByte fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlUnsignedByte parse(Node node)
    throws XmlException
```

Parses a XmlUnsignedByte fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlUnsignedByte parse(Node node,
                                   XmlOptions options)
    throws XmlException
```


Parses a `XmlUnsignedByte` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlUnsignedByte parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlUnsignedByte` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlUnsignedByte parse(XMLInputStream xis,
                                   XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlUnsignedByte` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlUnsignedInt Interface

public interface XmlUnsignedInt

extends XmlUnsignedLong

Corresponds to the XML Schema xs:unsignedInt type. One of the derived types based on xs:decimal.

Verified to be in the range 0..4294967295 when validating.

Convertible to Java long.

All Superinterfaces

XmlAnySimpleType, XmlDecimal, XmlInteger, XmlNonNegativeInteger, XmlObject, XmlTokenSource, XmlUnsignedLong

All Known Subinterfaces

XmlUnsignedByte, XmlUnsignedShort

Nested Class Summary

```
public static final class XmlUnsignedInt.Factory
    A class with methods for creating instances of XmlUnsignedInt.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlDecimal

XmlDecimal.Factory

Nested classes from interface com.bea.xml.XmlInteger

XmlInteger.Factory

Nested classes from interface com.bea.xml.XmlNonNegativeInteger

XmlNonNegativeInteger.Factory

Nested classes from interface com.bea.xml.XmlObject

`XmlObject.Factory`

Nested classes from interface `com.bea.xml.XmlUnsignedLong`

`XmlUnsignedLong.Factory`

Field Summary

```

    public
    static type
final SchemaType

```

The constant `SchemaType` object representing this schema type.

Fields from interface `com.bea.xml.XmlAnySimpleType`

`type`

Fields from interface `com.bea.xml.XmlDecimal`

`type`

Fields from interface `com.bea.xml.XmlInteger`

`type`

Fields from interface `com.bea.xml.XmlNonNegativeInteger`

`type`

Fields from interface `com.bea.xml.XmlObject`

`EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type`

Fields from interface `com.bea.xml.XmlUnsignedLong`

`type`

Method Summary

```

public
    long getLongValue()
        Returns this value as a
        long
public
    long longValue()
        Returns this value as a
        long
public
    void set(long v)

```


Sets this value as a long

```
public
    void setLongValue(long v)
        Sets this value as a long
```

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlDecimal`

`bigDecimalValue`, `getBigDecimalValue`, `set`, `setBigDecimalValue`

Methods from interface `com.bea.xml.XmlInteger`

`bigIntegerValue`, `getBigIntegerValue`, `set`, `setBigIntegerValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`, `isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`, `toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`, `newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`, `newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `xmlText`, `xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

Method Detail

`getLongValue()` Method

```
public long getLongValue()
```

Returns this value as a long

longValue() Method

DEPRECATED replaced with `com.bea.xml.XmlUnsignedInt.getLongValue()`

```
public long longValue()
```

Returns this value as a long

set(long) Method

DEPRECATED replaced with `com.bea.xml.XmlUnsignedInt.setLongValue(long)`

```
public void set(long v)
```

Sets this value as a long

setLongValue(long) Method

```
public void setLongValue(long v)
```

Sets this value as a long

XmlUnsignedInt.Factory Class

public static final class XmlUnsignedInt.Factory

extends Object

A class with methods for creating instances of XmlUnsignedInt.

Hierarchy

```
Object
  XmlUnsignedInt.Factory
```

Enclosing interface

```
XmlUnsignedInt
```

Method Summary

```
public static
XmlUnsignedInt newInstance()
    Creates an empty instance of XmlUnsignedInt

public static
XmlUnsignedInt newInstance(XmlOptions options)
    Creates an empty instance of XmlUnsignedInt

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
options)
    Returns a validating XMLInputStream.

public static
XmlUnsignedInt newValue(Object obj)
    Creates an immutable XmlUnsignedInt value

public static
XmlUnsignedInt parse(String s)
    Parses a XmlUnsignedInt fragment from a String.

public static
XmlUnsignedInt parse(String s, XmlOptions options)
    Parses a XmlUnsignedInt fragment from a String.

public static
XmlUnsignedInt parse(File f)
    Parses a XmlUnsignedInt fragment from a File.
```



```

    public static parse(File f, XmlOptions options)
    XmlUnsignedInt      Parses a XmlUnsignedInt fragment from a File.

