

# Oracle8i

Supplied Java Packages Reference

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Oracle8i Supplied Java Packages Reference, Release 2 (8.1.6)

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# Preface

Topics in this preface are:

- [What This Guide Has to Offer](#)
- [Your Comments Are Welcome](#)

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## What This Guide Has to Offer

Each chapter in this guide presents an Oracle8i Supplied Java Package. Interfaces, classes, and exceptions are summarized in a table, and then each is presented in alphabetical order, with its syntax, a member summary, and an inherited member summary. This is then followed by the details of the fields, constructors, and methods.

The first publication of this guide is release 2 (8.1.6) in December of 1999.

For more information, Java programmers should see:

- *Oracle8i JDBC Developer's Guide and Reference*
- *Oracle8i Application Developer's Guide - Fundamentals*
- *Oracle8i Application Developer's Guide - Advanced Queuing*
- *Oracle8i Data Cartridge Developer's Guide.*

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**Package oracle.AQ**

## Package oracle.AQ Description

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### Class Summary

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#### Interfaces

<a href="#">AQSession</a>	Open a session to the queuing system
<a href="#">AQQueueTable</a>	AQ Queue Table interface
<a href="#">AQQueueAdmin</a>	AQ Queue administrative interfaces
<a href="#">AQQueue</a>	AQ Queue operational interfaces
<a href="#">AQMessage</a>	AQ message
<a href="#">AQRawPayload</a>	AQ Raw Payload
<a href="#">AQObjectPayload</a>	AQ Object Payload

#### Classes: Common

<a href="#">AQConstants</a>	Constants used in AQ operations
<a href="#">AQAgent</a>	AQ Agent
<a href="#">AQDriverManager</a>	Driver Manager for various AQ drivers
<a href="#">AQEnqueueOption</a>	AQ Enqueue Options
<a href="#">AQDequeueOption</a>	AQ Dequeue options
<a href="#">AQMessageProperty</a>	AQ Message properties
<a href="#">AQQueueProperty</a>	AQ Queue properties
<a href="#">AQQueueTableProperty</a>	AQ Queue Table properties

Classes: Oracle8i: [These classes are not described in this manual]

<a href="#">AQOracleSession</a>	Oracle server implementation of AQSession
<a href="#">AQOracleMessage</a>	Oracle Server implementation of AQMessage
<a href="#">AQOracleDriver</a>	Oracle server implementation of AQDriver
<a href="#">AQOracleQueue</a>	Oracle server implementation of AQQueue
<a href="#">AQOracleQueueTable</a>	Oracle server implementation of AQQueueTable
<a href="#">AQOracleRawPayload</a>	Oracle server implementation of AQRawPayload
<a href="#">AQOracleObjectPayload</a>	Oracle server implementation of AQObjectPayload

---

**Class Summary**

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**Exceptions**

[AQException](#)

[AQOracleSQLException](#)

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## Introduction

Java AQ API supports both the administrative and operational features of Oracle AQ (Advanced Queueing). In developing Java programs for messaging applications, you will use JDBC to open a connection to the database and then the oracle.AQ, the Java AQ API for message queuing. This means that you will no longer need to use PL/SQL interfaces.

The following sections describe the common interfaces and classes based on current PL/SQL interfaces.

- The common interfaces are prefixed with "AQ". These interfaces will have different implementations in Oracle8i and Oracle Lite.
- In this document we describe the common interfaces and their corresponding Oracle8i implementations, which are in turn prefixed with "AQOracle".

### Location of Java AQ Classes

The Java AQ classes are located in `$ORACLE_HOME/rdbms/jlib/aqapi.jar`. These classes can be used with any Oracle8i JDBC driver.

If your application uses the OCI8 or thin JDBC driver, for JDK 1.2 you must include `$ORACLE_HOME/rdbms/jlib/aqapi.jar` in the CLASSPATH; for JDK 1.1 you must include `$ORACLE_HOME/rdbms/jlib/aqapi11.jar` in the CLASSPATH.

If the application is using the Oracle Server driver and accessing the java AQ API from java stored procedures, the Java files are generally automatically pre-loaded in a Java-enabled database. If they are not loaded, you must first load the `aqapi.jar` and `jmscommon.jar` files into the database using the "loadjava" utility.

*Oracle8i Application Developer's Guide - Advanced Queueing* Appendix A, "Oracle Advanced Queueing by Example" contains the following examples:

- Enqueue and Dequeue of Object Type Messages (CustomDatum interface) Using Java
- Enqueue and Dequeue of Object Type Messages (using SQLData interface) Using Java
- Create a Queue Table and Queue Using Java
- Create a Queue and Start Enqueue/Dequeue Using Java
- Create a Multi-Consumer Queue and Add Subscribers Using Java
- Enqueue of RAW Messages using Java

- Dequeue of Messages Using Java
- Dequeue of Messages in Browse Mode Using Java
- Enqueue of Messages with Priority Using Java
- Enqueuing and Dequeuing Object Type Messages That Contain LOB Attributes Using Java

Set up for the test\_aqjava class is described in "[Setup for oracle.AQ Examples](#)" on page 1-11.

The way to create a multi-consumer queue is described in the "[AQSession](#)" on page 1-9.

## oracle.AQ AQDriverManager

The various implementations of the Java AQ API are managed via an `AQDriverManager`. Both `OLite` and `Oracle8i` will have an `AQDriver` which is registered with the `AQDriverManager`. The driver manager is used to create an `AQSession` which can be used to perform messaging tasks.

When the `AQDriverManager.createAQSession()` method is invoked, it calls the appropriate `AQDriver` (amongst the registered drivers) depending on the parameter passed to the `createAQSession()` call.

The `Oracle8i` `AQDriver` expects a valid JDBC connection to be passed in as a parameter to create an `AQSession`. Users must have the execute privilege on the `DBMS_AQIN` package in order to use the AQ Java interfaces. Users can also acquire these rights through the `AQ_USER_ROLE` or the `AQ_ADMINISTRATOR_ROLE`. Users will also need the appropriate system and queue privileges for 8.1 style queue tables.

### Methods

#### getDrivers

```
public static java.util.Vector getDrivers()
```

This method returns the list of drivers registered with the driver manager. It returns a `Vector` of strings containing the names of the registered drivers.

#### getAQSession

```
public static AQSession getAQSession (java.lang.Object conn) throws AQException
```

This method creates an `AQSession`.

#### Parameter

`conn`

If the user is using the `AQOracleDriver`, then the object passed in must be a valid JDBC connection.

### Multithreaded Program Support

Currently Java AQ objects are not thread safe. Therefore, methods on `AQSession`, `AQQueueTable`, `AQQueue` and other AQ objects should not be called concurrently from different threads. You can pass these objects between threads, but the program must ensure that the methods on these AQ objects are not invoked concurrently.

We recommend that multithreaded programs create a different `AQSession` in each thread (using the same or a different JDBC connection) and get new queue table and queue handles using the `getQueueTable` and `getQueue` methods in `AQSession`.

## Loading the Java AQ Driver

To create an `AQSession`, you must first open a JDBC connection. Then you must load the `AQDriver` that you need to use in the application. If you are using Oracle8i, the driver is loaded using the `Class.forName("oracle.AQ.AQOracleDriver")` command.

Note that the driver needs to be loaded only once (before the first `createAQSession` call). Loading the driver multiple times will have no effect. For more information, see ["Setup for oracle.AQ Examples"](#) on page 1-11.

### Example

```
Connection db_conn;          /* JDBC connection */
AQSession  aq_sess;         /* AQSession */

/* JDBC setup and connection creation: */
Class.forName("oracle.jdbc.driver.OracleDriver");
db_conn = DriverManager.getConnection (
    "jdbc:oracle:oci8:@", "aquser", "aquser");
db_conn.setAutoCommit(false);

/* Load the Oracle8i AQ driver: */
Class.forName("oracle.AQ.AQOracleDriver");
/* Create an AQ Session: */
aq_sess = AQDriverManager.createAQSession(db_conn);
```

In general use only the interfaces and classes that are common to both implementations (as described in the first two tables). This will ensure that your applications are portable between Oracle 8i and Olite AQ implementations.

**oracle.AQ** classes should not be used unless there is a method in these classes that is not available in the common interfaces.

Note that since the `AQQueue` interface extends `AQQueueAdmin`, all queue administrative and operation functionality is available via `AQQueue`.

---

## oracle.AQ AQSession

### Methods

#### createQueueTable

```
public AQQueueTable createQueueTable(java.lang.String owner,
                                     java.lang.String name,
                                     AQQueueTableProperty property)
    throws AQException
```

This method creates a new queue table in a particular user's schema according to the properties specified in the `AQQueueTableProperty` object passed in.

Parameter	Meaning
<code>owner</code>	schema (user) in which to create the queue table
<code>q_name</code>	name of the queue table
<code>property</code>	queue table properties

#### Returns

`AQQueueTable` object

#### getQueueTable

```
public AQQueueTable getQueueTable(java.lang.String owner,
                                   java.lang.String name)
```

This method is used to get a handle to an existing queue table.

Parameter	Meaning
<code>owner</code>	schema (user) in which the queue table resides
<code>name</code>	name of the queue table

#### Returns

`AQQueueTable` object

## createQueue

This method creates a queue in a `queue_table` with the specified queue properties. It uses the same schema name that was used to create the queue table.

```
public AQQueue createQueue(AQQueueTable q_table,  
                           java.lang.String q_name,  
                           AQQueueProperty q_property) throws AQException
```

Parameter	Meaning
<code>q_table</code>	queue table in which to create queue
<code>name</code>	name of the queue to be created
<code>q_property</code>	queue properties

### Returns

AQQueue object

## getQueue

```
public AQQueue getQueue(java.lang.String owner,  
                        java.lang.String name)
```

This method can be used to get a handle to an existing queue.

Parameter	Meaning
<code>owner</code>	schema (user) in which the queue table resides
<code>name</code>	name of the queue

### Returns

AQQueue object

## getDB Connection

```
public java.sql.Connection getDBConnection()
```

This method can be used to get the underlying JDBC connection from an AQ session object

This method is available only in the Oracle server implementation of AQSession. Hence the AQSession object must be cast to AQOracleSession before calling this method.

### Example

```
AQSession aq_sess;
Connection db_conn = ((AQOracleSession)aq_sess).getDBConnection();
```

## Setup for oracle.AQ Examples

### 1. Create an oracle.AQ User

Here an 'aqjava' user is setup as follows:

```
CONNECT sys/change_on_install AS sysdba

DROP USER aqjava CASCADE;
GRANT CONNECT, RESOURCE, AQ_ADMINISTRATOR_ROLE TO aqjava IDENTIFIED BY aqjava;
GRANT EXECUTE ON SYS.DBMS_AQADM TO aqjava;
GRANT EXECUTE ON SYS.DBMS_AQ TO aqjava;
GRANT EXECUTE ON SYS.DBMS_AQIN TO aqjava;
CONNECT aqjava/aqjava
```

### 2. Set up main class

Next we set up the main class from which we will call subsequent examples and handle exceptions.

```
import java.sql.*;
import oracle.AQ.*;

public class test_aqjava
{
    public static void main(String args[])
    {
        AQSession aq_sess = null;

        try
        {
            aq_sess = createSession(args);

            /* now run the test: */
            runTest(aq_sess);
        }
    }
}
```

```
        catch (Exception ex)
        {
            System.out.println("Exception-1: " + ex);
            ex.printStackTrace();
        }
    }
}
```

### 3. Create an AQ Session;

Next, an AQ Session is created for the 'aqjava' user as shown in the AQDriverManager section above:

```
public static AQSession createSession(String args[])
{
    Connection db_conn;
    AQSession aq_sess = null;

    try
    {

        Class.forName("oracle.jdbc.driver.OracleDriver");
        /* your actual hostname, port number, and SID will
        vary from what follows. Here we use 'dlsun736,' '5521,'
        and 'test,' respectively: */

        db_conn =
            DriverManager.getConnection(
                "jdbc:oracle:thin:@dlsun736:5521:test",
                "aqjava", "aqjava");

        System.out.println("JDBC Connection opened ");
        db_conn.setAutoCommit(false);

        /* Load the Oracle8i AQ driver: */
        Class.forName("oracle.AQ.AQOracleDriver");

        /* Create an AQ Session: */
        aq_sess = AQDriverManager.createAQSession(db_conn);
        System.out.println("Successfully created AQSession ");
    }
    catch (Exception ex)
    {
        System.out.println("Exception: " + ex);
        ex.printStackTrace();
    }
}
```

```

        return aq_sess;
    }

```

## Example

### 1. Create a queue table and a queue

Now, with the 'runTest' class, called from the above main class, we will create a queue table and queue for the 'aqjava' user.

```

public static void runTest(AQSession aq_sess) throws AQException
{
    AQQueueTableProperty    qtable_prop;
    AQQueueProperty         queue_prop;
    AQQueueTable            q_table;
    AQQueue                 queue;

    /* Create a AQQueueTableProperty object (payload type - RAW): */
    qtable_prop = new AQQueueTableProperty("RAW");

    /* Create a queue table called aq_table1 in aqjava schema: */
    q_table = aq_sess.createQueueTable ("aqjava", "aq_table1", qtable_prop);
    System.out.println("Successfully created aq_table1 in aqjava schema");

    /* Create a new AQQueueProperty object: */
    queue_prop = new AQQueueProperty();

    /* Create a queue called aq_queue1 in aq_table1: */
    queue = aq_sess.createQueue (q_table, "aq_queue1", queue_prop);
    System.out.println("Successfully created aq_queue1 in aq_table1");
}

```

### 2. Get a handle to an existing queue table and queue

```

public static void runTest(AQSession aq_sess) throws AQException
{
    AQQueueTable            q_table;
    AQQueue                 queue;

    /* Get a handle to queue table - aq_table1 in aqjava schema: */
    q_table = aq_sess.getQueueTable ("aqjava", "aq_table1");
    System.out.println("Successful getQueueTable");

    /* Get a handle to a queue - aq_queue1 in aqjava schema: */

```

```
queue = aq_sess.getQueue ("aqjava", "aq_queue1");  
System.out.println("Successful getQueue");  
}
```

## oracle.AQ

### AQConstants

This class contains some constants used in the java AQ API .

#### Visibility constants

```
VISIBILITY_IMMEDIATE  
public static final int VISIBILITY_IMMEDIATE
```

```
VISIBILITY_ONCOMMIT  
public static final int VISIBILITY_ONCOMMIT
```

#### Payload type, Object

```
RAW_TYPE_PAYLOAD  
public static final int RAW_TYPE_PAYLOAD
```

#### Payload type, RAW

```
OBJECT_TYPE_PAYLOAD  
public static final int OBJECT_TYPE_PAYLOAD
```

## oracle.AQ AQAgent

This object specifies the producer or a consumer of a message.

### Constructor

```
public AQAgent(java.lang.String name,  
               java.lang.String address,  
               double protocol)
```

```
public AQAgent(java.lang.String name,  
               java.lang.String address)
```

There are two implementations of the constructor, each of which allocates a new `AQAgent` with the specified parameters.

Parameter	Meaning
name	agent name
address	agent address
protocol	agent protocol (required only in the first constructor); default is 0

### Methods

#### getName

```
public java.lang.String getName() throws AQException
```

This method gets the agent name.

#### setName

```
public void setName(java.lang.String name) throws AQException
```

This method sets the agent name.

Parameter	Meaning
name	Agent name

**getAddress**

```
public java.lang.String getAddress() throws AQException
```

This method gets the agent address.

**setAddress**

```
public void setAddress(java.lang.String address) throws AQException
```

This method sets the agent address.

---

<b>Parameter</b>	<b>Meaning</b>
address	queue at a specific destination

---

**getProtocol**

```
public int getProtocol() throws AQException
```

This method gets the agent protocol.

**setProtocol**

```
public void setProtocol(int protocol) throws AQException
```

This method sets the agent protocol.

---

<b>Parameter</b>	<b>Meaning</b>
protocol	Agent protocol

---

## oracle.AQ AQQueueTableProperty

This class represents queue table properties.

### Constants for Message Grouping

```
public static final int NONE
public static final int TRANSACTIONA
```

### Constructor

```
public AQQueueTableProperty(java.lang.String p_type)
```

This method creates an `AQQueueTableProperty` object with default property values and the specified payload type.

Parameter	Meaning
<code>p_type</code>	payload type: this is "RAW" for queue tables that will contain raw payloads or the object ADT type for queue tables that will contain structured payloads

### Methods

#### getPayloadType

```
public java.lang.String getPayloadType() throws AQException
```

This method returns "RAW" for raw payloads or the object type for object payloads.

#### setPayloadType

```
public void setPayloadType(java.lang.String p_type) throws AQException
```

This method is used to set the payload type.

Parameter	Meaning
<code>p_type</code>	payload type: this is "RAW" for queue tables that will contain raw payloads or the object (ADT) type for queue tables that will contain structured payloads

#### setStorageClause

```
public void setStorageClause(java.lang.String s_clause) throws AQException
```

This method is used to set the storage clause to be used to create the queue table.

Parameter	Meaning
s_clauses	storage parameter: this clause is used in the 'CREATE TABLE' statement when the queue table is created

### getSortOrder

public java.lang.String getSortOrder() throws AQException  
This method gets the sort order that is used.

#### Returns

The sort order used

### setSortOrder

public void setSortOrder(java.lang.String s\_order) throws AQException  
This method sets the sort order to be used.

Parameter	Meaning
s_order	specifies the columns to be used as the sort_key in ascending order; the string has the format <sort_column1, sort_column2>; the allowed columns name are priority and enq_time.

### isMulticonsumerEnabled

public boolean isMulticonsumerEnabled() throws AQException  
This method queries whether the queues created in the table can have multiple consumers per message or not.

#### Returns

TRUE if the queues created in the table can have multiple consumers per message.  
FALSE if the queues created in the table can have only one consumer per message.

### setMultiConsumer

public void setMultiConsumer(boolean enable) throws AQException  
This method determines whether the queues created in the table can have multiple consumers per message or not.

Parameter	Meaning
enable	FALSE if the queues created in the table can have only one consumer per message TRUE if the queues created in the table can have multiple consumers per message

---

## getMessageGrouping

`public int getMessageGrouping() throws AQException`

This method is used to get the message grouping behavior for the queues in this queue table.

### Returns

NONE: each message is treated individually

TRANSACTIONAL: all messages enqueued as part of one transaction are considered part of the same group and can be dequeued as a group of related messages.

## setMessageGrouping

`public void setMessageGrouping(int m_grouping) throws AQException`

This method is used to set the message grouping behavior for queues created in this queue table.

---

Parameter	Meaning
m_grouping	NONE or TRANSACTIONAL

---

## getComment

`public java.lang.String getComment() throws AQException`

This method gets the queue table comment.

## setComment

`public void setComment(java.lang.String qt_comment) throws AQException`

This method sets a comment.

---

Parameter	Meaning
qt_comment	comment

---

## getCompatible

public java.lang.String getCompatible() throws AQException  
This method gets the compatible property.

## setCompatible

public void setCompatible(java.lang.String qt\_compatible) throws AQException  
This method sets the compatible property.

---

Parameter	Meaning
qt_compatible	compatible property

---

## getPrimaryInstance

public int getPrimaryInstance() throws AQException  
This method gets the primary instance.

## setPrimaryInstance

public void setPrimaryInstance(int inst) throws AQException  
This method sets the primary instance.

---

Parameter	Meaning
inst	primary instance

---

## getSecondaryInstance

public int getSecondaryInstance() throws AQException  
This method gets the secondary instance.

## setSecondaryInstance

public void setSecondaryInstance(int inst) throws AQException  
This method sets the secondary instance.

---

Parameter	Meaning
inst	secondary instance

---

**Examples:**

Set up the test\_aqjava class as described in the For more information, see ["Setup for oracle.AQ Examples"](#) on page 1-11.

**1. Create a queue table property object with raw payload type**

```
public static void runTest(AQSession aq_sess) throws AQException
{
    AQQueueTableProperty qtable_prop;

    /* Create AQQueueTable Property object: */
    qtable_prop = new AQQueueTableProperty("RAW");
    qtable_prop.setSortOrder("PRIORITY");
}
```

**2. Create a queue table property object with raw payload type (for 8.1 style queues)**

```
public static void runTest(AQSession aq_sess) throws AQException
{
    AQQueueTableProperty qtable_prop;

    /* Create AQQueueTable Property object: */
    qtable_prop = new AQQueueTableProperty("RAW");
    qtable_prop.setComment("Qtable with raw payload");
    qtable_prop.setCompatible("8.1");
}
```

**3. Create a queue table property object with "PERSON" payload type (ADT type):**

```
public static void runTest(AQSession aq_sess) throws AQException
{
    AQQueueTableProperty qtable_prop;
    qtable_prop = new AQQueueTableProperty("PERSON");
    qtable_prop.setComment("Qtable with Person ADT payload");
    qtable_prop.setMessageGrouping(TRANSACTIONAL);
}
```

---

## oracle.AQ AQQueueProperty

This class represents queue properties.

### Constants

```
public static final int NORMAL_QUEUE
public static final int EXCEPTION_QUEUE
public static final int INFINITE /* infinite retention */
```

### Constructor

```
public AQQueueProperty()
```

This method creates a new `AQQueueProperty` object with default property values.

### Methods

#### getQueueType

```
public int getQueueType() throws AQException
```

This method gets the queue type .

#### Returns

`NORMAL_QUEUE` or `EXCEPTION_QUEUE`

#### setQueueType

```
public void setQueueType(int q_type) throws AQException
```

This method is used to set the queue type.

---

Parameter	Meaning
-----------	---------

<code>q_type</code>	<code>NORMAL_QUEUE</code> or <code>EXCEPTION_QUEUE</code>
---------------------	---

#### getMaxRetries

```
public int getMaxRetries() throws AQException
```

This method gets the maximum retries for dequeue with `REMOVE` mode.

## setMaxRetries

`public void setMaxRetries(int retries) throws AQException`

`public void setMaxRetries(Integer retries) throws AQException`

This method sets the maximum retries for dequeue with REMOVE mode.

---

Parameter	Meaning
<code>retries</code>	maximum retries for dequeue with REMOVE mode; specifying <code>NULL</code> will use the default. The default applies to single consumer queues and 8.1 compatible multiconsumer queues. <code>Max_retries</code> is not supported for 8.0 compatible multiconsumer queues.

---

## setRetryInterval

`public void setRetryInterval(double interval) throws AQException`

`public void setRetryInterval(Double interval) throws AQException`

This method sets the retry interval, that is the time before this message is scheduled for processing after an application rollback. Default is 0.

---

Parameter	Meaning
<code>interval</code>	retry interval; specifying <code>NULL</code> will use the default

---

## getRetryInterval

`public double getRetryInterval() throws AQException`

This method gets the retry interval.

## getRetentionTime

`public double getRetentionTime() throws AQException`

This method gets the retention time.

## setRetentionTime

`public void setRetentionTime(double r_time) throws AQException`

`public void setRetentionTime(Double r_time) throws AQException`

This method gets the retention time.

---

Parameter	Meaning
<code>r_time</code>	retention time; specifying <code>NULL</code> will use the default

---

## getComment

```
public java.lang.String getComment() throws AQException
```

This method gets the queue comment.

## setComment

```
public void setComment(java.lang.String qt_comment) throws AQException
```

This method sets the queue comment.

---

Parameter	Meaning
qt_comment	queue comment

---

## Example

Set up the test\_aqjava class as described in the [Setup for oracle.AQ Examples](#) section on page 1-11.

### Create a AQQueueProperty object

```
{
    AQQueueProperty      q_prop;
    q_prop = new AQQueueProperty();
    q_prop.setRetentionTime(15); /* set retention time */
    q_prop.setRetryInterval(30); /* set retry interval */
}
```

## oracle.AQ AQQueueTable

The AQQueueTable interface contains methods for queue table administration.

### Methods

#### getOwner

```
public java.lang.String getOwner() throws AQException
```

This method gets the queue table owner.

#### getName

```
public java.lang.String getName() throws AQException
```

This method gets the queue table name.

#### getProperty

```
public AQQueueTableProperty getProperty() throws AQException
```

This method gets the queue table properties.

#### Returns

AQQueueTableProperty object

#### drop

```
public void drop(boolean force) throws AQException
```

This method drops the current queue table.

---

Parameter	Meaning
force	FALSE: this operation will not succeed if there are any queues in the queue table (the default) TRUE : all queues in the queue table are stopped and dropped automatically

---

#### alter

```
public void alter(java.lang.String comment,  
                 int primary_instance,  
                 int secondary_instance) throws AQException
```

---

```
public void alter(java.lang.String comment) throws AQException
```

This method is used to alter queue table properties.

Parameter	Meaning
comment	new comment
primary_instance	new value for primary instance
secondary_instance	new value for secondary instance

### createQueue

```
public AQQueue createQueue(java.lang.String queue_name,
                           AQQueueProperty q_property) throws AQException
```

This method is used to create a queue in this queue table.

Parameter	Meaning
queue_name	name of the queue to be created
q_property	queue properties

### Returns

AQQueue object

### dropQueue

```
public void dropQueue(java.lang.String queue_name) throws AQException
```

This method is used to drop a queue in this queue table.

Parameter	Meaning
queue_name	name of the queue to be dropped

### Example

Set up the test\_aqjava class as described in the [Setup for oracle.AQ Examples](#) section on page 1-11, above.

#### 1. Create a queue table and a queue

```
public static void runTest(AQSession aq_sess) throws AQException
```

```
{
    AQQueueTableProperty    qtable_prop;
    AQQueueProperty        queue_prop;
    AQQueueTable           q_table;
    AQQueue                queue;

    /* Create a AQQueueTable property object (payload type - RAW): */
    qtable_prop = new AQQueueTableProperty("RAW");

    /* Create a queue table called aq_table2 in aquser schema: */
    qtable = aq_sess.createQueueTable ("aquser", "aq_table2", qtable_prop);
    System.out.println("Successfully createQueueTable");

    /* Create a new AQQueueProperty object: */
    queue_prop = new AQQueueProperty();

    /* Create a queue called aq_queue2 in aq_table2: */
    queue = qtable.createQueue ("aq_queue2", queue_prop);
    System.out.println("Successful createQueue");
}
```

## 2. Alter queue table, get properties and drop the queue table

```
{
    AQQueueTableProperty    qtable_prop;
    AQQueueTable           q_table;

    /*Get a handle to the queue table called aq_table2 in aquser schema: */
    q_table = aq_sess.getQueueTable ("aqjava", "aq_table2");
    System.out.println("Successful getQueueTable");
    /* Get queue table properties: */
    qtable_prop = q_table.getProperty();

    /* Alter the queue table: */
    q_table.alter("altered queue table");

    /* Drop the queue table (and automatically drop queues inside it): */
    q_table.drop(true);
    System.out.println("Successful drop");
}
```

---

---

**Note:** Queues can be created via the `AQSession.createQueue` or the `AQQueueTable.createQueue` interfaces. The former expects an `AQQueueTable` object as a parameter in addition to the `queue_name` and `queue` properties.

---

---

## oracle.AQ AQQueueAdmin

### Methods

#### start

```
public void start(boolean enqueue,  
                 boolean dequeue) throws AQException
```

This method is used to enable enqueue and dequeue on this queue.

Parameter	Meaning
enqueue	TRUE — enable enqueue on this queue FALSE — leave current setting unchanged
dequeue	TRUE — enable dequeue on this queue FALSE — leave current setting unchanged

#### startEnqueue

```
public void startEnqueue() throws AQException
```

This method is used to enable enqueue on this queue . This is equivalent to `start(TRUE, FALSE)`

#### startDequeue

```
public void startEnqueuee() throws AQException
```

This method is used to enable dequeue on this queue. This is equivalent to `start(FALSE, TRUE)`.

#### stop

```
public void stop(boolean enqueue,  
                boolean dequeue,  
                boolean wait) throws AQException
```

This method is used to disable enqueue/dequeue on this queue.

Parameter	Meaning
enqueue	TRUE — disable enqueue on this queue FALSE — leave current setting unchanged
dequeue	TRUE — disable dequeue on this queue FALSE — leave current setting unchanged
wait	TRUE — wait for outstanding transactions to complete FALSE — return immediately either with a success or an error

### stopEnqueue

`public void stopEnqueue(boolean wait) throws AQException`

This method is used to disable enqueue on a queue. This is equivalent to `stop(TRUE, FALSE, wait)`.

Parameter	Meaning
wait	TRUE — wait for outstanding transactions to complete FALSE — return immediately either with a success or an error

### stopDequeue

`public void stopDequeue(boolean wait) throws AQException`

This method is used to disable dequeue on a queue. This is equivalent to `stop(FALSE, TRUE, wait)`.

Parameter	Meaning
wait	TRUE — wait for outstanding transactions to complete FALSE — return immediately either with a success or an error

### drop

`public void drop() throws AQException`

This method is used to drop a queue

### alterQueue

`public void alterQueue(AQQueueProperty property) throws AQException`

This method is used to alter queue properties

Parameter	Meaning
property	AQueueProperty object with new property values. Note that only <code>max_retries</code> , <code>retry_delay</code> , <code>retention_time</code> and <code>comment</code> can be altered.

## addSubscriber

```
public void addSubscriber(AQAgent subscriber,  
    java.lang.String rule) throws AQException
```

This method is used to add a subscriber for this queue.

Parameter	Meaning
subscriber	the AQAgent on whose behalf the subscription is being defined
rule	a conditional expression based on message properties, and the message data properties

## removeSubscriber

```
public void removeSubscriber(AQAgent subscriber) throws AQException
```

This method removes a subscriber from a queue.

Parameter	Meaning
subscriber	the AQAgent to be removed

## alterSubscriber

```
public void alterSubscriber(AQAgent subscriber,  
    java.lang.String rule) throws AQException
```

This method alters properties for a subscriber to a queue.

Parameter	Meaning
subscriber	the AQAgent whose subscription is being altered
rule	a conditional expression based on message properties, the message data properties

## grantQueuePrivilege

```
public void grantQueuePrivilege(java.lang.String privilege,  
    java.lang.String grantee,  
    boolean grant_option) throws AQException
```

```
public void grantQueuePrivilege(java.lang.String privilege,
                               java.lang.String grantee) throws AQException
```

This method is used to grant queue privileges to users and roles. The method has been overloaded. The second implementation is equivalent to calling the first implementation with `grant_option = FALSE`.

Parameter	Meaning
<code>privilege</code>	specifies the privilege to be granted: <code>ENQUEUE</code> , <code>DEQUEUE</code> or <code>ALL</code>
<code>grantee</code>	specifies the grantee(s); the grantee(s) can be a user, a role or the <code>PUBLIC</code> roles
<code>grant_option</code>	<code>TRUE</code> — the grantee is allowed to use this method to grant access to others <code>FALSE</code> — default

### revokeQueuePrivilege

```
public void revokeQueuePrivilege(java.lang.String privilege,
                                 java.lang.String grantee) throws AQException
```

This method is used to revoke a queue privilege.

Parameter	Meaning
<code>privilege</code>	specifies the privilege to be revoked: <code>ENQUEUE</code> , <code>DEQUEUE</code> or <code>ALL</code>
<code>grantee</code>	specifies the grantee(s); the grantee(s) can be a user, a role or the <code>PUBLIC</code> roles

### schedulePropagation

```
public void schedulePropagation(java.lang.String destination,
                               java.util.Date start_time,
                               java.lang.Double duration,
                               java.lang.String next_time,
                               java.lang.Double latency) throws AQException
```

This method is used to schedule propagation from a queue to a destination identified by a database link.

Parameter	Meaning
destination	specifies the destination database link. Messages in the source queue for recipients at the destination will be propagated.  NULL => destination is the local database and messages will be propagated to all other queues in the local database. Maximum length for this field is 128 bytes. If the name is not fully qualified, the default domain name is used.
start_time	specifies the initial start time for the propagation window for messages from this queue to the destination. NULL => start time is current time.
duration	specifies the duration of the propagation window in seconds. NULL => propagation window is forever or until propagation is unscheduled
next_time	date function to compute the start of the next propagation window from the end of the current window. (e.g use "SYSDATE+ 1 - duration/86400" to start the window at the same time everyday. NULL => propagation will be stopped at the end of the current window
latency	maximum wait, in seconds, in the propagation window for the message to be propagated after it is enqueued. NULL => use default value (60 seconds)

## unschedulePropagation

```
public void unschedulePropagation(java.lang.String destination)
                                throws AQException
```

This method is used to unschedule a previously scheduled propagation of messages from the current queue to a destination identified by a specific database link..

Parameter	Meaning
destination	specifies the destination database link. NULL => destination is the local database.

## alterPropagationSchedule

```
public void alterPropagationSchedule(java.lang.String destination,
                                     java.lang.Double duration,
                                     java.lang.String next_time,
                                     java.lang.Double latency) throws AQException
```

This method is used to alter a propagation schedule.

Parameter	Meaning
destination	specifies the destination database link. NULL => destination is the local database.

Parameter	Meaning
duration	specifies the duration of the propagation window in seconds. NULL => propagation window is forever or until propagation is unscheduled
next_time	date function to compute the start of the next propagation window from the end of the current window. (e.g use "SYSDATE+ 1 - duration/86400" to start the window at the same time everyday. NULL => propagation will be stopped at the end of the current window
latency	maximum wait, in seconds, in the propagation window for the message to be propagated after it is enqueued. NULL => use default value (60 seconds)

### enablePropagationSchedule

```
public void enablePropagationSchedule(java.lang.String destination)
                                     throws AQException
```

This method is used to enable a propagation schedule.

Parameter	Meaning
destination	specifies the destination database link. NULL => destination is the local database.

### disablePropagationSchedule

```
public void disablePropagationSchedule(java.lang.String destination)
                                       throws AQException
```

This method is used to disable a propagation schedule.

Parameter	Meaning
destination	specifies the destination database link. NULL => destination is the local database.

### Examples

Set up the test\_aqjava class. For more information, see ["Setup for oracle.AQ Examples"](#) on page 1-11

#### 1. Create a queue and start enqueue/dequeue

```
{
    AQQueueTableProperty  qtable_prop;
    AQQueueProperty       queue_prop;
    AQQueueTable          q_table;
```

```
AQueue          queue;

/* Create a AQueueTable property object (payload type - RAW): */
qtable_prop = new AQueueTableProperty("RAW");
qtable_prop.setCompatible("8.1");

/* Create a queue table called aq_table3 in aqjava schema: */
q_table = aq_sess.createQueueTable ("aqjava", "aq_table3",qtable_prop);
System.out.println("Successful createQueueTable");

/* Create a new AQueueProperty object: */
queue_prop = new AQueueProperty();

/* Create a queue called aq_queue3 in aq_table3: */
queue = aq_sess.createQueue (q_table, "aq_queue3", queue_prop);
System.out.println("Successful createQueue");

/* Enable enqueue/dequeue on this queue: */
queue.start();
System.out.println("Successful start queue");

/* Grant enqueue_any privilege on this queue to user scott: */
queue.grantQueuePrivilege("ENQUEUE", "scott");
System.out.println("Successful grantQueuePrivilege");
}
```

## 2. Create a multi-consumer queue and add subscribers

```
public static void runTest(AQSession aq_sess) throws AQException
{
    AQueueTableProperty    qtable_prop;
    AQueueProperty         queue_prop;
    AQueueTable            q_table;
    AQueue                 queue;
    AQAgent                subs1, subs2;

    /* Create a AQueueTable property object (payload type - RAW): */
    qtable_prop = new AQueueTableProperty("RAW");
    System.out.println("Successful setCompatible");

    /* Set multiconsumer flag to true: */
    qtable_prop.setMultiConsumer(true);

    /* Create a queue table called aq_table4 in aqjava schema: */
    q_table = aq_sess.createQueueTable ("aqjava", "aq_table4", qtable_
```

```
prop);
    System.out.println("Successful createQueueTable");

    /* Create a new AQQueueProperty object: */
    queue_prop = new AQQueueProperty();
    /* Create a queue called aq_queue4 in aq_table4 */
    queue = aq_sess.createQueue (q_table, "aq_queue4", queue_prop);
    System.out.println("Successful createQueue");

    /* Enable enqueue/dequeue on this queue: */
    queue.start();
    System.out.println("Successful start queue");

    /* Add subscribers to this queue: */
    subs1 = new AQAgent("GREEN", null, 0);
    subs2 = new AQAgent("BLUE", null, 0);

    queue.addSubscriber(subs1, null); /* no rule */
    System.out.println("Successful addSubscriber 1");

    queue.addSubscriber(subs2, "priority < 2"); /* with rule */
    System.out.println("Successful addSubscriber 2");
}
```

## oracle.AQ AQQueue

This interface supports the operational interfaces of queues. `AQQueue` extends `AQQueueAdmin`. Hence, you can also use administrative functions through this interface.

### Methods

#### `getOwner`

```
public java.lang.String getOwner() throws AQException
```

This method gets the queue owner.

#### `getName`

```
public java.lang.String getName() throws AQException
```

This method gets the queue name.

#### `getQueueTableName`

```
public java.lang.String getQueueTableName() throws AQException
```

This method gets the name of the queue table in which the queue resides.

#### `getProperty`

```
public AQQueueProperty getProperty() throws AQException
```

This method is used to get the queue properties.

#### Returns

`AQQueueProperty` object

#### `createMessage`

```
public AQMessage createMessage() throws AQException
```

This method is used to create a new `AQMessage` object that can be populated with data to be enqueued.

#### Returns

`AQMessage` object

## enqueue

```
public byte[] enqueue(AQEnqueueOption enq_option,
                    AQMessage message) throws AQException
```

This method is used to enqueue a message in a queue.

Parameter	Meaning
enq_option	AQEnqueueOption object
message	AQMessage to be enqueued

### Returns

Message id of the the enqueued message. The AQMessage object's messageId field is also populated after the completion of this call.

## dequeue

```
public AQMessage dequeue(AQDequeueOption deq_option) throws AQException
```

This method is used to dequeue a message from a queue.

Parameter	Meaning
deq_option	AQDequeueOption object

### Returns

AQMessage, the dequeued message

## dequeue (for queues with Oracle object type payloads - SQL data version)

```
public AQMessage dequeue(AQDequeueOption deq_option, java.lang.Class payload_
class) throws AQException
```

This method is used to dequeue a message from a queue containing Oracle object payloads. This version must be used if your program uses the SQL Data interface for mapping java classes to Oracle object types.

### Parameters

deq\_option - AQDequeueOption object

payload\_class - the payload dequeued is transformed as an object of this type. The class specified must implement the SQLData interface and correspond to the payload type defined for the queue

**Returns**

AQMessage, the dequeued message

Users are also required to register all java classes that map to ADTs contained in the queue in the typeMap of the JDBC connection.

For more information on the SQLData interface and registering classes in the type map refer to the JDBC developer's guide.

**dequeue (for queues with Oracle object type payloads - Custom Datum version)**

```
public AQMessage dequeue(AQDequeueOption deq_option,  
oracle.sql.CustomDatumFactory payload_fact) throws AQException
```

This method is used to dequeue a message from a queue containing Oracle object payloads. This version must be used if your program uses the Custom Datum interface for mapping java classes to Oracle object types.

**Parameters:**

deq\_option - AQDequeueOption object

payload\_fact - This is the CustomDatum factory for the class that maps to the SQL ADT type of the payload in the queue. For example, if Person is the java class that maps to PERSON ADT in the database, then the CustomDatum factory for this class can be obtained using Person.getFactory()

**Returns**

AQMessage - the dequeued message

For more information on the CustomDatum and CustomDatumFactory interface and registering classes in the type map refer to the JDBC developer's guide.

**getSubscribers**

```
public AQAgent[] getSubscribers() throws AQException
```

This method is used to get a subscriber list for the queue.

**Returns**

An array of AQAgents

## oracle.AQ AQEnqueueOption

This class is used to specify options available for the enqueue operation.

### Constants

```
public static final int DEVIATION_NONE
public static final int DEVIATION_BEFORE
public static final int DEVIATION_TOP
public static final int VISIBILITY_ONCOMMIT
public static final int VISIBILITY_IMMEDIATE
```

### Constructors

```
public AQEnqueueOption(int visibility,
                       byte[] relative_msgid,
                       int sequence_deviation)
public AQEnqueueOption()
```

There are two constructors available. The first creates an object with the specified options, the second creates an object with the default options.

Parameter	Meaning
visibility	VISIBILITY_IMMEDIATE or VISIBILITY_ONCOMMIT (default)
relative_msgid	when DEVIATION_BEFORE is used, this parameter identifies the message identifier of the message before which the current message is to be enqueued
sequence_deviation	DEVIATION_TOP— the message is enqueued ahead of any other messages DEVIATION_BEFORE — the message is enqueued ahead of the message specified by relative_msgid DEVIATION_NONE — default

### getVisibility

```
public int getVisibility() throws AQException
```

This method gets the visibility.

**Returns**

VISIBILITY\_IMMEDIATE or VISIBILITY\_ONCOMMIT

**setVisibility**

public void setVisibility(int visibility) throws AQException  
This method sets the visibility.

---

Parameter	Meaning
visibility	VISIBILITY_IMMEDIATE or VISIBILITY_ONCOMMIT

---

**getRelMessageId**

public byte[] getRelMessageId() throws AQException  
This method gets the relative message id.

**getSequenceDeviation**

public int getSequenceDeviation() throws AQException  
This method gets the sequence deviation.

**setSequenceDeviation**

public void setSequenceDeviation(int sequence\_deviation,  
byte[] relative\_msgid) throws AQException  
This method specifies whether the message being enqueued should be dequeued before other message(s) already in the queue.

---

Parameter	Meaning
sequence_deviation	DEVIATION_TOP— the message is enqueued ahead of any other messages DEVIATION_BEFORE — the message is enqueued ahead of the message specified by relative_msgid DEVIATION_NONE — default
relative_msgid	when DEVIATION_BEFORE is used, this parameter identifies the message identifier of the message before which the current message is to be enqueued

---

---

## oracle.AQ AQDequeueOption

This class is used to specify the options available for the dequeue option.

### Constants

```
public static final int NAVIGATION_FIRST_MESSAGE
public static final int NAVIGATION_NEXT_TRANSACTION
public static final int NAVIGATION_NEXT_MESSAGE
public static final int DEQUEUE_BROWSE
public static final int DEQUEUE_LOCKED
public static final int DEQUEUE_REMOVE
public static final int DEQUEUE_REMOVE_NODATA
public static final int WAIT_FOREVER
public static final int WAIT_NONE
public static final int VISIBILITY_ONCOMMIT
public static final int VISIBILITY_IMMEDIATE
```

### Constructor

```
public AQDequeueOption()
```

This method creates an object with the default options.

### getConsumerName

```
public java.lang.String getConsumerName() throws AQException
```

This method gets consumer name.

### setConsumerName

```
public void setConsumerName(java.lang.String consumer_name) throws AQException
```

This method sets consumer name

---

Parameter	Meaning
consumer_name	Agent name

---

### getDequeueMode

```
public int getDequeueMode() throws AQException
```

This method gets dequeue mode.

**Returns**

DEQUEUE\_BROWSE, DEQUEUE\_LOCKED, DEQUEUE\_REMOVE or DEQUEUE\_REMOVE\_NODATA

**setDequeueMode**

public void setDequeueMode(int dequeue\_mode) throws AQException  
This method sets the dequeue mode.

---

Parameter	Meaning
dequeue_mode	DEQUEUE_BROWSE, DEQUEUE_LOCKED, DEQUEUE_REMOVE or DEQUEUE_REMOVE_NODATA

---

**getNavigationMode**

public int getNavigationMode() throws AQException  
This method gets the navigation mode.

**Returns**

NAVIGATION\_FIRST\_MESSAGE or NAVIGATION\_NEXT\_MESSAGE or NAVIGATION\_NEXT\_TRANSACTION

**setNavigationMode**

public void setNavigationMode(int navigation) throws AQException  
This method sets the navigation mode.

---

Parameter	Meaning
navigation	NAVIGATION_FIRST_MESSAGE or NAVIGATION_NEXT_MESSAGE or NAVIGATION_NEXT_TRANSACTION

---

**getVisibility**

public int getVisibility() throws AQException  
This method gets the visibility.

**Returns**

VISIBILITY\_IMMEDIATE or VISIBILITY\_ONCOMMIT

## setVisibility

public void setVisibility(int visibility) throws AQException  
 This method sets the visibility.

Parameter	Meaning
visibility	VISIBILITY_IMMEDIATE or VISIBILITY_ONCOMMIT

## getWaitTime

public int getWaitTime() throws AQException  
 This method gets the wait time.

### Returns

WAIT\_FOREVER or WAIT\_NONE or the actual time in seconds

## setWaitTime

public void setWaitTime(int wait\_time) throws AQException  
 This method sets the wait time.

Parameter	Meaning
wait_time	WAIT_FOREVER or WAIT_NONE or time in seconds

## getMessageId

public byte[] getMessageId() throws AQException  
 This method gets the message id.

## setMessageId

public void setMessageId(byte[] message\_id) throws AQException  
 This method sets the message id.

Parameter	Meaning
message_id	message id

## getCorrelation

public java.lang.String getCorrelation() throws AQException  
 This method gets the correlation id.

## setCorrelation

`public void setCorrelation(java.lang.String correlation) throws AQException`  
This method sets the correlation id.

---

Parameter	Meaning
correlation	user-supplied information

---

---

## oracle.AQ AQMessage

This interface contains methods for AQ messages with raw or object payloads.

### Methods

#### getMessageId

public byte[] getMessageId() throws AQException  
This method gets the message id.

#### getRawPayload

public AQRawPayload getRawPayload() throws AQException  
This method gets the raw payload

#### Returns

AQRawPayload object

#### setRawPayload

public void setRawPayload(AQRawPayload message\_payload) throws AQException  
This method sets the raw payload. It throws AQException if this is called on messages created from object type queues.

---

Parameter	Meaning
message_payload	AQRawPayload object containing raw user data

---

#### getObjectPayload

public AQObjectPayload getObjectPayload() throws AQException  
Get the object payload

#### Returns

AQObjectPayload object

### setObjectPayload

public void setObjectPayload(AQObjectPayload message\_payload) throws  
AQException

Set the object payload.

---

Parameter	Meaning
message_payload	AQObjectPayload object containing object user data. Throws AQException if this is called on Messages created from raw type queues.

---

### getMessageProperty

public AQMessageProperty getMessageProperty() throws AQException

This method gets the message properties

#### Returns

AQMessageProperty object

### setMessageProperty

public void setMessageProperty(AQMessageProperty property) throws AQException

This method sets the message properties.

---

Parameter	Meaning
property	AQMessageProperty object

---

## oracle.AQ AQMessageProperty

The AQMessageProperty class contains information that is used by AQ to manage individual messages. The properties are set at enqueue time and their values are returned at dequeue time.

### Constants

```
public static final int DELAY_NONE
public static final int EXPIRATION_NEVER
public static final int STATE_READY
public static final int STATE_WAITING
public static final int STATE_PROCESSED
public static final int STATE_EXPIRED
```

### Constructor

```
public AQMessageProperty()
```

This method creates the AQMessageProperty object with default property values.

### Methods

#### getPriority

```
public int getPriority() throws AQException
```

This method gets the message priority.

#### setPriority

```
public void setPriority(int priority) throws AQException
```

This method sets the message priority.

---

Parameter	Meaning
priority	priority of the message; this can be any number, including negative number - a smaller number indicates a higher priority

---

#### getDelay

```
public int getDelay() throws AQException
```

This method gets the delay value.

## setDelay

```
public void setDelay(int delay) throws AQException
```

This method sets delay value.

Parameter	Meaning
delay	the delay represents the number of seconds after which the message is available for dequeuing; with <code>NO_DELAY</code> the message is available for immediate dequeuing

## getExpiration

```
public int getExpiration() throws AQException
```

This method gets expiration value

## setExpiration

```
public void setExpiration(int expiration) throws AQException
```

This method sets expiration value

Parameter	Meaning
expiration	the duration the message is available for dequeuing; this parameter is an offset from the delay; if <code>NEVER</code> , the message will not expire

## getCorrelation

```
public java.lang.String getCorrelation() throws AQException
```

This method gets correlation

## setCorrelation

```
public void setCorrelation(java.lang.String correlation) throws AQException
```

This method sets correlation

Parameter	Meaning
correlation	user-supplied information

## getAttempts

```
public int getAttempts() throws AQException
```

This method gets the number of attempts.

## getRecipientList

public java.util.Vector getRecipientList() throws AQException  
 This method gets the recipient list.

### Returns

A vector of AQAgents. This parameter is not returned to a consumer at dequeue time.

## setRecipientList

public void setRecipientList(java.util.Vector r\_list) throws AQException  
 This method sets the recipient list.

Parameter	Meaning
r_list	vector of AQAgents; the default recipients are the queue subscribers

## getOrigMessageId

public byte[] getOrigMessageId() throws AQException  
 This method gets original message id.

## getSender

public AQAgent getSender() throws AQException  
 This method gets the sender of the message.

## setSender

public void setSender(AQAgent sender) throws AQException  
 This method sets the sender of the message.

Parameter	Meaning
sender	AQAgent

## getExceptionQueue

public java.lang.String getExceptionQueue() throws AQException  
 This method gets the exception queue name.

## setExceptionQueue

`public void setExceptionQueue(java.lang.String queue) throws AQException`  
This method sets the exception queue name.

---

Parameter	Meaning
queue	exception queue name

---

## getEnqueueTime

`public java.util.Date getEnqueueTime() throws AQException`  
This method gets the enqueue time.

## getState

`public int getState() throws AQException`  
This method gets the message state.

### Returns

STATE\_READY or STATE\_WAITING or STATE\_PROCESSED or STATE\_EXPIRED

---

## oracle.AQ AQRawPayload

This object represents the raw user data that is included in AQMessage.

### getStream

```
public int getStream(byte[] value, int len) throws AQException
```

This method reads some portion of the raw payload data into the specified byte array.

Parameter	Meaning
value	byte array to hold the raw data
len	number of bytes to be read

### Returns

The number of bytes read

### getBytes

```
public byte[] getBytes() throws AQException
```

This method retrieves the entire raw payload data as a byte array.

### Returns

byte - the raw payload as a byte array

### setStream

```
public void setStream(byte[] value,  
                     int len) throws AQException
```

This method sets the value of the raw payload.

Parameter	Meaning
value	byte array containing the raw payload
len	number of bytes to be written to the raw stream

## AQObjectPayload

This object represents the structured user data (for object queues) that is included in the AQMessage

### Methods

#### setPayloadData

`public void setPayloadData(java.lang.Object obj) throws AQException`  
This method is used to fill in the payload into the AQObjectPayload object

Parameter	Meaning
obj	User-data to be put. Depending on which AQ driver you use, there may be certain restrictions on the types of objects that can be passed in. The Oracle8i AQ driver accepts objects which implement the SQLData or CustomDatum interface inside the payload.

Please refer to the JDBC developer's guide for more information on SQLData and CustomDatum interfaces

#### getPayloadData

`public java.lang.Object getPayloadData() throws AQException`  
This method is used to retrieve the message payload from the AQObjectPayload object

#### Returns

Object payload in message - This will depend on the SQLData class or CustomDatum Factory specified during dequeue.

## oracle.AQ AQException

```
public class AQException extends java.lang.RuntimeException
```

This exception is raised when the user encounters any error while using the Java AQ Api.

This interface supports all methods supported by Java exceptions and some additional methods.

### Methods

#### **getMessage**

This method gets the error message.

#### **getErrorCode**

This method gets the error number (Oracle error code).

#### **getNextException**

This method gets the next exception in the chain if any.

---

## **oracle.AQ AQOracleSQLException**

`AQOracleSQLException` extends `AQException`.

When using Oracle8i AQ driver, some errors may be raised from the client side and some from the RDBMS. The Oracle8i driver raises `AQOracleSQLException` for all errors that occur while performing SQL.

For sophisticated users interested in differentiating between the two types of exceptions, this interface might be useful. In general you will only use `AQException`.

---

## Package oracle.jms

## Package oracle.jms Description

---

### Class Summary

---

#### Interfaces

<a href="#">AdtMessage</a>	This interface extends the Message interface and represents messages containing Oracle object type payloads - this is an AQ extension to JMS.
<a href="#">AQjmsQueueReceiver</a>	This interface extends javax.jms.QueueReceiver and defines AQ extensions to JMS. A client uses a QueueReceiver for receiving messages that have been delivered to a Queue
<a href="#">AQjmsQueueSender</a>	This interface extends QueueSender and defines AQ extensions to JMS. A client uses a QueueSender to send messages to a Queue
<a href="#">AQjmsTopicPublisher</a>	This interface extends TopicPublisher and defines AQ extensions to JMS. A client uses a TopicPublisher for publishing messages to a Topic
<a href="#">AQjmsTopicReceiver</a>	This interface extends the TopicReceiver interface that defines AQ extensions for remote subscribers and explicitly specified recipients(in point-to-multipoint communication). A TopicReceiver is used to receive messages from a Topic
<a href="#">AQjmsTopicSubscriber</a>	This interface extends TopicSubscriber and defines AQ extensions to JMS. A client uses a TopicSubscriber to receive messages published on a Topic
<a href="#">TopicReceiver</a>	This interface extends MessageConsumer to allow remote subscribers and explicitly specified recipients (in point-to-multipoint communication) to receive messages

#### Classes

<a href="#">AQjmsAdtMessage</a>	This class implements the AdtMessage interface. An AdtMessage is used to send a message containing Oracle object type payloads
<a href="#">AQjmsAgent</a>	This class implements the Destination interface. It is used to define remote subscribers and ReplyTo Destinations
<a href="#">AQjmsBytesMessage</a>	This class implements the BytesMessage interface. A BytesMessage is used to send a message containing a stream of uninterpreted bytes
<a href="#">AQjmsConnection</a>	This class implements the Connection interface. This is an active connection to the JMS provider
<a href="#">AQjmsConnectionMetadata</a>	class AQjmsConnectionMetadata represents the Meta Data information available for a JMS Connection.
<a href="#">AQjmsConstants</a>	This class defines the constants used in the oracle.jms package

---

**Class Summary**


---

<a href="#">AQjmsConsumer</a>	This class implements the MessageConsumer interface
<a href="#">AQjmsDestination</a>	This class implements administered objects, Queue and Topic
<a href="#">AQjmsDestinationProperty</a>	This class defines Destination properties
<a href="#">AQjmsFactory</a>	This class is used for accessing administered ConnectionFactory objects in Oracle's implementation of JMS.
<a href="#">AQjmsMapMessage</a>	This class implements the MapMessage interface. A MapMessage is used to send a set of name-value pairs where names are Strings and values are java primitive types
<a href="#">AQjmsMessage</a>	This class implements the Message interface. This is the superclass of all JMS messages
<a href="#">AQjmsObjectMessage</a>	This class implements the ObjectMessage interface. An ObjectMessage is used to send a message that contains a serializable java object
<a href="#">AQjmsOracleDebug</a>	AQ Oracle Debug class - not to be used unless instructed by Oracle Support
<a href="#">AQjmsProducer</a>	This class implements the MessageProducer interface. A MessageProducer is used to send messages to a Destination
<a href="#">AQjmsQueueBrowser</a>	This class implements the QueueBrowser interface. A QueueBrowser is used to look at messages in a Queue without removing them.
<a href="#">AQjmsQueueConnectionFactory</a>	This class implements the QueueConnectionFactory interface. A QueueConnectionFactory is used to create QueueConnections
<a href="#">AQjmsSession</a>	This class implements the javax.jms.Session interface. A Session is a single threaded context for producing a consuming messages
<a href="#">AQjmsStreamMessage</a>	This class implements the StreamMessage interface. A StreamMessage is used to send a stream of java primitives
<a href="#">AQjmsTextMessage</a>	This class implements the TextMessage interface. A TextMessage is used to send a message containing a java.lang.StringBuffer
<a href="#">AQjmsTopicConnectionFactory</a>	This class implements the TopicConnectionFactory interface. A TopicConnectionFactory is used to create TopicConnections
<b>Exceptions</b>	
<a href="#">AQjmsException</a>	This exception extends JMSEException - adds Oracle error codes. This is the root of all JMS exceptions
<a href="#">AQjmsInvalidDestinationException</a>	This exception extends InvalidDestinationException. It is thrown when a Destination is not valid

---

## Class Summary

---

<a href="#">AQjmsInvalidSelectorException</a>	This exception extends InvalidSelectorException. It is thrown when the specified MessageSelector is not valid
<a href="#">AQjmsMessageEOFException</a>	This exception extends MessageEOFException. It is thrown when an unexpected end of stream has been reached when a StreamMessage or BytesMessage is being read
<a href="#">AQjmsMessageFormatException</a>	This exception extends MessageFormatException. It is thrown when a client attempts to use a datatype not supported by a message or attempts to read data in the message as the wrong type
<a href="#">AQjmsMessageNotReadableException</a>	This exception extends MessageNotReadableException. It is thrown when a client attempts to read a write-only message
<a href="#">AQjmsMessageNotWritableException</a>	This exception extends MessageNotWritableException. It is thrown when a client attempts to write a read-only message

---

## oracle.jms AdtMessage

### Syntax

```
public interface AdtMessage extends javax.jms.Message
```

### All Superinterfaces

[javax.jms.Message](#)

### All Known Implementing Classes:

[AQjmsAdtMessage](#)

### Description

This interface extends the Message interface and represents messages containing Oracle object type payloads - this is an AQ extension to JMS.

---

### Member Summary

---

#### Methods

<a href="#">getAdtPayload()</a>	Get the CustomDatum object containing this Adt message's data.
<a href="#">setAdtPayload(CustomDatum)</a>	set the CustomDatum object containing this Adt message's data

---

---

## Inherited Member Summary

---

Fields inherited from interface `javax.jms.Message`

`DEFAULT_DELIVERY_MODE`, `DEFAULT_PRIORITY`, `DEFAULT_TIME_TO_LIVE`

Methods inherited from interface `javax.jms.Message`

`clearBody`, `clearProperties`, `getBooleanProperty`, `getByteProperty`, `getDoubleProperty`, `getFloatProperty`, `getIntProperty`, `getJMSCorrelationID`, `getJMSCorrelationIDAsBytes`, `getJMSDeliveryMode`, `getJMSDestination`, `getJMSExpiration`, `getJMSMessageID`, `getJMSPriority`, `getJMSRedelivered`, `getJMSReplyTo`, `getJMSTimestamp`, `getJMSType`, `getLongProperty`, `getObjectProperty`, `getPropertyNames`, `getShortProperty`, `getStringProperty`, `propertyExists`, `setBooleanProperty`, `setByteProperty`, `setDoubleProperty`, `setFloatProperty`, `setIntProperty`, `setJMSCorrelationID`, `setJMSCorrelationIDAsBytes`, `setJMSDeliveryMode`, `setJMSDestination`, `setJMSExpiration`, `setJMSMessageID`, `setJMSPriority`, `setJMSRedelivered`, `setJMSReplyTo`, `setJMSTimestamp`, `setJMSType`, `setLongProperty`, `setObjectProperty`, `setShortProperty`, `setStringProperty`

---

## Methods

### `getAdtPayload()`

```
public oracle.sql.CustomDatum getAdtPayload()
```

Get the `CustomDatum` object containing this Adt message's data.

#### Returns

the object containing this message's data

#### Throws

[JMSException](#) - if JMS fails to get object due to some internal JMS error.

### `setAdtPayload(CustomDatum)`

```
public void setAdtPayload(oracle.sql.CustomDatum payload)
```

set the `CustomDatum` object containing this Adt message's data

#### Parameters

[payload](#) - the message's data (the object must implement the `CustomDatum` interface). This payload must be a java object that represents the ADT that is defined as the queue/topic payload type

#### Throws

[JMSException](#) - if JMS fails to set the adt payload

[MessageNotWriteableException](#) - if message in read-only mode.

## oracle.jms AQjmsAdtMessage

### Syntax

public class AQjmsAdtMessage extends [AQjmsMessage](#) implements [AdtMessage](#)

```

java.lang.Object
|
+--AQjmsMessage
    |
    +--oracle.jms.AQjmsAdtMessage
  
```

### AQjmsTopicSubscriberAll Implemented Interfaces

[AdtMessage](#), [javax.jms.Message](#)

### Description

This class implements the AdtMessage interface. An AdtMessage is used to send a message containing Oracle object type payloads

---

## Member Summary

---

### Methods

<a href="#">clearBody()</a>	Clear out the message body.
<a href="#">getAdtPayload()</a>	Get the CustomDatum object containing this Adt message's data.
<a href="#">getBooleanProperty(String)</a>	Return the boolean property value with the given name.
<a href="#">getByteProperty(String)</a>	Return the byte property value with the given name.
<a href="#">getDoubleProperty(String)</a>	Return the double property value with the given name.
<a href="#">getFloatProperty(String)</a>	Return the float property value with the given name.
<a href="#">getIntProperty(String)</a>	Return the integer property value with the given name.
<a href="#">getJMSReplyTo()</a>	Get where a reply to this message should be sent.
<a href="#">getJMSType()</a>	Get the message type.
<a href="#">getLongProperty(String)</a>	Return the long property value with the given name.
<a href="#">getObjectProperty(String)</a>	Return the Java object property value with the given name.

---

**Member Summary**

---

<a href="#">getPropertyNames()</a>	Return an Enumeration of all the property names.
<a href="#">getShortProperty(String)</a>	Return the short property value with the given name.
<a href="#">getStringProperty(String)</a>	Return the String property value with the given name.
<a href="#">propertyExists(String)</a>	Check if a property value exists.
<a href="#">setAdtPayload(CustomDatum)</a>	set the CustomDatum object containing this Adt message's data
<a href="#">setBooleanProperty(String, boolean)</a>	Set a boolean property value with the given name, into the Message.
<a href="#">setByteProperty(String, byte)</a>	Set a byte property value with the given name, into the Message.
<a href="#">setDoubleProperty(String, double)</a>	Set a double property value with the given name, into the Message.
<a href="#">setFloatProperty(String, float)</a>	Set a float property value with the given name, into the Message.
<a href="#">setIntProperty(String, int)</a>	Set an integer property value with the given name, into the Message.
<a href="#">setJMSReplyTo(Destination)</a>	Set where a reply to this message should be sent.
<a href="#">setJMSType(String)</a>	Set the message type.
<a href="#">setLongProperty(String, long)</a>	Set a long property value with the given name, into the Message.
<a href="#">setObjectProperty(String, Object)</a>	Set a Java object property value with the given name, into the Message.
<a href="#">setShortProperty(String, short)</a>	Set a short property value with the given name, into the Message.
<a href="#">setStringProperty(String, String)</a>	Set a String property value with the given name, into the Message.

---

---

**Inherited Member Summary**

---

Fields inherited from interface `javax.jms.Message`

DEFAULT\_DELIVERY\_MODE, DEFAULT\_PRIORITY, DEFAULT\_TIME\_TO\_LIVE

Methods inherited from class [AQjmsMessage](#)

`clearProperties()`, `getJMSCorrelationID()`, `getJMSCorrelationIDAsBytes()`, `getJMSDeliveryMode()`, `getJMSDestination()`, `getJMSExpiration()`, `getJMSMessageID()`, `getJMSMessageIDAsBytes()`, `getJMSPriority()`, `getJMSRedelivered()`, `getJMSTimestamp()`, `getSenderID()`, `setJMSCorrelationID(String)`, `setJMSCorrelationIDAsBytes(byte[])`, `setJMSDestination(Destination)`, `setJMSDestination(Destination)`, `setJMSExpiration(long)`, `setJMSMessageID(String)`, `setJMSPriority(int)`, `setJMSRedelivered(boolean)`, `setJMSTimestamp(long)`, `setSenderID(AQjmsAgent)`

Methods inherited from class `java.lang.Object`

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

---

## Inherited Member Summary

---

Methods inherited from interface `javax.jms.Message`

`clearProperties`, `getJMSCorrelationID`, `getJMSCorrelationIDAsBytes`, `getJMSDeliveryMode`, `getJMSDestination`, `getJMSExpiration`, `getJMSMessageID`, `getJMSPriority`, `getJMSRedelivered`, `getJMSTimestamp`, `setJMSCorrelationID`, `setJMSCorrelationIDAsBytes`, `setJMSDeliveryMode`, `setJMSDestination`, `setJMSExpiration`, `setJMSMessageID`, `setJMSPriority`, `setJMSRedelivered`, `setJMSTimestamp`

---

## Methods

### `clearBody()`

```
public void clearBody()
```

Clear out the message body. All other parts of the message are left untouched.

#### Specified By

`clearBody()` in interface `javax.jms.Message`

#### Specified By

`clearBody()` in interface `javax.jms.Message`

#### Overrides

`clearBody()` in class [AQjmsMessage](#)

#### Throws

[JMSException](#) - if JMS fails to due to some internal JMS error.

### `getAdtPayload()`

```
public oracle.sql.CustomDatum getAdtPayload()
```

Get the CustomDatum object containing this Adt message's data.

#### Specified By

`getAdtPayload()` in interface [AdtMessage](#)

#### Returns

the object containing this message's data

#### Throws

[JMSException](#) - if JMS fails to get object due to some internal JMS error.

## getBooleanProperty(String)

```
public boolean getBooleanProperty(java.lang.String name)
```

Return the boolean property value with the given name.

### Specified By

`javax.jms.Message.getBooleanProperty(java.lang.String)` in interface `javax.jms.Message`

### Overrides

`getBooleanProperty(String)` in class `AQjmsMessage`

### Parameters

[name](#) - the name of the boolean property

### Returns

the boolean property value with the given name.

### Throws

[JMSEException](#) - if JMS fails to get Property due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

## getBytesProperty(String)

```
public byte getBytesProperty(java.lang.String name)
```

Return the byte property value with the given name.

### Specified By

`javax.jms.Message.getBytesProperty(java.lang.String)` in interface `javax.jms.Message`

### Overrides

`getBytesProperty(String)` in class `AQjmsMessage`

### Parameters

[name](#) - the name of the byte property

### Returns

the byte property value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to get Property due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

**getDoubleProperty(String)**

```
public double getDoubleProperty(java.lang.String name)
```

Return the double property value with the given name.

**Specified By**

`javax.jms.Message.getDoubleProperty(java.lang.String)` in interface `javax.jms.Message`

**Overrides**

[getDoubleProperty\(String\)](#) in class [AQjmsMessage](#)

**Parameters**

[name](#) - the name of the double property

**Returns**

the double property value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to get Property due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

**getFloatProperty(String)**

```
public float getFloatProperty(java.lang.String name)
```

Return the float property value with the given name.

**Specified By**

`javax.jms.Message.getFloatProperty(java.lang.String)` in interface `javax.jms.Message`

**Overrides**

[getFloatProperty\(String\)](#) in class [AQjmsMessage](#)

**Parameters**

[name](#) - the name of the float property

**Returns**

the float property value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to get Property due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

**getIntProperty(String)**

```
public int getIntProperty(java.lang.String name)
Return the integer property value with the given name.
```

**Specified By**

`javax.jms.Message.getIntProperty(java.lang.String)` in interface `javax.jms.Message`

**Overrides**

[getIntProperty\(String\)](#) in class [AQjmsMessage](#)

**Parameters**

[name](#) - the name of the integer property

**Returns**

the integer property value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to get Property due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

**getJMSReplyTo()**

```
public javax.jms.Destination getJMSReplyTo()
Get where a reply to this message should be sent. This method is not supported for
AdtMessages in this release
```

**Specified By**

javax.jms.Message.getJMSReplyTo() in interface javax.jms.Message

**Overrides**

[getJMSReplyTo\(\)](#) in class [AQjmsMessage](#)

**Throws**

[JMSEException](#) - NOT\_SUPPORTED for AdtMessage

**getJMSType()**

```
public java.lang.String getJMSType()
```

Get the message type. This method is not supported for AdtMessages in this release

**Specified By**

javax.jms.Message.getJMSType() in interface javax.jms.Message

**Overrides**

[getJMSType\(\)](#) in class [AQjmsMessage](#)

**Returns**

the message type

**Throws**

[JMSEException](#) - NOT\_SUPPORTED for AdtMessage

**getLongProperty(String)**

```
public long getLongProperty(java.lang.String name)
```

Return the long property value with the given name.

**Specified By**

javax.jms.Message.getLongProperty(java.lang.String) in interface javax.jms.Message

**Overrides**

[getLongProperty\(String\)](#) in class [AQjmsMessage](#)

**Parameters**

[name](#) - the name of the long property

**Returns**

the long property value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to get Property due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

**getObjectProperty(String)**

```
public java.lang.Object getObjectProperty(java.lang.String name)
```

Return the Java object property value with the given name.

Note that this method can be used to return in objectified format, an object that had been stored as a property in the Message with the equivalent [setObject](#) method call, or it's equivalent primitive set method.

**Specified By**

`javax.jms.Message.getObjectProperty(java.lang.String)` in interface `javax.jms.Message`

**Overrides**

[getObjectProperty\(String\)](#) in class [AQjmsMessage](#)

**Parameters**

[name](#) - the name of the Java object property

**Returns**

the Java object property value with the given name, in objectified format (ie. if it set as an int, then a Integer is returned). If there is no property by this name, a null value is returned.

**Throws**

[JMSEException](#) - if JMS fails to get Property due to some internal JMS error.

## getPropertyNames()

```
public synchronized java.util.Enumeration getPropertyNames()
```

Return an Enumeration of all the property names.

### Specified By

`javax.jms.Message.getPropertyNames()` in interface `javax.jms.Message`

### Overrides

[getPropertyNames\(\)](#) in class [AQjmsMessage](#)

### Returns

an enumeration of all the names of property values.

### Throws

[JMSEException](#) - if JMS fails to get Property names due to some internal JMS error.

## getShortProperty(String)

```
public short getShortProperty(java.lang.String name)
```

Return the short property value with the given name.

### Specified By

`javax.jms.Message.getShortProperty(java.lang.String)` in interface `javax.jms.Message`

### Overrides

[getShortProperty\(String\)](#) in class [AQjmsMessage](#)

### Parameters

[name](#) - the name of the short property

### Returns

the short property value with the given name.

### Throws

[JMSEException](#) - if JMS fails to get Property due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

## getStringProperty(String)

```
public java.lang.String getStringProperty(java.lang.String name)
```

Return the String property value with the given name.

### Specified By

`javax.jms.Message.getStringProperty(java.lang.String)` in interface `javax.jms.Message`

### Overrides

[getStringProperty\(String\)](#) in class `AQjmsMessage`

### Parameters

[name](#) - the name of the String property

### Returns

the String property value with the given name. If there is no property by this name, a null value is returned.

### Throws

[JMSEException](#) - if JMS fails to get Property due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

## propertyExists(String)

```
public boolean propertyExists(java.lang.String name)
```

Check if a property value exists.

### Specified By

`javax.jms.Message.propertyExists(java.lang.String)` in interface `javax.jms.Message`

### Overrides

[propertyExists\(String\)](#) in class `AQjmsMessage`

### Parameters

[name](#) - the name of the property to test

**Returns**

true if the property does exist.

**Throws**

[JMSEException](#) - if JMS fails to check if property exists due to some internal JMS error.

**setAdtPayload(CustomDatum)**

```
public void setAdtPayload(oracle.sql.CustomDatum payload)
set the CustomDatum object containing this Adt message's data
```

**Specified By**

[setAdtPayload\(CustomDatum\)](#) in interface [AdtMessage](#)

**Parameters**

[payload](#) - the message's data (the object must implement the CustomDatum interface). This payload must be a java object that represents the ADT that is defined as the queue/topic payload type

**Throws**

[JMSEException](#) - if JMS fails to set the adt payload

[MessageNotWriteableException](#) - if message in read-only mode.

**setBooleanProperty(String, boolean)**

```
public void setBooleanProperty(java.lang.String name, boolean value)
Set a boolean property value with the given name, into the Message.
```

**Specified By**

[javax.jms.Message.setBooleanProperty\(java.lang.String, boolean\)](#) in interface [javax.jms.Message](#)

**Overrides**

[setBooleanProperty\(String, boolean\)](#) in class [AQjmsMessage](#)

**Parameters**

[name](#) - the name of the boolean property

[value](#) - the boolean property value to set in the Message.

### Throws

[JMSEException](#) - if JMS fails to set Property due to some internal JMS error.

[MessageNotWriteableException](#) - if properties are read-only

## setByteProperty(String, byte)

```
public void setByteProperty(java.lang.String name, byte value)
```

Set a byte property value with the given name, into the Message.

### Specified By

javax.jms.Message.setByteProperty(java.lang.String, byte) in interface  
javax.jms.Message

### Overrides

[setByteProperty\(String, byte\)](#) in class [AQjmsMessage](#)

### Parameters

[name](#) - the name of the byte property

[value](#) - the byte property value to set in the Message.

### Throws

[JMSEException](#) - if JMS fails to set Property due to some internal JMS error.

[MessageNotWriteableException](#) - if properties are read-only

## setDoubleProperty(String, double)

```
public void setDoubleProperty(java.lang.String name, double value)
```

Set a double property value with the given name, into the Message.

### Specified By

javax.jms.Message.setDoubleProperty(java.lang.String, double) in interface  
javax.jms.Message

### Overrides

[setDoubleProperty\(String, double\)](#) in class [AQjmsMessage](#)

**Parameters**

[name](#) - the name of the double property

[value](#) - the double property value to set in the Message.

**Throws**

[JMSEException](#) - if JMS fails to set Property due to some internal JMS error.

[MessageNotWriteableException](#) - if properties are read-only

**setFloatProperty(String, float)**

```
public void setFloatProperty(java.lang.String name, float value)
```

Set a float property value with the given name, into the Message.

**Specified By**

`javax.jms.Message.setFloatProperty(java.lang.String, float)` in interface `javax.jms.Message`

**Overrides**

`setFloatProperty(String, float)` in class `AQjmsMessage`

**Parameters**

[name](#) - the name of the float property

[value](#) - the float property value to set in the Message.

**Throws**

[JMSEException](#) - if JMS fails to set Property due to some internal JMS error.

[MessageNotWriteableException](#) - if properties are read-only

**setIntProperty(String, int)**

```
public void setIntProperty(java.lang.String name, int value)
```

Set an integer property value with the given name, into the Message.

**Specified By**

`javax.jms.Message.setIntProperty(java.lang.String, int)` in interface `javax.jms.Message`

**Overrides**

[setIntProperty\(String, int\)](#) in class [AQjmsMessage](#)

**Parameters**

[name](#) - the name of the integer property

[value](#) - the integer property value to set in the Message.

**Throws**

[JMSEException](#) - if JMS fails to set Property due to some internal JMS error.

[MessageNotWriteableException](#) - if properties are read-only

**setJMSReplyTo(Destination)**

```
public void setJMSReplyTo(javax.jms.Destination replyTo)
```

Set where a reply to this message should be sent. This method is not supported for AdtMessage in this release

**Specified By**

[javax.jms.Message.setJMSReplyTo\(javax.jms.Destination\)](#) in interface [javax.jms.Message](#)

**Overrides**

[setJMSReplyTo\(Destination\)](#) in class [AQjmsMessage](#)

**Throws**

[JMSEException](#) - NOT\_SUPPORTED for AdtMessage

**setJMSType(String)**

```
public void setJMSType(java.lang.String type)
```

Set the message type. This method is not supported for AdtMessages in this release

**Specified By**

[javax.jms.Message.setJMSType\(java.lang.String\)](#) in interface [javax.jms.Message](#)

**Overrides**

[setJMSType\(String\)](#) in class [AQjmsMessage](#)

**Parameters**

[type](#) - of the message

**Throws**

[JMSEException](#) - NOT\_SUPPORTED for AdtMessage

**setLongProperty(String, long)**

```
public void setLongProperty(java.lang.String name, long value)
Set a long property value with the given name, into the Message.
```

**Specified By**

`javax.jms.Message.setLongProperty(java.lang.String, long)` in interface `javax.jms.Message`

**Overrides**

[setLongProperty\(String, long\)](#) in class `AQjmsMessage`

**Parameters**

[name](#) - the name of the long property

[value](#) - the long property value to set in the Message.

**Throws**

[JMSEException](#) - if JMS fails to set Property due to some internal JMS error.

[MessageNotWriteableException](#) - if properties are read-only

**setObjectProperty(String, Object)**

```
public void setObjectProperty(java.lang.String name, java.lang.Object value)
Set a Java object property value with the given name, into the Message.
```

Note that this method only works for the objectified primitive object types (Integer, Double, Long ...) and String's.

**Specified By**

`javax.jms.Message.setObjectProperty(java.lang.String, java.lang.Object)` in interface `javax.jms.Message`

**Overrides**

[setObjectProperty\(String, Object\)](#) in class [AQjmsMessage](#)

**Parameters**

[name](#) - the name of the Java object property.

[value](#) - the Java object property value to set in the Message.

**Throws**

[JMSEException](#) - if JMS fails to set Property due to some internal JMS error.

[MessageFormatException](#) - if object is invalid

[MessageNotWriteableException](#) - if properties are read-only

**setShortProperty(String, short)**

```
public void setShortProperty(java.lang.String name, short value)
```

Set a short property value with the given name, into the Message.

**Specified By**

[javax.jms.Message.setShortProperty\(java.lang.String, short\)](#) in interface [javax.jms.Message](#)

**Overrides**

[setShortProperty\(String, short\)](#) in class [AQjmsMessage](#)

**Parameters**

[name](#) - the name of the short property

[value](#) - the short property value to set in the Message.

**Throws**

[JMSEException](#) - if JMS fails to set Property due to some internal JMS error.

[MessageNotWriteableException](#) - if properties are read-only

**setStringProperty(String, String)**

```
public void setStringProperty(java.lang.String name, java.lang.String value)
```

Set a String property value with the given name, into the Message.

**Specified By**

`javax.jms.Message.setStringProperty(java.lang.String, java.lang.String)` in interface `javax.jms.Message`

**Overrides**

`setStringProperty(String, String)` in class `AQjmsMessage`

**Parameters**

[name](#) - the name of the String property

[value](#) - the String property value to set in the Message.

**Throws**

[JMSEException](#) - if JMS fails to set Property due to some internal JMS error.

[MessageNotWriteableException](#) - if properties are read-only

## oracle.jms AQjmsAgent

### Syntax

```
public class AQjmsAgent implements javax.jms.Destination
```

```
oracle.jms.AQjmsAgent
```

### All Implemented Interfaces

```
javax.jms.Destination
```

### Description

This class implements the Destination interface. It is used to define remote subscribers and ReplyTo Destinations

---

### Member Summary

---

#### Fields

#### Constructors

[AQjmsAgent\(String, String\)](#) Constructor

[AQjmsAgent\(String, String, int\)](#) Constructor

#### Methods

[getAddress\(\)](#) Get the address of the agent

[getName\(\)](#) Get the name of the agent

[getProtocol\(\)](#) Get the protocol of the agent

[setAddress\(String\)](#) Set the address of the agent

[setName\(String\)](#) Set the name of the agent

[setProtocol\(int\)](#) Set the protocol of the agent

[toString\(\)](#) Convert the agent to its string representation which is of the form: "[AQjmsAgent]  
\n name :NAME \n address: ADDRESS \n protocol: PROTOCOL"

---

## Fields

## Constructors

### AQjmsAgent(String, String)

```
public AQjmsAgent(java.lang.String name, java.lang.String address)  
Constructor
```

#### Parameters

[name](#) - Name of the agent

[address](#) - Address of the agent

#### Throws

[SQLException](#) - if it fails to create an agent

### AQjmsAgent(String, String, int)

```
public AQjmsAgent(java.lang.String name, java.lang.String address, int  
protocol)  
Constructor
```

#### Parameters

[name](#) - Name of the agent

[address](#) - Address of the agent

[protocol](#) - Protocol of the agent

#### Throws

[SQLException](#) - if it fails to create an agent

## Methods

### getAddress()

```
public java.lang.String getAddress()  
Get the address of the agent
```

**Returns**

the address of the agent

**Throws**

[SQLException](#) - if there was an error in getting the address

**getName()**

```
public java.lang.String getName()
```

Get the name of the agent

**Returns**

the name of the agent

**Throws**

[SQLException](#) - if there was an error in getting the name

**getProtocol()**

```
public int getProtocol()
```

Get the protocol of the agent

**Returns**

the protocol of the agent

**Throws**

[SQLException](#) - if there was an error in getting the protocol

**setAddress(String)**

```
public void setAddress(java.lang.String address)
```

Set the address of the agent

**Parameters**

[address](#) - the address of the agent

**Throws**

[SQLException](#) - if there was an error in setting the address

**setName(String)**

```
public void setName(java.lang.String name)
Set the name of the agent
```

**Parameters**

[name](#) - the name of the agent

**Throws**

[SQLException](#) - if there was an error in setting the name

**setProtocol(int)**

```
public void setProtocol(int protocol)
Set the protocol of the agent
```

**Parameters**

[protocol](#) - the protocol of the agent

**Throws**

[SQLException](#) - if there was an error in setting the address

**toString()**

```
public java.lang.String toString()
Convert the agent to its string representation which is of the form: "[AQjmsAgent]
\n name :NAME \n address: ADDRESS \n protocol: PROTOCOL"
```

**Returns**

the string representation of the agent

**Throws**

[SQLException](#) - if there was an error in setting the address

## oracle.jms AQjmsBytesMessage

### Syntax

```
public class AQjmsBytesMessage extends AQjmsMessage implements  
    javax.jms.BytesMessage
```

```
java.lang.Object  
|  
+--AQjmsMessage  
|  
+--oracle.jms.AQjmsBytesMessage
```

### All Implemented Interfaces

```
javax.jms.BytesMessage, javax.jms.Message
```

### Description

This class implements the BytesMessage interface. A BytesMessage is used to send a message containing a stream of uninterpreted bytes

---

## Member Summary

---

### Methods

<a href="#">clearBody()</a>	Clear out the message body.
<a href="#">clearProperties()</a>	Clear a message's properties.
<a href="#">readBoolean()</a>	Read a <a href="#">boolean</a> from the stream message.
<a href="#">readByte()</a>	Read a signed 8-bit value from the stream message.
<a href="#">readBytes(byte[])</a>	Read a byte array from the stream message.
<a href="#">readBytes(byte[], int)</a>	Read a portion of the bytes message.
<a href="#">readChar()</a>	Read a Unicode character value from the stream message.
<a href="#">readDouble()</a>	Read a <a href="#">double</a> from the stream message.
<a href="#">readFloat()</a>	Read a float from the stream message.
<a href="#">readInt()</a>	Read a signed 32-bit integer from the stream message.

---

**Member Summary**


---

<a href="#">readLong()</a>	Read a signed 64-bit integer from the stream message.
<a href="#">readShort()</a>	Put the message in read-only mode, and reposition the stream of bytes to the beginning.
<a href="#">readUnsignedByte()</a>	Read an unsigned 8-bit number from the stream message.
<a href="#">readUnsignedShort()</a>	Read an unsigned 16-bit number from the stream message.
<a href="#">readUTF()</a>	Read in a string that has been encoded using a modified UTF-8 format from the stream message.
<a href="#">reset()</a>	Put the message in read-only mode, and reposition the stream of bytes to the beginning.
<a href="#">writeBoolean(boolean)</a>	Write a <a href="#">boolean</a> to the stream message as a 1-byte value.
<a href="#">writeByte(byte)</a>	Write out a <a href="#">byte</a> to the stream message as a 1-byte value.
<a href="#">writeBytes(byte[])</a>	Write a byte array to the stream message.
<a href="#">writeBytes(byte, int, int)</a>	Write a portion of a byte array to the stream message.
<a href="#">writeChar(char)</a>	Write a <a href="#">char</a> to the stream message as a 2-byte value, high byte first.
<a href="#">writeDouble(double)</a>	Convert the double argument to a <a href="#">long</a> using the <a href="#">doubleToLongBits</a> method in class <a href="#">Double</a> , and then writes that <a href="#">long</a> value to the stream message as an 8-byte quantity, high byte first.
<a href="#">writeFloat(float)</a>	Convert the float argument to an <a href="#">int</a> using the <a href="#">floatToIntBits</a> method in class <a href="#">Float</a> , and then writes that <a href="#">int</a> value to the stream message as a 4-byte quantity, high byte first.
<a href="#">writeInt(int)</a>	Write an <a href="#">int</a> to the stream message as four bytes, high byte first.
<a href="#">writeLong(long)</a>	Write a <a href="#">long</a> to the stream message as eight bytes, high byte first.
<a href="#">writeObject(Object)</a>	Write a Java object to the stream message.
<a href="#">writeShort(short)</a>	Write a <a href="#">short</a> to the stream message as two bytes, high byte first.
<a href="#">writeUTF(String)</a>	Write a string to the stream message using UTF-8 encoding in a machine-independent manner.

---

**Inherited Member Summary**


---

Fields inherited from interface [javax.jms.Message](#)

DEFAULT\_DELIVERY\_MODE, DEFAULT\_PRIORITY, DEFAULT\_TIME\_TO\_LIVE

---

## Inherited Member Summary

---

### Methods inherited from class [AQjmsMessage](#)

[getBooleanProperty\(String\)](#), [getByteProperty\(String\)](#), [getDoubleProperty\(String\)](#), [getFloatProperty\(String\)](#), [getIntProperty\(String\)](#), [getJMSCorrelationID\(\)](#), [getJMSCorrelationIDAsBytes\(\)](#), [getJMSDeliveryMode\(\)](#), [getJMSDestination\(\)](#), [getJMSExpiration\(\)](#), [getJMSMessageID\(\)](#), [getJMSMessageIDAsBytes\(\)](#), [getJMSPriority\(\)](#), [getJMSRedelivered\(\)](#), [getJMSReplyTo\(\)](#), [getJMSTimestamp\(\)](#), [getJMSType\(\)](#), [getLongProperty\(String\)](#), [getObjectProperty\(String\)](#), [getPropertyNames\(\)](#), [getSenderID\(\)](#), [getShortProperty\(String\)](#), [getStringProperty\(String\)](#), [propertyExists\(String\)](#), [setBooleanProperty\(String, boolean\)](#), [setByteProperty\(String, byte\)](#), [setDoubleProperty\(String, double\)](#), [setFloatProperty\(String, float\)](#), [setIntProperty\(String, int\)](#), [setJMSCorrelationID\(String\)](#), [setJMSCorrelationIDAsBytes\(byte\[\]\)](#), [setJMSDestination\(Destination\)](#), [setJMSDestination\(Destination\)](#), [setJMSExpiration\(long\)](#), [setJMSMessageID\(String\)](#), [setJMSPriority\(int\)](#), [setJMSRedelivered\(boolean\)](#), [setJMSReplyTo\(Destination\)](#), [setJMSTimestamp\(long\)](#), [setJMSType\(String\)](#), [setLongProperty\(String, long\)](#), [setObjectProperty\(String, Object\)](#), [setSenderID\(AQjmsAgent\)](#), [setShortProperty\(String, short\)](#), [setStringProperty\(String, String\)](#)

### Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

### Methods inherited from interface [javax.jms.Message](#)

[getBooleanProperty](#), [getByteProperty](#), [getDoubleProperty](#), [getFloatProperty](#), [getIntProperty](#), [getJMSCorrelationID](#), [getJMSCorrelationIDAsBytes](#), [getJMSDeliveryMode](#), [getJMSDestination](#), [getJMSExpiration](#), [getJMSMessageID](#), [getJMSPriority](#), [getJMSRedelivered](#), [getJMSReplyTo](#), [getJMSTimestamp](#), [getJMSType](#), [getLongProperty](#), [getObjectProperty](#), [getPropertyNames](#), [getShortProperty](#), [getStringProperty](#), [propertyExists](#), [setBooleanProperty](#), [setByteProperty](#), [setDoubleProperty](#), [setFloatProperty](#), [setIntProperty](#), [setJMSCorrelationID](#), [setJMSCorrelationIDAsBytes](#), [setJMSDeliveryMode](#), [setJMSDestination](#), [setJMSExpiration](#), [setJMSMessageID](#), [setJMSPriority](#), [setJMSRedelivered](#), [setJMSReplyTo](#), [setJMSTimestamp](#), [setJMSType](#), [setLongProperty](#), [setObjectProperty](#), [setShortProperty](#), [setStringProperty](#)

---

## Methods

### **clearBody()**

```
public void clearBody()
```

Clear out the message body. All other parts of the message are left untouched.

### **Specified By**

[javax.jms.Message.clearBody\(\)](#) in interface [javax.jms.Message](#)

### **Overrides**

[clearBody\(\)](#) in class [AQjmsMessage](#)

### **Throws**

[JMSException](#) - if JMS fails to due to some internal JMS error.

## clearProperties()

```
public void clearProperties()  
Clear a message's properties.
```

### Specified By

`javax.jms.Message.clearProperties()` in interface `javax.jms.Message`

### Overrides

`clearProperties()` in class [AQjmsMessage](#)

### Throws

[JMSException](#) - if JMS fails to clear JMS message properties due to some internal JMS error.

## readBoolean()

```
public boolean readBoolean()  
Read a boolean from the stream message.
```

### Specified By

`javax.jms.BytesMessage.readBoolean()` in interface `javax.jms.BytesMessage`

### Returns

the [boolean](#) value read.

### Throws

[MessageNotReadableException](#) - if message in write-only mode.

[JMSException](#) - if JMS fails to read message due to some internal JMS error.

[MessageEOFException](#) - if end of message stream

## readByte()

```
public byte readByte()  
Read a signed 8-bit value from the stream message.
```

### Specified By

`javax.jms.BytesMessage.readByte()` in interface `javax.jms.BytesMessage`

**Returns**

the next byte from the stream message as a signed 8-bit [byte](#).

**Throws**

[MessageNotReadableException](#) - if message in write-only mode.

[MessageEOFException](#) - if end of message stream

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**readBytes(byte[])**

```
public int readBytes(byte[] value)
```

Read a byte array from the stream message.

**Specified By**

`javax.jms.BytesMessage.readBytes(byte[])` in interface `javax.jms.BytesMessage`

**Parameters**

[value](#) - the buffer into which the data is read.

**Returns**

the total number of bytes read into the buffer, or -1 if there is no more data because the end of the stream has been reached.

**Throws**

[MessageNotReadableException](#) - if message in write-only mode.

[MessageEOFException](#) - if end of message stream

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**readBytes(byte[], int)**

```
public int readBytes(byte[] value, int length)
```

Read a portion of the bytes message.

**Specified By**

`javax.jms.BytesMessage.readBytes(byte[], int)` in interface `javax.jms.BytesMessage`

**Parameters**

[value](#) - the buffer into which the data is read.

[length](#) - the number of bytes to read.

**Returns**

the total number of bytes read into the buffer, or -1 if there is no more data because the end of the stream has been reached.

**Throws**

[MessageNotReadableException](#) - if message in write-only mode.

[MessageEOFException](#) - if end of message stream

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**readChar()**

```
public char readChar()
```

Read a Unicode character value from the stream message.

**Specified By**

`javax.jms.BytesMessage.readChar()` in interface `javax.jms.BytesMessage`

**Returns**

the next two bytes from the stream message as a Unicode character.

**Throws**

[MessageNotReadableException](#) - if message in write-only mode.

[MessageEOFException](#) - if end of message stream

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**readDouble()**

```
public double readDouble()
```

Read a [double](#) from the stream message.

**Specified By**

`javax.jms.BytesMessage.readDouble()` in interface `javax.jms.BytesMessage`

**Returns**

the next eight bytes from the stream message, interpreted as a [double](#).

**Throws**

[MessageNotReadableException](#) - if message in write-only mode.

[MessageEOFException](#) - if end of message stream

[JMSException](#) - if JMS fails to read message due to some internal JMS error.

**readFloat()**

```
public float readFloat()  
Read a float from the stream message.
```

**Specified By**

`javax.jms.BytesMessage.readFloat()` in interface `javax.jms.BytesMessage`

**Returns**

the next four bytes from the stream message, interpreted as a [float](#).

**Throws**

[MessageNotReadableException](#) - if message in write-only mode.

[MessageEOFException](#) - if end of message stream

[JMSException](#) - if JMS fails to read message due to some internal JMS error.

**readInt()**

```
public int readInt()  
Read a signed 32-bit integer from the stream message.
```

**Specified By**

`javax.jms.BytesMessage.readInt()` in interface `javax.jms.BytesMessage`

**Returns**

the next four bytes from the stream message, interpreted as an [int](#).

**Throws**

[MessageNotReadableException](#) - if message in write-only mode.

[MessageEOFException](#) - if end of message stream

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

## readLong()

```
public long readLong()
```

Read a signed 64-bit integer from the stream message.

### Specified By

`javax.jms.BytesMessage.readLong()` in interface `javax.jms.BytesMessage`

### Returns

the next eight bytes from the stream message, interpreted as a [long](#).

### Throws

[MessageNotReadableException](#) - if message in write-only mode.

[MessageEOFException](#) - if end of message stream

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

## readShort()

```
public short readShort()
```

Put the message in read-only mode, and reposition the stream of bytes to the beginning. Throws `MessageNotWriteableException` - if message in write-only mode. `JMSEException` - if JMS fails to read message due to some internal JMS error.

### Specified By

`javax.jms.BytesMessage.readShort()` in interface `javax.jms.BytesMessage`

## readUnsignedByte()

```
public int readUnsignedByte()
```

Read an unsigned 8-bit number from the stream message.

### Specified By

`javax.jms.BytesMessage.readUnsignedByte()` in interface `javax.jms.BytesMessage`

### Returns

the next byte from the stream message, interpreted as an unsigned 8-bit number.

**Throws**

[MessageNotReadableException](#) - if message in write-only mode.

[MessageEOFException](#) - if end of message stream

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**readUnsignedShort()**

```
public int readUnsignedShort()
```

Read an unsigned 16-bit number from the stream message.

**Specified By**

javax.jms.BytesMessage.readUnsignedShort() in interface javax.jms.BytesMessage

**Returns**

the next two bytes from the stream message, interpreted as an unsigned 16-bit integer.

**Throws**

[MessageNotReadableException](#) - if message in write-only mode.

[MessageEOFException](#) - if end of message stream

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**readUTF()**

```
public java.lang.String readUTF()
```

Read in a string that has been encoded using a modified UTF-8 format from the stream message.

**Specified By**

javax.jms.BytesMessage.readUTF() in interface javax.jms.BytesMessage

**Returns**

a Unicode string from the stream message.

**Throws**

[MessageNotReadableException](#) - if message in write-only mode.

[MessageEOFException](#) - if end of message stream

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

## reset()

```
public void reset()
```

Put the message in read-only mode, and reposition the stream of bytes to the beginning.

### Specified By

`javax.jms.BytesMessage.reset()` in interface `javax.jms.BytesMessage`

### Throws

[JMSEException](#) - if JMS fails to reset the message due to some internal JMS error.