    public static
    XmlUnsignedInt parse(URL u)
                        Parses a XmlUnsignedInt fragment from a URL.

    public static
    XmlUnsignedInt parse(URL u, XmlOptions options)
                        Parses a XmlUnsignedInt fragment from a URL.

    public static
    XmlUnsignedInt parse(InputStream is)
                        Parses a XmlUnsignedInt fragment from an InputStream.

    public static
    XmlUnsignedInt parse(InputStream is, XmlOptions options)
                        Parses a XmlUnsignedInt fragment from an InputStream.

    public static
    XmlUnsignedInt parse(Reader r)
                        Parses a XmlUnsignedInt fragment from a Reader.

    public static
    XmlUnsignedInt parse(Reader r, XmlOptions options)
                        Parses a XmlUnsignedInt fragment from a Reader.

    public static
    XmlUnsignedInt parse(Node node)
                        Parses a XmlUnsignedInt fragment from a DOM Node.

    public static
    XmlUnsignedInt parse(Node node, XmlOptions options)
                        Parses a XmlUnsignedInt fragment from a DOM Node.

    public static
    XmlUnsignedInt parse(XMLInputStream xis)
                        Parses a XmlUnsignedInt fragment from an XMLInputStream.

    public static
    XmlUnsignedInt parse(XMLInputStream xis, XmlOptions options)
                        Parses a XmlUnsignedInt fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlUnsignedInt newInstance()
```

Creates an empty instance of `XmlUnsignedInt`

newInstance(XmlOptions) Method

```
public static XmlUnsignedInt newInstance(XmlOptions options)
```

Creates an empty instance of XmlUnsignedInt

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlUnsignedInt newValue(Object obj)
```

Creates an immutable XmlUnsignedInt value

parse(String) Method

```
public static XmlUnsignedInt parse(String s)
    throws XmlException
```


Parses a `XmlUnsignedInt` fragment from a `String`. For example:
"<xml-fragment>1234567</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlUnsignedInt parse(String s,  
                                   XmlOptions options)  
    throws XmlException
```

Parses a `XmlUnsignedInt` fragment from a `String`. For example:
"<xml-fragment>1234567</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlUnsignedInt parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlUnsignedInt` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlUnsignedInt parse(File f,  
                                   XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlUnsignedInt` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlUnsignedInt parse(URL u)
    throws XmlException, IOException
```

Parses a `XmlUnsignedInt` fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlUnsignedInt parse(URL u,
                                   XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlUnsignedInt` fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlUnsignedInt parse(InputStream is)
    throws XmlException, IOException
```

Parses a `XmlUnsignedInt` fragment from an `InputStream`.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlUnsignedInt parse(InputStream is,
                                   XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlUnsignedInt` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlUnsignedInt parse(Reader r)
    throws XmlException, IOException
```

Parses a `XmlUnsignedInt` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlUnsignedInt parse(Reader r,
                                   XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlUnsignedInt` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlUnsignedInt parse(Node node)
    throws XmlException
```

Parses a `XmlUnsignedInt` fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlUnsignedInt parse(Node node,
                                   XmlOptions options)
    throws XmlException
```


Parses a `XmlUnsignedInt` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlUnsignedInt parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlUnsignedInt` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlUnsignedInt parse(XMLInputStream xis,
                                   XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlUnsignedInt` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlUnsignedLong Interface

public interface XmlUnsignedLong

extends XmlNonNegativeInteger

Corresponds to the XML Schema xs:unsignedLong type. One of the derived types based on xs:decimal.

Verified to be in the range 0..264–1 when validating.

Convertible to BigInteger.

All Superinterfaces

XmlAnySimpleType, XmlDecimal, XmlInteger, XmlNonNegativeInteger, XmlObject, XmlTokenSource

All Known Subinterfaces

XmlUnsignedByte, XmlUnsignedInt, XmlUnsignedShort

Nested Class Summary

```
public static final class XmlUnsignedLong.Factory
    A class with methods for creating instances of XmlUnsignedLong.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlDecimal

XmlDecimal.Factory

Nested classes from interface com.bea.xml.XmlInteger

XmlInteger.Factory

Nested classes from interface com.bea.xml.XmlNonNegativeInteger

XmlNonNegativeInteger.Factory

Nested classes from interface com.bea.xml.XmlObject

XmlObject.Factory

Field Summary