[MessageFormatException](#) - if message has an invalid format

## writeBoolean(boolean)

```
public void writeBoolean(boolean value)
```

Write a [boolean](#) to the stream message as a 1-byte value. The value [true](#) is written out as the value [\(byte\)1](#); the value [false](#) is written out as the value [\(byte\)0](#).

### Specified By

`javax.jms.BytesMessage.writeBoolean(boolean)` in interface `javax.jms.BytesMessage`

### Parameters

[value](#) - the boolean value to be written.

### Throws

[MessageNotWriteableException](#) - if message in read-only mode.

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

## writeByte(byte)

```
public void writeByte(byte value)
```

Write out a [byte](#) to the stream message as a 1-byte value.

### Specified By

`javax.jms.BytesMessage.writeByte(byte)` in interface `javax.jms.BytesMessage`

**Parameters**

[value](#) - the [byte](#) value to be written.

**Throws**

[MessageNotWriteableException](#) - if message in read-only mode.

[JMSException](#) - if JMS fails to write message due to some internal JMS error.

**writeBytes(byte[])**

```
public void writeBytes(byte[] value)
```

Write a byte array to the stream message.

**Specified By**

`javax.jms.BytesMessage.writeBytes(byte[])` in interface `javax.jms.BytesMessage`

**Parameters**

[value](#) - the byte array to be written.

**Throws**

[MessageNotWriteableException](#) - if message in read-only mode.

[JMSException](#) - if JMS fails to write message due to some internal JMS error.

**writeBytes(byte, int, int)**

```
public void writeBytes(byte[] value, int offset, int length)
```

Write a portion of a byte array to the stream message.

**Specified By**

`javax.jms.BytesMessage.writeBytes(byte[], int, int)` in interface `javax.jms.BytesMessage`

**Parameters**

[value](#) - the byte array value to be written.

[offset](#) - the initial offset within the byte array.

[length](#) - the number of bytes to use.

**Throws**

[MessageNotWriteableException](#) - if message in read-only mode.

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

**writeChar(char)**

```
public void writeChar(char value)
```

Write a [char](#) to the stream message as a 2-byte value, high byte first.

**Specified By**

javax.jms.BytesMessage.writeChar(char) in interface javax.jms.BytesMessage

**Parameters**

[value](#) - the [char](#) value to be written.

**Throws**

[MessageNotWriteableException](#) - if message in read-only mode.

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

**writeDouble(double)**

```
public void writeDouble(double value)
```

Convert the double argument to a [long](#) using the [doubleToLongBits](#) method in class [Double](#), and then writes that [long](#) value to the stream message as an 8-byte quantity, high byte first.

**Specified By**

javax.jms.BytesMessage.writeDouble(double) in interface javax.jms.BytesMessage

**Parameters**

[value](#) - the [double](#) value to be written.

**Throws**

[MessageNotWriteableException](#) - if message in read-only mode.

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

**writeFloat(float)**

```
public void writeFloat(float value)
```

Convert the float argument to an [int](#) using the [floatToIntBits](#) method in class [Float](#), and then writes that [int](#) value to the stream message as a 4-byte quantity, high byte first.

**Specified By**

`javax.jms.BytesMessage.writeFloat(float)` in interface `javax.jms.BytesMessage`

**Parameters**

[value](#) - the [float](#) value to be written.

**Throws**

[MessageNotWriteableException](#) - if message in read-only mode.

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

**writeInt(int)**

```
public void writeInt(int value)
```

Write an [int](#) to the stream message as four bytes, high byte first.

**Specified By**

`javax.jms.BytesMessage.writeInt(int)` in interface `javax.jms.BytesMessage`

**Parameters**

[value](#) - the [int](#) to be written.

**Throws**

[MessageNotWriteableException](#) - if message in read-only mode.

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

**writeLong(long)**

```
public void writeLong(long value)
```

Write a [long](#) to the stream message as eight bytes, high byte first.

**Specified By**

`javax.jms.BytesMessage.writeLong(long)` in interface `javax.jms.BytesMessage`

**Parameters**

[value](#) - the [long](#) to be written.

**Throws**

[MessageNotWriteableException](#) - if message in read-only mode.

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

**writeObject(Object)**

```
public void writeObject(java.lang.Object value)
```

Write a Java object to the stream message.

Note that this method only works for the objectified primitive object types (Integer, Double, Long ...), String's and byte arrays.

**Specified By**

`javax.jms.BytesMessage.writeObject(java.lang.Object)` in interface `javax.jms.BytesMessage`

**Parameters**

[value](#) - the Java object to be written.

**Throws**

[MessageNotWriteableException](#) - if message in read-only mode.

[MessageFormatException](#) - if object is invalid type.

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

**writeShort(short)**

```
public void writeShort(short value)
```

Write a [short](#) to the stream message as two bytes, high byte first.

**Specified By**

`javax.jms.BytesMessage.writeShort(short)` in interface `javax.jms.BytesMessage`

**Parameters**

[value](#) - the [short](#) to be written.

### Throws

[MessageNotWriteableException](#) - if message in read-only mode.

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

### writeUTF(String)

```
public void writeUTF(java.lang.String value)
```

Write a string to the stream message using UTF-8 encoding in a machine-independent manner.

### Specified By

`javax.jms.BytesMessage.writeUTF(java.lang.String)` in interface `javax.jms.BytesMessage`

### Parameters

`value` - the [String](#) value to be written.

### Throws

[MessageNotWriteableException](#) - if message in read-only mode.

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

---

## oracle.jms AQjmsConnection

### Syntax

```
public class AQjmsConnection extends java.lang.Object implements  
javax.jms.QueueConnection, javax.jms.TopicConnection
```

```
java.lang.Object  
|  
+--oracle.jms.AQjmsConnection
```

### All Implemented Interfaces

```
javax.jms.Connection, javax.jms.QueueConnection, javax.jms.TopicConnection
```

### Description

This class implements the Connection interface. This is an active connection to the JMS provider

---

## Member Summary

---

### Methods

<a href="#">close()</a>	Since a provider typically allocates significant resources outside the JVM on behalf of a Connection, clients should close them when they are not needed.
<a href="#">createQueueSession(boolean, int)</a>	create a queue session
<a href="#">createTopicSession(boolean, int)</a>	Create a TopicSession
<a href="#">getClientID()</a>	Get the client identifier for this connection.
<a href="#">getCurrentJmsSession()</a>	gets the current session
<a href="#">getMetaData()</a>	Get the meta data for this connection.
<a href="#">setClientID(String)</a>	Set the client identifier for this connection.
<a href="#">start()</a>	Start (or restart) a Connection's delivery of incoming messages.
<a href="#">stop()</a>	Used to temporarily stop a Connection's delivery of incoming messages.

---

---

## Inherited Member Summary

---

Methods inherited from class `java.lang.Object`

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

---

## Methods

### `close()`

```
public void close()
```

Since a provider typically allocates significant resources outside the JVM on behalf of a `Connection`, clients should close them when they are not needed. Relying on garbage collection to eventually reclaim these resources may not be timely enough.

#### Specified By

`javax.jms.Connection.close()` in interface `javax.jms.Connection`

#### Specified By

`javax.jms.Connection.close()` in interface `javax.jms.Connection`

#### Throws

[JMSEException](#) - if JMS implementation fails to close the connection due to internal error. For example, a failure to release resources or to close socket connection can lead to throwing of this exception.

### `createQueueSession(boolean, int)`

```
public javax.jms.QueueSession createQueueSession(boolean transacted, int ack_
mode)
```

create a queue session

#### Specified By

`javax.jms.QueueConnection.createQueueSession(boolean, int)` in interface `javax.jms.QueueConnection`

#### Parameters

[transacted](#) - is session transacted?

[ack\\_mode](#) - acknowledgement mode

### Returns

QueueSession. A QueueSession provides methods for creating QueueReceiver's, QueueSender's, QueueBrowser's.

### Throws

[JMSEException](#) - if JMS fails to create queue session

## createTopicSession(boolean, int)

```
public javax.jms.TopicSession createTopicSession(boolean transacted, int ack_
mode)
```

Create a TopicSession

### Specified By

javax.jms.TopicConnection.createTopicSession(boolean, int) in interface javax.jms.TopicConnection

### Parameters

[transacted](#) - if true, the session is transacted.

[acknowledgeMode](#) - indicates whether the consumer or the client will acknowledge any messages it receives. This parameter will be ignored if the session is transacted.

### Returns

a newly created topic session.

### Throws

[JMSEException](#) - if JMS Connection fails to create a session due to some internal error or lack of support for specific transaction and acknowledgement mode.

## getClientID()

```
public java.lang.String getClientID()
Get the client identifier for this connection.
```

### Specified By

javax.jms.Connection.getClientID() in interface javax.jms.Connection

**Returns**

the unique client identifier.

**Throws**

[JMSEException](#) - if JMS implementation fails to return the client ID for this Connection due to some internal error.

**getCurrentJmsSession()**

```
public javax.jms.Session getCurrentJmsSession()  
gets the current session
```

**Returns**

Session The current JMS session

**getMetaData()**

```
public javax.jms.ConnectionMetaData getMetaData()  
Get the meta data for this connection.
```

**Specified By**

`javax.jms.Connection.getMetaData()` in interface `javax.jms.Connection`

**Returns**

the connection meta data.

**Throws**

[JMSEException](#) - general exception if JMS implementation fails to get the Connection meta-data for this Connection.

**See Also**

`javax.jms.ConnectionMetaData`

**setClientID(String)**

```
public void setClientID(java.lang.String clientID)  
Set the client identifier for this connection.
```

The preferred way to assign a Client's client identifier is for it to be configured in a client-specific `ConnectionFactory` and transparently assigned to the `Connection` it

creates. Alternatively, a client can set a Connection's client identifier using a provider-specific value.

The purpose of client identifier is to associate a session and its objects with a state maintained on behalf of the client by a provider. The only such state identified by JMS is that required to support durable subscriptions

### Specified By

`javax.jms.Connection.setClientID(java.lang.String)` in interface `javax.jms.Connection`

### Parameters

[clientID](#) - the unique client identifier

### Throws

[JMSEException](#) - general exception if JMS implementation fails to set the client ID for this Connection due to some internal error.

[InvalidClientIDException](#) - if JMS client specifies an invalid or duplicate client id.

## start()

```
public void start()
```

Start (or restart) a Connection's delivery of incoming messages. Restart begins with the oldest unacknowledged message. Starting a started session is ignored.

### Specified By

`javax.jms.Connection.start()` in interface `javax.jms.Connection`

### Throws

[JMSEException](#) - if JMS implementation fails to start the message delivery due to some internal error.

### See Also

```
javax.jms.Connection.stop()
```

## stop()

```
public void stop()
```

Used to temporarily stop a Connection's delivery of incoming messages. It can be restarted using its [start](#) method. When stopped, delivery to all the Connection's

message consumers is inhibited: synchronous receive's block and messages are not delivered to message listeners.

After stop is called there may still be some messages delivered.

Stopping a Session has no affect on its ability to send messages. Stopping a stopped session is ignored.

### **Specified By**

`javax.jms.Connection.stop()` in interface `javax.jms.Connection`

### **Throws**

[JMSException](#) - if JMS implementation fails to stop the message delivery due to some internal error.

### **See Also**

`javax.jms.Connection.start()`

---

## oracle.jms

# AQjmsConnectionMetaData

### Syntax

```
public class AQjmsConnectionMetaData extends java.lang.Object implements
javax.jms.ConnectionMetaData
```

```
java.lang.Object
|
+--oracle.jms.AQjmsConnectionMetaData
```

### All Implemented Interfaces

```
javax.jms.ConnectionMetaData
```

### Description

This class represents the Meta Data information available for a JMS Connection.

---

## Member Summary

---

### Constructors

[AQjmsConnectionMetaData\(\)](#)

### Methods

<a href="#">getJMSMajorVersion()</a>	Get the JMS major version number.
<a href="#">getJMSMinorVersion()</a>	Get the JMS minor version number.
<a href="#">getJMSProviderName()</a>	Get the JMS provider name.
<a href="#">getJMSVersion()</a>	Get the JMS version.
<a href="#">getProviderMajorVersion()</a>	Get the JMS provider major version number.
<a href="#">getProviderMinorVersion()</a>	Get the JMS provider minor version number.
<a href="#">getProviderVersion()</a>	Get the JMS provider version.

---

---

## Inherited Member Summary

---

Methods inherited from class java.lang.Object

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

---

## Constructors

### AQjmsConnectionMetaData()

```
public AQjmsConnectionMetaData()
```

## Methods

### getJMSMajorVersion()

```
public int getJMSMajorVersion()
```

Get the JMS major version number.

#### Specified By

javax.jms.ConnectionMetaData.getJMSMajorVersion() in interface  
javax.jms.ConnectionMetaData

#### Returns

the JMS major version number.

#### Throws

[JMSEException](#) - if some internal error occurs in JMS implementation during the meta-data retrieval.

### getJMSMinorVersion()

```
public int getJMSMinorVersion()
```

Get the JMS minor version number.

#### Specified By

javax.jms.ConnectionMetaData.getJMSMinorVersion() in interface  
javax.jms.ConnectionMetaData

**Returns**

the JMS minor version number.

**Throws**

[JMSEException](#) - if some internal error occurs in JMS implementation during the meta-data retrieval.

**getJMSProviderName()**

```
public java.lang.String getJMSProviderName()
```

Get the JMS provider name.

**Specified By**

`javax.jms.ConnectionMetaData.getJMSProviderName()` in interface `javax.jms.ConnectionMetaData`

**Returns**

the JMS provider name.

**Throws**

[JMSEException](#) - if some internal error occurs in JMS implementation during the meta-data retrieval.

**getJMSVersion()**

```
public java.lang.String getJMSVersion()
```

Get the JMS version.

**Specified By**

`javax.jms.ConnectionMetaData.getJMSVersion()` in interface `javax.jms.ConnectionMetaData`

**Returns**

the JMS version.

**Throws**

[JMSEException](#) - if some internal error occurs in JMS implementation during the meta-data retrieval.

**getProviderMajorVersion()**

```
public int getProviderMajorVersion()  
Get the JMS provider major version number.
```

**Specified By**

`javax.jms.ConnectionMetaData.getProviderMajorVersion()` in interface  
`javax.jms.ConnectionMetaData`

**Returns**

the JMS provider major version number.

**Throws**

[JMSEException](#) - if some internal error occurs in JMS implementation during the meta-data retrieval.

**getProviderMinorVersion()**

```
public int getProviderMinorVersion()  
Get the JMS provider minor version number.
```

**Specified By**

`javax.jms.ConnectionMetaData.getProviderMinorVersion()` in interface  
`javax.jms.ConnectionMetaData`

**Returns**

the JMS provider minor version number.

**Throws**

[JMSEException](#) - if some internal error occurs in JMS implementation during the meta-data retrieval.

**getProviderVersion()**

```
public java.lang.String getProviderVersion()  
Get the JMS provider version.
```

**Specified By**

`javax.jms.ConnectionMetaData.getProviderVersion()` in interface  
`javax.jms.ConnectionMetaData`

**Returns**

the JMS provider version.

**Throws**

[JMSException](#) - if some internal error occurs in JMS implementation during the meta-data retrieval.

---

## oracle.jms AQjmsConstants

### Syntax

```
public class AQjmsConstants
```

```
oracle.jms.AQjmsConstants
```

### Description

This class defines the constants used in the oracle.jms package

---

### Member Summary

---

#### Fields

[EXCEPTION](#)

[NONE](#)

[NORMAL](#)

[STATE\\_EXPIRED](#)

[STATE\\_PROCESSED](#)

[STATE\\_READY](#)

[STATE\\_WAITING](#)

[TRANSACTIONAL](#)

[WAIT\\_FOREVER](#)

[WAIT\\_NONE](#)

#### Constructors

[AQjmsConstants\(\)](#)

---

### Fields

#### EXCEPTION

```
public static final int EXCEPTION
```

**NONE**

```
public static final int NONE
```

**NORMAL**

```
public static final int NORMAL
```

**STATE\_EXPIRED**

```
public static final int STATE_EXPIRED
```

**STATE\_PROCESSED**

```
public static final int STATE_PROCESSED
```

**STATE\_READY**

```
public static final int STATE_READY
```

**STATE\_WAITING**

```
public static final int STATE_WAITING
```

**TRANSACTIONAL**

```
public static final int TRANSACTIONAL
```

**WAIT\_FOREVER**

```
public static final int WAIT_FOREVER
```

**WAIT\_NONE**

```
public static final int WAIT_NONE
```

**Constructors****AQjmsConstants()**

```
public AQjmsConstants()
```

## oracle.jms AQjmsConsumer

### Syntax

public class AQjmsConsumer extends java.lang.Object implements [AQjmsQueueReceiver](#), [AQjmsTopicSubscriber](#), [AQjmsTopicReceiver](#)

```
java.lang.Object
|
+--oracle.jms.AQjmsConsumer
```

### All Implemented Interfaces

[AQjmsQueueReceiver](#), [AQjmsTopicReceiver](#), [AQjmsTopicSubscriber](#),  
[javax.jms.MessageConsumer](#), [javax.jms.QueueReceiver](#), [TopicReceiver](#),  
[javax.jms.TopicSubscriber](#)

### Description

This class implements the `MessageConsumer` interface

---

## Member Summary

---

### Methods

<a href="#">close()</a>	Since a provider may allocate some resources on behalf of a <code>MessageConsumer</code> outside the JVM, clients should close them when they are not needed.
<a href="#">getMessageListener()</a>	Get the message consumer's <code>MessageListener</code> .
<a href="#">getMessageSelector()</a>	Get the message consumer's message selector expression.
<a href="#">getNavigationMode()</a>	Get the navigation mode for the consumer
<a href="#">getNoLocal()</a>	Get the <code>NoLocal</code> attribute for this <code>TopicSubscriber</code> .
<a href="#">getQueue()</a>	Get the queue associated with this queue receiver.
<a href="#">getTopic()</a>	Get the topic associated with this subscriber.
<a href="#">receive()</a>	Receive the next message produced for this message consumer.
<a href="#">receive(long)</a>	Receive the next message that arrives within the specified timeout interval.
<a href="#">receiveNoData()</a>	Consume the message without returning it to the user.

---

**Member Summary**

---

<a href="#">receiveNoData(long)</a>	Consume the message without returning it to the user.
<a href="#">receiveNoWait()</a>	Receive the next message if one is immediately available.
<a href="#">setMessageListener(MessageListener)</a>	Set the message consumer's MessageListener.
<a href="#">setNavigationMode(int)</a>	Set the navigation mode for the consumer

---

---

**Inherited Member Summary**

---

Methods inherited from class `java.lang.Object`

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

---

**Methods****close()**

```
public void close()
```

Since a provider may allocate some resources on behalf of a `MessageConsumer` outside the JVM, clients should close them when they are not needed. Relying on garbage collection to eventually reclaim these resources may not be timely enough.

**Specified By**

`javax.jms.MessageConsumer.close()` in interface `javax.jms.MessageConsumer`

**Specified By**

`javax.jms.MessageConsumer.close()` in interface `javax.jms.MessageConsumer`

**Throws**

[JMSEException](#) - if JMS fails to close the consumer due to some error.

**getMessageListener()**

```
public synchronized javax.jms.MessageListener getMessageListener()
```

Get the message consumer's `MessageListener`.

**Specified By**

javax.jms.MessageConsumer.getMessageListener() in interface  
javax.jms.MessageConsumer

**Specified By**

javax.jms.MessageConsumer.getMessageListener() in interface  
javax.jms.MessageConsumer

**Returns**

the listener for the message consumer, or null if this isn't one set.

**Throws**

[JMSEException](#) - if JMS fails to get message listener due to some JMS error

**getMessageSelector()**

```
public synchronized java.lang.String getMessageSelector()  
Get the message consumer's message selector expression.
```

**Specified By**

javax.jms.MessageConsumer.getMessageSelector() in interface  
javax.jms.MessageConsumer

**Specified By**

javax.jms.MessageConsumer.getMessageSelector() in interface  
javax.jms.MessageConsumer

**Returns**

this message consumer's message selector

**Throws**

[JMSEException](#) - if JMS fails to get message selector due to some JMS error

**getNavigationMode()**

```
public synchronized int getNavigationMode()  
Get the navigation mode for the consumer
```

**Specified By**

[getNavigationMode\(\)](#) in interface [AQjmsTopicSubscriber](#)

**Specified By**

[getNavigationMode\(\)](#) in interface [AQjmsTopicReceiver](#)

**Returns**

the navigation mode of the consumer

**Throws**

[if](#) - the navigation mode could not be got

**getNoLocal()**

```
public synchronized boolean getNoLocal()
```

Get the NoLocal attribute for this TopicSubscriber. The default value for this attribute is false.

**Specified By**

[javax.jms.TopicSubscriber.getNoLocal\(\)](#) in interface [javax.jms.TopicSubscriber](#)

**Returns**

set to true if locally published messages are being inhibited.

**Throws**

[JMSEException](#) - if JMS fails to get noLocal attribute for this topic subscriber due to some internal error.

**getQueue()**

```
public synchronized javax.jms.Queue getQueue()
```

Get the queue associated with this queue receiver.

**Specified By**

[javax.jms.QueueReceiver.getQueue\(\)](#) in interface [javax.jms.QueueReceiver](#)

**Returns**

the queue associated with the receiver

**Throws**

[JMSEException](#) - if JMS fails to get queue for this queue receiver due to some internal error.

**getTopic()**

```
public synchronized javax.jms.Topic getTopic()
```

Get the topic associated with this subscriber.

**Specified By**

`javax.jms.TopicSubscriber.getTopic()` in interface `javax.jms.TopicSubscriber`

`getTopic()` in interface [TopicReceiver](#)

**Returns**

this subscriber's topic

**Throws**

[JMSEException](#) - if JMS fails to get topic for this topic subscriber due to some internal error.

**receive()**

```
public synchronized javax.jms.Message receive()
```

Receive the next message produced for this message consumer.

This call blocks indefinitely until a message is produced.

**Specified By**

`javax.jms.MessageConsumer.receive()` in interface `javax.jms.MessageConsumer`

**Returns**

the next message produced for this message consumer.

**Throws**

[JMSEException](#) - if JMS fails to receive the next message due to some error.

**receive(long)**

```
public synchronized javax.jms.Message receive(long timeout)
```

Receive the next message that arrives within the specified timeout interval.

This call blocks until either a message arrives or the timeout expires.

**Specified By**

`javax.jms.MessageConsumer.receive(long)` in interface `javax.jms.MessageConsumer`

**Parameters**

[timeout](#) - the timeout value (in milliseconds)

**Returns**

the next message produced for this message consumer, or null if one is not available.

**Throws**

[JMSEException](#) - if JMS fails to receive the next message due to some error.

**receiveNoData()**

```
public synchronized void receiveNoData()
```

Consume the message without returning it to the user. This call will avoid the overhead of fetching the message from the database. It can be used as an optimization by jms clients who have already read the message, for example using a queue browser.

**Specified By**

`receiveNoData()` in interface [AQjmsQueueReceiver](#)

**Throws**

[JMSEException](#) - if the message could not be received due to an error

**receiveNoData(long)**

```
public synchronized void receiveNoData(long timeout)
```

Consume the message without returning it to the user. This call will avoid the overhead of fetching the message from the database. It can be used as an optimization by jms clients who have already read the message, for example using a queue browser. This call will block until a message arrives or the timeout expires

**Specified By**

`receiveNoData(long)` in interface [AQjmsQueueReceiver](#)

**Parameters**

[timeout](#) - the timeout value in milliseconds

**Throws**

[JMSEException](#) - if the message could not be received due to an error

**receiveNoWait()**

```
public synchronized javax.jms.Message receiveNoWait()
Receive the next message if one is immediately available.
```

**Specified By**

`javax.jms.MessageConsumer.receiveNoWait()` in interface `javax.jms.MessageConsumer`

**Returns**

the next message produced for this message consumer, or null if one is not available.

**Throws**

[JMSEException](#) - if JMS fails to receive the next message due to some error.

**setMessageListener(MessageListener)**

```
public synchronized void setMessageListener(javax.jms.MessageListener
myListener)
Set the message consumer's MessageListener. The onMessage method of this object
is called when there are messages for this consumer.
```

**Specified By**

`javax.jms.MessageConsumer.setMessageListener(javax.jms.MessageListener)` in interface `javax.jms.MessageConsumer`

**Parameters**

[myListener](#) - set the consumer's message listener

**Throws**

[JMSEException](#) - if JMS fails to get message listener due to some JMS error

**setNavigationMode(int)**

```
public synchronized void setNavigationMode(int mode)
```

Set the navigation mode for the consumer

**Specified By**

[setNavigationMode\(int\)](#) in interface [AQjmsQueueReceiver](#)

**Parameters**

[mode](#) - the navigation mode of the consumer

**Throws**

[if](#) - the navigation mode could not be set

## oracle.jms AQjmsDestination

### Syntax

```
public class AQjmsDestination extends java.lang.Object implements  
    javax.jms.Queue, javax.jms.Topic
```

```
java.lang.Object  
|  
+--oracle.jms.AQjmsDestination
```

### All Implemented Interfaces

```
javax.jms.Destination, javax.jms.Queue, javax.jms.Topic
```

### Description

This class implements administered objects, Queue and Topic

---

## Member Summary

---

### Methods

<a href="#">alter(Session, AQjmsDestinationProperty)</a>	alter the properties of the queue/topic
<a href="#">alterPropagationSchedule(Session, String, Double, String, Double)</a>	alter propapagation schedule between the topic and the destination database
<a href="#">disablePropagationSchedule(Session, String)</a>	disable propapagation schedule
<a href="#">drop(Session)</a>	drop the queue/topic
<a href="#">enablePropagationSchedule(Session, String)</a>	enable propapagation schedule
<a href="#">getCompleteName()</a>	Get the complete name of the queue/topic, of the form, [schema].name
<a href="#">getCompleteTableName()</a>	Get the complete name of the queue table of the queue/topic of the form, [schema].name
<a href="#">getQueueName()</a>	Get the name of the queue
<a href="#">getQueueOwner()</a>	Get the owner of the queue

---

## Member Summary

---

<code>getTopicName()</code>	Get the name of the Topic
<code>getTopicOwner()</code>	Get the schema of the topic
<code>grantQueuePrivilege(Session, String, String, boolean)</code>	Grant enqueue or dequeue privilege on the queue to a database user
<code>grantTopicPrivilege(Session, String, String, boolean)</code>	Grant a topic privilege
<code>revokeQueuePrivilege(Session, String, String)</code>	Revoke a queue privilege
<code>revokeTopicPrivilege(Session, String, String)</code>	Revoke a topic privilege
<code>schedulePropagation(Session, String, Date, Double, String, Double)</code>	Schedule propagation from the topic for the given destination database
<code>start(Session, boolean, boolean)</code>	start the queue/topic for enqueue or dequeue or both
<code>stop(Session, boolean, boolean, boolean)</code>	stop the queue/topic for enqueue or dequeue or both
<code>toString()</code>	Get the queue/topic as a string, of the form [schema].name
<code>unschedulePropagation(Session, String)</code>	Unschedule propagation between the topic and the specified destination

---



---

## Inherited Member Summary

---

Methods inherited from class `java.lang.Object`

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

---

## Methods

### `alter(Session, AQjmsDestinationProperty)`

```
public void alter(javax.jms.Session session, AQjmsDestinationProperty dest_
property)
```

alter the properties of the queue/topic

### Parameters

[session](#) - the jms session

[dest\\_property](#) - the new properties of the queue/topic

### alterPropagationSchedule(Session, String, Double, String, Double)

```
public void alterPropagationSchedule(javax.jms.Session session, java.lang.String destination, java.lang.Double duration, java.lang.String next_time, java.lang.Double latency)
```

alter propagation schedule between the topic and the destination database

### Parameters

[session](#) - the jms session

[destination](#) - the dblink of the destination database

[duration](#) - the new duration

[next\\_time](#) - the new next\_time for propagation

[latency](#) - the new latency

### disablePropagationSchedule(Session, String)

```
public void disablePropagationSchedule(javax.jms.Session session, java.lang.String destination)
```

disable propagation schedule

### Parameters

[session](#) - the jms session

[destination](#) - the dblink to the destination database

### Throws

[JMSException](#) - if the propagation schedule could not be disabled

### drop(Session)

```
public void drop(javax.jms.Session session)
```

drop the queue/topic

### Parameters

[session](#) - the jms session

**Throws**

[JMSEException](#) - if the queue/topic could not be dropped

**enablePropagationSchedule(Session, String)**

```
public void enablePropagationSchedule(javax.jms.Session session,  
java.lang.String destination)  
enable propagation schedule
```

**Parameters**

[session](#) - the JMS session

[destination](#) - the dblink of the destination database

**Throws**

[JMSEException](#) - if the propagation could not be enabled

**getCompleteName()**

```
public java.lang.String getCompleteName()  
Get the complete name of the queue/topic, of the form, [schema].name
```

**Returns**

the complete name of the queue/topic

**getCompleteTableName()**

```
public java.lang.String getCompleteTableName()  
Get the complete name of the queue table of the queue/topic of the form,  
[schema].name
```

**Returns**

the complete name of the queue/topic's queue table

**getQueueName()**

```
public java.lang.String getQueueName()  
Get the name of the queue
```

**Specified By**

`javax.jms.Queue.getQueueName()` in interface `javax.jms.Queue`

**Returns**

the name of the queue

**Throws**

[JMSEException](#) - if the queue is not a single consumer queue

**getQueueOwner()**

```
public java.lang.String getQueueOwner()  
Get the owner of the queue
```

**Returns**

the schema of the queue

**Throws**

[JMSEException](#) - if the schema could not be retrieved

**getTopicName()**

```
public java.lang.String getTopicName()  
Get the name of the Topic
```

**Specified By**

`javax.jms.Topic.getTopicName()` in interface `javax.jms.Topic`

**Returns**

the name of the topic

**Throws**

[JMSEException](#) - if the queue is not a multi consumer queue (topic)

**getTopicOwner()**

```
public java.lang.String getTopicOwner()  
Get the schema of the topic
```

**Returns**

the schema of the topic

### Throws

[JMSEException](#) - if the schema could not be retrieved

### **grantQueuePrivilege(Session, String, String, boolean)**

```
public void grantQueuePrivilege(javax.jms.Session session, java.lang.String  
privilege, java.lang.String grantee, boolean grant_option)
```

Grant enqueue or dequeue privilege on the queue to a database user

### Parameters

[session](#) - the jms session

[privilege](#) - the privilege (ENQUEUE or DEQUEUE)

[grantee](#) - the user being granted the privilege

[grant\\_option](#) - whether the grantee can grant the privilege to others

### Throws

[JMSEException](#) - if the privilege could not be granted

### **grantTopicPrivilege(Session, String, String, boolean)**

```
public void grantTopicPrivilege(javax.jms.Session session, java.lang.String  
privilege, java.lang.String grantee, boolean grant_option)
```

Grant a topic privilege

### Parameters

[session](#) - the jms session

[privilege](#) - the privilege (ENQUEUE or DEQUEUE) being granted

[grantee](#) - the database user being granted the privilege

[grant\\_option](#) - whether the grantee can grant the privilege to other users

### Throws

[JMSEException](#) - if the privilege could not be granted

### **revokeQueuePrivilege(Session, String, String)**

```
public void revokeQueuePrivilege(javax.jms.Session session, java.lang.String  
privilege, java.lang.String grantee)
```

Revoke a queue privilege

**Parameters**

[session](#) - the jms session

[privilege](#) - the privilege (ENQUEUE or DEQUEUE) being revoked

[grantee](#) - the database user from whom the privilege is being revoked

**Throws**

[JMSEException](#) - if the privilege could not be revoked

**revokeTopicPrivilege(Session, String, String)**

```
public void revokeTopicPrivilege(javax.jms.Session session, java.lang.String
privilege, java.lang.String grantee)
```

Revoke a topic privilege

**Parameters**

[session](#) - the jms session

[privilege](#) - the privilege (ENQUEUE or DEQUEUE) being revoked

[grantee](#) - the database user from whom the privilege is being revoked

**Throws**

[JMSEException](#) - if the privilege could not be revoked

**schedulePropagation(Session, String, Date, Double, String, Double)**

```
public void schedulePropagation(javax.jms.Session session, java.lang.String
destination, java.util.Date start_time, java.lang.Double duration,
java.lang.String next_time, java.lang.Double latency)
```

Schedule propagation from the topic for the given destination database

**Parameters**

[session](#) - the JMS session

[destination](#) - the dblink of the remote database for which propagation is being scheduled. A null string means that propagation will be scheduled for all subscribers in the database of the topic

[start\\_time](#) - the time propagation must be started

[duration](#) - the duration of propagation

[next\\_time](#) - the next time propagation must be done

[latency](#) - the latency in seconds that can be tolerated latency is the difference between the time a message was enqueued and the time it was propagated

### Throws

[JMSEException](#) - if propagation could not be scheduled

### start(Session, boolean, boolean)

```
public void start(javax.jms.Session session, boolean enqueue, boolean dequeue)
start the queue/topic for enqueue or dequeue or both
```

### Parameters

[session](#) - the jms session

[enqueue](#) - whether enqueue should be enabled

[dequeue](#) - whether dequeue should be enabled

### Throws

[JMSEException](#) - if failed to start the queue/topic

### stop(Session, boolean, boolean, boolean)

```
public void stop(javax.jms.Session session, boolean enqueue, boolean dequeue,
boolean wait)
stop the queue/topic for enqueue or dequeue or both
```

### Parameters

[session](#) - the jms session

[enqueue](#) - whether enqueue should be disabled

[dequeue](#) - whether dequeue should be disabled

[wait](#) - whether to wait for pending transactions on the queue/topic to complete

### Throws

[JMSEException](#) - if failed to stop the queue/topic

### toString()

```
public java.lang.String toString()
Get the queue/topic as a string, of the form [schema].name
```

**Specified By**

java.xml.jms.Queue.toString() in interface javax.xml.jms.Queue

**Overrides**

java.lang.Object.toString() in class java.lang.Object

**Returns**

the queue/topic as a string

**unschedulePropagation(Session, String)**

```
public void unschedulePropagation(javax.xml.jms.Session session, java.lang.String destination)
```

Unschedule propagation between the topic and the specified destination

**Parameters**

[session](#) - the jms session

[destination](#) - the dblink of the destination database for which propagation must be unscheduled

**Throws**

[JMSException](#) - if propagation could not be unscheduled

## oracle.jms

# AQjmsDestinationProperty

```
public class AQjmsDestinationProperty
oracle.jms.AQjmsDestinationProperty
This class defines Destination properties
```

---

### Member Summary

---

#### Fields

NORMAL\_QUEUE

EXCEPTION\_QUEUE

INFINITE                      infinite retention

#### Constructors

[AQjmsDestinationProperty\(\)](#)    Cosnstructor - initializes object with default destination properties

#### Methods

<a href="#">getQueueType</a>	This method gets the queue type .
<a href="#">setQueueType</a>	This method is used to set the queue type.
<a href="#">getMaxRetries</a>	This method gets the maximum retries for dequeue with REMOVE mode.
<a href="#">setMaxRetries</a>	This method sets the maximum retries for dequeue with REMOVE mode.
<a href="#">setRetryInterval</a>	This method sets the retry interval, that is the time before this message is scheduled for processing after an application rollback. Default is 0.
<a href="#">getRetryInterval</a>	This method gets the retry interval.
<a href="#">getRetentionTime</a>	This method gets the retention time.
<a href="#">setRetentionTime</a>	This method gets the retention time.
<a href="#">getComment</a>	This method gets the queue comment.
<a href="#">setComment</a>	This method sets the queue comment.

---

### Constants

```
public static final int NORMAL_QUEUE
public static final int EXCEPTION_QUEUE
```

```
public static final int INFINITE /* infinite retention */
```

## Constructors

### AQjmsDestinationProperty()

```
public AQjmsDestinationProperty()
```

Cosntructor - initializes object with default destination properties

## Methods

### getQueueType

```
public int getQueueType() throws AQException
```

This method gets the queue type .

#### Returns

NORMAL\_QUEUE or EXCEPTION\_QUEUE

### setQueueType

```
public void setQueueType(int q_type) throws AQException
```

This method is used to set the queue type.

---

Parameter	Meaning
q_type	NORMAL_QUEUE or EXCEPTION_QUEUE

---

### getMaxRetries

```
public int getMaxRetries() throws AQException
```

This method gets the maximum retries for dequeue with REMOVE mode.

### setMaxRetries

```
public void setMaxRetries(int retries) throws AQException
```

```
public void setMaxRetries(Integer retries) throws AQException
```

This method sets the maximum retries for dequeue with REMOVE mode.

Parameter	Meaning
retries	maximum retries for dequeue with REMOVE mode; specifying NULL will use the default. The default applies to single consumer queues and 8.1 compatible multiconsumer queues. Max_retries is not supported for 8.0 compatible multiconsumer queues.

### setRetryInterval

```
public void setRetryInterval(double interval) throws AQException
public void setRetryInterval(Double interval) throws AQException
```

This method sets the retry interval, that is the time before this message is scheduled for processing after an application rollback. Default is 0.

Parameter	Meaning
interval	retry interval; specifying NULL will use the default

### getRetryInterval

```
public double getRetryInterval() throws AQException
```

This method gets the retry interval.

### getRetentionTime

```
public double getRetentionTime() throws AQException
```

This method gets the retention time.

### setRetentionTime

```
public void setRetentionTime(double r_time) throws AQException
public void setRetentionTime(Double r_time) throws AQException
```

This method gets the retention time.

Parameter	Meaning
r_time	retention time; specifying NULL will use the default

### getComment

```
public java.lang.String getComment() throws AQException
```

This method gets the queue comment.

## setComment

`public void setComment(java.lang.String qt_comment) throws AQException`  
This method sets the queue comment.

Parameter	Meaning
qt_comment	queue comment

---

## oracle.jms AQjmsException

### Syntax

```
public class AQjmsException extends javax.jms.JMSEException
```

```
java.lang.Object
|
+--java.lang.Throwable
    |
    +--java.lang.Exception
        |
        +--javax.jms.JMSEException
            |
            +--oracle.jms.AQjmsException
```

### All Implemented Interfaces

```
java.io.Serializable
```

### Description

This exception extends JMSEException - adds Oracle error codes. This is the root of all JMS exceptions

---

### Member Summary

#### Methods

<a href="#">getErrorNumber()</a>	Get the Oracle Error code for the exception
----------------------------------	---

---

---

### Inherited Member Summary

#### Methods inherited from interface javax.jms.JMSEException

[getErrorCode](#), [getLinkedException](#), [setLinkedException](#)

#### Methods inherited from class java.lang.Throwable

[fillInStackTrace](#), [getLocalizedMessage](#), [getMessage](#), [printStackTrace](#), [printStackTrace](#), [printStackTrace](#), [toString](#)

---

## Inherited Member Summary

---

Methods inherited from class java.lang.Object

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

---

## Methods

### getErrorNumber()

```
public int getErrorNumber()
```

Get the Oracle Error code for the exception

---

## oracle.jms AQjmsFactory

### Syntax

```
public class AQjmsFactory extends java.lang.Object
```

```
java.lang.Object  
|  
+--oracle.jms.AQjmsFactory
```

### Description

This class is used for accessing administered ConnectionFactory objects in Oracle's implementation of JMS

---

### Member Summary

#### Methods

<a href="#">getQueueConnectionFactory(String, Properties)</a>	get a Queue Connection Factory
<a href="#">getQueueConnectionFactory(String, String, int, String)</a>	get a Queue Connection Factory
<a href="#">getTopicConnectionFactory(String, Properties)</a>	get a Topic Connection Factory
<a href="#">getTopicConnectionFactory(String, String, int, String)</a>	get a Topic Connection Factory

---

---

### Inherited Member Summary

Methods inherited from class java.lang.Object

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

---

## Methods

### getQueueConnectionFactory(String, Properties)

```
public static javax.jms.QueueConnectionFactory  
getQueueConnectionFactory(java.lang.String jdbc_url, java.util.Properties info)  
get a Queue Connection Factory
```

#### Parameters

[jdbc\\_url](#) - url to connect to info properties information

#### Returns

a Queue Connection Factory

#### Throws

[JMSEException](#) - if JMS fails to get a queue connection factory due to some JMS error

### getQueueConnectionFactory(String, String, int, String)

```
public static javax.jms.QueueConnectionFactory  
getQueueConnectionFactory(java.lang.String hostname, java.lang.String oracle_  
sid, int portno, java.lang.String driver)  
get a Queue Connection Factory
```

#### Parameters

[hostname](#) - the name of the host running oracle oracle\_sid the oracle system identifier portno the port number driver the type of jdbc driver

#### Returns

a Queue Connection Factory

#### Throws

[JMSEException](#) - if JMS fails to get a queue connection factory due to some JMS error

### getTopicConnectionFactory(String, Properties)

```
public static javax.jms.TopicConnectionFactory  
getTopicConnectionFactory(java.lang.String jdbc_url, java.util.Properties info)
```

get a Topic Connection Factory

**Parameters**

[jdbc\\_url](#) - url to connect to info properties information

**Returns**

a Topic Connection Factory

**Throws**

[JMSEException](#) - if JMS fails to get a queue connection factory due to some JMS error

**getTopicConnectionFactory(String, String, int, String)**

```
public static javax.jms.TopicConnectionFactory  
getTopicConnectionFactory(java.lang.String hostname, java.lang.String oracle_  
sid, int portno, java.lang.String driver)  
get a Topic Connection Factory
```

**Parameters**

[hostname](#) - the name of the host running oracle oracle\_sid the oracle system identifier portno the port number driver the type of jdbc driver

**Returns**

a Topic Connection Factory

**Throws**

[JMSEException](#) - if JMS fails to get a queue connection factory due to some JMS error

## oracle.jms AQjmsInvalidDestinationException

### Syntax

```
public class AQjmsInvalidDestinationException extends  
    javax.jms.InvalidDestinationException
```

```
java.lang.Object  
|  
+--java.lang.Throwable  
|  
+--java.lang.Exception  
|  
+--javax.jms.JMSEException  
|  
+--javax.jms.InvalidDestinationException  
|  
+--oracle.jms.AQjmsInvalidDestinationException
```

### All Implemented Interfaces

```
java.io.Serializable
```

### Description

This exception extends `InvalidDestinationException`. It is thrown when a Destination is not valid

---

### Inherited Member Summary

---

Methods inherited from interface `javax.jms.JMSEException`

`getErrorCode`, `getLinkedException`, `setLinkedException`

Methods inherited from class `java.lang.Throwable`

`fillInStackTrace`, `getLocalizedMessage`, `getMessage`, `printStackTrace`, `printStackTrace`, `printStackTrace`, `toString`

Methods inherited from class `java.lang.Object`

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

---

## oracle.jms AQjmsInvalidSelectorException

### Syntax

```
public class AQjmsInvalidSelectorException extends
    javax.jms.InvalidSelectorException
```

```
java.lang.Object
|
+--java.lang.Throwable
    |
    +--java.lang.Exception
        |
        +--javax.jms.JMSException
            |
            +--javax.jms.InvalidSelectorException
                |
                +--oracle.jms.AQjmsInvalidSelectorException
```

### All Implemented Interfaces

```
java.io.Serializable
```

### Description

This exception extends `InvalidSelectorException`. It is thrown when the specified `MessageSelector` is not valid

---

### Inherited Member Summary

Methods inherited from interface `javax.jms.JMSException`

`getErrorCode`, `getLinkedException`, `setLinkedException`

Methods inherited from class `java.lang.Throwable`

`fillInStackTrace`, `getLocalizedMessage`, `getMessage`, `printStackTrace`, `printStackTrace`, `printStackTrace`, `toString`

Methods inherited from class `java.lang.Object`

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

---

## oracle.jms AQjmsMapMessage

### Syntax

```
public class AQjmsMapMessage extends AQjmsMessage implements  
    javax.jms.MapMessage
```

```
java.lang.Object  
|  
+--AQjmsMessage  
|  
+--oracle.jms.AQjmsMapMessage
```

### All Implemented Interfaces

```
javax.jms.MapMessage, javax.jms.Message
```

### Description

This class implements the MapMessage interface. A MapMessage is used to send a set of name-value pairs where names are Strings and values are java primitive types

---

## Member Summary

---

### Methods

<a href="#">clearBody()</a>	Clear out the message body.
<a href="#">clearProperties()</a>	Clear a message's properties.
<a href="#">getBoolean(String)</a>	Return the boolean value with the given name.
<a href="#">getByte(String)</a>	Return the byte value with the given name.
<a href="#">getBytes(String)</a>	Return the byte array value with the given name.
<a href="#">getChar(String)</a>	Return the Unicode character value with the given name.
<a href="#">getDouble(String)</a>	Return the double value with the given name.
<a href="#">getFloat(String)</a>	Return the float value with the given name.
<a href="#">getInt(String)</a>	Return the integer value with the given name.
<a href="#">getLong(String)</a>	Return the long value with the given name.

---

**Member Summary**

---

<a href="#">getMapNames()</a>	Return an Enumeration of all the Map message's names.
<a href="#">getObject(String)</a>	Return the Java object value with the given name.
<a href="#">getShort(String)</a>	Return the short value with the given name.
<a href="#">getString(String)</a>	Set a String value with the given name, into the Map.
<a href="#">itemExists(String)</a>	Check if an item exists in this MapMessage.
<a href="#">setBoolean(String, boolean)</a>	Set a boolean value with the given name, into the Map.
<a href="#">setByte(String, byte)</a>	Set a byte value with the given name, into the Map.
<a href="#">setBytes(String, byte[])</a>	Set a byte array value with the given name, into the Map.
<a href="#">setBytes(String, byte[], int, int)</a>	Set a portion of the byte array value with the given name, into the Map.
<a href="#">setChar(String, char)</a>	Set a Unicode character value with the given name, into the Map.
<a href="#">setDouble(String, double)</a>	Set a double value with the given name, into the Map.
<a href="#">setFloat(String, float)</a>	Set a float value with the given name, into the Map.
<a href="#">setInt(String, int)</a>	Set an integer value with the given name, into the Map.
<a href="#">setLong(String, long)</a>	Set a long value with the given name, into the Map.
<a href="#">setObject(String, Object)</a>	Set a Java object value with the given name, into the Map.
<a href="#">setShort(String, short)</a>	Set a short value with the given name, into the Map.
<a href="#">setString(String, String)</a>	Set a String value with the given name, into the Map.

---

---

**Inherited Member Summary**

---

Fields inherited from interface [javax.jms.Message](#)

DEFAULT\_DELIVERY\_MODE, DEFAULT\_PRIORITY, DEFAULT\_TIME\_TO\_LIVE

Methods inherited from class [AQjmsMessage](#)

---

**Inherited Member Summary**

---

[getBooleanProperty\(String\)](#), [getBytesProperty\(String\)](#), [getDoubleProperty\(String\)](#), [getFloatProperty\(String\)](#), [getIntProperty\(String\)](#), [getJMSCorrelationID\(\)](#), [getJMSCorrelationIDAsBytes\(\)](#), [getJMSDeliveryMode\(\)](#), [getJMSDestination\(\)](#), [getJMSExpiration\(\)](#), [getJMSMessageID\(\)](#), [getJMSMessageIDAsBytes\(\)](#), [getJMSPriority\(\)](#), [getJMSRedelivered\(\)](#), [getJMSReplyTo\(\)](#), [getJMSTimestamp\(\)](#), [getJMSType\(\)](#), [getLongProperty\(String\)](#), [getObjectProperty\(String\)](#), [getPropertyNames\(\)](#), [getSenderID\(\)](#), [getShortProperty\(String\)](#), [getStringProperty\(String\)](#), [propertyExists\(String\)](#), [setBooleanProperty\(String, boolean\)](#), [getBytesProperty\(String, byte\)](#), [setDoubleProperty\(String, double\)](#), [setFloatProperty\(String, float\)](#), [setIntProperty\(String, int\)](#), [setJMSCorrelationID\(String\)](#), [setJMSCorrelationIDAsBytes\(byte\[\]\)](#), [setJMSDestination\(Destination\)](#), [setJMSDestination\(Destination\)](#), [setJMSExpiration\(long\)](#), [setJMSMessageID\(String\)](#), [setJMSPriority\(int\)](#), [setJMSRedelivered\(boolean\)](#), [setJMSReplyTo\(Destination\)](#), [setJMSTimestamp\(long\)](#), [setJMSType\(String\)](#), [setLongProperty\(String, long\)](#), [setObjectProperty\(String, Object\)](#), [setSenderID\(AQjmsAgent\)](#), [setShortProperty\(String, short\)](#), [setStringProperty\(String, String\)](#)

**Methods inherited from class java.lang.Object**

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

**Methods inherited from interface javax.jms.Message**

[getBooleanProperty](#), [getBytesProperty](#), [getDoubleProperty](#), [getFloatProperty](#), [getIntProperty](#), [getJMSCorrelationID](#), [getJMSCorrelationIDAsBytes](#), [getJMSDeliveryMode](#), [getJMSDestination](#), [getJMSExpiration](#), [getJMSMessageID](#), [getJMSPriority](#), [getJMSRedelivered](#), [getJMSReplyTo](#), [getJMSTimestamp](#), [getJMSType](#), [getLongProperty](#), [getObjectProperty](#), [getPropertyNames](#), [getShortProperty](#), [getStringProperty](#), [propertyExists](#), [setBooleanProperty](#), [getBytesProperty](#), [setDoubleProperty](#), [setFloatProperty](#), [setIntProperty](#), [setJMSCorrelationID](#), [setJMSCorrelationIDAsBytes](#), [setJMSDeliveryMode](#), [setJMSDestination](#), [setJMSExpiration](#), [setJMSMessageID](#), [setJMSPriority](#), [setJMSRedelivered](#), [setJMSReplyTo](#), [setJMSTimestamp](#), [setJMSType](#), [setLongProperty](#), [setObjectProperty](#), [setShortProperty](#), [setStringProperty](#)

---

**Methods****clearBody()**

```
public void clearBody()
```

Clear out the message body. All other parts of the message are left untouched. The message can now be both read and written to.

**Specified By**

[javax.jms.Message.clearBody\(\)](#) in interface [javax.jms.Message](#)

**Overrides**

[clearBody\(\)](#) in class [AQjmsMessage](#)

**Throws**

[JMSException](#) - if JMS fails to due to some internal JMS error.

## clearProperties()

```
public void clearProperties()  
Clear a message's properties.
```

### Specified By

`javax.jms.Message.clearProperties()` in interface `javax.jms.Message`

### Overrides

`clearProperties()` in class [AQjmsMessage](#)

### Throws

[JMSEException](#) - if JMS fails to clear JMS message properties due to some internal JMS error.

## getBoolean(String)

```
public boolean getBoolean(java.lang.String name)  
Return the boolean value with the given name.
```

### Specified By

`javax.jms.MapMessage.getBoolean(java.lang.String)` in interface `javax.jms.MapMessage`

### Parameters

[name](#) - the name of the boolean

### Returns

the boolean value with the given name.

### Throws

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

## getBytes(String)

```
public byte getByte(java.lang.String name)  
Return the byte value with the given name.
```

**Specified By**

`javax.jms.MapMessage.getBytes(java.lang.String)` in interface `javax.jms.MapMessage`

**Parameters**

[name](#) - the name of the byte

**Returns**

the byte value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

**getBytes(String)**

```
public byte[] getBytes(java.lang.String name)
Return the byte array value with the given name.
```

**Specified By**

`javax.jms.MapMessage.getBytes(java.lang.String)` in interface `javax.jms.MapMessage`

**Parameters**

[name](#) - the name of the byte array

**Returns**

the byte array value with the given name. If there is no item by this name, a null value is returned.

**Throws**

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

**getChar(String)**

```
public char getChar(java.lang.String name)
Return the Unicode character value with the given name.
```

**Specified By**

javax.jms.MapMessage.getChar(java.lang.String) in interface  
javax.jms.MapMessage

**Parameters**

[name](#) - the name of the Unicode character

**Returns**

the Unicode character value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

**getDouble(String)**

```
public double getDouble(java.lang.String name)
```

Return the double value with the given name.

**Specified By**

javax.jms.MapMessage.getDouble(java.lang.String) in interface  
javax.jms.MapMessage

**Parameters**

[name](#) - the name of the double

**Returns**

the double value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

**getFloat(String)**

```
public float getFloat(java.lang.String name)
```

Return the float value with the given name.

**Specified By**

`javax.jms.MapMessage.getFloat(java.lang.String)` in interface `javax.jms.MapMessage`

**Parameters**

[name](#) - the name of the float

**Returns**

the float value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

**getInt(String)**

```
public int getInt(java.lang.String name)
Return the integer value with the given name.
```

**Specified By**

`javax.jms.MapMessage.getInt(java.lang.String)` in interface `javax.jms.MapMessage`

**Parameters**

[name](#) - the name of the integer

**Returns**

the integer value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

**getLong(String)**

```
public long getLong(java.lang.String name)
Return the long value with the given name.
```

**Specified By**

`javax.jms.MapMessage.getLong(java.lang.String)` in interface `javax.jms.MapMessage`

**Parameters**

[name](#) - the name of the long

**Returns**

the long value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

**getMapNames()**

```
public java.util.Enumeration getMapNames()
```

Return an Enumeration of all the Map message's names.

**Specified By**

`javax.jms.MapMessage.getMapNames()` in interface `javax.jms.MapMessage`

**Returns**

an enumeration of all the names in this Map message.

**Throws**

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**getObject(String)**

```
public java.lang.Object getObject(java.lang.String name)
```

Return the Java object value with the given name.

Note that this method can be used to return in objectified format, an object that had been stored in the Map with the equivalent [setObject](#) method call, or it's equivalent primitive set method.

**Specified By**

`javax.jms.MapMessage.getObject(java.lang.String)` in interface `javax.jms.MapMessage`

**Parameters**

[name](#) - the name of the Java object

**Returns**

the Java object value with the given name, in objectified format (ie. if it set as an int, then a Integer is returned). If there is no item by this name, a null value is returned.

**Throws**

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**getShort(String)**

```
public short getShort(java.lang.String name)
```

Return the short value with the given name.

**Specified By**

`javax.jms.MapMessage.getShort(java.lang.String)` in interface `javax.jms.MapMessage`

**Parameters**

[name](#) - the name of the short

**Returns**

the short value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageFormatException](#) - if this type conversion is invalid.

**getString(String)**

```
public java.lang.String getString(java.lang.String name)
```

Set a String value with the given name, into the Map.

**Specified By**

javax.jms.MapMessage.getString(java.lang.String) in interface javax.jms.MapMessage

**Parameters**

[name](#) - the name of the String

[value](#) - the String value to set in the Map.

**Throws**

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

[MessageNotWriteableException](#) - if message in read-only mode.

**itemExists(String)**

```
public boolean itemExists(java.lang.String name)
Check if an item exists in this MapMessage.
```

**Specified By**

javax.jms.MapMessage.itemExists(java.lang.String) in interface javax.jms.MapMessage

**Parameters**

[name](#) - the name of the item to test

**Returns**

true if the item does exist.

**Throws**

[JMSEException](#) - if a JMS error occurs.

**setBoolean(String, boolean)**

```
public void setBoolean(java.lang.String name, boolean value)
Set a boolean value with the given name, into the Map.
```

**Specified By**

javax.jms.MapMessage.setBoolean(java.lang.String, boolean) in interface javax.jms.MapMessage

**Parameters**

[name](#) - the name of the boolean

[value](#) - the boolean value to set in the Map.

**Throws**

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

[MessageNotWriteableException](#) - if message in read-only mode.

**setByte(String, byte)**

```
public void setByte(java.lang.String name, byte value)
```

Set a byte value with the given name, into the Map.

**Specified By**

`javax.jms.MapMessage.setByte(java.lang.String, byte)` in interface `javax.jms.MapMessage`

**Parameters**

[name](#) - the name of the byte

[value](#) - the byte value to set in the Map.

**Throws**

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

[MessageNotWriteableException](#) - if message in read-only mode.

**setBytes(String, byte[])**

```
public void setBytes(java.lang.String name, byte[] value)
```

Set a byte array value with the given name, into the Map.

**Specified By**

`javax.jms.MapMessage.setBytes(java.lang.String, byte[])` in interface `javax.jms.MapMessage`

**Parameters**

[name](#) - the name of the byte array

[value](#) - the byte array value to set in the Map.

**Throws**

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

[MessageNotWriteableException](#) - if message in read-only mode.

**setBytes(String, byte[], int, int)**

```
public void setBytes(java.lang.String name, byte[] value, int offset, int length)
```

Set a portion of the byte array value with the given name, into the Map.

**Specified By**

`javax.jms.MapMessage.setBytes(java.lang.String, byte[], int, int)` in interface `javax.jms.MapMessage`

**Parameters**

[name](#) - the name of the byte array

[value](#) - the byte array value to set in the Map.

[offset](#) - the initial offset within the byte array.

[length](#) - the number of bytes to use.

**Throws**

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

[MessageNotWriteableException](#) - if message in read-only mode.

**setChar(String, char)**

```
public void setChar(java.lang.String name, char value)
```

Set a Unicode character value with the given name, into the Map.

**Specified By**

`javax.jms.MapMessage.setChar(java.lang.String, char)` in interface `javax.jms.MapMessage`

**Parameters**

[name](#) - the name of the Unicode character

[value](#) - the Unicode character value to set in the Map.

**Throws**

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

[MessageNotWriteableException](#) - if message in read-only mode.

**setDouble(String, double)**

```
public void setDouble(java.lang.String name, double value)
```

Set a double value with the given name, into the Map.

**Specified By**

`javax.jms.MapMessage.setDouble(java.lang.String, double)` in interface `javax.jms.MapMessage`

**Parameters**

[name](#) - the name of the double

[value](#) - the double value to set in the Map.

**Throws**

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

[MessageNotWriteableException](#) - if message in read-only mode.

**setFloat(String, float)**

```
public void setFloat(java.lang.String name, float value)
```

Set a float value with the given name, into the Map.

**Specified By**

`javax.jms.MapMessage.setFloat(java.lang.String, float)` in interface `javax.jms.MapMessage`

**Parameters**

[name](#) - the name of the float

[value](#) - the float value to set in the Map.

**Throws**

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

[MessageNotWriteableException](#) - if message in read-only mode.

**setInt(String, int)**

```
public void setInt(java.lang.String name, int value)
```

Set an integer value with the given name, into the Map.

**Specified By**

`javax.jms.MapMessage.setInt(java.lang.String, int)` in interface `javax.jms.MapMessage`

**Parameters**

[name](#) - the name of the integer

[value](#) - the integer value to set in the Map.

**Throws**

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

[MessageNotWriteableException](#) - if message in read-only mode.

**setLong(String, long)**

```
public void setLong(java.lang.String name, long value)
```

Set a long value with the given name, into the Map.

**Specified By**

`javax.jms.MapMessage.setLong(java.lang.String, long)` in interface `javax.jms.MapMessage`

**Parameters**

[name](#) - the name of the long

[value](#) - the long value to set in the Map.

**Throws**

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

[MessageNotWriteableException](#) - if message in read-only mode.

**setObject(String, Object)**

```
public void setObject(java.lang.String name, java.lang.Object value)
```

Set a Java object value with the given name, into the Map.

Note that this method only works for the objectified primitive object types (Integer, Double, Long ...), String's and byte arrays.

### Specified By

`javax.jms.MapMessage.setObject(java.lang.String, java.lang.Object)` in interface `javax.jms.MapMessage`

### Parameters

[name](#) - the name of the Java object

[value](#) - the Java object value to set in the Map.

### Throws

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

[MessageFormatException](#) - if object is invalid

[MessageNotWriteableException](#) - if message in read-only mode.

## setShort(String, short)

```
public void setShort(java.lang.String name, short value)
Set a short value with the given name, into the Map.
```

### Specified By

`javax.jms.MapMessage.setShort(java.lang.String, short)` in interface `javax.jms.MapMessage`

### Parameters

[name](#) - the name of the short

[value](#) - the short value to set in the Map.

### Throws

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

[MessageNotWriteableException](#) - if message in read-only mode.

## setString(String, String)

```
public void setString(java.lang.String name, java.lang.String value)
Set a String value with the given name, into the Map.
```

**Specified By**

javax.jms.MapMessage.setString(java.lang.String, java.lang.String) in interface javax.jms.MapMessage

**Parameters**

[name](#) - the name of the String

[value](#) - the String value to set in the Map.

**Throws**

[JMSEException](#) - if JMS fails to write message due to some internal JMS error.

[MessageNotWriteableException](#) - if message in read-only mode.

## oracle.jms AQjmsMessage

### Syntax

```
public class AQjmsMessage extends java.lang.Object implements javax.jms.Message
```

```
java.lang.Object  
|  
+--oracle.jms.AQjmsMessage
```

### Direct Known Subclasses

[AQjmsAdtMessage](#), [AQjmsBytesMessage](#), [AQjmsMapMessage](#), [AQjmsObjectMessage](#),  
[AQjmsStreamMessage](#), [AQjmsTextMessage](#)

### All Implemented Interfaces

[javax.jms.Message](#)

### Description

This class implements the Message interface. This is the superclass of all JMS messages

---

## Member Summary

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### Methods

<a href="#">clearBody()</a>	Clear out the message body.
<a href="#">clearProperties()</a>	Clear a message's properties.
<a href="#">getBooleanProperty(String)</a>	Return the boolean property value with the given name.
<a href="#">getByteProperty(String)</a>	Return the byte property value with the given name.
<a href="#">getDoubleProperty(String)</a>	Return the double property value with the given name.
<a href="#">getFloatProperty(String)</a>	Return the float property value with the given name.
<a href="#">getIntProperty(String)</a>	Return the integer property value with the given name.
<a href="#">getJMSCorrelationID()</a>	Get the correlation ID for the message.
<a href="#">getJMSCorrelationIDAsBytes()</a>	Get the correlation ID as an array of bytes for the message.
<a href="#">getJMSDeliveryMode()</a>	Get the delivery mode for this message.

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**Member Summary**

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<a href="#">getJMSDestination()</a>	Get the destination for this message.
<a href="#">getJMSExpiration()</a>	Get the message's expiration value.
<a href="#">getJMSMessageID()</a>	Get the message ID.
<a href="#">getJMSMessageIDAsBytes()</a>	Get the message ID.
<a href="#">getJMSPriority()</a>	Get the message priority.
<a href="#">getJMSRedelivered()</a>	Get an indication of whether this message is being redelivered.
<a href="#">getJMSReplyTo()</a>	Get the replyTo field for this message
<a href="#">getJMSTimestamp()</a>	Get the message timestamp.
<a href="#">getJMSType()</a>	Get the message type.
<a href="#">getLongProperty(String)</a>	Return the long property value with the given name.
<a href="#">getObjectProperty(String)</a>	Return the Java object property value with the given name.
<a href="#">getPropertyNames()</a>	Return an Enumeration of all the property names.
<a href="#">getSenderID()</a>	Get the message's senderID.
<a href="#">getShortProperty(String)</a>	Return the short property value with the given name.
<a href="#">getStringProperty(String)</a>	Return the String property value with the given name.
<a href="#">propertyExists(String)</a>	Check if a property value exists.
<a href="#">setBooleanProperty(String, boolean)</a>	Set a boolean property value with the given name, into the Message.
<a href="#">setByteProperty(String, byte)</a>	Set a byte property value with the given name, into the Message.
<a href="#">setDoubleProperty(String, double)</a>	Set a double property value with the given name, into the Message.
<a href="#">setFloatProperty(String, float)</a>	Set a float property value with the given name, into the Message.
<a href="#">setIntProperty(String, int)</a>	Set an integer property value with the given name, into the Message.
<a href="#">setJMSCorrelationID(String)</a>	Set the correlation ID for the message.
<a href="#">setJMSCorrelationIDAsBytes(byte[])</a>	Set the correlation ID as an array of bytes for the message.
<a href="#">setJMSDestination(Destination)</a>	Set the destination for this message.
<a href="#">setJMSExpiration(long)</a>	Set the message's expiration value Providers set this field when a message is sent.
<a href="#">setJMSMessageID(String)</a>	Set the message ID.
<a href="#">setJMSPriority(int)</a>	Set the priority for this message.

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**Member Summary**

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<a href="#">setJMSRedelivered(boolean)</a>	Set to indicate whether this message is being redelivered.
<a href="#">setJMSReplyTo(Destination)</a>	Set where a reply to this message should be sent.
<a href="#">setJMSTimestamp(long)</a>	Set the message timestamp.
<a href="#">setJMSType(String)</a>	Set the message type.
<a href="#">setLongProperty(String, long)</a>	Set a long property value with the given name, into the Message.
<a href="#">setObjectProperty(String, Object)</a>	Set a Java object property value with the given name, into the Message.
<a href="#">setSenderID(AQjmsAgent)</a>	Set the message's senderID.
<a href="#">setShortProperty(String, short)</a>	Set a short property value with the given name, into the Message.
<a href="#">setStringProperty(String, String)</a>	Set a String property value with the given name, into the Message.

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**Inherited Member Summary**

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Fields inherited from interface `javax.jms.Message`

`DEFAULT_DELIVERY_MODE`, `DEFAULT_PRIORITY`, `DEFAULT_TIME_TO_LIVE`

Methods inherited from class `java.lang.Object`

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

---

**Methods****clearBody()**

```
public void clearBody()
```

Clear out the message body. All other parts of the message are left untouched.

**Specified By**

`javax.jms.Message.clearBody()` in interface `javax.jms.Message`

**Throws**

[JMSException](#) - if JMS fails to clear message

## clearProperties()

```
public void clearProperties()
Clear a message's properties.
```

### Specified By

`javax.jms.Message.clearProperties()` in interface `javax.jms.Message`

### Throws

[JMSEException](#) - if JMS fails to clear JMS message properties due to some internal JMS error.

## getBooleanProperty(String)

```
public boolean getBooleanProperty(java.lang.String name)
Return the boolean property value with the given name.
```

### Specified By

`javax.jms.Message.getBooleanProperty(java.lang.String)` in interface `javax.jms.Message`

### Parameters

[name](#) - the name of the boolean property

### Returns

the boolean property value with the given name.

### Throws

[JMSEException](#) - if JMS fails to get Property

[MessageFormatException](#) - if this type conversion is invalid.

## getBytesProperty(String)

```
public byte getBytesProperty(java.lang.String name)
Return the byte property value with the given name.
```

### Specified By

`javax.jms.Message.getBytesProperty(java.lang.String)` in interface `javax.jms.Message`

**Parameters**

[name](#) - the name of the byte property

**Returns**

the byte property value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to get Property

[MessageFormatException](#) - if this type conversion is invalid.

**getDoubleProperty(String)**

```
public double getDoubleProperty(java.lang.String name)
```

Return the double property value with the given name.

**Specified By**

`javax.jms.Message.getDoubleProperty(java.lang.String)` in interface `javax.jms.Message`

**Parameters**

[name](#) - the name of the double property

**Returns**

the double property value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to get Property

[MessageFormatException](#) - if this type conversion is invalid.

**getFloatProperty(String)**

```
public float getFloatProperty(java.lang.String name)
```

Return the float property value with the given name.

**Specified By**

`javax.jms.Message.getFloatProperty(java.lang.String)` in interface `javax.jms.Message`

**Parameters**

[name](#) - the name of the float property

**Returns**

the float property value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to get Property

[MessageFormatException](#) - if this type conversion is invalid.

**getIntProperty(String)**

```
public int getIntProperty(java.lang.String name)
```

Return the integer property value with the given name.

**Specified By**

`javax.jms.Message.getIntProperty(java.lang.String)` in interface `javax.jms.Message`

**Parameters**

[name](#) - the name of the integer property

**Returns**

the integer property value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to get Property

[MessageFormatException](#) - if this type conversion is invalid.

**getJMSCorrelationID()**

```
public java.lang.String getJMSCorrelationID()
```

Get the correlation ID for the message.

**Specified By**

`javax.jms.Message.getJMSCorrelationID()` in interface `javax.jms.Message`

**Returns**

the correlation ID of a message as a String.

**Throws**

[JMSEException](#) - if JMS fails to get correlationId due to some internal JMS error.

**getJMSCorrelationIDAsBytes()**

```
public byte[] getJMSCorrelationIDAsBytes()
```

Get the correlation ID as an array of bytes for the message.

**Specified By**

javax.jms.Message.getJMSCorrelationIDAsBytes() in interface javax.jms.Message

**Returns**

the correlation ID of a message as an array of bytes.

**Throws**

[JMSEException](#) - if JMS fails to get correlationId due to some internal JMS error.

**getJMSDeliveryMode()**

```
public int getJMSDeliveryMode()
```

Get the delivery mode for this message.

**Specified By**

javax.jms.Message.getJMSDeliveryMode() in interface javax.jms.Message

**Returns**

the delivery mode of this message. In the current version this will always return DeliveryMode.PERSISTENT

**Throws**

[JMSEException](#) - if JMS fails to get JMS DeliveryMode due to some internal JMS error.

**getJMSDestination()**

```
public javax.jms.Destination getJMSDestination()
```

Get the destination for this message. The destination field contains the destination to which the message is being sent. When a message is sent this value is ignored. After completion of the send method it holds the destination specified by the send. When a message is received, its destination value must be equivalent to the value assigned when it was sent.

**Specified By**

`javax.jms.Message.getJMSDestination()` in interface `javax.jms.Message`

**Returns**

the destination of this message.

**Throws**

[JMSEException](#) - if JMS fails to get JMS Destination due to some internal JMS error.

**getJMSExpiration()**

```
public long getJMSExpiration()
```

Get the message's expiration value. When a message is sent, expiration is left unassigned. After completion of the send method, it holds the expiration time of the message. This is the sum of the time-to-live value specified by the client and the GMT at the time of the send. If the time-to-live is specified as zero, expiration is set to zero which indicates the message does not expire. When a message's expiration time is reached, the message is moved to the exception queue corresponding to the destination queue/topic

**Specified By**

`javax.jms.Message.getJMSExpiration()` in interface `javax.jms.Message`

**Returns**

the time the message expires. It is the sum of the time-to-live value specified by the client, and the GMT at the time of the send.

**Throws**

[JMSEException](#) - if JMS fails to get JMS message expiration due to some internal JMS error.

**See Also**

`javax.jms.Message#setJMSExpiration()`

**getJMSMessageID()**

```
public java.lang.String getJMSMessageID()
```

Get the message ID. The `messageID` header field contains a value that uniquely identifies each message sent by a provider. When the `send` method returns it contains a provider-assigned value. All `JMSMessageID` string values start with the prefix `'ID:'`

**Specified By**

`javax.jms.Message.getJMSMessageID()` in interface `javax.jms.Message`

**Returns**

the message ID as a string (prefixed with `'ID:'`)

**Throws**

[JMSException](#) - if JMS fails to get the message Id due to internal JMS error.

**getJMSMessageIDAsBytes()**

```
public byte[] getJMSMessageIDAsBytes()
```

Get the message ID.

**Returns**

the message ID as a byte array

**Throws**

[JMSException](#) - if JMS fails to get the message Id due to internal JMS error.

**getJMSPriority()**

```
public int getJMSPriority()
```

Get the message priority. JMS defines a ten level priority value with 0 as the lowest priority and 9 as the highest.

**Specified By**

`javax.jms.Message.getJMSPriority()` in interface `javax.jms.Message`

**Returns**

the default message priority

**getJMSRedelivered()**

```
public boolean getJMSRedelivered()
```

Get an indication of whether this message is being redelivered.

If a client receives a message with the redelivered indicator set, it is likely, but not guaranteed, that this message was delivered to the client earlier but the client did not commit the transaction

**Specified By**

`javax.jms.Message.getJMSRedelivered()` in interface `javax.jms.Message`

**Returns**

set to true if this message is being redelivered.

**Throws**

[JMSEException](#) - if JMS fails to get JMS Redelivered flag due to some internal JMS error.

**getJMSReplyTo()**

```
public javax.jms.Destination getJMSReplyTo()
```

Get the replyTo field for this message

**Specified By**

`javax.jms.Message.getJMSReplyTo()` in interface `javax.jms.Message`

**Returns**

replyTo destination (the format is a `AQjmsAgent`)

**getJMSTimestamp()**

```
public long getJMSTimestamp()
```

Get the message timestamp. The `JMSTimestamp` header field contains the time a message was handed off to a provider to be sent. When a message is sent, `JMSTimestamp` is ignored. When the send is complete - this method will contain the time the message was enqueued.

**Specified By**

`javax.jms.Message.getJMSTimestamp()` in interface `javax.jms.Message`

**Throws**

[JMSEException](#) - if JMS fails to get the Timestamp

**getJMSType()**

```
public java.lang.String getJMSType()
```

Get the message type.

**Specified By**

`javax.jms.Message.getJMSType()` in interface `javax.jms.Message`

**Returns**

the message type

**Throws**

[JMSEException](#) - if JMS fails to get JMS message type due to some internal JMS error.

**getLongProperty(String)**

```
public long getLongProperty(java.lang.String name)
```

Return the long property value with the given name.

**Specified By**

`javax.jms.Message.getLongProperty(java.lang.String)` in interface `javax.jms.Message`

**Parameters**

[name](#) - the name of the long property

**Returns**

the long property value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to get Property

[MessageFormatException](#) - if this type conversion is invalid.

## getObjectProperty(String)

```
public java.lang.Object getObjectProperty(java.lang.String name)
```

Return the Java object property value with the given name. Note that this method can be used to return in objectified format, an object that had been stored as a property in the Message with the equivalent [setObject](#) method call, or it's equivalent primitive set method.

### Specified By

`javax.jms.Message.getObjectProperty(java.lang.String)` in interface `javax.jms.Message`

### Parameters

[name](#) - the name of the Java object property

### Returns

the Java object property value with the given name, in objectified format (ie. if it set as an int, then a Integer is returned). If there is no property by this name, a null value is returned.

### Throws

[JMSEException](#) - if JMS fails to get Property due to some internal JMS error.

## getPropertyNames()

```
public synchronized java.util.Enumeration getPropertyNames()
```

Return an Enumeration of all the property names.

### Specified By

`javax.jms.Message.getPropertyNames()` in interface `javax.jms.Message`

### Returns

an enumeration of all the names of property values.

### Throws

[JMSEException](#) - if JMS fails to get Property names due to some internal JMS error.

## getSenderID()

```
public AQjmsAgent getSenderID()
```

Get the message's senderID. This value is available only if it was set by the sender before sending the message

**Throws**

[JMSEException](#) - if JMS fails to get SenderID

**getShortProperty(String)**

```
public short getShortProperty(java.lang.String name)
```

Return the short property value with the given name.

**Specified By**

javax.jms.Message.getShortProperty(java.lang.String) in interface  
javax.jms.Message

**Parameters**

[name](#) - the name of the short property

**Returns**

the short property value with the given name.

**Throws**

[JMSEException](#) - if JMS fails to get Property

[MessageFormatException](#) - if this type conversion is invalid.

**getStringProperty(String)**

```
public java.lang.String getStringProperty(java.lang.String name)
```

Return the String property value with the given name.

**Specified By**

javax.jms.Message.getStringProperty(java.lang.String) in interface  
javax.jms.Message

**Parameters**

[name](#) - the name of the String property

**Returns**

the String property value with the given name. If there is no property by this name, a null value is returned.

**Throws**

[JMSEException](#) - if JMS fails to get Property

[MessageFormatException](#) - if this type conversion is invalid.

**propertyExists(String)**

```
public boolean propertyExists(java.lang.String name)
```

Check if a property value exists.

**Specified By**

javax.jms.Message.propertyExists(java.lang.String) in interface javax.jms.Message

**Parameters**

[name](#) - the name of the property to test

**Returns**

true if the property does exist.

**Throws**

[JMSEException](#) - if JMS fails to check if property exists due to some internal JMS error.

**setBooleanProperty(String, boolean)**

```
public void setBooleanProperty(java.lang.String name, boolean value)
```

Set a boolean property value with the given name, into the Message.

**Specified By**

javax.jms.Message.setBooleanProperty(java.lang.String, boolean) in interface javax.jms.Message

**Parameters**

[name](#) - the name of the boolean property

[value](#) - the boolean property value to set in the Message.

**Throws**

[JMSEException](#) - if JMS fails to set Property

[MessageNotWriteableException](#) - if properties are read-only

**setByteProperty(String, byte)**

```
public void setByteProperty(java.lang.String name, byte value)
```

Set a byte property value with the given name, into the Message.

**Specified By**

javax.jms.Message.setByteProperty(java.lang.String, byte) in interface  
javax.jms.Message

**Parameters**

[name](#) - the name of the byte property

[value](#) - the byte property value to set in the Message.

**Throws**

[JMSEException](#) - if JMS fails to set Property

[MessageNotWriteableException](#) - if properties are read-only

**setDoubleProperty(String, double)**

```
public void setDoubleProperty(java.lang.String name, double value)
```

Set a double property value with the given name, into the Message.

**Specified By**

javax.jms.Message.setDoubleProperty(java.lang.String, double) in interface  
javax.jms.Message

**Parameters**

[name](#) - the name of the double property

[value](#) - the double property value to set in the Message.

**Throws**

[JMSEException](#) - if JMS fails to set Property

[MessageNotWriteableException](#) - if properties are read-only

## setFloatProperty(String, float)

```
public void setFloatProperty(java.lang.String name, float value)
Set a float property value with the given name, into the Message.
```

### Specified By

javax.jms.Message.setFloatProperty(java.lang.String, float) in interface  
javax.jms.Message

### Parameters

[name](#) - the name of the float property

[value](#) - the float property value to set in the Message.

### Throws

[JMSEException](#) - if JMS fails to set Property

[MessageNotWriteableException](#) - if properties are read-only

## setIntProperty(String, int)

```
public void setIntProperty(java.lang.String name, int value)
Set an integer property value with the given name, into the Message.
```

### Specified By

javax.jms.Message.setIntProperty(java.lang.String, int) in interface  
javax.jms.Message

### Parameters

[name](#) - the name of the integer property

[value](#) - the integer property value to set in the Message.

### Throws

[JMSEException](#) - if JMS fails to set Property

[MessageNotWriteableException](#) - if properties are read-only

## setJMSCorrelationID(String)

```
public void setJMSCorrelationID(java.lang.String correlationID)
```

Set the correlation ID for the message. A client can use the `JMSCorrelationID` header field to link one message with another.

**Specified By**

`javax.jms.Message.setJMSCorrelationID(java.lang.String)` in interface `javax.jms.Message`

**Parameters**

[correlationID](#) - the message ID of a message being referred to.

**Throws**

[JMSEException](#) - if JMS fails to set `correlationId` due to some internal JMS error.

**setJMSCorrelationIDAsBytes(byte[])**

```
public void setJMSCorrelationIDAsBytes(byte[] correlationID)
```

Set the correlation ID as an array of bytes for the message.

**Specified By**

`javax.jms.Message.setJMSCorrelationIDAsBytes(byte[])` in interface `javax.jms.Message`

**Parameters**

[correlationID](#) - the correlation ID value as an array of bytes.

**Throws**

[JMSEException](#) - if JMS fails to set `correlationId` due to some internal JMS error.

**setJMSTDestination(Destination)**

```
public void setJMSTDestination(javax.jms.Destination destination)
```

Set the destination for this message. Providers set this field when a message is sent.

**Specified By**

`javax.jms.Message.setJMSTDestination(javax.jms.Destination)` in interface `javax.jms.Message`

**Parameters**

[destination](#) - the destination for this message.

**Throws**

[JMSEException](#) - if JMS fails to set JMS Destination due to some internal JMS error.

**setJMSExpiration(long)**

```
public void setJMSExpiration(long expiration)
```

Set the message's expiration value. Providers set this field when a message is sent.

**Specified By**

`javax.jms.Message.setJMSExpiration(long)` in interface `javax.jms.Message`

**Parameters**

[expiration](#) - the message's expiration time

**Throws**

[JMSEException](#) - if JMS fails to set JMS message expiration due to some internal JMS error.

**setJMSMessageID(String)**

```
public void setJMSMessageID(java.lang.String id)
```

Set the message ID. Providers set this field when a message is sent.

**Specified By**

`javax.jms.Message.setJMSMessageID(java.lang.String)` in interface `javax.jms.Message`

**Parameters**

[id](#) - the ID of the message

**Throws**

[JMSEException](#) - if JMS fails to set the message Id due to internal JMS error.

**setJMSPriority(int)**

```
public void setJMSPriority(int priority)
```

Set the priority for this message. Providers set this field when a message is sent.

**Specified By**

`javax.jms.Message.setJMSPriority(int)` in interface `javax.jms.Message`

**Parameters**

[priority](#) - the priority of this message

**Throws**

[JMSEException](#) - if JMS fails to set JMS message priority due to some internal JMS error.

**setJMSRedelivered(boolean)**

```
public void setJMSRedelivered(boolean redelivered)
```

Set to indicate whether this message is being redelivered. This field is set at the time the message is delivered.

**Specified By**

`javax.jms.Message.setJMSRedelivered(boolean)` in interface `javax.jms.Message`

**Parameters**

[redelivered](#) - an indication of whether this message is being redelivered.

**Throws**

[JMSEException](#) - if JMS fails to set JMS Redelivered flag due to some internal JMS error.

**setJMSReplyTo(Destination)**

```
public void setJMSReplyTo(javax.jms.Destination replyTo)
```

Set where a reply to this message should be sent.

**Specified By**

`javax.jms.Message.setJMSReplyTo(javax.jms.Destination)` in interface `javax.jms.Message`

**Parameters**

[replyTo](#) - where to send a response to this message. The destination must be specified as an `AQjmsAgent` (with `consumer_name` and `queue/topic` address)

**Throws**

[JMSEException](#) - if JMS fails to set ReplyTo Destination due to some internal JMS error.

**setJMSTimestamp(long)**

```
public void setJMSTimestamp(long timestamp)
```

Set the message timestamp. Providers set this field when a message is sent.

**Specified By**

`javax.jms.Message.setJMSTimestamp(long)` in interface `javax.jms.Message`

**Parameters**

[timestamp](#) - the timestamp for this message

**Throws**

[JMSEException](#) - if JMS fails to set the timestamp due to some internal JMS error.

**setJMSType(String)**

```
public void setJMSType(java.lang.String type)
```

Set the message type.

**Specified By**

`javax.jms.Message.setJMSType(java.lang.String)` in interface `javax.jms.Message`

**Parameters**

[type](#) - of the message

**Throws**

[JMSEException](#) - if JMS fails to set JMS message type due to some internal JMS error.

**setLongProperty(String, long)**

```
public void setLongProperty(java.lang.String name, long value)
```

Set a long property value with the given name, into the Message.

**Specified By**

`javax.jms.Message.setLongProperty(java.lang.String, long)` in interface `javax.jms.Message`

**Parameters**

[name](#) - the name of the long property

[value](#) - the long property value to set in the Message.

**Throws**

[JMSEException](#) - if JMS fails to set Property

[MessageNotWriteableException](#) - if properties are read-only

**setObjectProperty(String, Object)**

```
public void setObjectProperty(java.lang.String name, java.lang.Object value)
```

Set a Java object property value with the given name, into the Message. Note that this method only works for the objectified primitive object types (Integer, Double, Long ...) and String's.

**Specified By**

`javax.jms.Message.setObjectProperty(java.lang.String, java.lang.Object)` in interface `javax.jms.Message`

**Parameters**

[name](#) - the name of the Java object property.

[value](#) - the Java object property value to set in the Message.

**Throws**

[JMSEException](#) - if JMS fails to set Property

[MessageFormatException](#) - if object is invalid

[MessageNotWriteableException](#) - if properties are read-only

**setSenderID(AQjmsAgent)**

```
public void setSenderID(AQjmsAgent sender)
```

Set the message's senderID.

**Throws**

[JMSEException](#) - if JMS fails to set SenderID

**setShortProperty(String, short)**

```
public void setShortProperty(java.lang.String name, short value)
```

Set a short property value with the given name, into the Message.

**Specified By**

`javax.jms.Message.setShortProperty(java.lang.String, short)` in interface `javax.jms.Message`

**Parameters**

[name](#) - the name of the short property

[value](#) - the short property value to set in the Message.

**Throws**

[JMSEException](#) - if JMS fails to set Property

[MessageNotWriteableException](#) - if properties are read-only

**setStringProperty(String, String)**

```
public void setStringProperty(java.lang.String name, java.lang.String value)
```

Set a String property value with the given name, into the Message.

**Specified By**

`javax.jms.Message.setStringProperty(java.lang.String, java.lang.String)` in interface `javax.jms.Message`

**Parameters**

[name](#) - the name of the String property

[value](#) - the String property value to set in the Message.

**Throws**

[JMSEException](#) - if JMS fails to set Property

[MessageNotWriteableException](#) - if properties are read-only

## oracle.jms AQjmsMessageEOFException

### Syntax

```
public class AQjmsMessageEOFException extends javax.jms.MessageEOFException
```

```
java.lang.Object
|
+--java.lang.Throwable
   |
   +--java.lang.Exception
      |
      +--javax.jms.JMSEException
         |
         +--javax.jms.MessageEOFException
            |
            +--oracle.jms.AQjmsMessageEOFException
```

### All Implemented Interfaces

```
java.io.Serializable
```

### Description

This exception extends `MessageEOFException`. It is thrown when an unexpected end of stream has been reached when a `StreamMessage` or `BytesMessage` is being read

---

### Inherited Member Summary

---

Methods inherited from interface `javax.jms.JMSEException`

`getErrorCode`, `getLinkedException`, `setLinkedException`

Methods inherited from class `java.lang.Throwable`

`fillInStackTrace`, `getLocalizedMessage`, `getMessage`, `printStackTrace`, `printStackTrace`, `printStackTrace`, `toString`

Methods inherited from class `java.lang.Object`

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

---

## oracle.jms

# AQjmsMessageFormatException

### Syntax

```
public class AQjmsMessageFormatException extends
    javax.jms.MessageFormatException
```

```
java.lang.Object
|
+--java.lang.Throwable
    |
    +--java.lang.Exception
        |
        +--javax.jms.JMSException
            |
            +--javax.jms.MessageFormatException
                |
                +--oracle.jms.AQjmsMessageFormatException
```

### All Implemented Interfaces

```
java.io.Serializable
```

### Description

This exception extends MessageFormatException. It is thrown when a client attempts to use a datatype not supported by a message or attempts to read data in the message as the wrong type

---

### Inherited Member Summary

---

Methods inherited from interface javax.jms.JMSException

getErrorCode, getLinkedException, setLinkedException

Methods inherited from class java.lang.Throwable

fillInStackTrace, getLocalizedMessage, getMessage, printStackTrace, printStackTrace, printStackTrace, toString

Methods inherited from class java.lang.Object

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

---

## oracle.jms AQjmsMessageNotReadableException

### Syntax

```
public class AQjmsMessageNotReadableException extends  
    javax.jms.MessageNotReadableException
```

```
java.lang.Object  
|  
+--java.lang.Throwable  
|  
+--java.lang.Exception  
|  
+--javax.jms.JMSEException  
|  
+--javax.jms.MessageNotReadableException  
|  
+--oracle.jms.AQjmsMessageNotReadableException
```

### All Implemented Interfaces

```
java.io.Serializable
```

### Description

This exception extends `MessageNotReadableException`. It is thrown when a client attempts to read a write-only message

---

### Inherited Member Summary

---

Methods inherited from interface `javax.jms.JMSEException`

`getErrorCode`, `getLinkedException`, `setLinkedException`

Methods inherited from class `java.lang.Throwable`

`fillInStackTrace`, `getLocalizedMessage`, `getMessage`, `printStackTrace`, `printStackTrace`, `printStackTrace`, `toString`

Methods inherited from class `java.lang.Object`

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

---

## oracle.jms

# AQjmsMessageNotWriteableException

### Syntax

```
public class AQjmsMessageNotWriteableException extends
    javax.jms.MessageNotWriteableException
```

```
java.lang.Object
|
+--java.lang.Throwable
    |
    +--java.lang.Exception
        |
        +--javax.jms.JMSEException
            |
            +--javax.jms.MessageNotWriteableException
                |
                +--oracle.jms.AQjmsMessageNotWriteableExceptio
n
```

### All Implemented Interfaces

```
java.io.Serializable
```

### Description

This exception extends MessageNotWriteableException. It is thrown when a client attempts to write a read-only message

---

### Inherited Member Summary

---

Methods inherited from interface javax.jms.JMSEException

getErrorCode, getLinkedException, setLinkedException

Methods inherited from class java.lang.Throwable

fillInStackTrace, getLocalizedMessage, getMessage, printStackTrace, printStackTrace, printStackTrace, toString

Methods inherited from class java.lang.Object

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

---

## oracle.jms AQjmsObjectMessage

### Syntax

```
public class AQjmsObjectMessage extends AQjmsMessage implements  
    javax.jms.ObjectMessage
```

```
java.lang.Object  
|  
+--AQjmsMessage  
|  
+--oracle.jms.AQjmsObjectMessage
```

### All Implemented Interfaces

javax.jms.Message, javax.jms.ObjectMessage

### Description

This class implements the ObjectMessage interface. An ObjectMessage is used to send a message that contains a serializable java object

---

### Member Summary

---

#### Methods

<a href="#">clearBody()</a>	Clear out the message body.
<a href="#">clearProperties()</a>	Clear a message's properties.
<a href="#">getObject()</a>	Get the serializable object containing this message's data.
<a href="#">setObject(Serializable)</a>	Set the serializable object containing this message's data.

---

---

### Inherited Member Summary

---

Fields inherited from interface javax.jms.Message

DEFAULT\_DELIVERY\_MODE, DEFAULT\_PRIORITY, DEFAULT\_TIME\_TO\_LIVE

Methods inherited from class [AQjmsMessage](#)

---

## Inherited Member Summary

---

[getBooleanProperty\(String\)](#), [getByteProperty\(String\)](#), [getDoubleProperty\(String\)](#), [getFloatProperty\(String\)](#), [getIntProperty\(String\)](#), [getJMSCorrelationID\(\)](#), [getJMSCorrelationIDAsBytes\(\)](#), [getJMSDeliveryMode\(\)](#), [getJMSDestination\(\)](#), [getJMSExpiration\(\)](#), [getJMSMessageID\(\)](#), [getJMSMessageIDAsBytes\(\)](#), [getJMSPriority\(\)](#), [getJMSRedelivered\(\)](#), [getJMSReplyTo\(\)](#), [getJMSTimestamp\(\)](#), [getJMSType\(\)](#), [getLongProperty\(String\)](#), [getObjectProperty\(String\)](#), [getPropertyNames\(\)](#), [getSenderID\(\)](#), [getShortProperty\(String\)](#), [getStringProperty\(String\)](#), [propertyExists\(String\)](#), [setBooleanProperty\(String, boolean\)](#), [setByteProperty\(String, byte\)](#), [setDoubleProperty\(String, double\)](#), [setFloatProperty\(String, float\)](#), [setIntProperty\(String, int\)](#), [setJMSCorrelationID\(String\)](#), [setJMSCorrelationIDAsBytes\(byte\[\]\)](#), [setJMSDestination\(Destination\)](#), [setJMSDestination\(Destination\)](#), [setJMSExpiration\(long\)](#), [setJMSMessageID\(String\)](#), [setJMSPriority\(int\)](#), [setJMSRedelivered\(boolean\)](#), [setJMSReplyTo\(Destination\)](#), [setJMSTimestamp\(long\)](#), [setJMSType\(String\)](#), [setLongProperty\(String, long\)](#), [setObjectProperty\(String, Object\)](#), [setSenderID\(AQjmsAgent\)](#), [setShortProperty\(String, short\)](#), [setStringProperty\(String, String\)](#)

### Methods inherited from class java.lang.Object

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

### Methods inherited from interface javax.jms.Message

[getBooleanProperty](#), [getByteProperty](#), [getDoubleProperty](#), [getFloatProperty](#), [getIntProperty](#), [getJMSCorrelationID](#), [getJMSCorrelationIDAsBytes](#), [getJMSDeliveryMode](#), [getJMSDestination](#), [getJMSExpiration](#), [getJMSMessageID](#), [getJMSPriority](#), [getJMSRedelivered](#), [getJMSReplyTo](#), [getJMSTimestamp](#), [getJMSType](#), [getLongProperty](#), [getObjectProperty](#), [getPropertyNames](#), [getShortProperty](#), [getStringProperty](#), [propertyExists](#), [setBooleanProperty](#), [setByteProperty](#), [setDoubleProperty](#), [setFloatProperty](#), [setIntProperty](#), [setJMSCorrelationID](#), [setJMSCorrelationIDAsBytes](#), [setJMSDeliveryMode](#), [setJMSDestination](#), [setJMSExpiration](#), [setJMSMessageID](#), [setJMSPriority](#), [setJMSRedelivered](#), [setJMSReplyTo](#), [setJMSTimestamp](#), [setJMSType](#), [setLongProperty](#), [setObjectProperty](#), [setShortProperty](#), [setStringProperty](#)

---

## Methods

### clearBody()

```
public void clearBody()
```

Clear out the message body. All other parts of the message are left untouched.

### Specified By

[javax.jms.Message.clearBody\(\)](#) in interface [javax.jms.Message](#)

### Overrides

[clearBody\(\)](#) in class [AQjmsMessage](#)

### Throws

[JMSException](#) - if JMS fails to due to some internal JMS error.

## clearProperties()

```
public void clearProperties()  
Clear a message's properties.
```

### Specified By

`javax.jms.Message.clearProperties()` in interface `javax.jms.Message`

### Overrides

`clearProperties()` in class [AQjmsMessage](#)

### Throws

[JMSEException](#) - if JMS fails to clear JMS message properties due to some internal JMS error.

## getObject()

```
public java.io.Serializable getObject()  
Get the serializable object containing this message's data. The default value is null.
```

### Specified By

`javax.jms.ObjectMessage.getObject()` in interface `javax.jms.ObjectMessage`

### Returns

the serializable object containing this message's data

### Throws

[JMSEException](#) - if JMS fails to get object due to some internal JMS error.

[MessageFormatException](#) - if object deserialization fails

## setObject(Serializable)

```
public void setObject(java.io.Serializable object)  
Set the serializable object containing this message's data.
```

### Specified By

`javax.jms.ObjectMessage.setObject(java.io.Serializable)` in interface `javax.jms.ObjectMessage`

**Parameters**

[object](#) - the message's data

**Throws**

[JMSEException](#) - if JMS fails to set object due to some internal JMS error.

[MessageFormatException](#) - if object serialization fails

[MessageNotWriteableException](#) - if message in read-only mode.