```

    public
    static type
final SchemaType

```

The constant SchemaType object representing this schema type.

Fields from interface com.bea.xml.XmlAnySimpleType

type

Fields from interface com.bea.xml.XmlDecimal

type

Fields from interface com.bea.xml.XmlInteger

type

Fields from interface com.bea.xml.XmlNonNegativeInteger

type

Fields from interface com.bea.xml.XmlObject

EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type

Method Summary

Methods from interface com.bea.xml.XmlAnySimpleType

getStringValue, set, setStringValue, stringValue

Methods from interface com.bea.xml.XmlDecimal

bigDecimalValue, getBigDecimalValue, set, setBigDecimalValue

Methods from interface com.bea.xml.XmlInteger

bigIntegerValue, getBigIntegerValue, set, setBigIntegerValue

Methods from interface com.bea.xml.XmlObject

changeType, compareTo, compareValue, copy, execQuery, execQuery,
isImmutable, isNil, schemaType, selectPath, selectPath, set, setNil,
toString, validate, validate, valueEquals, valueHashCode

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`,
`newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`,
`newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`,
`xmlText`, `xmlText`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

XmlUnsignedLong.Factory Class

public static final class XmlUnsignedLong.Factory

extends Object

A class with methods for creating instances of XmlUnsignedLong.

Hierarchy

```

Object
  XmlUnsignedLong.Factory
  
```

Enclosing interface

```

XmlUnsignedLong
  
```

Method Summary

```

public static
XmlUnsignedLong newInstance()
    Creates an empty instance of XmlUnsignedLong

public static
XmlUnsignedLong newInstance(XmlOptions options)
    Creates an empty instance of XmlUnsignedLong

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
options)
    Returns a validating XMLInputStream.

public static
XmlUnsignedLong newValue(Object obj)
    Creates an immutable XmlUnsignedLong value

public static
XmlUnsignedLong parse(String s)
    Parses a XmlUnsignedLong fragment from a String.

public static
XmlUnsignedLong parse(String s, XmlOptions options)
    Parses a XmlUnsignedLong fragment from a String.

public static
XmlUnsignedLong parse(File f)
    Parses a XmlUnsignedLong fragment from a File.
  
```



```

    public static parse(File f, XmlOptions options)
XmlUnsignedLong      Parses a XmlUnsignedLong fragment from a File.

    public static
XmlUnsignedLong parse(URL u)
                        Parses a XmlUnsignedLong fragment from a URL.

    public static
XmlUnsignedLong parse(URL u, XmlOptions options)
                        Parses a XmlUnsignedLong fragment from a URL.

    public static
XmlUnsignedLong parse(InputStream is)
                        Parses a XmlUnsignedLong fragment from an InputStream.

    public static
XmlUnsignedLong parse(InputStream is, XmlOptions options)
                        Parses a XmlUnsignedLong fragment from an InputStream.

    public static
XmlUnsignedLong parse(Reader r)
                        Parses a XmlUnsignedLong fragment from a Reader.

    public static
XmlUnsignedLong parse(Reader r, XmlOptions options)
                        Parses a XmlUnsignedLong fragment from a Reader.

    public static
XmlUnsignedLong parse(Node node)
                        Parses a XmlUnsignedLong fragment from a DOM Node.

    public static
XmlUnsignedLong parse(Node node, XmlOptions options)
                        Parses a XmlUnsignedLong fragment from a DOM Node.

    public static
XmlUnsignedLong parse(XMLInputStream xis)
                        Parses a XmlUnsignedLong fragment from an XMLInputStream.

    public static
XmlUnsignedLong parse(XMLInputStream xis, XmlOptions options)
                        Parses a XmlUnsignedLong fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlUnsignedLong newInstance()
```

Creates an empty instance of `XmlUnsignedLong`

newInstance(XmlOptions) Method

```
public static XmlUnsignedLong newInstance(XmlOptions options)
```

Creates an empty instance of XmlUnsignedLong

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException
XMLStreamException

newValue(Object) Method

```
public static XmlUnsignedLong newValue(Object obj)
```

Creates an immutable XmlUnsignedLong value

parse(String) Method

```
public static XmlUnsignedLong parse(String s)
    throws XmlException
```


Parses a `XmlUnsignedLong` fragment from a `String`. For example:
"<xml-fragment>123456789</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlUnsignedLong parse(String s,  
                                   XmlOptions options)  
    throws XmlException
```

Parses a `XmlUnsignedLong` fragment from a `String`. For example:
"<xml-fragment>123456789</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlUnsignedLong parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlUnsignedLong` fragment from a `File`.

Exceptions

XmlException

IOException

parse(File, XmlOptions) Method

```
public static XmlUnsignedLong parse(File f,  
                                   XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlUnsignedLong` fragment from a `File`.

Exceptions

XmlException

IOException

parse(URL) Method

```
public static XmlUnsignedLong parse(URL u)
    throws XmlException, IOException
```

Parses a XmlUnsignedLong fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlUnsignedLong parse(URL u,
                                   XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlUnsignedLong fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlUnsignedLong parse(InputStream is)
    throws XmlException, IOException
```

Parses a XmlUnsignedLong fragment from an InputStream.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlUnsignedLong parse(InputStream is,
                                   XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlUnsignedLong fragment from an InputStream.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlUnsignedLong parse(Reader r)
    throws XmlException, IOException
```

Parses a XmlUnsignedLong fragment from a Reader.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlUnsignedLong parse(Reader r,
                                   XmlOptions options)
    throws XmlException, IOException
```

Parses a XmlUnsignedLong fragment from a Reader.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlUnsignedLong parse(Node node)
    throws XmlException
```

Parses a XmlUnsignedLong fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlUnsignedLong parse(Node node,
                                   XmlOptions options)
    throws XmlException
```


Parses a `XmlUnsignedLong` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlUnsignedLong parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlUnsignedLong` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlUnsignedLong parse(XMLInputStream xis,
                                     XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlUnsignedLong` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

XmlUnsignedShort Interface

public interface XmlUnsignedShort

extends XmlUnsignedInt

Corresponds to the XML Schema xs:unsignedShort type. One of the derived types based on xs:decimal.

Verified to be in the range 0..65535 when validating.

Convertible to a Java int.

All Superinterfaces

XmlAnySimpleType, XmlDecimal, XmlInteger, XmlNonNegativeInteger, XmlObject, XmlTokenSource, XmlUnsignedInt, XmlUnsignedLong

All Known Subinterfaces

XmlUnsignedByte

Nested Class Summary

```
public static final class XmlUnsignedShort.Factory
    A class with methods for creating instances of XmlUnsignedShort.
```

Nested classes from interface com.bea.xml.XmlAnySimpleType

XmlAnySimpleType.Factory

Nested classes from interface com.bea.xml.XmlDecimal

XmlDecimal.Factory

Nested classes from interface com.bea.xml.XmlInteger

XmlInteger.Factory

Nested classes from interface com.bea.xml.XmlNonNegativeInteger

XmlNonNegativeInteger.Factory

Nested classes from interface com.bea.xml.XmlObject

`XmlObject.Factory`

Nested classes from interface `com.bea.xml.XmlUnsignedInt`

`XmlUnsignedInt.Factory`

Nested classes from interface `com.bea.xml.XmlUnsignedLong`

`XmlUnsignedLong.Factory`

Field Summary

`public static type final SchemaType` The constant `SchemaType` object representing this schema type.

Fields from interface `com.bea.xml.XmlAnySimpleType`

`type`

Fields from interface `com.bea.xml.XmlDecimal`

`type`

Fields from interface `com.bea.xml.XmlInteger`

`type`

Fields from interface `com.bea.xml.XmlNonNegativeInteger`

`type`

Fields from interface `com.bea.xml.XmlObject`

`EQUAL, GREATER_THAN, LESS_THAN, NOT_EQUAL, type`

Fields from interface `com.bea.xml.XmlUnsignedInt`

`type`

Fields from interface `com.bea.xml.XmlUnsignedLong`

`type`

Method Summary

`public int getIntValue()`

Returns this value as an
int

```
public
    int intValue()
```

Returns this value as an
int

```
public
    void set(int v)
```

Sets this value as an int

```
public
    void setIntValue(int v)
```

Sets this value as an int

Methods from interface `com.bea.xml.XmlAnySimpleType`

`getStringValue`, `set`, `setStringValue`, `stringValue`

Methods from interface `com.bea.xml.XmlDecimal`

`bigDecimalValue`, `getBigDecimalValue`, `set`, `setBigDecimalValue`

Methods from interface `com.bea.xml.XmlInteger`

`bigIntegerValue`, `getBigIntegerValue`, `set`, `setBigIntegerValue`

Methods from interface `com.bea.xml.XmlObject`

`changeType`, `compareTo`, `compareValue`, `copy`, `execQuery`, `execQuery`,
`isImmutable`, `isNil`, `schemaType`, `selectPath`, `selectPath`, `set`, `setNil`,
`toString`, `validate`, `validate`, `valueEquals`, `valueHashCode`