## oracle.jms AQjmsOracleDebug

### Syntax

```
public class AQjmsOracleDebug extends java.lang.Object
```

```
java.lang.Object  
|  
+--oracle.jms.AQjmsOracleDebug
```

### Description

AQ Oracle Debug class - Do not use unless instructed by Oracle Support

---

### Member Summary

---

#### Methods

<a href="#">getLogStream()</a>	Get log stream
<a href="#">setLogStream(OutputStream)</a>	Set log stream
<a href="#">setTraceLevel(int)</a>	Set trace level 0 - no tracing (default) 1 - fatal errors 2 - other errors, imp messages 3 - exception trace, other trace info 4 - method entry/exit 5 - print stack traces, variables

---

---

### Inherited Member Summary

---

Methods inherited from class java.lang.Object

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

---

### Methods

#### getLogStream()

```
public static java.io.OutputStream getLogStream()  
Get log stream
```

**setLogStream(OutputStream)**

```
public static void setLogStream(java.io.OutputStream output_stream)
Set log stream
```

**Parameters**

[output](#) - log stream

**setTraceLevel(int)**

```
public static void setTraceLevel(int level)
Set trace level 0 - no tracing (default) 1 - fatal errors 2 - other errors, imp messages 3
- exception trace, other trace info 4 - method entry/exit 5 - print stack traces,
variables
```

## oracle.jms AQjmsProducer

### Syntax

public class AQjmsProducer extends java.lang.Object implements [AQjmsQueueSender](#), [AQjmsTopicPublisher](#)

```
java.lang.Object
|
+--oracle.jms.AQjmsProducer
```

### All Implemented Interfaces

[AQjmsQueueSender](#), [AQjmsTopicPublisher](#), [javax.jms.MessageProducer](#), [javax.jms.QueueSender](#), [javax.jms.TopicPublisher](#)

### Description

This class implements the `MessageProducer` interface. A `MessageProducer` is used to send messages to a `Destination`.

---

### Member Summary

---

#### Methods

<a href="#">close()</a>	Since a provider may allocate some resources on behalf of a <code>MessageProducer</code> outside the JVM, clients should close them when they are not needed.
<a href="#">getDeliveryMode()</a>	Get the producer's default delivery mode.
<a href="#">getDisableMessageID()</a>	Get an indication of whether message IDs are disabled.
<a href="#">getDisableMessageTimestamp()</a>	Get an indication of whether message timestamps are disabled.
<a href="#">getPriority()</a>	Get the producer's default priority.
<a href="#">getQueue()</a>	Get the queue associated with this queue sender.
<a href="#">getTimeToLive()</a>	Get the default length of time in milliseconds from its dispatch time that a produced message should be retained by the message system.
<a href="#">getTopic()</a>	Get the topic associated with this publisher.
<a href="#">publish(Message)</a>	Publish a <code>Message</code> to the topic
<a href="#">publish(Message, AQjmsAgent[])</a>	Publish a <code>Message</code> to a specific list of recipients

---

**Member Summary**

---

<a href="#">publish(Message, AQjmsAgent[], int, int, long)</a>	Publish a Message to a topic by specifying a list of recipients, delivery mode, priority and time to live
<a href="#">publish(Message, int, int, long)</a>	Publish a Message to the topic specifying delivery mode, priority and time to live to the topic.
<a href="#">publish(Topic, Message)</a>	Publish a Message to a topic for an unidentified message producer.
<a href="#">publish(Topic, Message, AQjmsAgent[])</a>	Publish a Message to a topic by specifying a list of recipients
<a href="#">publish(Topic, Message, AQjmsAgent[], int, int, long)</a>	Publish a Message to a topic by specifying a list of recipients, delivery mode, priority and time to live
<a href="#">publish(Topic, Message, int, int, long)</a>	Publish a Message to a topic for an unidentified message producer, specifying delivery mode, priority and time to live.
<a href="#">send(Message)</a>	Send a message
<a href="#">send(Message, int, int, long)</a>	Send a message.
<a href="#">send(Queue, Message)</a>	Send a message.
<a href="#">send(Queue, Message, int, int, long)</a>	Send a message.
<a href="#">setDeliveryMode(int)</a>	Set the producer's default delivery mode.
<a href="#">setDisableMessageID(boolean)</a>	Set whether message IDs are disabled.
<a href="#">setDisableMessageTimestamp(boolean)</a>	Set whether message timestamps are disabled.
<a href="#">setPriority(int)</a>	Set the producer's default priority.
<a href="#">setTimeToLive(int)</a>	Set the default length of time in milliseconds from its dispatch time that a produced message should be retained by the message system.

---

---

**Inherited Member Summary**

---

Methods inherited from class java.lang.Object

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

---

## Methods

### close()

```
public void close()
```

Since a provider may allocate some resources on behalf of a `MessageProducer` outside the JVM, clients should close them when they are not needed. Relying on garbage collection to eventually reclaim these resources may not be timely enough.

#### Specified By

`javax.jms.MessageProducer.close()` in interface `javax.jms.MessageProducer`

#### Throws

[JMSEException](#) - if JMS fails to close the producer due to some error.

### getDeliveryMode()

```
public synchronized int getDeliveryMode()
```

Get the producer's default delivery mode.

#### Specified By

`javax.jms.MessageProducer.getDeliveryMode()` in interface `javax.jms.MessageProducer`

#### Returns

the message delivery mode for this message producer.

#### Throws

[JMSEException](#) - if JMS fails to get delivery mode due to some internal error.

### getDisableMessageID()

```
public synchronized boolean getDisableMessageID()
```

Get an indication of whether message IDs are disabled.

#### Specified By

`javax.jms.MessageProducer.getDisableMessageID()` in interface `javax.jms.MessageProducer`

**Returns**

an indication of whether message IDs are disabled.

**Throws**

[JMSEException](#) - if JMS fails to get disabled message Id due to some internal error.

**getDisableMessageTimestamp()**

```
public synchronized boolean getDisableMessageTimestamp()  
Get an indication of whether message timestamps are disabled.
```

**Specified By**

`javax.jms.MessageProducer.getDisableMessageTimestamp()` in interface `javax.jms.MessageProducer`

**Returns**

an indication of whether message IDs are disabled.

**Throws**

[JMSEException](#) - if JMS fails to get disabled message timestamp due to some internal error.

**getPriority()**

```
public synchronized int getPriority()  
Get the producer's default priority.
```

**Specified By**

`javax.jms.MessageProducer.getPriority()` in interface `javax.jms.MessageProducer`

**Returns**

the message priority for this message producer.

**Throws**

[JMSEException](#) - if JMS fails to get priority due to some internal error.

**getQueue()**

```
public synchronized javax.jms.Queue getQueue()
```

Get the queue associated with this queue sender.

**Specified By**

`javax.jms.QueueSender.getQueue()` in interface `javax.jms.QueueSender`

**Returns**

the queue

**Throws**

[JMSEException](#) - if JMS fails to get queue for this queue sender due to some internal error.

**getTimeToLive()**

```
public synchronized int getTimeToLive()
```

Get the default length of time in milliseconds from its dispatch time that a produced message should be retained by the message system.

**Specified By**

`javax.jms.MessageProducer.getTimeToLive()` in interface `javax.jms.MessageProducer`

**Returns**

the message time to live in milliseconds; zero is unlimited

**Throws**

[JMSEException](#) - if JMS fails to get Time to Live due to some internal error.

**getTopic()**

```
public synchronized javax.jms.Topic getTopic()
```

Get the topic associated with this publisher.

**Specified By**

`javax.jms.TopicPublisher.getTopic()` in interface `javax.jms.TopicPublisher`

**Returns**

this publisher's topic

### Throws

[JMSEException](#) - if JMS fails to get topic for this topic publisher due to some internal error.

### publish(Message)

```
public synchronized void publish(javax.jms.Message message)
```

Publish a Message to the topic

### Specified By

`javax.jms.TopicPublisher.publish(javax.jms.Message)` in interface `javax.jms.TopicPublisher`

### Parameters

[message](#) - The message to be published

### Throws

[JMSEException](#) - if JMS fails to publish the message due to some internal error.

### publish(Message, AQjmsAgent[])

```
public synchronized void publish(javax.jms.Message message, AQjmsAgent recipient_list)
```

Publish a Message to a specific list of recipients

### Specified By

`publish(Message, AQjmsAgent[])` in interface `AQjmsTopicPublisher`

### Parameters

[message](#) - The message to be published

[recipient\\_list](#) - The list of recipients to which the message is published. The recipients are of type `AQjmsAgent`.

### Throws

[JMSEException](#) - if JMS fails to publish the message due to some internal error.

### publish(Message, AQjmsAgent[], int, int, long)

```
public synchronized void publish(javax.jms.Message message, AQjmsAgent
```

`recipient_list, int deliveryMode, int priority, long timeToLive)`  
Publish a Message to a topic by specifying a list of recipients, delivery mode, priority and time to live

### Specified By

[publish\(Message, AQjmsAgent\[\], int, int, long\)](#) in interface [AQjmsTopicPublisher](#)

### Parameters

[message](#) - The message to be published

[recipient\\_list](#) - The list of recipients to which the message is published. The recipients are of type [AQjmsAgent](#).

[deliveryMode](#) - The delivery mode - persistent or non\_persistent

[priority](#) - The priority of the message

[timeToLive](#) - the message time to live in milliseconds; zero is unlimited

### Throws

[JMSEException](#) - if JMS fails to publish the message due to some internal error.

## **publish(Message, int, int, long)**

```
public synchronized void publish(javax.jms.Message message, int deliveryMode,
int priority, long timeToLive)
```

Publish a Message to the topic specifying delivery mode, priority and time to live to the topic.

### Specified By

[javax.jms.TopicPublisher.publish\(javax.jms.Message, int, int, long\)](#) in interface [javax.jms.TopicPublisher](#)

### Parameters

[message](#) - The message to be published

[deliveryMode](#) - The message delivery mode - persistent or non\_persistent

[priority](#) - The priority of the message

[timeToLive](#) - the message time to live in milliseconds; zero is unlimited

### Throws

[JMSEException](#) - if JMS fails to publish the message due to some internal error.

### publish(Topic, Message)

```
public synchronized void publish(javax.jms.Topic topic, javax.jms.Message message)
```

Publish a Message to a topic for an unidentified message producer. Use the producer's default delivery mode, timeToLive and priority.

### Specified By

`javax.jms.TopicPublisher.publish(javax.jms.Topic, javax.jms.Message)` in interface `javax.jms.TopicPublisher`

### Parameters

[topic](#) - The topic to which to publish the message. This overrides the default topic of the Message Producer

[message](#) - The message to be published

### Throws

[JMSEException](#) - if JMS fails to publish the message due to some internal error.

### publish(Topic, Message, AQjmsAgent[])

```
public synchronized void publish(javax.jms.Topic topic, javax.jms.Message message, AQjmsAgent recipient_list)
```

Publish a Message to a topic by specifying a list of recipients

### Specified By

`publish(Topic, Message, AQjmsAgent[])` in interface `AQjmsTopicPublisher`

### Parameters

[topic](#) - The topic to which to publish the message. This overrides the default topic of the Message Producer

[message](#) - The message to be published

[recipient\\_list](#) - The list of recipients to which the message is published. The recipients are of type `AQjmsAgent`.

**Throws**

[JMSEException](#) - if JMS fails to publish the message due to some internal error.

**publish(Topic, Message, AQjmsAgent[], int, int, long)**

```
public synchronized void publish(javax.jms.Topic topic, javax.jms.Message message, AQjmsAgent recipient_list, int deliveryMode, int priority, long timeToLive)
```

Publish a Message to a topic by specifying a list of recipients, delivery mode, priority and time to live

**Specified By**

[publish\(Topic, Message, AQjmsAgent\[\], int, int, long\)](#) in interface [AQjmsTopicPublisher](#)

**Parameters**

[topic](#) - The topic to which to publish the message. This overrides the default topic of the Message Producer

[message](#) - The message to be published

[recipient\\_list](#) - The list of recipients to which the message is published. The recipients are of type [AQjmsAgent](#).

[deliveryMode](#) - The delivery mode - persistent or non\_persistent

[priority](#) - The priority of the message

[timeToLive](#) - the message time to live in milliseconds; zero is unlimited

**Throws**

[JMSEException](#) - if JMS fails to publish the message due to some internal error.

**publish(Topic, Message, int, int, long)**

```
public synchronized void publish(javax.jms.Topic topic, javax.jms.Message message, int deliveryMode, int priority, long timeToLive)
```

Publish a Message to a topic for an unidentified message producer, specifying delivery mode, priority and time to live.

**Specified By**

[javax.jms.TopicPublisher.publish\(javax.jms.Topic, javax.jms.Message, int, int, long\)](#)  
in interface [javax.jms.TopicPublisher](#)

**Parameters**

[topic](#) - The topic to which to publish the message. This overrides the default topic of the Message Producer

[message](#) - The message to be published

[deliveryMode](#) - The message delivery mode - persistent or non\_persistent

[priority](#) - The priority of the message

[timeToLive](#) - the message time to live in milliseconds; zero is unlimited

**Throws**

[JMSEException](#) - if JMS fails to publish the message due to some internal error.

**send(Message)**

```
public synchronized void send(javax.jms.Message message)
Send a message
```

**Specified By**

javax.jms.QueueSender.send(javax.jms.Message) in interface  
javax.jms.QueueSender

**Parameters**

[message](#) - The message that has to be sent

**Throws**

[JMSEException](#) - if JMS fails to send the message due to some internal error.

**send(Message, int, int, long)**

```
public synchronized void send(javax.jms.Message message, int deliveryMode, int
priority, long timeToLive)
Send a message.
```

**Specified By**

javax.jms.QueueSender.send(javax.jms.Message, int, int, long) in interface  
javax.jms.QueueSender

**Parameters**

[message](#) - The message that has to be sent

[deliverMode](#) - The message delivery mode - persistent or non\_persistent

**Throws**

[JMSEException](#) - if JMS fails to send the message due to some internal error.

**send(Queue, Message)**

```
public synchronized void send(javax.jms.Queue queue, javax.jms.Message message)
Send a message.
```

**Specified By**

javax.jms.QueueSender.send(javax.jms.Queue, javax.jms.Message) in interface javax.jms.QueueSender

**Parameters**

[queue](#) - The destination queue where the message has to be sent. This overrides the default queue of the Message Producer.

[message](#) - The message that has to be sent

**Throws**

[JMSEException](#) - if JMS fails to send the message due to some internal error.

**send(Queue, Message, int, int, long)**

```
public synchronized void send(javax.jms.Queue queue, javax.jms.Message message,
int deliverMode, int priority, long timeToLive)
Send a message.
```

**Specified By**

javax.jms.QueueSender.send(javax.jms.Queue, javax.jms.Message, int, int, long) in interface javax.jms.QueueSender

**Parameters**

[queue](#) - The destination queue where the message has to be sent. This overrides the default queue of the Message Producer.

[message](#) - The message that has to be sent

[deliveryMode](#) - The message delivery mode - persistent or non\_persistent

[priority](#) - The priority of the message

[timeToLive](#) - the message time to live in milliseconds; zero is unlimited

### Throws

[JMSEException](#) - if JMS fails to send the message due to some internal error.

## setDeliveryMode(int)

```
public synchronized void setDeliveryMode(int deliveryMode)
```

Set the producer's default delivery mode.

Delivery mode is set to PERSISTENT by default.

### Specified By

javax.jms.MessageProducer.setDeliveryMode(int) in interface

javax.jms.MessageProducer

### Parameters

[deliveryMode](#) - the message delivery mode for this message producer.

### Throws

[JMSEException](#) - if JMS fails to set delivery mode due to some internal error.

## setDisableMessageID(boolean)

```
public synchronized void setDisableMessageID(boolean value)
```

Set whether message IDs are disabled.

Since message ID's take some effort to create and increase a message's size, some JMS providers may be able to optimize message overhead if they are given a hint that message ID is not used by an application. JMS message Producers provide a hint to disable message ID. When a client sets a Producer to disable message ID they are saying that they do not depend on the value of message ID for the messages it produces. These messages must either have message ID set to null or, if the hint is ignored, messageID must be set to its normal unique value.

Message IDs are enabled by default.

### Specified By

`javax.jms.MessageProducer.setDisableMessageID(boolean)` in interface `javax.jms.MessageProducer`

### Parameters

[value](#) - indicates if message IDs are disabled.

### Throws

[JMSEException](#) - if JMS fails to set disabled message Id due to some internal error.

### setDisableMessageTimestamp(boolean)

```
public synchronized void setDisableMessageTimestamp(boolean value)
```

Set whether message timestamps are disabled.

### Specified By

`javax.jms.MessageProducer.setDisableMessageTimestamp(boolean)` in interface `javax.jms.MessageProducer`

### Parameters

[value](#) - indicates if message timestamps are disabled.

### Throws

[JMSEException](#) - if JMS fails to set disabled message timestamp due to some internal error.

### setPriority(int)

```
public synchronized void setPriority(int priority)
```

Set the producer's default priority.

Priority is set to 4, by default.

### Specified By

`javax.jms.MessageProducer.setPriority(int)` in interface `javax.jms.MessageProducer`

### Parameters

[priority](#) - the message priority for this message producer.

**Throws**

[JMSEException](#) - if JMS fails to set priority due to some internal error.

**setTimeToLive(int)**

```
public synchronized void setTimeToLive(int timeToLive)
```

Set the default length of time in milliseconds from its dispatch time that a produced message should be retained by the message system.

Time to live is set to zero by default.

**Specified By**

javax.jms.MessageProducer.setTimeToLive(int) in interface  
javax.jms.MessageProducer

**Parameters**

[timeToLive](#) - the message time to live in milliseconds; zero is unlimited

**Throws**

[JMSEException](#) - if JMS fails to set Time to Live due to some internal error.

## oracle.jms AQjmsQueueBrowser

### Syntax

```
public class AQjmsQueueBrowser extends java.lang.Object implements  
javax.jms.QueueBrowser, java.util.Enumeration
```

```
java.lang.Object  
|  
+--oracle.jms.AQjmsQueueBrowser
```

### All Implemented Interfaces

```
java.util.Enumeration, javax.jms.QueueBrowser
```

### Description

This class implements the QueueBrowser interface. A QueueBrowser is used to look at messages in a Queue without removing them

---

### Member Summary

---

#### Methods

<a href="#">close()</a>	Since a provider may allocate some resources on behalf of a QueueBrowser outside the JVM, clients should close them when they are not needed.
<a href="#">getEnumeration()</a>	Get an enumeration for browsing the current queue messages in the order they would be received.
<a href="#">getMessageSelector()</a>	Get this queue browser's message selector expression.
<a href="#">getQueue()</a>	Get the queue associated with this queue browser.
<a href="#">hasMoreElements()</a>	Tests if this enumeration contains more elements.
<a href="#">nextElement()</a>	Returns the next element of this enumeration.

---

---

### Inherited Member Summary

---

Methods inherited from class java.lang.Object

---

**Inherited Member Summary**

---

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

---

**Methods****close()**

```
public void close()
```

Since a provider may allocate some resources on behalf of a QueueBrowser outside the JVM, clients should close them when they are not needed. Relying on garbage collection to eventually reclaim these resources may not be timely enough.

**Specified By**

javax.jms.QueueBrowser.close() in interface javax.jms.QueueBrowser

**getEnumeration()**

```
public java.util.Enumeration getEnumeration()
```

Get an enumeration for browsing the current queue messages in the order they would be received.

**Specified By**

javax.jms.QueueBrowser.getEnumeration() in interface javax.jms.QueueBrowser

**Returns**

an enumeration for browsing the messages

**Throws**

[JMSEException](#) - if JMS fails to get the enumeration for this browser due to some JMS error.

**getMessageSelector()**

```
public java.lang.String getMessageSelector()
```

Get this queue browser's message selector expression.

**Specified By**

javax.jms.QueueBrowser.getMessageSelector() in interface javax.jms.QueueBrowser

**Returns**

this queue browser's message selector

**Throws**

[JMSEException](#) - if JMS fails to get message selector due to some JMS error

**getQueue()**

```
public javax.jms.Queue getQueue()
Get the queue associated with this queue browser.
```

**Specified By**

`javax.jms.QueueBrowser.getQueue()` in interface `javax.jms.QueueBrowser`

**Returns**

the queue

**Throws**

[JMSEException](#) - if JMS fails to get the queue associated with this Browser due to some JMS error.

**hasMoreElements()**

```
public boolean hasMoreElements()
Tests if this enumeration contains more elements.
```

**Specified By**

`java.util.Enumeration.hasMoreElements()` in interface `java.util.Enumeration`

**Returns**

true if more elements exist in the enumeration false otherwise.

**nextElement()**

```
public java.lang.Object nextElement()
Returns the next element of this enumeration.
```

**Specified By**

`java.util.Enumeration.nextElement()` in interface `java.util.Enumeration`

**Returns**

the next element of this enumeration

**Throws**

[NoSuchElementException](#) - if no more elements exist.

---

## oracle.jms AQjmsQueueConnectionFactory

### Syntax

```
public class AQjmsQueueConnectionFactory extends java.lang.Object implements  
javax.jms.QueueConnectionFactory
```

```
java.lang.Object  
|  
+--oracle.jms.AQjmsQueueConnectionFactory
```

### All Implemented Interfaces

```
javax.jms.ConnectionFactory, javax.jms.QueueConnectionFactory
```

### Description

This class implements the QueueConnectionFactory interface. A QueueConnectionFactory is used to create QueueConnections

---

### Member Summary

#### Methods

<a href="#">createQueueConnection()</a>	create a Queue Connection to the JMS Server hosting this Queue-ConnectionFactory.
<a href="#">createQueueConnection(Connection)</a>	create a Queue Connection using the already open JDBC connection.
<a href="#">createQueueConnection(String, String)</a>	create a Queue Connection using the given username and password for authentication during creation of the Connection.

---

### Inherited Member Summary

#### Methods inherited from class java.lang.Object

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

---

## Methods

### createQueueConnection()

```
public javax.jms.QueueConnection createQueueConnection()  
create a Queue Connection to the JMS Server hosting this Queue-  
ConnectionFactory.
```

#### Specified By

javax.jms.QueueConnectionFactory.createQueueConnection() in interface  
javax.jms.QueueConnectionFactory

#### Returns

a Queue Connection

#### Throws

[JMSEException](#) - if JMS fails to get a queue connection due to some JMS error

### createQueueConnection(Connection)

```
public static javax.jms.QueueConnection  
createQueueConnection(java.sql.Connection jdbc_connection)  
create a Queue Connection using the already open JDBC connection. This creation  
does NOT result in creation of another connection to the database. Instead JMS binds  
to the given connection to the database and provides an interface to the Queuing  
mechanism defined by JMS.
```

#### Parameters

[jdbc\\_connection](#) - a valid open connection to the database.

#### Returns

a Queue Connection

#### Throws

[JMSEException](#) - if JMS fails to get a queue connection due to some JMS error

### createQueueConnection(String, String)

```
public javax.jms.QueueConnection createQueueConnection(java.lang.String  
username, java.lang.String password)
```

create a Queue Connection using the given username and password for authentication during creation of the Connection.

**Specified By**

`javax.jms.QueueConnectionFactory.createQueueConnection(java.lang.String, java.lang.String)` in interface `javax.jms.QueueConnectionFactory`

**Parameters**

[username](#) - name of the user connecting to the DB for Queueing. password password for the creating the connection to server.

**Returns**

a Queue Connection

**Throws**

[JMSException](#) - if JMS fails to get a queue connection due to some JMS error

---

## oracle.jms

# AQjmsQueueReceiver

### Syntax

```
public interface AQjmsQueueReceiver extends javax.jms.QueueReceiver
```

### All Superinterfaces

`javax.jms.MessageConsumer`, `javax.jms.QueueReceiver`

### All Known Implementing Classes

[AQjmsConsumer](#)

### Description

This interface extends `javax.jms.QueueReceiver` and defines AQ extensions to JMS. A client uses a `QueueReceiver` for receiving messages that have been delivered to a `Queue`

---

### Member Summary

#### Methods

<a href="#">getNavigationMode()</a>	get the navigation mode used for receiving messages
<a href="#">receiveNoData()</a>	Consume the message without returning it to the user.
<a href="#">receiveNoData(long)</a>	Consume the message without returning it to the user.
<a href="#">setNavigationMode(int)</a>	set the navigation mode used for receiving messages

---

### Inherited Member Summary

Methods inherited from interface `javax.jms.QueueReceiver`

`getQueue`

Methods inherited from interface `javax.jms.MessageConsumer`

`close`, `getMessageListener`, `getMessageSelector`, `receive`, `receive`, `receiveNoWait`, `setMessageListener`

---

## Methods

### getNavigationMode()

```
public int getNavigationMode()
get the navigation mode used for receiving messages
```

#### Returns

the navigation mode

#### Throws

[JMSEException](#) - if there was an error in getting the navigation mode

### receiveNoData()

```
public void receiveNoData()
Consume the message without returning it to the user. This call will avoid the
overhead of fetching the message from the database and hence can be used as an
optimization by jms clients who have already got the message for example using a
queue browser.
```

#### Throws

[JMSEException](#) - if the message could not be received due to an error

### receiveNoData(long)

```
public void receiveNoData(long timeout)
Consume the message without returning it to the user. This call will avoid the
overhead of fetching the message from the database and hence can be used as an
optimization by jms clients who have already got the message for example using a
queue browser. This call will block until a message arrives or the timeout expires
```

#### Parameters

[timeout](#) - the timeout value in milliseconds

#### Throws

[JMSEException](#) - if the message could not be received due to an error

### setNavigationMode(int)

```
public void setNavigationMode(int mode)
```

set the navigation mode used for receiving messages

**Parameters**

[mode](#) - the new value of the navigation mode

**Throws**

[JMSEException](#) - if there was an error in getting the navigation mode

---

## oracle.jms AQjmsQueueSender

### Syntax

```
public interface AQjmsQueueSender extends javax.jms.QueueSender
```

### All Superinterfaces

```
javax.jms.MessageProducer, javax.jms.QueueSender
```

### All Known Implementing Classes

[AQjmsProducer](#)

### Description

This interface extends `QueueSender` and defines AQ extensions to JMS. A client uses a `QueueSender` to send messages to a `Queue`.

---

### Inherited Member Summary

---

Methods inherited from interface `javax.jms.QueueSender`

`getQueue`, `send`, `send`, `send`, `send`

Methods inherited from interface `javax.jms.MessageProducer`

`close`, `getDeliveryMode`, `getDisableMessageID`, `getDisableMessageTimestamp`, `getPriority`, `getTimeToLive`, `setDeliveryMode`, `setDisableMessageID`, `setDisableMessageTimestamp`, `setPriority`, `setTimeToLive`

---

---

## oracle.jms AQjmsSession

### Syntax

```
public class AQjmsSession extends java.lang.Object implements  
javax.jms.QueueSession, javax.jms.TopicSession
```

```
java.lang.Object  
|  
+--oracle.jms.AQjmsSession
```

### All Implemented Interfaces

```
javax.jms.QueueSession, java.lang.Runnable, javax.jms.Session,  
javax.jms.TopicSession
```

### Description

This class implements the `javax.jms.Session` interface. A JMS Session is a single threaded context for producing and consuming messages.

---

## Member Summary

---

### Methods

<a href="#">close()</a>	Close a JMS session Since a provider may allocate some resources on behalf of a Session outside the JVM, clients should close them when they are not needed.
<a href="#">commit()</a>	Commit all messages done in this transaction and releases any locks currently held.
<a href="#">createAdtMessage()</a>	Create an AdtMessage.
<a href="#">createAdtMessage(CustomDatum)</a>	Create an initialized AdtMessage.
<a href="#">createBrowser(Queue)</a>	Create a QueueBrowser to peek at the messages on the specified queue.
<a href="#">createBrowser(Queue, CustomDatumFactory)</a>	Create a QueueBrowser to peek at the messages on the specified queue containing ADT messages.
<a href="#">createBrowser(Queue, String)</a>	Create a QueueBrowser to peek at the messages on the specified queue.
<a href="#">createBrowser(Queue, String, boolean)</a>	Create a QueueBrowser to peek at the messages on the specified queue.

**Member Summary**

---

<a href="#">createBrowser(Queue, String, CustomDatumFactory)</a>	Create a QueueBrowser to peek at the messages on the specified queue containing ADT messages.
<a href="#">createBrowser(Queue, String, CustomDatumFactory, boolean)</a>	Create a QueueBrowser to peek at the messages on the specified queue containing ADT messages.
<a href="#">createBytesMessage()</a>	Create a BytesMessage.
<a href="#">createDurableSubscriber(Topic, String)</a>	Create a durable Subscriber to the specified topic.
<a href="#">createDurableSubscriber(Topic, String, CustomDatumFactory)</a>	Create a durable Subscriber to the specified topic.
<a href="#">createDurableSubscriber(Topic, String, String, boolean)</a>	Create a durable Subscriber to the specified topic.
<a href="#">createDurableSubscriber(Topic, String, String, boolean, CustomDatumFactory)</a>	Create a durable Subscriber to the specified topic.
<a href="#">createMapMessage()</a>	Create a MapMessage.
<a href="#">createObjectMessage()</a>	Create an ObjectMessage.
<a href="#">createObjectMessage(Serializable)</a>	Create an initialized ObjectMessage.
<a href="#">createPublisher(Topic)</a>	Create a Publisher for the specified topic.
<a href="#">createQueue(AQQueueTable, String, AQjmsDestinationProperty)</a>	Create a queue.
<a href="#">createQueueTable(String, String, AQQueueTableProperty)</a>	Create a Queue Table.
<a href="#">createReceiver(Queue)</a>	Create a QueueReceiver to receive messages from the specified queue.
<a href="#">createReceiver(Queue, CustomDatumFactory)</a>	Create a QueueReceiver to receive messages from the specified queue containing ADT messages.
<a href="#">createReceiver(Queue, String)</a>	Create a QueueReceiver to receive messages from the specified queue.
<a href="#">createReceiver(Queue, String, CustomDatumFactory)</a>	Create a QueueReceiver to receive messages from the specified queue containing ADT messages.
<a href="#">createRemoteSubscriber(Topic, AQjmsAgent, String)</a>	Create a remote subscriber for a topic.
<a href="#">createRemoteSubscriber(Topic, AQjmsAgent, String, CustomDatumFactory)</a>	Create a remote subscriber for a topic.
<a href="#">createSender(Queue)</a>	Create a QueueSender to send messages to the specified queue.

---

**Member Summary**


---

<code>createStreamMessage()</code>	Create a <code>StreamMessage</code> .
<code>createSubscriber(Topic)</code>	Create a non-durable <code>Subscriber</code> to the specified topic.
<code>createSubscriber(Topic, String, boolean)</code>	Create a non-durable <code>Subscriber</code> to the specified topic.
<code>createTextMessage()</code>	Create a temporary queue.
<code>createTextMessage()</code>	Create a <code>TextMessage</code> .
<code>createTextMessage(StringBuffer)</code>	Create an initialized <code>TextMessage</code> .
<code>createTopic(AQQueueTable, String, AQjmsDestinationProperty)</code>	Create a topic
<code>createTopicReceiver(Topic, String, String)</code>	Create a <code>TopicReceiver</code> to receive messages from the specified topic.
<code>createTopicReceiver(Topic, String, String, CustomDatumFactory)</code>	
<code>getDBConnection()</code>	
<code>getJmsConnection()</code>	
<code>getMessageListener()</code>	Return the session's distinguished message listener.
<code>getQueue(String, String)</code>	Get an existing queue.
<code>getQueueTable(String, String)</code>	Get a handle to an existing queue-table If owner of queue-table is not the same as the user which opened the connection, the caller must have <code>AQ enqueue/dequeue</code> privileges on queues/topics in the queue table.
<code>getTopic(String, String)</code>	Get an existing topic.
<code>getTransacted()</code>	Checks if the session in transacted mode?
<code>grantSystemPrivilege(String, String, boolean)</code>	Grant <code>AQ</code> system privileges to users/roles.
<code>revokeSystemPrivilege(String, String)</code>	Revoke <code>AQ</code> system privilege from user/roles
<code>rollback()</code>	Rollback any messages done in this transaction and releases any locks currently held.
<code>run()</code>	
<code>setMessageListener(MessageListener)</code>	Set the session's distinguished message listener.
<code>unsubscribe(Topic, AQjmsAgent)</code>	Unsubscribe a remote durable subscription that has been created by a client on the specified topic

---

**Member Summary**

---

<a href="#">unsubscribe(Topic, String)</a>	Unsubscribe a durable subscription that has been created by a client on the specified topic
--	---

---

---

**Inherited Member Summary**

---

Fields inherited from interface `javax.jms.Session`

AUTO\_ACKNOWLEDGE, CLIENT\_ACKNOWLEDGE, DUPS\_OK\_ACKNOWLEDGE

Methods inherited from class `java.lang.Object`

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

---

**Methods****close()**

```
public void close()
```

Close a JMS session. Since a provider may allocate some resources on behalf of a Session outside the JVM, clients should close them when they are not needed. Relying on garbage collection to eventually reclaim these resources may not be timely enough. This call may take a couple of minutes if there are receivers blocked on a receive call with infinite timeout.

**Specified By**

`javax.jms.Session.close()` in interface `javax.jms.Session`

**Specified By**

`javax.jms.Session.close()` in interface `javax.jms.Session`

**Throws**

[JMSException](#) - if JMS implementation fails to close a Session due to some internal error.

**commit()**

```
public synchronized void commit()
```

Commit all messages done in this transaction and releases any locks currently held.

### Specified By

`javax.jms.Session.commit()` in interface `javax.jms.Session`

### Throws

[JMSEException](#) - if JMS implementation fails to commit the the transaction due to some internal error. The linked SQL exception has more info about the error

### `createAdtMessage()`

```
public synchronized AdtMessage createAdtMessage()
```

Create an `AdtMessage`. An `AdtMessage` is used to send a message that containing an Java object that maps to a Oracle SQL ADT. This object must support the `OracleCustomDatum` interface.

### Throws

[JMSEException](#) - if some error occurs during message creation

### `createAdtMessage(CustomDatum)`

```
public synchronized AQjmsAdtMessage createAdtMessage(oracle.sql.CustomDatum payload)
```

Create an initialized `AdtMessage`. An `AQjmsAdtMessage` is used to send a message that containing an Java object that maps to a Oracle SQL ADT. This object must support the `OracleCustomDatum` interface.

### Parameters

[payload](#) - the object to use to initialize this message.

### Throws

[JMSEException](#) - if some error occurs during message creation

### `createBrowser(Queue)`

```
public synchronized javax.jms.QueueBrowser createBrowser(javax.jms.Queue queue)
```

Create a `QueueBrowser` to peek at the messages on the specified queue. This method can be used to create browsers for queues that contain payloads of type `AQ$JMS_TEXT_MESSAGE`, `AQ$JMS_STREAM_MESSAGE`, `AQ$JMS_BYTES_MESSAGE`, `AQ$JMS_MAP_MESSAGE` or `AQ$JMS_OBJECT_MESSAGE`

**Specified By**

`javax.jms.QueueSession.createBrowser(javax.jms.Queue)` in interface `javax.jms.QueueSession`

**Parameters**

[queue](#) - the queue to access

**Throws**

[JMSEException](#) - if a session fails to create a browser due to some JMS error.

[InvalidDestinationException](#) - if invalid Queue specified.

**createBrowser(Queue, CustomDatumFactory)**

```
public synchronized javax.jms.QueueBrowser createBrowser( javax.jms.Queue queue,
oracle.sql.CustomDatumFactory payload_factory)
```

Create a `QueueBrowser` to peek at the messages on the specified queue containing ADT messages. This method is used to create receivers for queues that contain Oracle ADT payloads (instead of the standard JMS defined payloads)

**Parameters**

[queue](#) - the queue to access

[payload\\_factory](#) - `CustomDatumFactory` for the java class that maps to the Oracle ADT

**Throws**

[JMSEException](#) - if a session fails to create a browser due to some JMS error.

[InvalidDestinationException](#) - if invalid Queue specified.

**createBrowser(Queue, String)**

```
public synchronized javax.jms.QueueBrowser createBrowser( javax.jms.Queue queue,
java.lang.String messageSelector)
```

Create a `QueueBrowser` to peek at the messages on the specified queue. This method can be used to create browsers for queues that contain payloads of type `AQ$JMS_TEXT_MESSAGE`, `AQ$JMS_STREAM_MESSAGE`, `AQ$JMS_BYTES_MESSAGE`, `AQ$JMS_MAP_MESSAGE` or `AQ$JMS_OBJECT_MESSAGE`

## Specified By

`javax.jms.QueueSession.createBrowser(javax.jms.Queue, java.lang.String)` in interface `javax.jms.QueueSession`

## Parameters

[queue](#) - the queue to access

[messageSelector](#) - only messages with properties matching the message selector expression are delivered The selector for the `QueueBrowser` can be one of the following: a. `JMSMessageID = 'ID:2345234523452345'` to retrieve messages that have the specified message ID. &nbsp; &nbsp; &nbsp; All message IDs must be prefixed with "ID:" b. `JMSCorrelationID = 'RUSH'` to retrieve messages that have a certain correlationID

## Throws

[JMSEException](#) - if a session fails to create a browser due to some JMS error.

[InvalidDestinationException](#) - if invalid Queue specified.

[InvalidSelectorException](#) - if the message selector is invalid.

## `createBrowser(Queue, String, boolean)`

```
public synchronized javax.jms.QueueBrowser createBrowser(javax.jms.Queue queue,
java.lang.String messageSelector, boolean locked)
```

Create a `QueueBrowser` to peek at the messages on the specified queue. This method can be used to create browsers for queues that contain payloads of type `AQS_JMS_TEXT_MESSAGE`, `AQS_JMS_STREAM_MESSAGE`, `AQS_JMS_BYTES_MESSAGE`, `AQS_JMS_MAP_MESSAGE` or `AQS_JMS_OBJECT_MESSAGE`

## Parameters

[queue](#) - the queue to access

[messageSelector](#) - only messages with properties matching the message selector expression are delivered

[locked](#) - if true then messages are locked as they are browsed (similar to a `SELECT` for `UPDATE`) The selector for the `QueueBrowser` can be one of the following: a. `JMSMessageID = 'ID:2345234523452345'` to retrieve messages that have the specified message ID. &nbsp; &nbsp; &nbsp; All message IDs must be prefixed with "ID:" b. `JMSCorrelationID = 'RUSH'` to retrieve messages that have a certain correlationID

### Throws

[JMSEException](#) - if a session fails to create a browser due to some JMS error.

[InvalidDestinationException](#) - if invalid Queue specified.

[InvalidSelectorException](#) - if the message selector is invalid.

### createBrowser(Queue, String, CustomDatumFactory)

```
public synchronized javax.jms.QueueBrowser createBrowser(javax.jms.Queue queue,  
java.lang.String messageSelector, oracle.sql.CustomDatumFactory payload_factory)
```

Create a QueueBrowser to peek at the messages on the specified queue containing ADT messages. This method is used to create browsers for queues that contain Oracle ADT payloads (instead of the standard JMS defined payloads)

### Parameters

[queue](#) - the queue to access

[messageSelector](#) - only messages with properties matching the message selector expression are delivered

[payload\\_factory](#) - CustomDatumFactory for the java class that maps to the Oracle ADT The selector for the QueueBrowser can be one of the following: a. JMSMessageID = 'ID:2345234523452345' to receive messages that have the specified message ID. &nbsp; &nbsp; &nbsp; All message IDs must be prefixed with "ID:" b. JMSCorrelationID = 'RUSH' to retrieve messages that have a certain correlationID

### Throws

[JMSEException](#) - if a session fails to create a browser due to some JMS error.

[InvalidDestinationException](#) - if invalid Queue specified.

### createBrowser(Queue, String, CustomDatumFactory, boolean)

```
public synchronized javax.jms.QueueBrowser createBrowser(javax.jms.Queue queue,  
java.lang.String messageSelector, oracle.sql.CustomDatumFactory payload_factory,  
boolean locked)
```

Create a QueueBrowser to peek at the messages on the specified queue containing ADT messages. This method is used to create browsers for queues that contain Oracle ADT payloads (instead of the standard JMS defined payloads)

### Parameters

[queue](#) - the queue to access

[messageSelector](#) - only messages with properties matching the message selector expression are delivered

[payload\\_factory](#) - CustomDatumFactory for the java class that maps to the Oracle ADT

[locked](#) - if true then messages are locked as they are browsed (similar to a SELECT for UPDATE) The selector for the QueueBrowser can be one of the following: a. JMSMessageID = 'ID:2345234523452345' to retrieve messages that have the specified message ID. &nbsp; &nbsp; &nbsp; All message IDs must be prefixed with "ID:" b. JMSCorrelationID = 'RUSH' to retrieve messages that have a certain correlationID

### Throws

[JMSEException](#) - if a session fails to create a browser due to some JMS error.

[InvalidDestinationException](#) - if invalid Queue specified.

### createBytesMessage()

```
public synchronized javax.jms.BytesMessage createBytesMessage()
```

Create a BytesMessage. A BytesMessage is used to send a message containing a stream of uninterpreted bytes.

### Specified By

javax.jms.Session.createBytesMessage() in interface javax.jms.Session

### Throws

[JMSEException](#) - if some error occurs during message creation

### createDurableSubscriber(Topic, String)

```
public synchronized javax.jms.TopicSubscriber  
createDurableSubscriber(javax.jms.Topic topic, java.lang.String subs_name)
```

Create a durable Subscriber to the specified topic. This method can be used to create subscribers for queues that contain payloads of type AQS\_JMS\_TEXT\_MESSAGE, AQS\_JMS\_STREAM\_MESSAGE, AQS\_JMS\_BYTES\_MESSAGE, AQS\_JMS\_MAP\_MESSAGE or AQS\_JMS\_OBJECT\_MESSAGE A client can change an existing durable subscription by creating a durable TopicSubscriber with the same name and message selector.

**Specified By**

`javax.jms.TopicSession.createDurableSubscriber(javax.jms.Topic, java.lang.String)` in interface `javax.jms.TopicSession`

**Parameters**

[topic](#) - the topic to subscribe to

[name](#) - the name used to identify this subscription.

**Throws**

[JMSEException](#) - if a session fails to create a subscriber due to some JMS error.

[InvalidDestinationException](#) - if invalid Topic specified.

**createDurableSubscriber(Topic, String, CustomDatumFactory)**

```
public synchronized javax.jms.TopicSubscriber
createDurableSubscriber(javax.jms.Topic topic, java.lang.String subs_name,
oracle.sql.CustomDatumFactory payload_factory)
```

Create a durable Subscriber to the specified topic. This method is used to create browsers for queues that contain Oracle ADT payloads (instead of the standard JMS defined payloads) A client can change an existing durable subscription by creating a durable `TopicSubscriber` with the same name and message selector.

**Parameters**

[topic](#) - the topic to subscribe to

[name](#) - the name used to identify this subscription.

[payload\\_factory](#) - `CustomDatumFactory` for the java class that maps to the Oracle ADT

**Throws**

[JMSEException](#) - if a session fails to create a subscriber due to some JMS error.

[InvalidDestinationException](#) - if invalid Topic specified.

**createDurableSubscriber(Topic, String, String, boolean)**

```
public synchronized javax.jms.TopicSubscriber
createDurableSubscriber(javax.jms.Topic topic, java.lang.String subs_name,
java.lang.String messageSelector, boolean noLocal)
```

Create a durable Subscriber to the specified topic. This method can be used to create subscribers for queues that contain payloads of type `AQ$JMS_TEXT_MESSAGE`, `AQ$JMS_STREAM_MESSAGE`, `AQ$JMS_BYTES_MESSAGE`, `AQ$JMS_MAP_MESSAGE` or `AQ$JMS_OBJECT_MESSAGE`. A client can change an existing durable subscription by creating a durable `TopicSubscriber` with the same name and message selector.

### Specified By

`javax.jms.TopicSession.createDurableSubscriber(javax.jms.Topic, java.lang.String, java.lang.String, boolean)` in interface `javax.jms.TopicSession`

### Parameters

[topic](#) - the topic to subscribe to

[name](#) - the name used to identify this subscription.

[messageSelector](#) - only messages with properties matching the message selector expression are delivered. This value may be null.

[noLocal](#) - - must be set to false. `noLocal=true` not supported. The selector can contain any SQL92 expression which has a combination of one or more of the following:

- a. JMS Message header fields or properties: `JMSPriority` (int), `JMSCorrelationID` (string), `JMSType` (string), `JMSXUserID` (string), `JMSXAppID` (string), `JMSXGroupID` (string), `JMSXGroupSeq` (int) &nbsp; &nbsp; eg:- `JMSPriority < 3 AND JMSCorrelationID = 'Fiction'`
- b. User defined message properties &nbsp; &nbsp; eg: - `color IN ('RED', 'BLUE', 'GREEN') AND price < 30000`

&nbsp; &nbsp; Operators allowed are: -- logical operators in precedence order NOT, AND, OR -- comparison operators =, >, >=, <, <=, <>, ! &nbsp; &nbsp; &nbsp; (both <> and ! can be used for not equal) -- arithmetic operators in precedence order +, - unary, \*, /, +, - -- identifier [NOT] IN (string-literal1, string-literal2, ...) -- arithmetic-expr1 [NOT] BETWEEN arithmetic-expr2 and arithmetic-expr3 -- identifier [NOT] LIKE pattern-value [ESCAPE escape-character] &nbsp; &nbsp; &nbsp; &nbsp; pattern-value is a string literal where % refers &nbsp; &nbsp; &nbsp; to any sequence of characters and \_ refers to any single character. &nbsp; &nbsp; &nbsp; &nbsp; The optional escape-character is used to escape the special meaning of the '-' and '%' &nbsp; &nbsp; &nbsp; in pattern-value -- identifier IS [NOT] NULL

### Throws

[JMSEException](#) - if a session fails to create a subscriber due to some JMS error.

[InvalidDestinationException](#) - if invalid Topic specified.

[InvalidSelectorException](#) - if the message selector is invalid.

## **createDurableSubscriber(Topic, String, String, boolean, CustomDatumFactory)**

```
public synchronized javax.jms.TopicSubscriber  
createDurableSubscriber(javax.jms.Topic topic, java.lang.String subs_name,  
java.lang.String messageSelector, boolean noLocal, oracle.sql.CustomDatumFactory  
payload_factory)
```

Create a durable Subscriber to the specified topic. This method is used to create browsers for queues that contain Oracle ADT payloads (instead of the standard JMS defined payloads) A client can change an existing durable subscription by creating a durable TopicSubscriber with the same name and message selector.

### **Parameters**

[topic](#) - the topic to subscribe to

[name](#) - the name used to identify this subscription.

[messageSelector](#) - only messages with attributes matching the message selector expression are delivered. This value may be null.

[noLocal](#) - - must be set to false. nolocal=true not supported

[payload\\_factory](#) - CustomDatumFactory for the java class that maps to the Oracle ADT ADT messages do not contain any user defined properties. However, the selector can be used to select messages based on priority or correlation id or attribute values of the message payload The syntax for the selector for queues containing ADT messages is different from the syntax for selectors on queues containing standard JMS payloads (text, stream, object, bytes, map) The selector is similar to the AQ rules syntax a. Selector on priority or correlation is specified as follows &nbsp;   eg:- priority < 3 AND corr\_id = 'Fiction' b. Selector on message payload is specified as follows. The attribute name must be prefixed with tab.user\_data. &nbsp;   eg:- tab.user\_data.color = 'GREEN' AND tab.user\_data.price < 30000

### **Throws**

[JMSEException](#) - if a session fails to create a subscriber due to some JMS error.

[InvalidDestinationException](#) - if invalid Topic specified.

## **createMapMessage()**

```
public synchronized javax.jms.MapMessage createMapMessage()
```

Create a `MapMessage`. A `MapMessage` is used to send a self-defining set of name-value pairs where names are `Strings` and values are Java primitive types.

**Specified By**

`javax.jms.Session.createMapMessage()` in interface `javax.jms.Session`

**Throws**

[JMSEException](#) - if some error occurs during message creation

**createObjectMessage()**

```
public synchronized javax.jms.ObjectMessage createObjectMessage()
```

Create an `ObjectMessage`. An `ObjectMessage` is used to send a message that containing a serializable Java object.

**Specified By**

`javax.jms.Session.createObjectMessage()` in interface `javax.jms.Session`

**Throws**

[JMSEException](#) - if some error occurs during message creation

**createObjectMessage(Serializable)**

```
public synchronized javax.jms.ObjectMessage  
createObjectMessage(java.io.Serializable object)
```

Create an initialized `ObjectMessage`. An `ObjectMessage` is used to send a message that containing a serializable Java object.

**Specified By**

`javax.jms.Session.createObjectMessage(java.io.Serializable)` in interface `javax.jms.Session`

**Parameters**

[object](#) - the object to use to initialize this message.

**Throws**

[JMSEException](#) - if some error occurs during message creation

## createPublisher(Topic)

```
public synchronized javax.jms.TopicPublisher createPublisher(javax.jms.Topic topic)
```

Create a Publisher for the specified topic. A client uses a TopicPublisher for publishing messages on a topic.

### Specified By

javax.jms.TopicSession.createPublisher(javax.jms.Topic) in interface javax.jms.TopicSession

### Parameters

[topic](#) - the topic to publish to, or null if this is an unidentified producer.

### Throws

[JMSEException](#) - if a session fails to create a publisher due to some JMS error.

[InvalidDestinationException](#) - if invalid Topic specified.

## createQueue(AQQueueTable, String, AQjmsDestinationProperty)

```
public synchronized javax.jms.Queue createQueue(oracle.jms.AQQueueTable q_table, java.lang.String queue_name, AQjmsDestinationProperty dest_property)
```

Create a queue.

### Parameters

[q\\_table](#) - Queue-Table in which the queue is to be created. The queue-table must not be multiconsumer enabled

[queue\\_name](#) - name of the queue to be created

[dest\\_property](#) - Queue properties.

### Throws

[JMSEException](#) - if the queue could not be created

### See Also

[AQjmsDestinationProperty](#)

## createQueueTable(String, String, AQQueueTableProperty)

```
public synchronized oracle.jms.AQQueueTable createQueueTable(java.lang.String
```

---

owner, java.lang.String name, oracle.jms.AQQueueTableProperty property)  
Create a Queue Table. A QueueTable holds both queues or topics

### Parameters

[owner](#) - the queue table owner (schema)

[name](#) - queue table name

[property](#) - queue table properties. If the queuetable will be used to hold queues, then the queuetable must not be multiconsumer enabled (default). If the queue table will be used to hold topics the queuetable must be multiconsumer enabled

### Throws

[JMSEException](#) - if the QueueTable cannot be created

### See Also

[oracle.AQ.AQQueueTableProperty](#), [oracle.AQ.AQQueueTableProperty](#)

## createReceiver(Queue)

```
public synchronized javax.jms.QueueReceiver createReceiver(javax.jms.Queue  
queue)
```

Create a QueueReceiver to receive messages from the specified queue. This method can be used to create receivers for queues that contain payloads of type AQ\$JMS\_TEXT\_MESSAGE, AQ\$JMS\_STREAM\_MESSAGE, AQ\$JMS\_BYTES\_MESSAGE, AQ\$JMS\_MAP\_MESSAGE or AQ\$JMS\_OBJECT\_MESSAGE

### Specified By

javax.jms.QueueSession.createReceiver(javax.jms.Queue) in interface  
javax.jms.QueueSession

### Parameters

[queue](#) - the queue to access

### Throws

[JMSEException](#) - if a session fails to create a receiver due to some JMS error.

[InvalidDestinationException](#) - if invalid Queue specified.

## createReceiver(Queue, CustomDatumFactory)

```
public synchronized javax.jms.QueueReceiver createReceiver(javax.jms.Queue
queue, oracle.sql.CustomDatumFactory payload_factory)
```

Create a `QueueReceiver` to receive messages from the specified queue containing ADT messages. This method is used to create receivers for queues that contain Oracle ADT payloads (instead of the standard JMS defined payloads)

### Parameters

[queue](#) - the queue to access

[payload\\_factory](#) - `CustomDatumFactory` for the java class that maps to the Oracle ADT

### Throws

[JMSEException](#) - if a session fails to create a receiver due to some JMS error.

[InvalidDestinationException](#) - if invalid Queue specified.

## createReceiver(Queue, String)

```
public synchronized javax.jms.QueueReceiver createReceiver(javax.jms.Queue
queue, java.lang.String messageSelector)
```

Create a `QueueReceiver` to receive messages from the specified queue. This method can be used to create receivers for queues that contain payloads of type `AQ$_JMS_TEXT_MESSAGE`, `AQ$_JMS_STREAM_MESSAGE`, `AQ$_JMS_BYTES_MESSAGE`, `AQ$_JMS_MAP_MESSAGE` or `AQ$_JMS_OBJECT_MESSAGE`

### Specified By

`javax.jms.QueueSession.createReceiver(javax.jms.Queue, java.lang.String)` in interface `javax.jms.QueueSession`

### Parameters

[queue](#) - the queue to access

[messageSelector](#) - only messages with properties matching the message selector expression are delivered The selector for the `QueueReceiver` can be one of the following: a. `JMSMessageID = 'ID:2345234523452345'` to retrieve messages that have the specified message ID. All message IDs must be prefixed with "ID:" b. `JMSCorrelationID = 'RUSH'` to retrieve messages that have a certain correlationID

## Throws

[JMSEException](#) - if a session fails to create a receiver due to some JMS error.

[InvalidDestinationException](#) - if invalid Queue specified.

[InvalidSelectorException](#) - if the message selector is invalid.

## createReceiver(Queue, String, CustomDatumFactory)

```
public synchronized javax.jms.QueueReceiver createReceiver(javax.jms.Queue
queue, java.lang.String messageSelector, oracle.sql.CustomDatumFactory payload_
factory)
```

Create a QueueReceiver to receive messages from the specified queue containing ADT messages. This method is used to create receivers for queues that contain Oracle ADT payloads (instead of the standard JMS defined payloads)

## Parameters

[queue](#) - the queue to access

[messageSelector](#) - only messages with properties matching the message selector expression are delivered

[payload\\_factory](#) - CustomDatumFactory for the java class that maps to the Oracle ADT The selector for the QueueReceiver can be one of the following: a. JMSMessageID = 'ID:2345234523452345' to retrieve messages that have the specified message ID. &nbsp; &nbsp; &nbsp; All message IDs must be prefixed with "ID:" b. JMSCorrelationID = 'RUSH' to retrieve messages that have a certain correlationID

## Throws

[JMSEException](#) - if a session fails to create a receiver due to some JMS error.

[InvalidDestinationException](#) - if invalid Queue specified.

[InvalidSelectorException](#) - if the message selector is invalid.

## createRemoteSubscriber(Topic, AQjmsAgent, String)

```
public synchronized void createRemoteSubscriber(javax.jms.Topic topic,
AQjmsAgent remote_subscriber, java.lang.String messageSelector)
```

Create a remote subscriber for a topic. This method can be used to remote subscribers for queues that contain payloads of type AQ\$\_JMS\_TEXT\_MESSAGE, AQ\$\_JMS\_STREAM\_MESSAGE, AQ\$\_JMS\_BYTES\_MESSAGE, AQ\$\_JMS\_MAP\_MESSAGE or AQ\$\_JMS\_OBJECT\_MESSAGE AQ allows topics to have remote subscribers, ie subscribers at other topics in the same or different database. In order

to use remote subscribers, you must set up propagation between the two local and remote topic

### Parameters

[topic](#) - the topic to subscribe to

[remote\\_subscriber](#) - AQjmsAgent that refers to the remote subscriber

[messageSelector](#) - only messages with properties matching the message selector expression are delivered. This value may be null. The selector syntax is the same as that for createDurableSubscriber Remote subscribers may be a specific consumer at the remote topic or all subscribers at the remote topic A remote subscriber is defined using the AQjmsAgent structure. An AQjmsAgent consists of a name and address. The name refers to the consumer\_name at the remote topic. The address refers to the remote topic - the syntax is (schema).(topic\_name)[@dblink] 1. To publish messages to a particular consumer at the remote topic, the subscription\_name of the recipient at the remote topic must be specified in the name field of AQjmsAgent. The remote topic must be specified in the address field of AQjmsAgent 2. To publish messages to all subscribers of the remote topic, the name field of AQjmsAgent must be set to null. The remote topic must be specified in the address field of AQjmsAgent

### **createRemoteSubscriber(Topic, AQjmsAgent, String, CustomDatumFactory)**

```
public synchronized void createRemoteSubscriber(javax.jms.Topic topic,
AQjmsAgent remote_subscriber, java.lang.String messageSelector,
oracle.sql.CustomDatumFactory payload_factory)
```

Create a remote subscriber for a topic. This method is used to create browsers for queues that contain Oracle ADT payloads (instead of the standard JMS defined payloads) AQ allows topics to have remote subscribers, ie subscribers at other topics in the same or different database. In order to use remote subscribers, you must set up propagation between the two local and remote topic

### Parameters

[topic](#) - the topic to subscribe to

[remote\\_subscriber](#) - AQjmsAgent that refers to the remote subscriber

[messageSelector](#) - only messages with properties matching the message selector expression are delivered. This value may be null. The selector syntax is the same as that for createDurableSubscriber for topics with ADT messages

[payload\\_factory](#) - CustomDatumFactory for the java class that maps to the Oracle ADT Remote subscribers may be a specific consumer at the remote topic or

all subscribers at the remote topic A remote subscriber is defined using the AQjmsAgent structure. An AQjmsAgent consists of a name and address. The name refers to the consumer\_name at the remote topic. The address refers to the remote topic - the syntax is (schema).(topic\_name)[@dblink] 1. To publish messages to a particular consumer at the remote topic, the subscription\_name of the recipient at the remote topic must be specified in the name field of AQjmsAgent. The remote topic must be specified in the address field of AQjmsAgent 2. To publish messages to all subscribers of the remote topic, the name field of AQjmsAgent must be set to null. The remote topic must be specified in the address field of AQjmsAgent

### createSender(Queue)

```
public synchronized javax.jms.QueueSender createSender(javax.jms.Queue queue)
```

Create a QueueSender to send messages to the specified queue.

#### Specified By

javax.jms.QueueSession.createSender(javax.jms.Queue) in interface javax.jms.QueueSession

#### Parameters

[queue](#) - the queue to access, or null if this is an unidentified producer.

#### Throws

[JMSEException](#) - if a session fails to create a sender due to some JMS error.

[InvalidDestinationException](#) - if invalid Queue specified.

### createStreamMessage()

```
public synchronized javax.jms.StreamMessage createStreamMessage()
```

Create a StreamMessage. A StreamMessage is used to send a self-defining stream of Java primitives.

#### Specified By

javax.jms.Session.createStreamMessage() in interface javax.jms.Session

#### Throws

[JMSEException](#) - if some error occurs during message creation

**createSubscriber(Topic)**

```
public synchronized javax.jms.TopicSubscriber createSubscriber(javax.jms.Topic
topic)
```

Create a non-durable Subscriber to the specified topic. This method is not supported in the current release

**Specified By**

`javax.jms.TopicSession.createSubscriber(javax.jms.Topic)` in interface `javax.jms.TopicSession`

**Throws**

[JMSEException](#) - NOT\_SUPPORTED

**createSubscriber(Topic, String, boolean)**

```
public synchronized javax.jms.TopicSubscriber createSubscriber(javax.jms.Topic
topic, java.lang.String messageSelector, boolean noLocal)
```

Create a non-durable Subscriber to the specified topic. This method is not supported in the current release

**Specified By**

`javax.jms.TopicSession.createSubscriber(javax.jms.Topic, java.lang.String, boolean)` in interface `javax.jms.TopicSession`

**Throws**

[JMSEException](#) - NOT\_SUPPORTED

**createTextMessage()**

```
public synchronized javax.jms.TextMessage createTextMessage()
```

Create a `TextMessage`. A `TextMessage` is used to send a message containing a `StringBuffer`.

**Specified By**

`javax.jms.Session.createTextMessage()` in interface `javax.jms.Session`

**Throws**

[JMSEException](#) - if some error occurs during message creation

## createTextMessage(StringBuffer)

```
public synchronized javax.jms.TextMessage  
createTextMessage(java.lang.StringBuffer stringBuffer)  
Create an initialized TextMessage. A TextMessage is used to send a message  
containing a StringBuffer.
```

### Specified By

javax.jms.Session.createTextMessage(java.lang.StringBuffer) in interface  
javax.jms.Session

### Parameters

[stringBuffer](#) - the string buffer used to initialize this message.

### Throws

[JMSEException](#) - if some error occurs during message creation

## createTopic(AQQueueTable, String, AQjmsDestinationProperty)

```
public synchronized javax.jms.Topic createTopic(oracle.jms.AQQueueTable q_table,  
java.lang.String topic_name, AQjmsDestinationProperty dest_property)  
Create a topic
```

### Parameters

[q\\_table](#) - Queue-Table in which the topic is to be created. The queue-table must  
be multiconsumer enabled

[topic\\_name](#) - name of the topic to be created

[dest\\_property](#) - Topic properties.

### Throws

[JMSEException](#) - if the topic could not be created

### See Also

[AQjmsDestinationProperty](#)

## createTopicReceiver(Topic, String, String)

```
public synchronized TopicReceiver createTopicReceiver(javax.jms.Topic topic,  
java.lang.String receiver_name, java.lang.String messageSelector)
```

Create a `TopicReceiver` to receive messages from the specified topic. AQ allows messages to be sent to all subscribers of a topic or to specified recipients. These receivers may or may not be subscribers of the topic. If the receiver is not a subscriber to the topic, it will receive only those messages that are explicitly This method must be used in order to create a `TopicReceiver` object for consumers that are not durable subscribers of the topic

### Parameters

[topic](#) - the topic to access

### Throws

[JMSEException](#) - if a session fails to create a receiver due to some JMS error.

[InvalidDestinationException](#) - if invalid Topic specified.

[InvalidSelectorException](#) - if the message selector is invalid.

### `createTopicReceiver(Topic, String, String, CustomDatumFactory)`

```
public synchronized TopicReceiver createTopicReceiver(javax.jms.Topic topic,  
java.lang.String receiver_name, java.lang.String messageSelector,  
oracle.sql.CustomDatumFactory payload_factory)
```

### `getDBConnection()`

```
public synchronized java.sql.Connection getDBConnection()
```

### `getJmsConnection()`

```
public AQjmsConnection getJmsConnection()
```

### `getMessageListener()`

```
public synchronized javax.jms.MessageListener getMessageListener()  
Return the session's distinguished message listener.
```

### Specified By

`javax.jms.Session.getMessageListener()` in interface `javax.jms.Session`

### Returns

the message listener associated with this session.

### Throws

[JMSEException](#) - if JMS fails to get the message listener due to an internal error in JMS Provider.

### getQueue(String, String)

```
public synchronized javax.jms.Queue getQueue(java.lang.String owner,  
java.lang.String name)
```

Get an existing queue. The Queue is returned only if the user has created the queue or as enqueue/dequeue privileges on the specified queue

### Parameters

[owner](#) - queue owner (schema)

[name](#) - queue name

### Throws

[JMSEException](#) - if the queue could not be returned due to some error

### getQueueTable(String, String)

```
public synchronized oracle.jms.AQQueueTable getQueueTable(java.lang.String  
owner, java.lang.String name)
```

Get a handle to an existing queue-table If owner of queue-table is not the same as the user which opened the connection, the caller must have AQ enqueue/dequeue privileges on queues/topics in the queue table. Otherwise the queue-table will not be returned

### Parameters

[owner](#) - the owner (schema) of the queue-table

[name](#) - queue-table name

### Throws

[JMSEException](#) - if the queue table does not exist or if the user does not have privileges on any queue/topic in the queue-table

### getTopic(String, String)

```
public synchronized javax.jms.Topic getTopic(java.lang.String owner,  
java.lang.String name)
```

Get an existing topic. The Topic is returned only if the user has created the topic or as enqueue/dequeue privileges on the specified topic

### Parameters

[owner](#) - topic owner (schema)

[name](#) - topic name

### Throws

[JMSEException](#) - if the topic could not be returned due to some error

## getTransacted()

```
public synchronized boolean getTransacted()  
Checks if the session in transacted mode?
```

### Specified By

javax.jms.Session.getTransacted() in interface javax.jms.Session

### Returns

true if in transacted mode

### Throws

[JMSEException](#) - if session is closed

## grantSystemPrivilege(String, String, boolean)

```
public void grantSystemPrivilege(java.lang.String privilege, java.lang.String  
grantee, boolean admin_option)  
Grant AQ system privileges to users/roles. Initially only SYS and SYSTEM can use  
this procedure successfully
```

### Parameters

[privilege](#) - options are ENQUEUE\_ANY, DEQUEUE\_ANY and MANAGE\_ANY  
&nbsp; &nbsp; ENQUEUE\_ANY - users with this privilege are allowed to enqueue  
messages to any queue/topic in the database &nbsp; &nbsp; DEQUEUE\_ANY -  
users with this privilege are allowed to dequeue messages from any queue/topic in  
the database &nbsp; &nbsp; MANAGE\_ANY - users with this privilege are allowed  
to access and make admin calls on any queue/topic in the database

[grantee](#) - specifies the grantee. The grantee can be a user, role or the PUBLIC role

---

[admin\\_option](#) - if this is set to true, the grantee is allowed to use this procedure to grant the system privilege to other users or roles

### Throws

[JMSEException](#) - if the system privilege could not be granted.

## revokeSystemPrivilege(String, String)

```
public void revokeSystemPrivilege(java.lang.String privilege, java.lang.String grantee)
```

Revoke AQ system privilege from user/roles

### Parameters

[privilege](#) - options are ENQUEUE\_ANY, DEQUEUE\_ANY and MANAGE\_ANY

[grantee](#) - specifies the grantee. The grantee can be a user, role or the PUBLIC role

### Throws

[JMSEException](#) - if the system privilege could not be revoked

## rollback()

```
public synchronized void rollback()
```

Rollback any messages done in this transaction and releases any locks currently held.

### Specified By

`javax.jms.Session.rollback()` in interface `javax.jms.Session`

### Throws

[JMSEException](#) - if JMS implementation fails to rollback the the transaction due to some internal error.

## run()

```
public void run()
```

### Specified By

`java.lang.Runnable.run()` in interface `java.lang.Runnable`

## setMessageListener(MessageListener)

```
public synchronized void setMessageListener(javax.jms.MessageListener listener)
```

Set the session's distinguished message listener. When it is set no other form of message receipt in the session can be used; however, all forms of sending messages are still supported.

### Specified By

`javax.jms.Session.setMessageListener(javax.jms.MessageListener)` in interface `javax.jms.Session`

### Parameters

[listener](#) - the message listener to associate with this session.

### Throws

[JMSEException](#) - if JMS fails to set the message listener due to an internal error in JMS Provider.

## unsubscribe(Topic, AQjmsAgent)

```
public synchronized void unsubscribe(javax.jms.Topic topic, AQjmsAgent remote_subscriber)
```

Unsubscribe a remote durable subscription that has been created by a client on the specified topic

### Parameters

[topic](#) - the topic subscribed to

[remote\\_subscriber](#) - AQjmsAgent that refers to the remote subscriber. the address field of the AQjmsAgent cannot be null

### Throws

[JMSEException](#) - if JMS fails to unsubscribe to durable subscription due to some JMS error.

[InvalidDestinationException](#) - if invalid Topic specified.

## unsubscribe(Topic, String)

```
public synchronized void unsubscribe(javax.jms.Topic topic, java.lang.String subs_name)
```

Unsubscribe a durable subscription that has been created by a client on the specified topic

**Parameters**

[topic](#) - the topic subscribed to

[subs\\_name](#) - the name used to identify this subscription.

**Throws**

[JMSException](#) - if JMS fails to unsubscribe to durable subscription due to some JMS error.

[InvalidDestinationException](#) - if invalid Topic specified.

## oracle.jms AQjmsStreamMessage

### Syntax

public class AQjmsStreamMessage extends [AQjmsMessage](#) implements [javax.jms.StreamMessage](#)

```
java.lang.Object
|
+--AQjmsMessage
   |
   +--oracle.jms.AQjmsStreamMessage
```

### All Implemented Interfaces

[javax.jms.Message](#), [javax.jms.StreamMessage](#)

### Description

This class implements the StreamMessage interface. A StreamMessage is used to send a stream of java primitives

---

## Member Summary

---

### Methods

<a href="#">clearBody()</a>	Clear out the message body.
<a href="#">clearProperties()</a>	
<a href="#">readBoolean()</a>	Reads a boolean from the stream message
<a href="#">readByte()</a>	Reads a signed 8-bit value from the stream message
<a href="#">readBytes(byte[])</a>	Read a byte array from the stream message
<a href="#">readChar()</a>	Read a Unicode character value from the stream message
<a href="#">readDouble()</a>	Read a double from the stream message
<a href="#">readFloat()</a>	Read a float from the stream message
<a href="#">readInt()</a>	Read a signed 32 bit integer from the stream message
<a href="#">readLong()</a>	Read a signed 64 bit integer from the stream message

---

**Member Summary**

---

<a href="#">readObject()</a>	Read a Java object from the stream message.
<a href="#">readShort()</a>	Reads a signed 16-bit value from the stream message
<a href="#">readString()</a>	Read a string from the stream message
<a href="#">reset()</a>	Put the message in read-only mode, and reposition the stream of bytes to the beginning.
<a href="#">writeBoolean(boolean)</a>	Write a boolean to the stream message as a 1-byte value.
<a href="#">writeByte(byte)</a>	Write out a byte to the stream message as a 1-byte value.
<a href="#">writeBytes(byte[])</a>	Write a byte array to the stream message
<a href="#">writeBytes(byte[], int, int)</a>	Write a portion of byte array to the stream message
<a href="#">writeChar(char)</a>	Write a char to the stream as a 2-byte, high byte first
<a href="#">writeDouble(double)</a>	Write a double to the stream as a 8-byte, high byte first
<a href="#">writeFloat(float)</a>	Write a float to the stream as a 4-byte, high byte first
<a href="#">writeInt(int)</a>	Write a int to the stream as a 4-byte, high byte first
<a href="#">writeLong(long)</a>	Write a int to the stream as a 4-byte, high byte first
<a href="#">writeObject(Object)</a>	Write a java object to the stream message
<a href="#">writeShort(short)</a>	Write a short to the stream as a 2-byte, high byte first
<a href="#">writeString(String)</a>	Writes a string to the underlying output stream

---

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**Inherited Member Summary**

---

Fields inherited from interface [javax.jms.Message](#)

DEFAULT\_DELIVERY\_MODE, DEFAULT\_PRIORITY, DEFAULT\_TIME\_TO\_LIVE

Methods inherited from class [AQjmsMessage](#)

---

**Inherited Member Summary**

---

[getBooleanProperty\(String\)](#), [getBytesProperty\(String\)](#), [getDoubleProperty\(String\)](#), [getFloatProperty\(String\)](#), [getIntProperty\(String\)](#), [getJMSCorrelationID\(\)](#), [getJMSCorrelationIDAsBytes\(\)](#), [getJMSDeliveryMode\(\)](#), [getJMSDestination\(\)](#), [getJMSExpiration\(\)](#), [getJMSMessageID\(\)](#), [getJMSMessageIDAsBytes\(\)](#), [getJMSPriority\(\)](#), [getJMSRedelivered\(\)](#), [getJMSReplyTo\(\)](#), [getJMSTimestamp\(\)](#), [getJMSType\(\)](#), [getLongProperty\(String\)](#), [getObjectProperty\(String\)](#), [getPropertyNames\(\)](#), [getSenderID\(\)](#), [getShortProperty\(String\)](#), [getStringProperty\(String\)](#), [propertyExists\(String\)](#), [setBooleanProperty\(String, boolean\)](#), [setBytesProperty\(String, byte\)](#), [setDoubleProperty\(String, double\)](#), [setFloatProperty\(String, float\)](#), [setIntProperty\(String, int\)](#), [setJMSCorrelationID\(String\)](#), [setJMSCorrelationIDAsBytes\(byte\[\]\)](#), [setJMSDestination\(Destination\)](#), [setJMSExpiration\(long\)](#), [setJMSMessageID\(String\)](#), [setJMSPriority\(int\)](#), [setJMSRedelivered\(boolean\)](#), [setJMSReplyTo\(Destination\)](#), [setJMSTimestamp\(long\)](#), [setJMSType\(String\)](#), [setLongProperty\(String, long\)](#), [setObjectProperty\(String, Object\)](#), [setSenderID\(AQjmsAgent\)](#), [setShortProperty\(String, short\)](#), [setStringProperty\(String, String\)](#)

**Methods inherited from class java.lang.Object**

[clone\(\)](#), [equals\(Object\)](#), [finalize\(\)](#), [getClass\(\)](#), [hashCode\(\)](#), [notify\(\)](#), [notifyAll\(\)](#), [toString\(\)](#), [wait\(\)](#), [wait\(long\)](#), [wait\(Timeout\)](#)

**Methods inherited from interface javax.jms.Message**

[getBooleanProperty\(String\)](#), [getBytesProperty\(String\)](#), [getDoubleProperty\(String\)](#), [getFloatProperty\(String\)](#), [getIntProperty\(String\)](#), [getJMSCorrelationID\(\)](#), [getJMSCorrelationIDAsBytes\(\)](#), [getJMSDeliveryMode\(\)](#), [getJMSDestination\(\)](#), [getJMSExpiration\(\)](#), [getJMSMessageID\(\)](#), [getJMSPriority\(\)](#), [getJMSRedelivered\(\)](#), [getJMSReplyTo\(\)](#), [getJMSTimestamp\(\)](#), [getJMSType\(\)](#), [getLongProperty\(String\)](#), [getObjectProperty\(String\)](#), [getPropertyNames\(\)](#), [getShortProperty\(String\)](#), [getStringProperty\(String\)](#), [propertyExists\(String\)](#), [setBooleanProperty\(String, boolean\)](#), [setBytesProperty\(String, byte\)](#), [setDoubleProperty\(String, double\)](#), [setFloatProperty\(String, float\)](#), [setIntProperty\(String, int\)](#), [setJMSCorrelationID\(String\)](#), [setJMSCorrelationIDAsBytes\(byte\[\]\)](#), [setJMSDeliveryMode\(DeliveryMode\)](#), [setJMSDestination\(Destination\)](#), [setJMSExpiration\(long\)](#), [setJMSMessageID\(String\)](#), [setJMSPriority\(int\)](#), [setJMSRedelivered\(boolean\)](#), [setJMSReplyTo\(Destination\)](#), [setJMSTimestamp\(long\)](#), [setJMSType\(String\)](#), [setLongProperty\(String, long\)](#), [setObjectProperty\(String, Object\)](#), [setShortProperty\(String, short\)](#), [setStringProperty\(String, String\)](#)

---

**Methods****clearBody()**

```
public void clearBody()
```

Clear out the message body. All other parts of the message are left untouched.

**Specified By**

[clearBody\(\)](#) in interface [javax.jms.Message](#)

**Overrides**

[clearBody\(\)](#) in class [AQjmsMessage](#)

**Throws**

[JMSException](#) - if JMS fails to due to some internal JMS error.

## clearProperties()

```
public void clearProperties()
```

### Specified By

`clearProperties()` in interface `javax.jms.Message`

### Overrides

`clearProperties()` in class [AQjmsMessage](#)

## readBoolean()

```
public boolean readBoolean()
```

Reads a boolean from the stream message

### Specified By

`readBoolean()` in interface `javax.jms.StreamMessage`

### Throws

[MessageNotReadableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageEOFException](#) - if end of message stream

## readByte()

```
public byte readByte()
```

Reads a signed 8-bit value from the stream message

### Specified By

`readByte()` in interface `javax.jms.StreamMessage`

### Returns

the next byte from the stream message as a signed 8-bit byte

### Throws

[MessageNotReadableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageEOFException](#) - if end of message stream

## readBytes(byte[])

```
public int readBytes(byte[] value)
Read a byte array from the stream message
```

### Specified By

`javax.jms.StreamMessage.readBytes(byte[])` in interface `javax.jms.StreamMessage`

### Parameters

[value](#) - the buffer into which the data is read

### Throws

[MessageNotReadableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageEOFException](#) - if end of message stream

## readChar()

```
public char readChar()
Read a Unicode character value from the stream message
```

### Specified By

`javax.jms.StreamMessage.readChar()` in interface `javax.jms.StreamMessage`

### Returns

the next two bytes from the stream message as a Unicode character.

### Throws

[MessageNotReadableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageEOFException](#) - if end of message stream

## readDouble()

```
public double readDouble()
Read a double from the stream message
```

**Specified By**

`javax.jms.StreamMessage.readDouble()` in interface `javax.jms.StreamMessage`

**Returns**

the next eight bytes from the stream message, interpreted as a double.

**Throws**

[MessageNotReadableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageEOFException](#) - if end of message stream

**readFloat()**

```
public float readFloat()  
Read a float from the stream message
```

**Specified By**

`javax.jms.StreamMessage.readFloat()` in interface `javax.jms.StreamMessage`

**Returns**

the next four bytes from the stream message, interpreted as a float.

**Throws**

[MessageNotReadableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageEOFException](#) - if end of message stream

**readInt()**

```
public int readInt()  
Read a signed 32 bit integer from the stream message
```

**Specified By**

`javax.jms.StreamMessage.readInt()` in interface `javax.jms.StreamMessage`

**Returns**

the next four bytes from the stream message, interpreted as a int.

**Throws**

[MessageNotReadableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageEOFException](#) - if end of message stream

**readLong()**

```
public long readLong()
```

Read a signed 64 bit integer from the stream message

**Specified By**

`javax.jms.StreamMessage.readLong()` in interface `javax.jms.StreamMessage`

**Returns**

the next eight bytes from the stream message, interpreted as a long.

**Throws**

[MessageNotReadableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageEOFException](#) - if end of message stream

**readObject()**

```
public java.lang.Object readObject()
```

Read a Java object from the stream message.

Note that this method can be used to return in objectified format, an object that had been written to the Stream with the equivalent [writeObject](#) method call, or it's equivalent primitive write method.

**Specified By**

`javax.jms.StreamMessage.readObject()` in interface `javax.jms.StreamMessage`

**Returns**

a Java object from the stream message, in objectified format (ie. if it set as an int, then a Integer is returned).

**Throws**

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageEOFException](#) - if an end of message stream

[MessageNotReadableException](#) - if message in write-only mode.

**readShort()**

```
public short readShort()
```

Reads a signed 16-bit value from the stream message

**Specified By**

`javax.jms.StreamMessage.readShort()` in interface `javax.jms.StreamMessage`

**Returns**

the next two bytes from the stream message, interpreted as a 16-bit number

**Throws**

[MessageNotReadableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageEOFException](#) - if end of message stream

**readString()**

```
public java.lang.String readString()
```

Read a string from the stream message

**Specified By**

`javax.jms.StreamMessage.readString()` in interface `javax.jms.StreamMessage`

**Returns**

string from the stream message

**Throws**

[MessageNotReadableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

[MessageEOFException](#) - if end of message stream

**reset()**

```
public void reset()
```

Put the message in read-only mode, and reposition the stream of bytes to the beginning.

**Specified By**

`javax.jms.StreamMessage.reset()` in interface `javax.jms.StreamMessage`

**Throws**

[MessageNotWriteableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**writeBoolean(boolean)**

```
public void writeBoolean(boolean value)
```

Write a boolean to the stream message as a 1-byte value. The value true is written out as the value (byte)1; the value false is written out as the value (byte)0.

**Specified By**

`javax.jms.StreamMessage.writeBoolean(boolean)` in interface `javax.jms.StreamMessage`

**Parameters**

[value](#) - the boolean value to be written

**Throws**

[MessageNotWritableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**writeByte(byte)**

```
public void writeByte(byte value)
```

Write out a byte to the stream message as a 1-byte value.

**Specified By**

`javax.jms.StreamMessage.writeByte(byte)` in interface `javax.jms.StreamMessage`

**Parameters**

[value](#) - the byte value to be written

**Throws**

[MessageNotWritableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**writeBytes(byte[])**

```
public void writeBytes(byte[] value)
```

Write a byte array to the stream message

**Specified By**

`javax.jms.StreamMessage.writeBytes(byte[])` in interface `javax.jms.StreamMessage`

**Parameters**

[value](#) - The byte array to be written

**Throws**

[MessageNotWritableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**writeBytes(byte[], int, int)**

```
public void writeBytes(byte[] value, int offset, int length)
```

Write a portion of byte array to the stream message

**Specified By**

`javax.jms.StreamMessage.writeBytes(byte[], int, int)` in interface `javax.jms.StreamMessage`

**Parameters**

[value](#) - the byte array to be written

[offset](#) - the initial offset within the byte array

[length](#) - the number of bytes to use

**Throws**

[MessageNotWritableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**writeChar(char)**

```
public void writeChar(char value)
```

Write a char to the stream as a 2-byte, high byte first

**Specified By**

javax.jms.StreamMessage.writeChar(char) in interface javax.jms.StreamMessage

**Parameters**

[value](#) - the char to be written

**Throws**

[MessageNotWritableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**writeDouble(double)**

```
public void writeDouble(double value)
```

Write a double to the stream as a 8-byte, high byte first

**Specified By**

javax.jms.StreamMessage.writeDouble(double) in interface  
javax.jms.StreamMessage

**Parameters**

[value](#) - The double to be written

**Throws**

[MessageNotWritableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**writeFloat(float)**

```
public void writeFloat(float value)
```

Write a float to the stream as a 4-byte, high byte first

**Specified By**

`javax.jms.StreamMessage.writeFloat(float)` in interface `javax.jms.StreamMessage`

**Parameters**

[value](#) - the float to be written

**Throws**

[MessageNotWritableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**writeInt(int)**

```
public void writeInt(int value)
```

Write a int to the stream as a 4-byte, high byte first

**Specified By**

`javax.jms.StreamMessage.writeInt(int)` in interface `javax.jms.StreamMessage`

**Parameters**

[value](#) - the int to be written

**Throws**

[MessageNotWritableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**writeLong(long)**

```
public void writeLong(long value)
```

Write a int to the stream as a 4-byte, high byte first

**Specified By**

`javax.jms.StreamMessage.writeLong(long)` in interface `javax.jms.StreamMessage`

**Parameters**

[value](#) - the int to be written

**Throws**

[MessageNotWritableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**writeObject(Object)**

```
public void writeObject(java.lang.Object value)
```

Write a java object to the stream message

**Specified By**

javax.jms.StreamMessage.writeObject(java.lang.Object) in interface  
javax.jms.StreamMessage

**Parameters**

[value](#) - the java object to be written.

**Throws**

[MessageNotWritableException](#) - if message in write-only mode.

[MessageFormatException](#) - if object is invalid type

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**writeShort(short)**

```
public void writeShort(short value)
```

Write a short to the stream as a 2-byte, high byte first

**Specified By**

javax.jms.StreamMessage.writeShort(short) in interface javax.jms.StreamMessage

**Parameters**

[value](#) - the short to be written

**Throws**

[MessageNotWritableException](#) - if message in write-only mode.

[JMSEException](#) - if JMS fails to read message due to some internal JMS error.

**writeString(String)**

```
public void writeString(java.lang.String value)
```

Writes a string to the underlying output stream

**Specified By**

`javax.jms.StreamMessage.writeString(java.lang.String)` in interface `javax.jms.StreamMessage`

**Parameters**

[value](#) - The string to be written

**Throws**

[MessageNotWritableException](#) - if message in write-only mode.

[JMSException](#) - if JMS fails to read message due to some internal JMS error.

## oracle.jms AQjmsTextMessage

### Syntax

```
public class AQjmsTextMessage extends AQjmsMessage implements  
    javax.jms.TextMessage
```

```
java.lang.Object  
|  
+--AQjmsMessage  
    |  
    +--oracle.jms.AQjmsTextMessage
```

### All Implemented Interfaces

javax.jms.Message, javax.jms.TextMessage

### Description

This class implements the TextMessage interface. A TextMessage is used to send a message containing a java.lang.StringBuffer

---

### Member Summary

---

#### Methods

<a href="#">clearBody()</a>	
<a href="#">clearProperties()</a>	Clear a message's properties.
<a href="#">getText()</a>	Get the string containing this message's data.
<a href="#">setText(String)</a>	Set the string containing this message's data.

---

---

### Inherited Member Summary

---

Fields inherited from interface javax.jms.Message

DEFAULT\_DELIVERY\_MODE, DEFAULT\_PRIORITY, DEFAULT\_TIME\_TO\_LIVE

Methods inherited from class [AQjmsMessage](#)

---

## Inherited Member Summary

---

[getBooleanProperty\(String\)](#), [getByteProperty\(String\)](#), [getDoubleProperty\(String\)](#), [getFloatProperty\(String\)](#), [getIntProperty\(String\)](#), [getJMSCorrelationID\(\)](#), [getJMSCorrelationIDAsBytes\(\)](#), [getJMSDeliveryMode\(\)](#), [getJMSDestination\(\)](#), [getJMSExpiration\(\)](#), [getJMSMessageID\(\)](#), [getJMSMessageIDAsBytes\(\)](#), [getJMSPriority\(\)](#), [getJMSRedelivered\(\)](#), [getJMSReplyTo\(\)](#), [getJMSTimestamp\(\)](#), [getJMSType\(\)](#), [getLongProperty\(String\)](#), [getObjectProperty\(String\)](#), [getPropertyNames\(\)](#), [getSenderID\(\)](#), [getShortProperty\(String\)](#), [getStringProperty\(String\)](#), [propertyExists\(String\)](#), [setBooleanProperty\(String, boolean\)](#), [setByteProperty\(String, byte\)](#), [setDoubleProperty\(String, double\)](#), [setFloatProperty\(String, float\)](#), [setIntProperty\(String, int\)](#), [setJMSCorrelationID\(String\)](#), [setJMSCorrelationIDAsBytes\(byte\[\]\)](#), [setJMSDestination\(Destination\)](#), [setJMSDestination\(Destination\)](#), [setJMSExpiration\(long\)](#), [setJMSMessageID\(String\)](#), [setJMSPriority\(int\)](#), [setJMSRedelivered\(boolean\)](#), [setJMSReplyTo\(Destination\)](#), [setJMSTimestamp\(long\)](#), [setJMSType\(String\)](#), [setLongProperty\(String, long\)](#), [setObjectProperty\(String, Object\)](#), [setSenderID\(AQjmsAgent\)](#), [setShortProperty\(String, short\)](#), [setStringProperty\(String, String\)](#)

### Methods inherited from class java.lang.Object

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

### Methods inherited from interface javax.jms.Message

[getBooleanProperty](#), [getByteProperty](#), [getDoubleProperty](#), [getFloatProperty](#), [getIntProperty](#), [getJMSCorrelationID](#), [getJMSCorrelationIDAsBytes](#), [getJMSDeliveryMode](#), [getJMSDestination](#), [getJMSExpiration](#), [getJMSMessageID](#), [getJMSPriority](#), [getJMSRedelivered](#), [getJMSReplyTo](#), [getJMSTimestamp](#), [getJMSType](#), [getLongProperty](#), [getObjectProperty](#), [getPropertyNames](#), [getShortProperty](#), [getStringProperty](#), [propertyExists](#), [setBooleanProperty](#), [setByteProperty](#), [setDoubleProperty](#), [setFloatProperty](#), [setIntProperty](#), [setJMSCorrelationID](#), [setJMSCorrelationIDAsBytes](#), [setJMSDeliveryMode](#), [setJMSDestination](#), [setJMSExpiration](#), [setJMSMessageID](#), [setJMSPriority](#), [setJMSRedelivered](#), [setJMSReplyTo](#), [setJMSTimestamp](#), [setJMSType](#), [setLongProperty](#), [setObjectProperty](#), [setShortProperty](#), [setStringProperty](#)

---

## Methods

### clearBody()

```
public void clearBody()
```

#### Specified By

[clearBody\(\)](#) in interface [javax.jms.Message](#)

#### Overrides

[clearBody\(\)](#) in class [AQjmsMessage](#)

### clearProperties()

```
public void clearProperties()
Clear a message's properties.
```

**Specified By**

`javax.jms.Message.clearProperties()` in interface `javax.jms.Message`

**Overrides**

`clearProperties()` in class [AQjmsMessage](#)

**Throws**

[JMSEException](#) - if JMS fails to clear JMS message properties due to some internal JMS error.

**getText()**

```
public java.lang.String getText()
```

Get the string containing this message's data. The default value is null.

**Specified By**

`javax.jms.TextMessage.getText()` in interface `javax.jms.TextMessage`

**Returns**

the String containing the message's data

**Throws**

[JMSEException](#) - if JMS fails to get text due to some internal JMS error.

**setText(String)**

```
public void setText(java.lang.String string)
```

Set the string containing this message's data.

**Specified By**

`javax.jms.TextMessage.setText(java.lang.String)` in interface `javax.jms.TextMessage`

**Parameters**

[string](#) - the String containing the message's data

**Throws**

[JMSEException](#) - if JMS fails to set text due to some internal JMS error.

[MessageNotWriteableException](#) - if message in read-only mode.

---

## oracle.jms AQjmsTopicConnectionFactory

### Syntax

```
public class AQjmsTopicConnectionFactory extends java.lang.Object implements  
javax.jms.TopicConnectionFactory
```

```
java.lang.Object  
|  
+--oracle.jms.AQjmsTopicConnectionFactory
```

### All Implemented Interfaces

```
javax.jms.ConnectionFactory, javax.jms.TopicConnectionFactory
```

### Description

This class implements the TopicConnectionFactory interface. A TopicConnectionFactory is used to create TopicConnections

---

### Member Summary

#### Methods

<a href="#">createTopicConnection()</a>	create a Topic Connection to the JMS Server hosting this Topic- connection factory.
<a href="#">createTopicConnection(Connection)</a>	create a TopicConnection using the already open JDBC connection.
<a href="#">createTopicConnection(String, String)</a>	create a Topic Connection using the given username and password for authentication during creation of the Connection.

---

### Inherited Member Summary

#### Methods inherited from class java.lang.Object

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

---

## Methods

### createTopicConnection()

```
public javax.jms.TopicConnection createTopicConnection()
```

create a Topic Connection to the JMS Server hosting this Topic- connection factory.

#### Specified By

javax.jms.TopicConnectionFactory.createTopicConnection() in interface javax.jms.TopicConnectionFactory

#### Returns

a Topic Connection

#### Throws

[JMSEException](#) - if JMS fails to get a topic connection due to some JMS error

### createTopicConnection(Connection)

```
public static javax.jms.TopicConnection
```

```
createTopicConnection(java.sql.Connection jdbc_connection)
```

create a TopicConnection using the already open JDBC connection. This creation does NOT result in creation of another connection to the database. Instead JMS binds to the given connection to the database and provides an interface to the Pub/Sub mechanism defined by JMS.

#### Parameters

[jdbc\\_connection](#) - a valid open connection to the database.

#### Returns

a TopicConnection

#### Throws

[JMSEException](#) - if JMS fails to get a topic connection due to some JMS error

### createTopicConnection(String, String)

```
public javax.jms.TopicConnection createTopicConnection(java.lang.String  
username, java.lang.String password)
```

create a Topic Connection using the given username and password for authentication during creation of the Connection.

**Specified By**

`javax.jms.TopicConnectionFactory.createTopicConnection(java.lang.String, java.lang.String)` in interface `javax.jms.TopicConnectionFactory`

**Parameters**

[username](#) - name of the user connecting to the DB for Queueing. `password` password for the user creating the connection.

**Returns**

a Topic Connection

**Throws**

[JMSException](#) - if JMS fails to get a topic connection due to some JMS error

## oracle.jms AQjmsTopicPublisher

### Syntax

```
public interface AQjmsTopicPublisher extends javax.jms.TopicPublisher
```

### All Superinterface

```
javax.jms.MessageProducer, javax.jms.TopicPublisher
```

### All Known Implementing Classes

[AQjmsProducer](#)

### Description

This interface extends `TopicPublisher` and defines AQ extensions to JMS. A client uses a `TopicPublisher` for publishing messages to a `Topic`

---

### Member Summary

---

#### Methods

<a href="#">publish(Message, AQjmsAgent[])</a>	Publish a Message to a specific list of recipients
<a href="#">publish(Message, AQjmsAgent[], int, int, long)</a>	Publish a Message to a topic by specifying a list of recipients, delivery mode, priority and time to live
<a href="#">publish(Topic, Message, AQjmsAgent[])</a>	Publish a Message to a topic by specifying a list of recipients
<a href="#">publish(Topic, Message, AQjmsAgent[], int, int, long)</a>	Publish a Message to a topic by specifying a list of recipients, delivery mode, priority and time to live

---

---

### Inherited Member Summary

---

Methods inherited from interface `javax.jms.TopicPublisher`

`getTopic`, `publish`, `publish`, `publish`, `publish`

Methods inherited from interface `javax.jms.MessageProducer`

---

## Inherited Member Summary

---

close, getDeliveryMode, getDisableMessageID, getDisableMessageTimestamp, getPriority, getTimeToLive, setDeliveryMode, setDisableMessageID, setDisableMessageTimestamp, setPriority, setTimeToLive

---

## Methods

### publish(Message, AQjmsAgent[])

```
public void publish(javax.jms.Message message, AQjmsAgent recipient_list)
```

Publish a Message to a specific list of recipients

#### Parameters

[message](#) - The message to be published

[recipient\\_list](#) - The list of recipients to which the message is published. The recipients are of type AQjmsAgent.

#### Throws

[JMSEException](#) - if JMS fails to publish the message due to some internal error.

### publish(Message, AQjmsAgent[], int, int, long)

```
public void publish(javax.jms.Message message, AQjmsAgent recipient_list, int deliveryMode, int priority, long timeToLive)
```

Publish a Message to a topic by specifying a list of recipients, delivery mode, priority and time to live

#### Parameters

[message](#) - The message to be published

[recipient\\_list](#) - The list of recipients to which the message is published. The recipients are of type AQjmsAgent.

[deliveryMode](#) - The delivery mode - persistent or non\_persistent

[priority](#) - The priority of the message

[timeToLive](#) - the message time to live in milliseconds; zero is unlimited

#### Throws

[JMSEException](#) - if JMS fails to publish the message due to some internal error.

## publish(Topic, Message, AQjmsAgent[])

```
public void publish(javax.jms.Topic topic, javax.jms.Message message, AQjmsAgent recipient_list)
```

Publish a Message to a topic by specifying a list of recipients

### Parameters

[topic](#) - The topic to which to publish the message. This overrides the default topic of the Message Producer

[message](#) - The message to be published

[recipient\\_list](#) - The list of recipients to which the message is published. The recipients are of type AQjmsAgent.