Methods from interface `com.bea.xml.XmlTokenSource`

`documentProperties`, `monitor`, `newCursor`, `newDomNode`, `newDomNode`,
`newInputStream`, `newInputStream`, `newReader`, `newReader`, `newXMLInputStream`,
`newXMLInputStream`, `save`, `save`, `save`, `save`, `save`, `save`, `save`, `save`,
`xmlText`, `xmlText`

Methods from interface `com.bea.xml.XmlUnsignedInt`

`getLongValue`, `longValue`, `set`, `setLongValue`

Field Detail

type

```
public static final SchemaType type
```

The constant `SchemaType` object representing this schema type.

Method Detail

getIntValue() Method

```
public int getIntValue()
```

Returns this value as an int

intValue() Method

DEPRECATED replaced with `com.bea.xml.XmlUnsignedShort.getIntValue()`

```
public int intValue()
```

Returns this value as an int

set(int) Method

DEPRECATED replaced with `com.bea.xml.XmlUnsignedShort.setIntValue(int)`

```
public void set(int v)
```

Sets this value as an int

setIntValue(int) Method

```
public void setIntValue(int v)
```

Sets this value as an int

XmlUnsignedShort.Factory Class

public static final class XmlUnsignedShort.Factory

extends Object

A class with methods for creating instances of XmlUnsignedShort.

Hierarchy

```
Object
  XmlUnsignedShort.Factory
```

Enclosing interface

```
XmlUnsignedShort
```

Method Summary

```
public static
XmlUnsignedShort newInstance()
    Creates an empty instance of XmlUnsignedShort

public static
XmlUnsignedShort newInstance(XmlOptions options)
    Creates an empty instance of XmlUnsignedShort

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    Returns a validating XMLInputStream.

public static
XMLInputStream newValidatingXMLInputStream(XMLInputStream xis, XmlOptions
options)
    Returns a validating XMLInputStream.

public static
XmlUnsignedShort newValue(Object obj)
    Creates an immutable XmlUnsignedShort value

public static
XmlUnsignedShort parse(String s)
    Parses a XmlUnsignedShort fragment from a String.

public static
XmlUnsignedShort parse(String s, XmlOptions options)
    Parses a XmlUnsignedShort fragment from a String.

public static
XmlUnsignedShort parse(File f)
    Parses a XmlUnsignedShort fragment from a File.
```



```

    public static parse(File f, XmlOptions options)
XmlUnsignedShort      Parses a XmlUnsignedShort fragment from a File.

    public static
XmlUnsignedShort parse(URL u)
                        Parses a XmlUnsignedShort fragment from a URL.

    public static
XmlUnsignedShort parse(URL u, XmlOptions options)
                        Parses a XmlUnsignedShort fragment from a URL.

    public static
XmlUnsignedShort parse(InputStream is)
                        Parses a XmlUnsignedShort fragment from an InputStream.

    public static
XmlUnsignedShort parse(InputStream is, XmlOptions options)
                        Parses a XmlUnsignedShort fragment from an InputStream.

    public static
XmlUnsignedShort parse(Reader r)
                        Parses a XmlUnsignedShort fragment from a Reader.

    public static
XmlUnsignedShort parse(Reader r, XmlOptions options)
                        Parses a XmlUnsignedShort fragment from a Reader.

    public static
XmlUnsignedShort parse(Node node)
                        Parses a XmlUnsignedShort fragment from a DOM Node.

    public static
XmlUnsignedShort parse(Node node, XmlOptions options)
                        Parses a XmlUnsignedShort fragment from a DOM Node.

    public static
XmlUnsignedShort parse(XMLInputStream xis)
                        Parses a XmlUnsignedShort fragment from an XMLInputStream.

    public static
XmlUnsignedShort parse(XMLInputStream xis, XmlOptions options)
                        Parses a XmlUnsignedShort fragment from an XMLInputStream.