### Throws

[JMSEException](#) - if JMS fails to publish the message due to some internal error.

## publish(Topic, Message, AQjmsAgent[], int, int, long)

```
public void publish(javax.jms.Topic topic, javax.jms.Message message, AQjmsAgent recipient_list, int deliveryMode, int priority, long timeToLive)
```

Publish a Message to a topic by specifying a list of recipients, delivery mode, priority and time to live

### Parameters

[topic](#) - The topic to which to publish the message. This overrides the default topic of the Message Producer

[message](#) - The message to be published

[recipient\\_list](#) - The list of recipients to which the message is published. The recipients are of type AQjmsAgent.

[deliveryMode](#) - The delivery mode - persistent or non\_persistent

[priority](#) - The priority of the message

[timeToLive](#) - the message time to live in milliseconds; zero is unlimited

### Throws

[JMSEException](#) - if JMS fails to publish the message due to some internal error.

---

## oracle.jms AQjmsTopicReceiver

### Syntax

```
public interface AQjmsTopicReceiver extends TopicReceiver
```

### All Superinterfaces

[javax.jms.MessageConsumer](#), [TopicReceiver](#)

### All Known Implementing Classes

[AQjmsConsumer](#)

### Description

This interface extends the [TopicReceiver](#) interface that defines AQ extensions for remote subscribers and explicitly specified recipients (in point-to-multipoint communication). A [TopicReceiver](#) is used to receive messages from a [Topic](#).

---

### Member Summary

---

#### Methods

<a href="#">getNavigationMode()</a>	get the navigation mode used for receiving messages
<a href="#">receiveNoData()</a>	Consume the message without returning it to the user.
<a href="#">receiveNoData(long)</a>	Consume the message without returning it to the user.
<a href="#">setNavigationMode(int)</a>	set the navigation mode used for receiving messages

---

---

### Inherited Member Summary

---

Methods inherited from interface [TopicReceiver](#)

[getTopic\(\)](#)

Methods inherited from interface [javax.jms.MessageConsumer](#)

[close](#), [getMessageListener](#), [getMessageSelector](#), [receive](#), [receive](#), [receiveNoWait](#), [setMessageListener](#)

---

## Methods

### getNavigationMode()

```
public int getNavigationMode()  
get the navigation mode used for receiving messages
```

#### Returns

the navigation mode

#### Throws

[JMSEException](#) - if there was an error in getting the navigation mode

### receiveNoData()

```
public void receiveNoData()  
Consume the message without returning it to the user. This call will avoid the  
overhead of fetching the message from the database and hence can be used as an  
optimization by jms clients who have already got the message for example using a  
queue browser.
```

#### Throws

[JMSEException](#) - if the message could not be received due to an error

### receiveNoData(long)

```
public void receiveNoData(long timeout)  
Consume the message without returning it to the user. This call will avoid the  
overhead of fetching the message from the database and hence can be used as an  
optimization by jms clients who have already got the message for example using a  
queue browser. This call will block until a message arrives or the timeout expires
```

#### Parameters

[timeout](#) - the timeout value in milliseconds

#### Throws

[JMSEException](#) - if the message could not be received due to an error

### setNavigationMode(int)

```
public void setNavigationMode(int mode)
```

set the navigation mode used for receiving messages

**Parameters**

[mode](#) - the new value of the navigation mode

**Throws**

[JMSEException](#) - if there was an error in getting the navigation mode

## oracle.jms AQjmsTopicSubscriber

### Syntax

```
public interface AQjmsTopicSubscriber extends javax.jms.TopicSubscriber
```

### All Superinterfaces

[javax.jms.MessageConsumer](#), [javax.jms.TopicSubscriber](#)

### All Known Implementing Classes

[AQjmsConsumer](#)

### Description

This interface extends [TopicSubscriber](#) and defines AQ extensions to JMS. A client uses a [TopicSubscriber](#) to receive messages published on a [Topic](#)

---

#### Member Summary

---

##### Methods

<a href="#">getNavigationMode()</a>	Consume the message without returning it to the user.
<a href="#">receiveNoData()</a>	Consume the message without returning it to the user.
<a href="#">receiveNoData(long)</a>	Consume the message without returning it to the user.
<a href="#">setNavigationMode(int)</a>	set the navigation mode used for receiving messages

---

---

#### Inherited Member Summary

---

Methods inherited from interface [javax.jms.TopicSubscriber](#)

[getNoLocal](#), [getTopic](#)

Methods inherited from interface [javax.jms.MessageConsumer](#)

[close](#), [getMessageListener](#), [getMessageSelector](#), [receive](#), [receive](#), [receiveNoWait](#), [setMessageListener](#)

---

## Methods

### getNavigationMode()

```
public int getNavigationMode()
```

Consume the message without returning it to the user. This call will avoid the overhead of fetching the message from the database and hence can be used as an optimization by jms clients who have already got the message for example using a queue browser. This call will block until a message arrives or the timeout expires

#### Parameters

[timeout](#) - the timeout value in milliseconds

#### Throws

[JMSEException](#) - if the message could not be received due to an error

### receiveNoData()

```
public void receiveNoData()
```

Consume the message without returning it to the user. This call will avoid the overhead of fetching the message from the database and hence can be used as an optimization by jms clients who have already got the message for example using a queue browser.

#### Throws

[JMSEException](#) - if the message could not be received due to an error

### receiveNoData(long)

```
public void receiveNoData(long tomeOut)
```

Consume the message without returning it to the user. This call will avoid the overhead of fetching the message from the database and hence can be used as an optimization by jms clients who have already got the message for example using a queue browser. This call will block until a message arrives or the timeout expires

#### Parameters

[timeout](#) - the timeout value in milliseconds

#### Throws

[JMSEException](#) - if the message could not be received due to an error

## **setNavigationMode(int)**

```
public void setNavigationMode(int mode)
```

set the navigation mode used for receiving messages

### **Parameters**

[mode](#) - the new value of the navigation mode

### **Throws**

[JMSException](#) - if there was an error in getting the navigation mode

---

## oracle.jms TopicReceiver

### Syntax

```
public interface TopicReceiver extends javax.jms.MessageConsumer
```

### All Known Subinterfaces

[AQjmsTopicReceiver](#)

### All Superinterfaces

[javax.jms.MessageConsumer](#)

### Description

This interface extends `MessageConsumer` to allow remote subscribers and explicitly specified recipients (in point-to-multipoint communication) to receive messages

---

### Member Summary

#### Methods

<a href="#">getTopic()</a>	Get the topic associated with this receiver.
----------------------------	--

---

---

### Inherited Member Summary

Methods inherited from interface `javax.jms.MessageConsumer`

`close`, `getMessageListener`, `getMessageSelector`, `receive`, `receive`, `receiveNoWait`, `setMessageListener`

---

### Methods

#### getTopic()

```
public javax.jms.Topic getTopic()  
Get the topic associated with this receiver.
```

**Returns**

this subscriber's topic

**Throws**

[JMSException](#) - if JMS fails to get topic for this topic receiver due to some internal error.

# 3

---

## Package oracle.ODCI

## Package oracle.ODCI Description

---

### Class Summary

---

#### Classes

[ODCIArgDesc](#)

[ODCIArgDescList](#)

[ODCIArgDescRef](#)

[ODCICollInfo](#)

[ODCICollInfoList](#)

[ODCICollInfoRef](#)

[ODCICost](#)

[ODCICostRef](#)

[ODCIFuncInfo](#)

[ODCIFuncInfoRef](#)

[ODCIIndexCtx](#)

[ODCIIndexCtxRef](#)

[ODCIIndexInfo](#)

[ODCIIndexInfoRef](#)

[ODCIObject](#)

[ODCIObjectList](#)

[ODCIObjectRef](#)

[ODCIPredInfo](#)

[ODCIPredInfoRef](#)

[ODCIQueryInfo](#)

[ODCIQueryInfoRef](#)

[ODCIRidList](#)

[ODCIStatsOptions](#)

[ODCIStatsOptionsRef](#)

---

## oracle.ODCI ODCIArgDesc

### Syntax

```
public class ODCIArgDesc
```

```
oracle.ODCI.ODCIArgDesc
```

### Description

---

#### Member Summary

---

##### Fields

[\\_SQL\\_NAME](#)

[\\_SQL\\_TYPECODE](#)

##### Constructors

[ODCIArgDesc\(\)](#)

[ODCIArgDesc\(Connection\)](#)

[ODCIArgDesc\(ConnectionContext\)](#)

##### Methods

[create\(Datum, int\)](#)

[getArgtype\(\)](#)

[getColname\(\)](#)

[getFactory\(\)](#)

[getTablename\(\)](#)

[getTableschema\(\)](#)

[setArgtype\(BigDecimal\)](#)

[setColname\(String\)](#)

[setTablename\(String\)](#)

[setTableschema\(String\)](#)

[toDatum\(OracleConnection\)](#)

---

## Fields

### **\_SQL\_NAME**

```
public static final java.lang.String _SQL_NAME
```

### **\_SQL\_TYPECODE**

```
public static final int _SQL_TYPECODE
```

## Constructors

### **ODCIArgDesc()**

```
public ODCIArgDesc()
```

### **ODCIArgDesc(Connection)**

```
public ODCIArgDesc(java.sql.Connection c)
```

### **ODCIArgDesc(ConnectionContext)**

```
public ODCIArgDesc(sqlj.runtime.ConnectionContext c)
```

## Methods

### **create(Datum, int)**

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### **getArgtype()**

```
public java.math.BigDecimal getArgtype()
```

### **getColname()**

```
public java.lang.String getColname()
```

### **getFactory()**

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### **getTablename()**

```
public java.lang.String getTablename()
```

**getTableschema()**

```
public java.lang.String getTableschema()
```

**setArgtype(BigDecimal)**

```
public void setArgtype(java.math.BigDecimal argtype)
```

**setColname(String)**

```
public void setColname(java.lang.String colname)
```

**setTablename(String)**

```
public void setTablename(java.lang.String tablename)
```

**setTableschema(String)**

```
public void setTableschema(java.lang.String tableschema)
```

**toDatum(OracleConnection)**

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

---

## oracle.ODCI ODCIArgDescList

### Syntax

```
public class ODCIArgDescList
```

```
oracle.ODCI.ODCIArgDescList
```

### Description

---

#### Member Summary

---

##### Fields

[\\_SQL\\_NAME](#)

[\\_SQL\\_TYPECODE](#)

##### Constructors

[ODCIArgDescList\(\)](#)

[ODCIArgDescList\(ODCIArgDesc\[\]\)](#)

##### Methods

[create\(Datum, int\)](#)

[getArray\(\)](#)

[getArray\(long, int\)](#)

[getBaseType\(\)](#)

[getBaseTypeName\(\)](#)

[getDescriptor\(\)](#)

[getElement\(long\)](#)

[getFactory\(\)](#)

[length\(\)](#)

[setArray\(ODCIArgDesc\[\]\)](#)

[setArray\(ODCIArgDesc\[\], long\)](#)

[setElement\(ODCIArgDesc, long\)](#)

---

**Member Summary**

---

[toDatum\(OracleConnection\)](#)

---

**Fields****\_SQL\_NAME**

```
public static final java.lang.String _SQL_NAME
```

**\_SQL\_TYPECODE**

```
public static final int _SQL_TYPECODE
```

**Constructors****ODCIArgDescList()**

```
public ODCIArgDescList()
```

**ODCIArgDescList(ODCIArgDesc[])**

```
public ODCIArgDescList(ODCIArgDesc a)
```

**Methods****create(Datum, int)**

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

**getArray()**

```
public ODCIArgDesc getArray()
```

**getArray(long, int)**

```
public ODCIArgDesc getArray(long index, int count)
```

**getBaseType()**

```
public int getBaseType()
```

**getBaseTypeName()**

```
public java.lang.String getBaseTypeName()
```

**getDescriptor()**

```
public oracle.sql.ArrayDescriptor getDescriptor()
```

**getElement(long)**

```
public ODCIArgDesc getElement(long index)
```

**getFactory()**

```
public static oracle.sql.CustomDatumFactory getFactory()
```

**length()**

```
public int length()
```

**setArray(ODCIArgDesc[])**

```
public void setArray(ODCIArgDesc a)
```

**setArray(ODCIArgDesc[], long)**

```
public void setArray(ODCIArgDesc a, long index)
```

**setElement(ODCIArgDesc, long)**

```
public void setElement(ODCIArgDesc a, long index)
```

**toDatum(OracleConnection)**

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

---

## oracle.ODCI ODCIArgDescRef

### Syntax

```
public class ODCIArgDescRef
```

```
oracle.ODCI.ODCIArgDescRef
```

### Description

---

#### Member Summary

---

##### Fields

[\\_SQL\\_BASETYPE](#)

[\\_SQL\\_TYPECODE](#)

##### Constructors

[ODCIArgDescRef\(\)](#)

##### Methods

[create\(Datum, int\)](#)

[getFactory\(\)](#)

[getValue\(\)](#)

[setValue\(ODCIArgDesc\)](#)

[toDatum\(OracleConnection\)](#)

---

#### Fields

##### **`_SQL_BASETYPE`**

```
public static final java.lang.String _SQL_BASETYPE
```

##### **`_SQL_TYPECODE`**

```
public static final int _SQL_TYPECODE
```

## Constructors

### ODCIArgDescRef()

```
public ODCIArgDescRef()
```

## Methods

### create(Datum, int)

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### getFactory()

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### getValue()

```
public ODCIArgDesc getValue()
```

### setValue(ODCIArgDesc)

```
public void setValue(ODCIArgDesc c)
```

### toDatum(OracleConnection)

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

---

## oracle.ODCI ODCICollInfo

### Syntax

```
public class ODCICollInfo
```

```
oracle.ODCI.ODCICollInfo
```

### Description

---

## Member Summary

---

### Fields

[\\_SQL\\_NAME](#)

[\\_SQL\\_TYPECODE](#)

### Constructors

[ODCICollInfo\(\)](#)

[ODCICollInfo\(Connection\)](#)

[ODCICollInfo\(ConnectionContext\)](#)

### Methods

[create\(Datum, int\)](#)

[getColname\(\)](#)

[getColtypename\(\)](#)

[getColtypeschema\(\)](#)

[getFactory\(\)](#)

[getTablename\(\)](#)

[getTableschema\(\)](#)

[setColname\(String\)](#)

[setColtypename\(String\)](#)

[setColtypeschema\(String\)](#)

[setTablename\(String\)](#)

---

**Member Summary**

---

[setTableschema\(String\)](#)[toDatum\(OracleConnection\)](#)

---

**Fields****\_SQL\_NAME**

```
public static final java.lang.String _SQL_NAME
```

**\_SQL\_TYPECODE**

```
public static final int _SQL_TYPECODE
```

**Constructors****ODCICollInfo()**

```
public ODCICollInfo()
```

**ODCICollInfo(Connection)**

```
public ODCICollInfo(java.sql.Connection c)
```

**ODCICollInfo(ConnectionContext)**

```
public ODCICollInfo(sqlj.runtime.ConnectionContext c)
```

**Methods****create(Datum, int)**

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

**getColname()**

```
public java.lang.String getColname()
```

**getColtypename()**

```
public java.lang.String getColtypename()
```

**getColtypeschema()**

```
public java.lang.String getColtypeschema()
```

**getFactory()**

```
public static oracle.sql.CustomDatumFactory getFactory()
```

**getTablename()**

```
public java.lang.String getTablename()
```

**getTableschema()**

```
public java.lang.String getTableschema()
```

**setColname(String)**

```
public void setColname(java.lang.String colname)
```

**setColtypename(String)**

```
public void setColtypename(java.lang.String coltypename)
```

**setColtypeschema(String)**

```
public void setColtypeschema(java.lang.String coltypeschema)
```

**setTablename(String)**

```
public void setTablename(java.lang.String tablename)
```

**setTableschema(String)**

```
public void setTableschema(java.lang.String tableschema)
```

**toDatum(OracleConnection)**

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

## oracle.ODCI ODCICollInfoList

### Syntax

```
public class ODCICollInfoList
```

```
oracle.ODCI.ODCICollInfoList
```

### Description

---

#### Member Summary

---

##### Fields

[\\_SQL\\_NAME](#)

[\\_SQL\\_TYPECODE](#)

##### Constructors

[ODCICollInfoList\(\)](#)

[ODCICollInfoList\(ODCICollInfo\[\]\)](#)

##### Methods

[create\(Datum, int\)](#)

[getArray\(\)](#)

[getArray\(long, int\)](#)

[getBaseType\(\)](#)

[getBaseTypeName\(\)](#)

[getDescriptor\(\)](#)

[getElement\(long\)](#)

[getFactory\(\)](#)

[length\(\)](#)

[setArray\(ODCICollInfo\[\]\)](#)

[setArray\(ODCICollInfo\[\], long\)](#)

[setElement\(ODCICollInfo, long\)](#)

---

**Member Summary**

---

[toDatum\(OracleConnection\)](#)

---

**Fields****`_SQL_NAME`**

```
public static final java.lang.String _SQL_NAME
```

**`_SQL_TYPECODE`**

```
public static final int _SQL_TYPECODE
```

**Constructors****`ODCIColInfoList()`**

```
public ODCIColInfoList()
```

**`ODCIColInfoList(ODCIColInfo[])`**

```
public ODCIColInfoList(ODCIColInfo a)
```

**Methods****`create(Datum, int)`**

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

**`getArray()`**

```
public ODCIColInfo getArray()
```

**`getArray(long, int)`**

```
public ODCIColInfo getArray(long index, int count)
```

**`getBaseType()`**

```
public int getBaseType()
```

**getBaseTypeName()**

```
public java.lang.String getBaseTypeName()
```

**getDescriptor()**

```
public oracle.sql.ArrayDescriptor getDescriptor()
```

**getElement(long)**

```
public ODCICollInfo getElement(long index)
```

**getFactory()**

```
public static oracle.sql.CustomDatumFactory getFactory()
```

**length()**

```
public int length()
```

**setArray(ODCICollInfo[])**

```
public void setArray(ODCICollInfo a)
```

**setArray(ODCICollInfo[], long)**

```
public void setArray(ODCICollInfo a, long index)
```

**setElement(ODCICollInfo, long)**

```
public void setElement(ODCICollInfo a, long index)
```

**toDatum(OracleConnection)**

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

---

## oracle.ODCI ODCICollInfoRef

### Syntax

```
public class ODCICollInfoRef
```

```
oracle.ODCI.ODCICollInfoRef
```

### Description

---

#### Member Summary

---

##### Fields

[\\_SQL\\_BASETYPE](#)

[\\_SQL\\_TYPECODE](#)

##### Constructors

[ODCICollInfoRef\(\)](#)

##### Methods

[create\(Datum, int\)](#)

[getFactory\(\)](#)

[getValue\(\)](#)

[setValue\(ODCICollInfo\)](#)

[toDatum\(OracleConnection\)](#)

---

#### Fields

##### **`_SQL_BASETYPE`**

```
public static final java.lang.String _SQL_BASETYPE
```

##### **`_SQL_TYPECODE`**

```
public static final int _SQL_TYPECODE
```

## Constructors

### ODCColInfoRef()

```
public ODCColInfoRef()
```

## Methods

### create(Datum, int)

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### getFactory()

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### getValue()

```
public ODCColInfo getValue()
```

### setValue(ODCColInfo)

```
public void setValue(ODCColInfo c)
```

### toDatum(OracleConnection)

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

## oracle.ODCI ODCICost

### Syntax

```
public class ODCICost
```

```
oracle.ODCI.ODCICost
```

### Description

---

#### Member Summary

---

##### Fields

[\\_SQL\\_NAME](#)

[\\_SQL\\_TYPECODE](#)

##### Constructors

[ODCICost\(\)](#)

[ODCICost\(Connection\)](#)

[ODCICost\(ConnectionContext\)](#)

##### Methods

[create\(Datum, int\)](#)

[getCpuCost\(\)](#)

[getFactory\(\)](#)

[getLocCost\(\)](#)

[getNetworkCost\(\)](#)

[setCpuCost\(BigDecimal\)](#)

[setLocCost\(BigDecimal\)](#)

[setNetworkCost\(BigDecimal\)](#)

[toDatum\(OracleConnection\)](#)

---

## Fields

### **\_SQL\_NAME**

```
public static final java.lang.String _SQL_NAME
```

### **\_SQL\_TYPECODE**

```
public static final int _SQL_TYPECODE
```

## Constructors

### **ODCICost()**

```
public ODCICost()
```

### **ODCICost(Connection)**

```
public ODCICost(java.sql.Connection c)
```

### **ODCICost(ConnectionContext)**

```
public ODCICost(sqlj.runtime.ConnectionContext c)
```

## Methods

### **create(Datum, int)**

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### **getCpucost()**

```
public java.math.BigDecimal getCpucost()
```

### **getFactory()**

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### **getIocost()**

```
public java.math.BigDecimal getIocost()
```

### **getNetworkcost()**

```
public java.math.BigDecimal getNetworkcost()
```

**setCpucost(BigDecimal)**

```
public void setCpucost(java.math.BigDecimal cpucost)
```

**setIocost(BigDecimal)**

```
public void setIocost(java.math.BigDecimal iocost)
```

**setNetworkcost(BigDecimal)**

```
public void setNetworkcost(java.math.BigDecimal networkcost)
```

**toDatum(OracleConnection)**

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

## oracle.ODCI ODCICostRef

### Syntax

```
public class ODCICostRef
```

```
oracle.ODCI.ODCICostRef
```

### Description

---

## Member Summary

---

### Fields

[\\_SQL\\_BASETYPE](#)

[\\_SQL\\_TYPECODE](#)

### Constructors

[ODCICostRef\(\)](#)

### Methods

[create\(Datum, int\)](#)

[getFactory\(\)](#)

[getValue\(\)](#)

[setValue\(ODCICost\)](#)

[toDatum\(OracleConnection\)](#)

---

## Fields

### **[\\_SQL\\_BASETYPE](#)**

```
public static final java.lang.String _SQL_BASETYPE
```

### **[\\_SQL\\_TYPECODE](#)**

```
public static final int _SQL_TYPECODE
```

## Constructors

### ODCICostRef()

```
public ODCICostRef()
```

## Methods

### create(Datum, int)

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### getFactory()

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### getValue()

```
public ODCICost getValue()
```

### setValue(ODCICost)

```
public void setValue(ODCICost c)
```

### toDatum(OracleConnection)

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

## oracle.ODCI ODCIFuncInfo

### Syntax

```
public class ODCIFuncInfo
```

```
oracle.ODCI.ODCIFuncInfo
```

### Description

---

#### Member Summary

---

##### Fields

[\\_SQL\\_NAME](#)

[\\_SQL\\_TYPECODE](#)

##### Constructors

[ODCIFuncInfo\(\)](#)

[ODCIFuncInfo\(Connection\)](#)

[ODCIFuncInfo\(ConnectionContext\)](#)

##### Methods

[create\(Datum, int\)](#)

[getFactory\(\)](#)

[getFlags\(\)](#)

[getMethodname\(\)](#)

[getObjectname\(\)](#)

[getObjectschema\(\)](#)

[setFlags\(BigDecimal\)](#)

[setMethodname\(String\)](#)

[setObjectname\(String\)](#)

[setObjectschema\(String\)](#)

[toDatum\(OracleConnection\)](#)

---

## Fields

### **\_SQL\_NAME**

```
public static final java.lang.String _SQL_NAME
```

### **\_SQL\_TYPECODE**

```
public static final int _SQL_TYPECODE
```

## Constructors

### **ODCIFuncInfo()**

```
public ODCIFuncInfo()
```

### **ODCIFuncInfo(Connection)**

```
public ODCIFuncInfo(java.sql.Connection c)
```

### **ODCIFuncInfo(ConnectionContext)**

```
public ODCIFuncInfo(sqlj.runtime.ConnectionContext c)
```

## Methods

### **create(Datum, int)**

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### **getFactory()**

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### **getFlags()**

```
public java.math.BigDecimal getFlags()
```

### **getMethodname()**

```
public java.lang.String getMethodname()
```

### **getObjectname()**

```
public java.lang.String getObjectname()
```

**getObjectschema()**

```
public java.lang.String getObjectschema()
```

**setFlags(BigDecimal)**

```
public void setFlags(java.math.BigDecimal flags)
```

**setMethodname(String)**

```
public void setMethodname(java.lang.String methodname)
```

**setObjectname(String)**

```
public void setObjectname(java.lang.String objectname)
```

**setObjectschema(String)**

```
public void setObjectschema(java.lang.String objectschema)
```

**toDatum(OracleConnection)**

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

---

## oracle.ODCI ODCIFuncInfoRef

### Syntax

```
public class ODCIFuncInfoRef
```

```
oracle.ODCI.ODCIFuncInfoRef
```

### Description

---

#### Member Summary

---

##### Fields

[\\_SQL\\_BASETYPE](#)

[\\_SQL\\_TYPECODE](#)

##### Constructors

[ODCIFuncInfoRef\(\)](#)

##### Methods

[create\(Datum, int\)](#)

[getFactory\(\)](#)

[getValue\(\)](#)

[setValue\(ODCIFuncInfo\)](#)

[toDatum\(OracleConnection\)](#)

---

#### Fields

##### **[\\_SQL\\_BASETYPE](#)**

```
public static final java.lang.String _SQL_BASETYPE
```

##### **[\\_SQL\\_TYPECODE](#)**

```
public static final int _SQL_TYPECODE
```

## Constructors

### ODCIFuncInfoRef()

```
public ODCIFuncInfoRef()
```

## Methods

### create(Datum, int)

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### getFactory()

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### getValue()

```
public ODCIFuncInfo getValue()
```

### setValue(ODCIFuncInfo)

```
public void setValue(ODCIFuncInfo c)
```

### toDatum(OracleConnection)

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

---

## oracle.ODCI ODCIIndexCtx

### Syntax

```
public class ODCIIndexCtx
```

```
oracle.ODCI.ODCIIndexCtx
```

### Description

---

#### Member Summary

---

##### Fields

[\\_SQL\\_NAME](#)

[\\_SQL\\_TYPECODE](#)

##### Constructors

[ODCIIndexCtx\(\)](#)

[ODCIIndexCtx\(Connection\)](#)

[ODCIIndexCtx\(ConnectionContext\)](#)

##### Methods

[create\(Datum, int\)](#)

[getFactory\(\)](#)

[getIndexinfo\(\)](#)

[getRid\(\)](#)

[setIndexinfo\(ODCIIndexInfo\)](#)

[setRid\(String\)](#)

[toDatum\(OracleConnection\)](#)

---

## Fields

### **`_SQL_NAME`**

```
public static final java.lang.String _SQL_NAME
```

### **`_SQL_TYPECODE`**

```
public static final int _SQL_TYPECODE
```

## Constructors

### **`ODCIIndexCtx()`**

```
public ODCIIndexCtx()
```

### **`ODCIIndexCtx(Connection)`**

```
public ODCIIndexCtx(java.sql.Connection c)
```

### **`ODCIIndexCtx(ConnectionContext)`**

```
public ODCIIndexCtx(sqlj.runtime.ConnectionContext c)
```

## Methods

### **`create(Datum, int)`**

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### **`getFactory()`**

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### **`getIndexinfo()`**

```
public ODCIIndexInfo getIndexinfo()
```

### **`getRid()`**

```
public java.lang.String getRid()
```

### **`setIndexinfo(ODCIIndexInfo)`**

```
public void setIndexinfo(ODCIIndexInfo indexinfo)
```

**setRid(String)**

```
public void setRid(java.lang.String rid)
```

**toDatum(OracleConnection)**

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

## oracle.ODCI ODCIIndexCtxRef

### Syntax

```
public class ODCIIndexCtxRef  
  
oracle.ODCI.ODCIIndexCtxRef
```

### Description

---

## Member Summary

---

### Fields

[\\_SQL\\_BASETYPE](#)  
[\\_SQL\\_TYPECODE](#)

### Constructors

[ODCIIndexCtxRef\(\)](#)

### Methods

[create\(Datum, int\)](#)  
[getFactory\(\)](#)  
[getValue\(\)](#)  
[setValue\(ODCIIndexCtx\)](#)  
[toDatum\(OracleConnection\)](#)

---

### Fields

#### **[\\_SQL\\_BASETYPE](#)**

```
public static final java.lang.String _SQL_BASETYPE
```

#### **[\\_SQL\\_TYPECODE](#)**

```
public static final int _SQL_TYPECODE
```

## Constructors

### ODCIIndexCtxRef()

```
public ODCIIndexCtxRef()
```

## Methods

### create(Datum, int)

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### getFactory()

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### getValue()

```
public ODCIIndexCtx getValue()
```

### setValue(ODCIIndexCtx)

```
public void setValue(ODCIIndexCtx c)
```

### toDatum(OracleConnection)

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

## oracle.ODCI ODCIIndexInfo

### Syntax

```
public class ODCIIndexInfo
```

```
oracle.ODCI.ODCIIndexInfo
```

### Description

---

## Member Summary

---

### Fields

[\\_SQL\\_NAME](#)

[\\_SQL\\_TYPECODE](#)

### Constructors

[ODCIIndexInfo\(\)](#)

[ODCIIndexInfo\(Connection\)](#)

[ODCIIndexInfo\(ConnectionContext\)](#)

### Methods

[create\(Datum, int\)](#)

[getFactory\(\)](#)

[getIndexcols\(\)](#)

[getIndexname\(\)](#)

[getIndexschema\(\)](#)

[setIndexcols\(ODCICollInfoList\)](#)

[setIndexname\(String\)](#)

[setIndexschema\(String\)](#)

[toDatum\(OracleConnection\)](#)

---

## Fields

### **\_SQL\_NAME**

```
public static final java.lang.String _SQL_NAME
```

### **\_SQL\_TYPECODE**

```
public static final int _SQL_TYPECODE
```

## Constructors

### **ODCIIndexInfo()**

```
public ODCIIndexInfo()
```

### **ODCIIndexInfo(Connection)**

```
public ODCIIndexInfo(java.sql.Connection c)
```

### **ODCIIndexInfo(ConnectionContext)**

```
public ODCIIndexInfo(sqlj.runtime.ConnectionContext c)
```

## Methods

### **create(Datum, int)**

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### **getFactory()**

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### **getIndexcols()**

```
public ODCIColInfoList getIndexcols()
```

### **getIndexname()**

```
public java.lang.String getIndexname()
```

### **getIndexschema()**

```
public java.lang.String getIndexschema()
```

### **setIndexcols(ODCICollInfoList)**

```
public void setIndexcols(ODCICollInfoList indexcols)
```

### **setIndexname(String)**

```
public void setIndexname(java.lang.String indexname)
```

### **setIndexschema(String)**

```
public void setIndexschema(java.lang.String indexschema)
```

### **toDatum(OracleConnection)**

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

---

## oracle.ODCI ODCIIndexInfoRef

### Syntax

```
public class ODCIIndexInfoRef
```

```
oracle.ODCI.ODCIIndexInfoRef
```

### Description

---

## Member Summary

---

### Fields

[\\_SQL\\_BASETYPE](#)

[\\_SQL\\_TYPECODE](#)

### Constructors

[ODCIIndexInfoRef\(\)](#)

### Methods

[create\(Datum, int\)](#)

[getFactory\(\)](#)

[getValue\(\)](#)

[setValue\(ODCIIndexInfo\)](#)

[toDatum\(OracleConnection\)](#)

---

## Fields

### **`_SQL_BASETYPE`**

```
public static final java.lang.String _SQL_BASETYPE
```

### **`_SQL_TYPECODE`**

```
public static final int _SQL_TYPECODE
```

## Constructors

### ODCIIndexInfoRef()

```
public ODCIIndexInfoRef()
```

## Methods

### create(Datum, int)

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### getFactory()

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### getValue()

```
public ODCIIndexInfo getValue()
```

### setValue(ODCIIndexInfo)

```
public void setValue(ODCIIndexInfo c)
```

### toDatum(OracleConnection)

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

## oracle.ODCI ODCIObject

### Syntax

```
public class ODCIObject
```

```
oracle.ODCI.ODCIObject
```

### Description

---

#### Member Summary

---

##### Fields

[\\_SQL\\_NAME](#)

[\\_SQL\\_TYPECODE](#)

##### Constructors

[ODCIObject\(\)](#)

[ODCIObject\(Connection\)](#)

[ODCIObject\(ConnectionContext\)](#)

##### Methods

[create\(Datum, int\)](#)

[getFactory\(\)](#)

[getObjectname\(\)](#)

[getObjectschema\(\)](#)

[setObjectname\(String\)](#)

[setObjectschema\(String\)](#)

[toDatum\(OracleConnection\)](#)

---

## Fields

### **\_SQL\_NAME**

```
public static final java.lang.String _SQL_NAME
```

### **\_SQL\_TYPECODE**

```
public static final int _SQL_TYPECODE
```

## Constructors

### **ODCIObject()**

```
public ODCIObject()
```

### **ODCIObject(Connection)**

```
public ODCIObject(java.sql.Connection c)
```

### **ODCIObject(ConnectionContext)**

```
public ODCIObject(sqlj.runtime.ConnectionContext c)
```

## Methods

### **create(Datum, int)**

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### **getFactory()**

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### **getObjectname()**

```
public java.lang.String getObjectname()
```

### **getObjectschema()**

```
public java.lang.String getObjectschema()
```

### **setObjectname(String)**

```
public void setObjectname(java.lang.String objectname)
```

**setObjectschema(String)**

```
public void setObjectschema(java.lang.String objectschema)
```

**toDatum(OracleConnection)**

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

## oracle.ODCI ODCIObjectList

### Syntax

```
public class ODCIObjectList
```

```
oracle.ODCI.ODCIObjectList
```

### Description

---

#### Member Summary

---

##### Fields

[\\_SQL\\_NAME](#)

[\\_SQL\\_TYPECODE](#)

##### Constructors

[ODCIObjectList\(\)](#)

[ODCIObjectList\(ODCIObject\[\]\)](#)

##### Methods

[create\(Datum, int\)](#)

[getArray\(\)](#)

[getArray\(long, int\)](#)

[getBaseType\(\)](#)

[getBaseTypeName\(\)](#)

[getDescriptor\(\)](#)

[getElement\(long\)](#)

[getFactory\(\)](#)

[length\(\)](#)

[setArray\(ODCIObject\[\]\)](#)

[setArray\(ODCIObject\[\], long\)](#)

[setElement\(ODCIObject, long\)](#)

---

**Member Summary**

---

[toDatum\(OracleConnection\)](#)

---

**Fields****\_SQL\_NAME**

```
public static final java.lang.String _SQL_NAME
```

**\_SQL\_TYPECODE**

```
public static final int _SQL_TYPECODE
```

**Constructors****ODCIObjectList()**

```
public ODCIObjectList()
```

**ODCIObjectList(ODCIObject[])**

```
public ODCIObjectList(ODCIObject a)
```

**Methods****create(Datum, int)**

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

**getArray()**

```
public ODCIObject getArray()
```

**getArray(long, int)**

```
public ODCIObject getArray(long index, int count)
```

**getBaseType()**

```
public int getBaseType()
```

**getBaseTypeName()**

```
public java.lang.String getBaseTypeName()
```

**getDescriptor()**

```
public oracle.sql.ArrayDescriptor getDescriptor()
```

**getElement(long)**

```
public ODCIObject getElement(long index)
```

**getFactory()**

```
public static oracle.sql.CustomDatumFactory getFactory()
```

**length()**

```
public int length()
```

**setArray(ODCIObject[])**

```
public void setArray(ODCIObject a)
```

**setArray(ODCIObject[], long)**

```
public void setArray(ODCIObject a, long index)
```

**setElement(ODCIObject, long)**

```
public void setElement(ODCIObject a, long index)
```

**toDatum(OracleConnection)**

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

---

## oracle.ODCI ODCIObjectRef

### Syntax

```
public class ODCIObjectRef
```

```
oracle.ODCI.ODCIObjectRef
```

### Description

---

#### Member Summary

---

##### Fields

[\\_SQL\\_BASETYPE](#)

[\\_SQL\\_TYPECODE](#)

##### Constructors

[ODCIObjectRef\(\)](#)

##### Methods

[create\(Datum, int\)](#)

[getFactory\(\)](#)

[getValue\(\)](#)

[setValue\(ODCIObject\)](#)

[toDatum\(OracleConnection\)](#)

---

#### Fields

##### **`_SQL_BASETYPE`**

```
public static final java.lang.String _SQL_BASETYPE
```

##### **`_SQL_TYPECODE`**

```
public static final int _SQL_TYPECODE
```

## Constructors

### ODCIObjectRef()

```
public ODCIObjectRef()
```

## Methods

### create(Datum, int)

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### getFactory()

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### getValue()

```
public ODCIObject getValue()
```

### setValue(ODCIObject)

```
public void setValue(ODCIObject c)
```

### toDatum(OracleConnection)

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

---

## oracle.ODCI ODCIPredInfo

### Syntax

```
public class ODCIPredInfo
```

```
oracle.ODCI.ODCIPredInfo
```

### Description

---

#### Member Summary

---

##### Fields

[\\_SQL\\_NAME](#)

[\\_SQL\\_TYPECODE](#)

##### Constructors

[ODCIPredInfo\(\)](#)

[ODCIPredInfo\(Connection\)](#)

[ODCIPredInfo\(ConnectionContext\)](#)

##### Methods

[create\(Datum, int\)](#)

[getFactory\(\)](#)

[getFlags\(\)](#)

[getMethodname\(\)](#)

[getObjectname\(\)](#)

[getObjectschema\(\)](#)

[setFlags\(BigDecimal\)](#)

[setMethodname\(String\)](#)

[setObjectname\(String\)](#)

[setObjectschema\(String\)](#)

[toDatum\(OracleConnection\)](#)

---

## Fields

### **\_SQL\_NAME**

```
public static final java.lang.String _SQL_NAME
```

### **\_SQL\_TYPECODE**

```
public static final int _SQL_TYPECODE
```

## Constructors

### **ODCIPredInfo()**

```
public ODCIPredInfo()
```

### **ODCIPredInfo(Connection)**

```
public ODCIPredInfo(java.sql.Connection c)
```

### **ODCIPredInfo(ConnectionContext)**

```
public ODCIPredInfo(sqlj.runtime.ConnectionContext c)
```

## Methods

### **create(Datum, int)**

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### **getFactory()**

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### **getFlags()**

```
public java.math.BigDecimal getFlags()
```

### **getMethodname()**

```
public java.lang.String getMethodname()
```

### **getObjectname()**

```
public java.lang.String getObjectname()
```

**getObjectSchema()**

```
public java.lang.String getObjectSchema()
```

**setFlags(BigDecimal)**

```
public void setFlags(java.math.BigDecimal flags)
```

**setMethodName(String)**

```
public void setMethodName(java.lang.String methodName)
```

**setObjectName(String)**

```
public void setObjectName(java.lang.String objectName)
```

**setObjectSchema(String)**

```
public void setObjectSchema(java.lang.String objectSchema)
```

**toDatum(OracleConnection)**

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

## oracle.ODCI ODCIPredInfoRef

### Syntax

```
public class ODCIPredInfoRef
```

```
oracle.ODCI.ODCIPredInfoRef
```

### Description

---

## Member Summary

---

### Fields

[\\_SQL\\_BASETYPE](#)

[\\_SQL\\_TYPECODE](#)

### Constructors

[ODCIPredInfoRef\(\)](#)

### Methods

[create\(Datum, int\)](#)

[getFactory\(\)](#)

[getValue\(\)](#)

[setValue\(ODCIPredInfo\)](#)

[toDatum\(OracleConnection\)](#)

---

## Fields

### **`_SQL_BASETYPE`**

```
public static final java.lang.String _SQL_BASETYPE
```

### **`_SQL_TYPECODE`**

```
public static final int _SQL_TYPECODE
```

## Constructors

### ODCIPredInfoRef()

```
public ODCIPredInfoRef()
```

## Methods

### create(Datum, int)

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### getFactory()

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### getValue()

```
public ODCIPredInfo getValue()
```

### setValue(ODCIPredInfo)

```
public void setValue(ODCIPredInfo c)
```

### toDatum(OracleConnection)

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

---

## oracle.ODCI ODCIQueryInfo

### Syntax

```
public class ODCIQueryInfo
```

```
oracle.ODCI.ODCIQueryInfo
```

### Description

---

#### Member Summary

---

##### Fields

[\\_SQL\\_NAME](#)

[\\_SQL\\_TYPECODE](#)

##### Constructors

[ODCIQueryInfo\(\)](#)

[ODCIQueryInfo\(Connection\)](#)

[ODCIQueryInfo\(ConnectionContext\)](#)

##### Methods

[create\(Datum, int\)](#)

[getAncops\(\)](#)

[getFactory\(\)](#)

[getFlags\(\)](#)

[setAncops\(ODCIObjectList\)](#)

[setFlags\(BigDecimal\)](#)

[toDatum\(OracleConnection\)](#)

---

## Fields

### **\_SQL\_NAME**

```
public static final java.lang.String _SQL_NAME
```

### **\_SQL\_TYPECODE**

```
public static final int _SQL_TYPECODE
```

## Constructors

### **ODCIQueryInfo()**

```
public ODCIQueryInfo()
```

### **ODCIQueryInfo(Connection)**

```
public ODCIQueryInfo(java.sql.Connection c)
```

### **ODCIQueryInfo(ConnectionContext)**

```
public ODCIQueryInfo(sqlj.runtime.ConnectionContext c)
```

## Methods

### **create(Datum, int)**

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### **getAncops()**

```
public ODCIObjectList getAncops()
```

### **getFactory()**

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### **getFlags()**

```
public java.math.BigDecimal getFlags()
```

### **setAncops(ODCIObjectList)**

```
public void setAncops(ODCIObjectList ancops)
```

### **setFlags(BigDecimal)**

```
public void setFlags(java.math.BigDecimal flags)
```

### **toDatum(OracleConnection)**

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

---

## oracle.ODCI ODCIQueryInfoRef

### Syntax

```
public class ODCIQueryInfoRef
```

```
oracle.ODCI.ODCIQueryInfoRef
```

### Description

---

## Member Summary

---

### Fields

[\\_SQL\\_BASETYPE](#)

[\\_SQL\\_TYPECODE](#)

### Constructors

[ODCIQueryInfoRef\(\)](#)

### Methods

[create\(Datum, int\)](#)

[getFactory\(\)](#)

[getValue\(\)](#)

[setValue\(ODCIQueryInfo\)](#)

[toDatum\(OracleConnection\)](#)

---

## Fields

### **`_SQL_BASETYPE`**

```
public static final java.lang.String _SQL_BASETYPE
```

### **`_SQL_TYPECODE`**

```
public static final int _SQL_TYPECODE
```

## Constructors

### ODCIQueryInfoRef()

```
public ODCIQueryInfoRef()
```

## Methods

### create(Datum, int)

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### getFactory()

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### getValue()

```
public ODCIQueryInfo getValue()
```

### setValue(ODCIQueryInfo)

```
public void setValue(ODCIQueryInfo c)
```

### toDatum(OracleConnection)

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

---

## oracle.ODCI ODCIRidList

### Syntax

```
public class ODCIRidList
```

```
oracle.ODCI.ODCIRidList
```

### Description

---

## Member Summary

---

### Fields

[\\_SQL\\_NAME](#)

[\\_SQL\\_TYPECODE](#)

### Constructors

[ODCIRidList\(\)](#)

[ODCIRidList\(String\[\]\)](#)

### Methods

[create\(Datum, int\)](#)

[getArray\(\)](#)

[getArray\(long, int\)](#)

[getBaseType\(\)](#)

[getBaseTypeName\(\)](#)

[getDescriptor\(\)](#)

[getElement\(long\)](#)

[getFactory\(\)](#)

[length\(\)](#)

[setArray\(String\[\]\)](#)

[setArray\(String\[\], long\)](#)

[setElement\(String, long\)](#)

---

**Member Summary**

---

[toDatum\(OracleConnection\)](#)

---

**Fields****\_SQL\_NAME**

```
public static final java.lang.String _SQL_NAME
```

**\_SQL\_TYPECODE**

```
public static final int _SQL_TYPECODE
```

**Constructors****ODCIRidList()**

```
public ODCIRidList()
```

**ODCIRidList(String[])**

```
public ODCIRidList(java.lang.String[] a)
```

**Methods****create(Datum, int)**

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

**getArray()**

```
public java.lang.String[] getArray()
```

**getArray(long, int)**

```
public java.lang.String[] getArray(long index, int count)
```

**getBaseType()**

```
public int getBaseType()
```

**getBaseTypeName()**

```
public java.lang.String getBaseTypeName()
```

**getDescriptor()**

```
public oracle.sql.ArrayDescriptor getDescriptor()
```

**getElement(long)**

```
public java.lang.String getElement(long index)
```

**getFactory()**

```
public static oracle.sql.CustomDatumFactory getFactory()
```

**length()**

```
public int length()
```

**setArray(String[])**

```
public void setArray(java.lang.String[] a)
```

**setArray(String[], long)**

```
public void setArray(java.lang.String[] a, long index)
```

**setElement(String, long)**

```
public void setElement(java.lang.String a, long index)
```

**toDatum(OracleConnection)**

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

## oracle.ODCI ODCIStatsOptions

### Syntax

```
public class ODCIStatsOptions
```

```
oracle.ODCI.ODCIStatsOptions
```

### Description

---

#### Member Summary

---

##### Fields

[\\_SQL\\_NAME](#)

[\\_SQL\\_TYPECODE](#)

##### Constructors

[ODCIStatsOptions\(\)](#)

[ODCIStatsOptions\(Connection\)](#)

[ODCIStatsOptions\(ConnectionContext\)](#)

##### Methods

[create\(Datum, int\)](#)

[getFactory\(\)](#)

[getFlags\(\)](#)

[getOptions\(\)](#)

[getSample\(\)](#)

[setFlags\(BigDecimal\)](#)

[setOptions\(BigDecimal\)](#)

[setSample\(BigDecimal\)](#)

[toDatum\(OracleConnection\)](#)

---

## Fields

### **\_SQL\_NAME**

```
public static final java.lang.String _SQL_NAME
```

### **\_SQL\_TYPECODE**

```
public static final int _SQL_TYPECODE
```

## Constructors

### **ODCIStatsOptions()**

```
public ODCIStatsOptions()
```

### **ODCIStatsOptions(Connection)**

```
public ODCIStatsOptions(java.sql.Connection c)
```

### **ODCIStatsOptions(ConnectionContext)**

```
public ODCIStatsOptions(sqlj.runtime.ConnectionContext c)
```

## Methods

### **create(Datum, int)**

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### **getFactory()**

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### **getFlags()**

```
public java.math.BigDecimal getFlags()
```

### **getOptions()**

```
public java.math.BigDecimal getOptions()
```

### **getSample()**

```
public java.math.BigDecimal getSample()
```

### **setFlags(BigDecimal)**

```
public void setFlags(java.math.BigDecimal flags)
```

### **setOptions(BigDecimal)**

```
public void setOptions(java.math.BigDecimal options)
```

### **setSample(BigDecimal)**

```
public void setSample(java.math.BigDecimal sample)
```

### **toDatum(OracleConnection)**

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

---

## oracle.ODCI ODCIStatsOptionsRef

### Syntax

```
public class ODCIStatsOptionsRef
```

```
oracle.ODCI.ODCIStatsOptionsRef
```

### Description

---

#### Member Summary

---

##### Fields

[\\_SQL\\_BASETYPE](#)