```

Methods from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`,
`toString`, `wait`, `wait`, `wait`

Method Detail

`newInstance()` Method

```
public static XmlUnsignedShort newInstance()
```

Creates an empty instance of `XmlUnsignedShort`

newInstance(XmlOptions) Method

```
public static XmlUnsignedShort newInstance(XmlOptions options)
```

Creates an empty instance of XmlUnsignedShort

newValidatingXMLInputStream(XMLInputStream) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValidatingXMLInputStream(XMLInputStream, XmlOptions) Method

DEPRECATED Superseded by JSR 173

```
public static XMLInputStream newValidatingXMLInputStream(XMLInputStream xis,
    XmlOptions options)
    throws XmlException, XMLStreamException
```

Returns a validating XMLInputStream.

Exceptions

XmlException

XMLStreamException

newValue(Object) Method

```
public static XmlUnsignedShort newValue(Object obj)
```

Creates an immutable XmlUnsignedShort value

parse(String) Method

```
public static XmlUnsignedShort parse(String s)
    throws XmlException
```


Parses a `XmlUnsignedShort` fragment from a `String`. For example:
"<xml-fragment>12345</xml-fragment>".

Exceptions

XmlException

parse(String, XmlOptions) Method

```
public static XmlUnsignedShort parse(String s,  
                                     XmlOptions options)  
    throws XmlException
```

Parses a `XmlUnsignedShort` fragment from a `String`. For example:
"<xml-fragment>12345</xml-fragment>".

Exceptions

XmlException

parse(File) Method

```
public static XmlUnsignedShort parse(File f)  
    throws XmlException, IOException
```

Parses a `XmlUnsignedShort` fragment from a `File`.

Exceptions

XmlException
IOException

parse(File, XmlOptions) Method

```
public static XmlUnsignedShort parse(File f,  
                                     XmlOptions options)  
    throws XmlException, IOException
```

Parses a `XmlUnsignedShort` fragment from a `File`.

Exceptions

XmlException
IOException

parse(URL) Method

```
public static XmlUnsignedShort parse(URL u)
    throws XmlException, IOException
```

Parses a `XmlUnsignedShort` fragment from a URL.

Exceptions

XmlException
IOException

parse(URL, XmlOptions) Method

```
public static XmlUnsignedShort parse(URL u,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlUnsignedShort` fragment from a URL.

Exceptions

XmlException
IOException

parse(InputStream) Method

```
public static XmlUnsignedShort parse(InputStream is)
    throws XmlException, IOException
```

Parses a `XmlUnsignedShort` fragment from an `InputStream`.

Exceptions

XmlException
IOException

parse(InputStream, XmlOptions) Method

```
public static XmlUnsignedShort parse(InputStream is,
    XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlUnsignedShort` fragment from an `InputStream`.

Exceptions

XmlException

IOException

parse(Reader) Method

```
public static XmlUnsignedShort parse(Reader r)
    throws XmlException, IOException
```

Parses a `XmlUnsignedShort` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Reader, XmlOptions) Method

```
public static XmlUnsignedShort parse(Reader r,
                                     XmlOptions options)
    throws XmlException, IOException
```

Parses a `XmlUnsignedShort` fragment from a `Reader`.

Exceptions

XmlException

IOException

parse(Node) Method

```
public static XmlUnsignedShort parse(Node node)
    throws XmlException
```

Parses a `XmlUnsignedShort` fragment from a DOM Node.

Exceptions

XmlException

parse(Node, XmlOptions) Method

```
public static XmlUnsignedShort parse(Node node,
                                     XmlOptions options)
    throws XmlException
```


Parses a `XmlUnsignedShort` fragment from a DOM Node.

Exceptions

XmlException

parse(XMLInputStream) Method

DEPRECATED Superceded by JSR 173

```
public static XmlUnsignedShort parse(XMLInputStream xis)
    throws XmlException, XMLStreamException
```

Parses a `XmlUnsignedShort` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException

parse(XMLInputStream, XmlOptions) Method

DEPRECATED Superceded by JSR 173

```
public static XmlUnsignedShort parse(XMLInputStream xis,
                                     XmlOptions options)
    throws XmlException, XMLStreamException
```

Parses a `XmlUnsignedShort` fragment from an `XMLInputStream`.

Exceptions

XmlException

XMLStreamException