[\\_SQL\\_TYPECODE](#)

##### Constructors

[ODCIStatsOptionsRef\(\)](#)

##### Methods

[create\(Datum, int\)](#)

[getFactory\(\)](#)

[getValue\(\)](#)

[setValue\(ODCIStatsOptions\)](#)

[toDatum\(OracleConnection\)](#)

---

#### Fields

##### **`_SQL_BASETYPE`**

```
public static final java.lang.String _SQL_BASETYPE
```

##### **`_SQL_TYPECODE`**

```
public static final int _SQL_TYPECODE
```

## Constructors

### ODCIStatsOptionsRef()

```
public ODCIStatsOptionsRef()
```

## Methods

### create(Datum, int)

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d, int sqlType)
```

### getFactory()

```
public static oracle.sql.CustomDatumFactory getFactory()
```

### getValue()

```
public ODCIStatsOptions getValue()
```

### setValue(ODCIStatsOptions)

```
public void setValue(ODCIStatsOptions c)
```

### toDatum(OracleConnection)

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

---

## Package oracle.xml.parser.v2

## Package Oracle.xml.parser.v2 Description

---

### Class Summary

---

#### Interfaces

<a href="#">NSName</a>	This interface provides Namespace support for Element and Attr names
<a href="#">NSResolver</a>	This interface provides support for resolving Namespaces
<a href="#">XMLDocumentHandler</a>	This interface extends the <code>org.xml.sax.DocumentHandler</code> interface.
<a href="#">XMLToken</a>	Basic interface for XMLToken

#### Classes

<a href="#">AttrDecl</a>	This class hold information about each attribute declared in an attribute list in the Document Type Definition.
<a href="#">Package Oracle.xml.parser.v2 Description</a>	This class implements the default behaviour for the <code>XMLDocumentHandler</code> interface.
<a href="#">DOMParser</a>	This class implements an eXtensible Markup Language (XML) 1.0 parser according to the World Wide Web Consortium (W3C) recommendation.
<a href="#">DTD</a>	Implements the DOM <code>DocumentType</code> interface and holds the Document Type Definition information for an XML document.
<a href="#">ElementDecl</a>	This class represents an element declaration in a DTD.
<a href="#">NodeFactory</a>	This class specifies methods to create various nodes of the DOM tree built during parsing.
<a href="#">oraxsl</a>	The <code>oraxsl</code> class provides a command-line interface to applying stylesheets on multiple XML documents.
<a href="#">SAXAttrList</a>	This class implements the SAX <code>AttributeList</code> interface and also provides Namespace support.
<a href="#">SAXParser</a>	This class implements an eXtensible Markup Language (XML) 1.0 SAX parser according to the World Wide Web Consortium (W3C) recommendation.
<a href="#">XMLAttr</a>	This class implements the DOM <code>Attr</code> interface and holds information on each attribute of an element.
<a href="#">XMLCDATA</a>	This class implements the DOM <code>CDATASection</code> interface.
<a href="#">XMLComment</a>	This class implements the DOM <code>Comment</code> interface.
<a href="#">XMLDocument</a>	This class implements the DOM <code>Document</code> interface, represents an entire XML document and serves the root of the Document Object Model tree.

---

**Class Summary**

---

<a href="#">XMLDocumentFragment</a>	This class implements the DOM DocumentFragment interface.
<a href="#">XMLElement</a>	This class implements the DOM Element interface.
<a href="#">XMLEntityReference</a>	
<a href="#">XMLNode</a>	Implements the DOM Node interface and serves as the primary datatype for the entire Document Object Model.
<a href="#">XMLParser</a>	This class serves as a base class for the DOMParser and SAXParser classes.
<a href="#">XMLPI</a>	This class implements the DOM Processing Instruction interface.
<a href="#">XMLText</a>	This class implements the DOM Text interface.
<a href="#">XMLTokenizer</a>	This class implements an eXtensible Markup Language (XML) 1.0 parser according to the World Wide Web Consortium (W3C) recommendation.
<a href="#">XSLProcessor</a>	This class provides methods to transform an input XML document using a previously constructed XSLStylesheet.
<a href="#">XSLStylesheet</a>	The class holds XSL stylesheet information such as templates, keys, variables, and attribute sets.

**Exceptions**

<a href="#">XMLParseException</a>	Indicates that a parsing exception occurred while processing an XML document
<a href="#">XSLException</a>	Indicates that an exception occurred during XSL transformation

---

## oracle.xml.parser.v2 AttrDecl

### Syntax

public class AttrDecl extends [XMLNode](#) implements  
oracle.xml.parser.v2.XMLConstants, java.io.Serializable

```

java.lang.Object
|
+--XMLNode
    |
    +--oracle.xml.parser.v2.AttrDecl
  
```

### All Implemented Interfaces

java.lang.Cloneable, [org.w3c.dom.Node](#), java.io.Serializable,  
oracle.xml.parser.v2.XMLConstants

### Description

This class holds information about each attribute declared in an attribute list in the Document Type Definition.

---

### Member Summary

---

#### Fields

<a href="#">CDATA</a>	AttType - StringType - CDATA
<a href="#">DEFAULT</a>	Attribute presence - Default
<a href="#">ENTITIES</a>	AttType - TokenizedType - Entities
<a href="#">ENTITY</a>	AttType - TokenizedType - Entity
<a href="#">ENUMERATION</a>	AttType - EnumeratedType - Enumeration
<a href="#">FIXED</a>	Attribute presence - Fixed
<a href="#">ID</a>	AttType - TokenizedType - ID
<a href="#">IDREF</a>	AttType - TokenizedType - ID reference
<a href="#">IDREFS</a>	AttType - TokenizedType - ID references
<a href="#">IMPLIED</a>	Attribute presence - Implied

---

**Member Summary**


---

<a href="#">NMTOKEN</a>	AttType - TokenizedType - Name token
<a href="#">NMTOKENS</a>	AttType - TokenizedType - Name tokens
<a href="#">NOTATION</a>	AttType - EnumeratedType - Notation
<a href="#">REQUIRED</a>	Attribute presence - Required
Methods	
<a href="#">getAttrPresence()</a>	Gets attribute presence
<a href="#">getAttrType()</a>	Gets attribute type
<a href="#">getDefaultValue()</a>	Gets attribute default value
<a href="#">getEnumerationValues()</a>	Gets attribute values

---



---

**Inherited Member Summary**


---

**Fields inherited from class [XMLNode](#)**

AMP, ASTERISK, [ATTRDECL](#), cANY, cATTLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREF, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cNDATA, cNMTOKEN, cNMTOKENS, cNOTATION, COLON, COMMA, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, [ELEMENTDECL](#), EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNamespace, nameXMLNSNamespace, nameXMLSpace, nameXSLPI, NONVALIDATING, OR, PERCENT, PLUS, QMARK, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

**Fields inherited from interface [oracle.xml.parser.v2.XMLConstants](#)**

AMP, ASTERISK, cANY, cATTLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREF, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cNDATA, cNMTOKEN, cNMTOKENS, cNOTATION, COLON, COMMA, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNamespace, nameXMLNSNamespace, nameXMLSpace, nameXSLPI, NONVALIDATING, OR, PERCENT, PLUS, QMARK, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

**Fields inherited from interface [Node](#)**

---

**Inherited Member Summary**

---

ATTRIBUTE\_NODE, CDATA\_SECTION\_NODE, COMMENT\_NODE, DOCUMENT\_FRAGMENT\_NODE, DOCUMENT\_NODE, DOCUMENT\_TYPE\_NODE, ELEMENT\_NODE, ENTITY\_NODE, ENTITY\_REFERENCE\_NODE, NOTATION\_NODE, PROCESSING\_INSTRUCTION\_NODE, TEXT\_NODE

Methods inherited from class [XMLNode](#)

[appendChild\(Node\)](#), [cloneNode\(boolean\)](#), [getAttributes\(\)](#), [getChildNodes\(\)](#), [getFirstChild\(\)](#), [getLastChild\(\)](#), [getNextSibling\(\)](#), [getNodeName\(\)](#), [getNodeType\(\)](#), [getNodeValue\(\)](#), [getOwnerDocument\(\)](#), [getParentNode\(\)](#), [getPreviousSibling\(\)](#), [hasChildNodes\(\)](#), [insertBefore\(Node, Node\)](#), [print\(OutputStream\)](#), [print\(OutputStream, String\)](#), [print\(PrintWriter\)](#), [removeChild\(Node\)](#), [replaceChild\(Node, Node\)](#), [selectNodes\(String, NSResolver\)](#), [selectSingleNode\(String, NSResolver\)](#), [setNodeValue\(String\)](#), [transformNode\(XSLStylesheet\)](#), [valueOf\(String, NSResolver\)](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [Node](#)

[appendChild\(Node\)](#), [cloneNode\(boolean\)](#), [getAttributes\(\)](#), [getChildNodes\(\)](#), [getFirstChild\(\)](#), [getLastChild\(\)](#), [getNextSibling\(\)](#), [getNodeName\(\)](#), [getNodeType\(\)](#), [getNodeValue\(\)](#), [getOwnerDocument\(\)](#), [getParentNode\(\)](#), [getPreviousSibling\(\)](#), [hasChildNodes\(\)](#), [insertBefore\(Node, Node\)](#), [removeChild\(Node\)](#), [replaceChild\(Node, Node\)](#), [setNodeValue\(String\)](#)

---

**Fields****CDATA**

```
public static final int CDATA
AttType - StringType - CDATA
```

**DEFAULT**

```
public static final int DEFAULT
Attribute presence - Default
```

**ENTITIES**

```
public static final int ENTITIES
AttType - TokenizedType - Entities
```

**ENTITY**

```
public static final int ENTITY
AttType - TokenizedType - Entity
```

**ENUMERATION**

```
public static final int ENUMERATION
AttType - EnumeratedType - Enumeration
```

**FIXED**

```
public static final int FIXED
Attribute presence - Fixed
```

**ID**

```
public static final int ID
AttType - TokenizedType - ID
```

**IDREF**

```
public static final int IDREF
AttType - TokenizedType - ID reference
```

**IDREFS**

```
public static final int IDREFS
AttType - TokenizedType - ID references
```

**IMPLIED**

```
public static final int IMPLIED
Attribute presence - Implied
```

**NMTOKEN**

```
public static final int NMTOKEN
AttType - TokenizedType - Name token
```

**NMTOKENS**

```
public static final int NMTOKENS
AttType - TokenizedType - Name tokens
```

**NOTATION**

```
public static final int NOTATION
AttType - EnumeratedType - Notation
```

## REQUIRED

```
public static final int REQUIRED
Attribute presence - Required
```

## Methods

### getAttrPresence()

```
public int getAttrPresence()
Gets attribute presence
```

#### Returns

The presence of the attribute

### getAttrType()

```
public int getAttrType()
Gets attribute type
```

#### Returns

The type of the attribute

### getDefaultValue()

```
public java.lang.String getDefaultValue()
Gets attribute default value
```

#### Returns

The default value of the attribute

### getEnumerationValues()

```
public java.util.Vector getEnumerationValues()
Gets attribute values
```

#### Returns

The values of the attribute as an Enumeration

## oracle.xml.parser.v2 DefaultXMLDocumentHandler

### Syntax

public class DefaultXMLDocumentHandler extends [org.xml.sax.HandlerBase](#) implements [XMLDocumentHandler](#)

```

java.lang.Object
|
+--org.xml.sax.HandlerBase
|
+--oracle.xml.parser.v2.DefaultXMLDocumentHandler

```

### Direct Known Subclasses:

[XMLTokenizer](#)

### All Implemented Interfaces

[org.xml.sax.DocumentHandler](#), [org.xml.sax.DTDHandler](#), [org.xml.sax.EntityResolver](#), [org.xml.sax.ErrorHandler](#), [XMLDocumentHandler](#)

### Description

This class implements the default behaviour for the [XMLDocumentHandler](#) interface.

Application writers can extend this class when they need to implement only part of the interface

---

### Member Summary

---

#### Constructors

[DefaultXMLDocumentHandler\(\)](#) Constructs a default document handler

#### Methods

[cDATASection\(char\[\], int, int\)](#) Receive notification of a CDATA Section.

[comment\(String\)](#) Receive notification of a comment.

---

**Member Summary**

---

<a href="#">endDoctype()</a>	Receive notification of end of the DTD.
<a href="#">endElement(NSName)</a>	Receive notification of the end of an element.
<a href="#">setDoctype(DTD)</a>	Receive notification of DTD.
<a href="#">setTextDecl(String, String)</a>	Receive notification of a Text XML Declaration.
<a href="#">setXMLDecl(String, String, String)</a>	Receive notification of an XML Declaration.
<a href="#">startElement(NSName, SAXAttrList)</a>	Receive notification of the beginning of an element.

---

---

**Inherited Member Summary**

---

Methods inherited from class HandlerBase

[characters\(char\[\], int, int\)](#), [endDocument\(\)](#), [endElement\(String\)](#), [error\(SAXParseException\)](#), [fatalError\(SAXParseException\)](#), [ignorableWhitespace\(char\[\], int, int\)](#), [notationDecl\(String, String, String\)](#), [processingInstruction\(String, String\)](#), [resolveEntity\(String, String\)](#), [setDocumentLocator\(Locator\)](#), [startDocument\(\)](#), [startElement\(String, AttributeList\)](#), [unparsedEntityDecl\(String, String, String, String\)](#), [warning\(SAXParseException\)](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface DocumentHandler

[characters\(char\[\], int, int\)](#), [endDocument\(\)](#), [endElement\(String\)](#), [ignorableWhitespace\(char\[\], int, int\)](#), [processingInstruction\(String, String\)](#), [setDocumentLocator\(Locator\)](#), [startDocument\(\)](#), [startElement\(String, AttributeList\)](#)

Methods inherited from interface EntityResolver

[resolveEntity\(String, String\)](#)

Methods inherited from interface DTDHandler

[notationDecl\(String, String, String\)](#), [unparsedEntityDecl\(String, String, String, String\)](#)

Methods inherited from interface ErrorHandler

[error\(SAXParseException\)](#), [fatalError\(SAXParseException\)](#), [warning\(SAXParseException\)](#)

---

## Constructor

### DefaultXMLDocumentHandler()

```
public DefaultXMLDocumentHandler()  
Constructs a default document handler
```

## Methods

### cDATASection(char[], int, int)

```
public void cDATASection(char[] ch, int start, int length)  
Receive notification of a CDATA Section.
```

The Parser will invoke this method once for each CDATA Section found.

#### Specified By

[cDATASection\(char\[\], int, int\)](#) in interface [XMLDocumentHandler](#)

#### Parameters

`ch` - The CDATA section characters.

`start` - The start position in the character array.

`length` - The number of characters to use from the character array.

#### Throws

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

### comment(String)

```
public void comment(java.lang.String data)  
Receive notification of a comment.
```

The Parser will invoke this method once for each comment found: note that comment may occur before or after the main document element.

#### Specified By

[comment\(String\)](#) in interface [XMLDocumentHandler](#)

### Parameters

`data` - The comment data, or null if none was supplied.

### Throws

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

## endDoctype()

```
public void endDoctype()
Receive notification of end of the DTD.
```

### Specified By

`endDoctype()` in interface [XMLDocumentHandler](#)

### Throws

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

## endElement(NSName)

```
public void endElement(NSName elem)
Receive notification of the end of an element. The SAX parser will invoke this method at the end of every element in the XML document; there will be a corresponding startElement() event for every endElement() event (even when the element is empty).
```

By implementing this method instead of `org.xml.sax.DocumentHandler.endElement`, SAX Applications can get the Namespace support provided by `NSName`.

### Specified By

`endElement(NSName)` in interface [XMLDocumentHandler](#)

### Parameters

`elem` - `NSName` object

### Throws

`org.xml.sax.SAXException` - A `SAXException` could be thrown.

**See Also**

[org.xml.sax.DocumentHandler.endElement\(String\)](#)

**setDoctype(DTD)**

```
public void setDoctype(DTD dtd)
```

Receive notification of DTD. Sets the DTD

**Specified By**

[setDoctype\(DTD\)](#) in interface [XMLDocumentHandler](#)

**Throws**

[org.xml.sax.SAXException](#) - Any SAX exception, possibly wrapping another exception.

**setTextDecl(String, String)**

```
public void setTextDecl(java.lang.String version, java.lang.String encoding)
```

Receive notification of a Text XML Declaration.

The Parser will invoke this method once for each text XML Decl

**Specified By**

[setTextDecl\(String, String\)](#) in interface [XMLDocumentHandler](#)

**Parameters**

`version` - The version number (or null, if not specified)

`encoding` - The encoding name

**Throws**

[org.xml.sax.SAXException](#) - Any SAX exception, possibly wrapping another exception.

**setXMLDecl(String, String, String)**

```
public void setXMLDecl(java.lang.String version, java.lang.String standalone,  
java.lang.String encoding)
```

Receive notification of an XML Declaration.

The Parser will invoke this method once for XML Decl

### Specified By

[setXMLDecl\(String, String, String\)](#) in interface [XMLDocumentHandler](#)

### Parameters

`version` - The version number

`standalone` - The standalone value (or null, if not specified)

`encoding` - The encoding name (or null, if not specified)

### Throws

[org.xml.sax.SAXException](#) - Any SAX exception, possibly wrapping another exception.

## **startElement(NSName, SAXAttrList)**

```
public void startElement(NSName elem, SAXAttrList attrlist)
```

Receive notification of the beginning of an element. The Parser will invoke this method at the beginning of every element in the XML document; there will be a corresponding `endElement()` event for every `startElement()` event (even when the element is empty). All of the element's content will be reported, in order, before the corresponding `endElement()` event.

By implementing this method instead of

`org.xml.sax.DocumentHandler.startElement`, SAX Applications can get the Namespace support provided by `NSName` and `SAXAttrList`.

### Specified By

[startElement\(NSName, SAXAttrList\)](#) in interface [XMLDocumentHandler](#)

### Parameters

`elem` - `NSName` object

`attrlist` - `SAXAttrList` for the element

### Throws

[org.xml.sax.SAXException](#) - A `SAXException` could be thrown.

### See Also

`org.xml.sax.DocumentHandler.startElement(String, AttributeList)`

---

## oracle.xml.parser.v2 DOMParser

### Syntax

public class DOMParser extends [XMLParser](#) implements  
oracle.xml.parser.v2.XMLConstants

```
java.lang.Object
|
+--XMLParser
|
+--oracle.xml.parser.v2.DOMParser
```

### All Implemented Interfaces

oracle.xml.parser.v2.XMLConstants

### Description

This class implements an eXtensible Markup Language (XML) 1.0 parser according to the World Wide Web Consortium (W3C) recommendation. to parse a XML document and build a DOM tree.

---

## Member Summary

---

### Constructors

[DOMParser\(\)](#) Creates a new parser object.

### Methods

[getDoctype\(\)](#) Get the DTD

[getDocument\(\)](#) Gets the document

[parseDTD\(InputSource, String\)](#) Parses the XML External DTD from given input source

[parseDTD\(InputStream, String\)](#) Parses the XML External DTD from given input stream.

[parseDTD\(Reader, String\)](#) Parses the XML External DTD from given input stream.

[parseDTD\(String, String\)](#) Parses the XML External DTD from the URL indicated

[parseDTD\(URL, String\)](#) Parses the XML External DTD document pointed to by the given URL and creates the corresponding XML document hierarchy.

---

**Member Summary**

---

<a href="#">setErrorStream(OutputStream)</a>	Creates an output stream for the output of errors and warnings.
<a href="#">setErrorStream(OutputStream, String)</a>	Creates an output stream for the output of errors and warnings.
<a href="#">setErrorStream(PrintWriter)</a>	Creates an output stream for the output of errors and warnings.
<a href="#">setNodeFactory(NodeFactory)</a>	Set the node factory.
<a href="#">showWarnings(boolean)</a>	Switch to determine whether to print warnings

---

---

**Inherited Member Summary**

---

Fields inherited from class [XMLParser](#)

AMP, ASTERISK, cANY, cATTLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREF, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cCDATA, cNMTOKEN, cNMTOKENS, cNOTATION, COLON, COMMA, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNamespace, nameXMLNSNamespace, nameXMLSpace, nameXSLPI, NONVALIDATING, OR, PERCENT, PLUS, QMARK, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

Fields inherited from interface [oracle.xml.parser.v2.XMLConstants](#)

AMP, ASTERISK, cANY, cATTLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREF, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cCDATA, cNMTOKEN, cNMTOKENS, cNOTATION, COLON, COMMA, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNamespace, nameXMLNSNamespace, nameXMLSpace, nameXSLPI, NONVALIDATING, OR, PERCENT, PLUS, QMARK, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

Methods inherited from class [XMLParser](#)

[getReleaseVersion\(\)](#), [getValidationMode\(\)](#), [parse\(InputSource\)](#), [parse\(InputStream\)](#), [parse\(Reader\)](#), [parse\(String\)](#), [parse\(URL\)](#), [setBaseURL\(URL\)](#), [setDoctype\(DTD\)](#), [setLocale\(Locale\)](#), [setPreserveWhitespace\(boolean\)](#), [setValidationMode\(boolean\)](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

---

## Constructor

### DOMParser()

```
public DOMParser()  
Creates a new parser object.
```

## Methods

### getDoctype()

```
public DTD getDoctype()  
Get the DTD
```

#### Returns

The DTD

### getDocument()

```
public XMLDocument getDocument()  
Gets the document
```

#### Returns

The document being parsed

### parseDTD(InputSource, String)

```
public final void parseDTD(org.xml.sax.InputSource in, java.lang.String rootName)  
Parses the XML External DTD from given input source
```

#### Parameters

`in` - the `org.xml.sax.InputSource` to parse

`rootName` - the element to be used as root Element

#### Throws

[XMLParseException](#) - if syntax or other error encountered.

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

`IOException` - IO Error.

## parseDTD(InputStream, String)

```
public final void parseDTD(java.io.InputStream in, java.lang.String rootName)
```

Parses the XML External DTD from given input stream. The base URL should be set for resolving external entities and DTD.

### Parameters

`in` - the `InputStream` containing XML data to parse.

`rootName` - the element to be used as root `Element`

### Throws

[XMLParseException](#) - if syntax or other error encountered.

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

`IOException` - IO Error.

### See Also

[setBaseURL\(URL\)](#)

## parseDTD(Reader, String)

```
public final void parseDTD(java.io.Reader r, java.lang.String rootName)
```

Parses the XML External DTD from given input stream. The base URL should be set for resolving external entities and DTD.

### Parameters

`r` - the `Reader` containing XML data to parse.

`rootName` - the element to be used as root `Element`

### Throws

[XMLParseException](#) - if syntax or other error encountered.

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

`IOException` - IO Error.

### See Also

[setBaseURL\(URL\)](#)

### **parseDTD(String, String)**

```
public final void parseDTD(java.lang.String in, java.lang.String rootName)
```

Parses the XML External DTD from the URL indicated

#### **Parameters**

`in` - the `String` containing the URL to parse from

`rootName` - the element to be used as root Element

#### **Throws**

[XMLParseException](#) - if syntax or other error encountered.

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

`IOException` - IO Error.

### **parseDTD(URL, String)**

```
public final void parseDTD(java.net.URL url, java.lang.String rootName)
```

Parses the XML External DTD document pointed to by the given URL and creates the corresponding XML document hierarchy.

#### **Parameters**

`url` - the url points to the XML document to parse.

`rootName` - the element to be used as root Element

#### **Throws**

[XMLParseException](#) - if syntax or other error encountered.

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

`IOException` - IO Error.

### **setErrorStream(OutputStream)**

```
public final void setErrorStream(java.io.OutputStream out)
```

Creates an output stream for the output of errors and warnings. If an output stream for errors is not specified, the parser will use the standard error output stream `System.err` for outputting errors and warnings.

**Parameters**

`out` - The output stream to use for errors and warnings

**setErrorStream(OutputStream, String)**

```
public final void setErrorStream(java.io.OutputStream out, java.lang.String enc)
```

Creates an output stream for the output of errors and warnings. If an output stream for errors is not specified, the parser will use the standard error output stream `System.err` for outputting errors and warnings. Additionally, an `.exception` is thrown if the encoding specified is unsupported.

**Parameters**

`out` - The output stream to use for errors and warnings

`enc` - the encoding to use

**Throws**

`IOException` - if an unsupported encoding is specified

**setErrorStream(PrintWriter)**

```
public final void setErrorStream(java.io.PrintWriter out)
```

Creates an output stream for the output of errors and warnings. If an output stream for errors is not specified, the parser will use the standard error output stream `System.err` for outputting errors and warnings.

**Parameters**

`out` - The `PrintWriter` to use for errors and warnings

**setNodeFactory(NodeFactory)**

```
public void setNodeFactory(NodeFactory factory)
```

Set the node factory. Applications can extend the `NodeFactory` and register it through this method. The parser will then use the user supplied `NodeFactory` to create nodes of the DOM tree.

**Parameters**

`factory` - The `NodeFactory` to set

**Throws**

[XMLParseException](#) - if an invalid factory is set

**See Also**[NodeFactory](#)**showWarnings(boolean)**

```
public void showWarnings(boolean yes)
```

Switch to determine whether to print warnings

**Parameters**

`yes` - determines whether warnings should be shown

---

## oracle.xml.parser.v2 DTD

### Syntax

public class DTD extends [XMLNode](#) implements [org.w3c.dom.DocumentType](#),  
[java.io.Serializable](#)

```
java.lang.Object
|
+--XMLNode
   |
   +--oracle.xml.parser.v2.DTD
```

### All Implemented Interfaces

[java.lang.Cloneable](#), [org.w3c.dom.DocumentType](#), [org.w3c.dom.Node](#),  
[java.io.Serializable](#), [oracle.xml.parser.v2.XMLConstants](#)

### Description

Implements the DOM [DocumentType](#) interface and holds the Document Type Definition information for an XML document.

---

### Member Summary

---

#### Methods

<a href="#">cloneNode(boolean)</a>	Returns a duplicate of this node, i.e., serves as a generic copy constructor for nodes.
<a href="#">findElementDecl(String)</a>	Finds an element declaration for the given tag name.
<a href="#">findEntity(String, boolean)</a>	Finds a named entity in the DTD.
<a href="#">findNotation(String)</a>	Retrieves the named notation from the DTD.
<a href="#">getChildNodes()</a>	A <a href="#">NodeList</a> that contains all children of this node.
<a href="#">getElementDecls()</a>	A <a href="#">NamedNodeMap</a> containing the element declarations in the DTD.
<a href="#">getEntities()</a>	A <a href="#">NamedNodeMap</a> containing the general entities, both external and internal, declared in the DTD.
<a href="#">getName()</a>	Gets the name of the DTD; i.e., the name immediately following the <code>DOCTYPE</code> keyword.

---

## Member Summary

---

<code>getNotations()</code>	A <code>NamedNodeMap</code> containing the notations declared in the DTD.
<code>getPublicId()</code>	Gets The public identifier associated with the DTD, if specified.
<code>getSystemId()</code>	Gets the system identifier associated with the DTD, if specified.
<code>hasChildNodes()</code>	This is a convenience method to allow easy determination of whether a node has any children.
<code>printExternalDTD(OutputStream)</code>	Writes the contents of this document to the given output stream.
<code>printExternalDTD(OutputStream, String)</code>	Writes the contents of the external DTD to the given output stream.
<code>printExternalDTD(PrintWriter)</code>	Writes the contents of this document to the given output stream.

---

## Inherited Member Summary

---

### Fields inherited from class `XMLNode`

AMP, ASTERISK, [ATTRDECL](#), cANY, cATTLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREF, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cNDATA, cNMTOKEN, cNMTOKENS, cNOTATION, COLON, COMMA, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, [ELEMENTDECL](#), EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNamespace, nameXMLNSNamespace, nameXMLSpace, nameXSLPI, NONVALIDATING, OR, PERCENT, PLUS, QMARK, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

### Fields inherited from interface `Node`

ATTRIBUTE\_NODE, CDATA\_SECTION\_NODE, COMMENT\_NODE, DOCUMENT\_FRAGMENT\_NODE, DOCUMENT\_NODE, DOCUMENT\_TYPE\_NODE, ELEMENT\_NODE, ENTITY\_NODE, ENTITY\_REFERENCE\_NODE, NOTATION\_NODE, PROCESSING\_INSTRUCTION\_NODE, TEXT\_NODE

### Fields inherited from interface `oracle.xml.parser.v2.XMLConstants`

---

## Inherited Member Summary

---

AMP, ASTERISK, cANY, cATTLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREF, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cNCDATA, cNMTOKEN, cNMTOKENS, cNOTATION, COLON, COMMA, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNamespace, nameXMLNSNamespace, nameXMLSpace, nameXSLPI, NONVALIDATING, OR, PERCENT, PLUS, QMARK, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

### Methods inherited from class [XMLNode](#)

[appendChild\(Node\)](#), [getAttributes\(\)](#), [getFirstChild\(\)](#), [getLastChild\(\)](#), [getNextSibling\(\)](#), [getNodeName\(\)](#), [getNodeName\(\)](#), [getNodeValue\(\)](#), [getOwnerDocument\(\)](#), [getParentNode\(\)](#), [getPreviousSibling\(\)](#), [insertBefore\(Node, Node\)](#), [print\(OutputStream\)](#), [print\(OutputStream, String\)](#), [print\(PrintWriter\)](#), [removeChild\(Node\)](#), [replaceChild\(Node, Node\)](#), [selectNodes\(String, NSResolver\)](#), [selectSingleNode\(String, NSResolver\)](#), [setNodeValue\(String\)](#), [transformNode\(XSLStylesheet\)](#), [valueOf\(String, NSResolver\)](#)

### Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

### Methods inherited from interface [Node](#)

[appendChild\(Node\)](#), [getAttributes\(\)](#), [getFirstChild\(\)](#), [getLastChild\(\)](#), [getNextSibling\(\)](#), [getNodeName\(\)](#), [getNodeName\(\)](#), [getNodeValue\(\)](#), [getOwnerDocument\(\)](#), [getParentNode\(\)](#), [getPreviousSibling\(\)](#), [insertBefore\(Node, Node\)](#), [removeChild\(Node\)](#), [replaceChild\(Node, Node\)](#), [setNodeValue\(String\)](#)

---

## Methods

### [cloneNode\(boolean\)](#)

```
public org.w3c.dom.Node cloneNode(boolean deep)
```

Returns a duplicate of this node, i.e., serves as a generic copy constructor for nodes. The duplicate node has no parent (`parentNode` returns `null`). Cloning an `Element` copies all attributes and their values, including those generated by the XML processor to represent defaulted attributes, but this method does not copy any text it contains unless it is a deep clone, since the text is contained in a child `Text` node. Cloning any other type of node simply returns a copy of this node.

### Specified By

`org.w3c.dom.Node.cloneNode(boolean)` in interface `org.w3c.dom.Node`

### Overrides

[cloneNode\(boolean\)](#) in class [XMLNode](#)

**Parameters**

`deep` - If `true`, recursively clone the subtree under the specified node; if `false`, clone only the node itself (and its attributes, if it is an `Element`).

**Returns**

The duplicate node.

**findElementDecl(String)**

```
public final ElementDecl findElementDecl(java.lang.String name)
```

Finds an element declaration for the given tag name.

**Parameters**

`name` - The tag name.

**Returns**

the element declaration object.

**findEntity(String, boolean)**

```
public final org.w3c.dom.Entity findEntity(java.lang.String n, boolean par)
```

Finds a named entity in the DTD.

**Parameters**

`n` - The name of the entity.

**Returns**

the specified `Entity` object; returns null if it is not found.

**findNotation(String)**

```
public final org.w3c.dom.Notation findNotation(java.lang.String name)
```

Retrieves the named notation from the DTD.

**Parameters**

`name` - The name of the notation.

**Returns**

the `Notation` object; returns null if it is not found.

## getChildNodes()

```
public org.w3c.dom.NodeList getChildNodes()
```

A `NodeList` that contains all children of this node. If there are no children, this is a `NodeList` containing no nodes. The content of the returned `NodeList` is "live" in the sense that, for instance, changes to the children of the node object that it was created from are immediately reflected in the nodes returned by the `NodeList` accessors; it is not a static snapshot of the content of the node. This is true for every `NodeList`, including the ones returned by the `getElementsByTagName` method.

### Specified By

`org.w3c.dom.Node.getChildNodes()` in interface `org.w3c.dom.Node`

### Overrides

[getChildNodes\(\)](#) in class [XMLNode](#)

### Returns

The children of this node

## getElementDecls()

```
public org.w3c.dom.NamedNodeMap getElementDecls()
```

A `NamedNodeMap` containing the element declarations in the DTD. Every node in this map is an `ElementDecl` object.

### Returns

The element declarations in the DTD The DOM Level 1 does not support editing `elementDecls`, therefore `elementDecls` cannot be altered in any way.

## getEntities()

```
public org.w3c.dom.NamedNodeMap getEntities()
```

A `NamedNodeMap` containing the general entities, both external and internal, declared in the DTD. Duplicates are discarded. For example in: `<!DOCTYPE ex SYSTEM "ex.dtd" [ <!ENTITY foo "foo"> <!ENTITY bar "bar"> <!ENTITY % baz "baz">]> <ex/>` the interface provides access to `foo` and `bar` but not `baz`. Every node in this map also implements the `Entity` interface. The DOM Level 1 does not support editing entities, therefore `entities` cannot be altered in any way.

**Specified By**

`org.w3c.dom.DocumentType.getEntities()` in interface `org.w3c.dom.DocumentType`

**Returns**

The entities declared in the DTD

**getName()**

```
public java.lang.String getName()
```

Gets the name of the DTD; i.e., the name immediately following the `DOCTYPE` keyword.

**Specified By**

`org.w3c.dom.DocumentType.getName()` in interface `org.w3c.dom.DocumentType`

**Returns**

Name of the DTD

**getNotations()**

```
public org.w3c.dom.NamedNodeMap getNotations()
```

A `NamedNodeMap` containing the notations declared in the DTD. Duplicates are discarded. Every node in this map also implements the `Notation` interface. The DOM Level 1 does not support editing notations, therefore notations cannot be altered in any way.

**Specified By**

`org.w3c.dom.DocumentType.getNotations()` in interface `org.w3c.dom.DocumentType`

**Returns**

The notations declared in the DTD

**getPublicId()**

```
public java.lang.String getPublicId()
```

Gets The public identifier associated with the DTD, if specified. If the public identifier was not specified, this is `null`.

**Returns**

the public identifier associated with the DTD

**getSystemId()**

```
public java.lang.String getSystemId()
```

Gets the system identifier associated with the DTD, if specified. If the system identifier was not specified, this is `null`.

**Returns**

the system identifier associated with the DTD

**hasChildNodes()**

```
public boolean hasChildNodes()
```

This is a convenience method to allow easy determination of whether a node has any children. return false always, as DTD cannot have any overrides method in XMLNode

**Specified By**

`org.w3c.dom.Node.hasChildNodes()` in interface `org.w3c.dom.Node`

**Overrides**

[hasChildNodes\(\)](#) in class [XMLNode](#)

**Returns**

false as DTD node can not have any children,

**printExternalDTD(OutputStream)**

```
public void printExternalDTD(java.io.OutputStream out)
```

Writes the contents of this document to the given output stream.

**Parameters**

out - `OutputStream` to write to

**Throws**

`IOException` - if an error occurs

**printExternalDTD(OutputStream, String)**

```
public void printExternalDTD(java.io.OutputStream out, java.lang.String enc)
```

Writes the contents of the external DTD to the given output stream.

**Parameters**

out - OutputStream to write to

enc - Encoding to use for the output

**Throws**

IOException - if an invalid encoding was specified or if any other error occurs

**printExternalDTD(PrintWriter)**

```
public void printExternalDTD(java.io.PrintWriter out)
```

Writes the contents of this document to the given output stream.

**Parameters**

out - PrintWriter to write to

**Throws**

IOException - if an error occurs

## oracle.xml.parser.v2 ElementDecl

### Syntax

public class ElementDecl extends [XMLNode](#) implements java.io.Serializable

```
java.lang.Object
|
+--XMLNode
   |
   +--oracle.xml.parser.v2.ElementDecl
```

### All Implemented Interfaces

java.lang.Cloneable, org.w3c.dom.Node, java.io.Serializable,  
oracle.xml.parser.v2.XMLConstants

### Description

This class represents an element declaration in a DTD.

---

### Member Summary

---

#### Fields

<a href="#">ANY</a>	Element content type - Children can be any element
<a href="#">ASTERISK</a>	ContentModelParseTreeNode type - "*" node (has one children)
<a href="#">COMMA</a>	ContentModelParseTreeNode type - "," node (has two children)
<a href="#">ELEMENT</a>	ContentModelParseTreeNode type - 'leaf' node (has no children)
<a href="#">ELEMENTS</a>	Element content type - Children can be elements as per Content Model
<a href="#">EMPTY</a>	Element content type - No Children
<a href="#">MIXED</a>	Element content type - Children can be PCDATA & elements as per Content Model
<a href="#">OR</a>	ContentModelParseTreeNode type - " " node (has two children)
<a href="#">PLUS</a>	ContentModelParseTreeNode type - "+" node (has one children)
<a href="#">QMARK</a>	ContentModelParseTreeNode type - "?" node (has one children)

---

## Member Summary

---

### Methods

<a href="#">expectedElements(Element)</a>	Returns vector of element names that can be appended to the element.
<a href="#">findAttrDecl(String)</a>	Gets an attribute declaration object or null if not found
<a href="#">getAttrDecls()</a>	Gets an enumeration of attribute declarations
<a href="#">getContentElements()</a>	Returns Vector of elements that can be appended to this element
<a href="#">getContentType()</a>	Returns content model of element
<a href="#">getParseTree()</a>	Returns the root node of Content Model Parse Tree.
<a href="#">validateContent(Element)</a>	Validates the content of a element node.

---



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## Inherited Member Summary

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### Fields inherited from class [XMLNode](#)

AMP, [ATTRDECL](#), cANY, cATTLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREF, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cNDATA, cNMTOKEN, cNMTOKENS, cNOTATION, COLON, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, [ELEMENTDECL](#), EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNameSpace, nameXMLNSNameSpace, nameXMLSpace, nameXSLPI, NONVALIDATING, PERCENT, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

### Fields inherited from interface Node

[ATTRIBUTE\\_NODE](#), [CDATA\\_SECTION\\_NODE](#), [COMMENT\\_NODE](#), [DOCUMENT\\_FRAGMENT\\_NODE](#), [DOCUMENT\\_NODE](#), [DOCUMENT\\_TYPE\\_NODE](#), [ELEMENT\\_NODE](#), [ENTITY\\_NODE](#), [ENTITY\\_REFERENCE\\_NODE](#), [NOTATION\\_NODE](#), [PROCESSING\\_INSTRUCTION\\_NODE](#), [TEXT\\_NODE](#)

### Fields inherited from interface oracle.xml.parser.v2.XMLConstants

AMP, cANY, cATTLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREF, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cNDATA, cNMTOKEN, cNMTOKENS, cNOTATION, COLON, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNameSpace, nameXMLNSNameSpace, nameXMLSpace, nameXSLPI, NONVALIDATING, PERCENT, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

---

## Inherited Member Summary

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### Methods inherited from class [XMLNode](#)

[appendChild\(Node\)](#), [cloneNode\(boolean\)](#), [getAttributes\(\)](#), [getChildNodes\(\)](#), [getFirstChild\(\)](#), [getLastChild\(\)](#), [getNextSibling\(\)](#), [getNodeName\(\)](#), [getNodeValue\(\)](#), [getOwnerDocument\(\)](#), [getParentNode\(\)](#), [getPreviousSibling\(\)](#), [hasChildNodes\(\)](#), [insertBefore\(Node, Node\)](#), [print\(OutputStream\)](#), [print\(OutputStream, String\)](#), [print\(PrintWriter\)](#), [removeChild\(Node\)](#), [replaceChild\(Node, Node\)](#), [selectNodes\(String, NSResolver\)](#), [selectSingleNode\(String, NSResolver\)](#), [setNodeValue\(String\)](#), [transformNode\(XSLStylesheet\)](#), [valueOf\(String, NSResolver\)](#)

### Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

### Methods inherited from interface [Node](#)

[appendChild\(Node\)](#), [cloneNode\(boolean\)](#), [getAttributes\(\)](#), [getChildNodes\(\)](#), [getFirstChild\(\)](#), [getLastChild\(\)](#), [getNextSibling\(\)](#), [getNodeName\(\)](#), [getNodeValue\(\)](#), [getOwnerDocument\(\)](#), [getParentNode\(\)](#), [getPreviousSibling\(\)](#), [hasChildNodes\(\)](#), [insertBefore\(Node, Node\)](#), [removeChild\(Node\)](#), [replaceChild\(Node, Node\)](#), [setNodeValue\(String\)](#)

---

## Fields

### ANY

```
public static final byte ANY
Element content type - Children can be any element
```

### ASTERISK

```
public static final int ASTERISK
ContentModelParseTreeNode type - "*" node (has one children)
```

### COMMA

```
public static final int COMMA
ContentModelParseTreeNode type - "," node (has two children)
```

### ELEMENT

```
public static final int ELEMENT
ContentModelParseTreeNode type - 'leaf' node (has no children)
```

### ELEMENTS

```
public static final byte ELEMENTS
Element content type - Children can be elements as per Content Model
```

**EMPTY**

```
public static final byte EMPTY
Element content type - No Children
```

**MIXED**

```
public static final byte MIXED
Element content type - Children can be PCDATA & elements as per Content Model
```

**OR**

```
public static final int OR
ContentModelParseTreeNode type - "|" node (has two children)
```

**PLUS**

```
public static final int PLUS
ContentModelParseTreeNode type - "+" node (has one children)
```

**QMARK**

```
public static final int QMARK
ContentModelParseTreeNode type - "?" node (has one children)
```

**Methods****expectedElements(Element)**

```
public java.util.Vector expectedElements(org.w3c.dom.Element e)
Returns vector of element names that can be appended to the element.
```

**Parameters**

e - Element

**Returns**

Vector of names

**findAttrDecl(String)**

```
public final AttrDecl findAttrDecl(java.lang.String name)
Gets an attribute declaration object or null if not found
```

**Parameters**

name - Attribute declaration to find

**Returns**

The `AttrDecl` object, or null, if it was not found

**getAttrDecls()**

```
public org.w3c.dom.NamedNodeMap getAttrDecls()  
Gets an enumeration of attribute declarations
```

**Returns**

An enumeration of attribute declarations

**getContentElements()**

```
public final java.util.Vector getContentElements()  
Returns Vector of elements that can be appended to this element
```

**Returns**

The `Vector` containing the element names.

**getContentType()**

```
public int getContentType()  
Returns content model of element
```

**Returns**

The `type` of the element declaration.

**getParseTree()**

```
public final org.w3c.dom.Node getParseTree()  
Returns the root node of Content Model Parse Tree. Node.getFirstChild() and  
Node.getLastChild() return the the parse tree branches.  
Node.getNodeType() and Node.getNodeName() return the the parse tree node  
type and name.
```

**Returns**

The `Node` containing the Content Model parse tree root node.

## validateContent(Element)

```
public boolean validateContent(org.w3c.dom.Element e)
```

Validates the content of a element node.

### Returns

True if valid, else false

## NodeFactory

### Syntax

```
public class NodeFactory extends java.lang.Object implements  
java.io.Serializable
```

```
java.lang.Object  
|  
+--oracle.xml.parser.v2.NodeFactory
```

### All Implemented Interfaces

```
java.io.Serializable
```

### Description

This class specifies methods to create various nodes of the DOM tree built during parsing. Applications can override these methods to create their own custom classes to be added to the DOM tree while parsing. Applications have to register their own NodeFactory using the XMLParser's `setNodeFactory()` method. If a null pointer is returned by these methods, then the node will not be added to the DOM tree.

### See Also

[setNodeFactory\(NodeFactory\)](#)

---

## Member Summary

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### Constructors

[NodeFactory\(\)](#)

### Methods

[createAttribute\(String, String\)](#) Creates an attribute node with the specified tag, and text.

[createCDATASection\(String\)](#) Creates a CDATA node with the specified text.

---

## Member Summary

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<a href="#">createComment(String)</a>	Creates a comment node with the specified text.
<a href="#">createDocument()</a>	Creates a document node.
<a href="#">createElement(String)</a>	Creates an Element node with the specified tag.
<a href="#">createProcessingInstruction(String, String)</a>	Creates a PI node with the specified tag, and text.
<a href="#">createTextNode(String)</a>	Creates a text node with the specified text.

---

---

## Inherited Member Summary

---

Methods inherited from class `java.lang.Object`

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

---

## Constructor

### NodeFactory()

```
public NodeFactory()
```

## Methods

### createAttribute(String, String)

```
public XMLAttr createAttribute(java.lang.String tag, java.lang.String text)
```

Creates an attribute node with the specified tag, and text.

#### Parameters

`tag` - The name of the node.

`text` - The text associated with the node.

#### Returns

The created attribute node.

### createCDATASection(String)

```
public XMLCDATA createCDATASection(java.lang.String text)
```

Creates a CDATA node with the specified text.

**Parameters**

text - The text associated with the node.

**Returns**

The created CDATA node.

**createComment(String)**

```
public XMLComment createComment(java.lang.String text)
```

Creates a comment node with the specified text.

**Parameters**

text - The text associated with the node.

**Returns**

The created comment node.

**createDocument()**

```
public XMLDocument createDocument()
```

Creates a document node. This method cannot return a null pointer.

**Returns**

The created element.

**createElement(String)**

```
public XMLElement createElement(java.lang.String tag)
```

Creates an Element node with the specified tag.

**Parameters**

tag - The name of the element.

**Returns**

The created element.

**createProcessingInstruction(String, String)**

```
public XMLPI createProcessingInstruction(java.lang.String tag, java.lang.String text)
```

Creates a PI node with the specified tag, and text.

**Parameters**

`tag` - The name of the node.

`text` - The text associated with the node.

**Returns**

The created PI node.

**createTextNode(String)**

```
public XMLText createTextNode(java.lang.String text)
```

Creates a text node with the specified text.

**Parameters**

`text` - The text associated with the node.

**Returns**

The created text node.

**NSName****Syntax**

```
public interface NSName
```

**All Known Implementing Classes:**

[XMLAttr](#), [XMLElement](#)

**Description**

This interface provides Namespace support for Element and Attr names

---

**Member Summary**

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Methods

---

**Member Summary**

---

<a href="#">getExpandedName()</a>	Get the fully resolved name for this name
<a href="#">getLocalName()</a>	Get the local name for this name
<a href="#">getNamespace()</a>	Get the resolved Namespace for this name
<a href="#">getPrefix()</a>	Get the prefix for this name
<a href="#">getQualifiedName()</a>	Get the qualified name

---

**Methods****getExpandedName()**

```
public java.lang.String getExpandedName()  
Get the fully resolved name for this name
```

**Returns**

The fully resolved name

**getLocalName()**

```
public java.lang.String getLocalName()  
Get the local name for this name
```

**Returns**

The local name

**getNamespace()**

```
public java.lang.String getNamespace()  
Get the resolved Namespace for this name
```

**Returns**

The resolved Namespace

**getPrefix()**

```
public java.lang.String getPrefix()  
Get the prefix for this name
```

**Returns**

The prefix

**getQualifiedName()**

```
public java.lang.String getQualifiedName()
```

Get the qualified name

**Returns**

The qualified name

---

## oracle.xml.parser.v2 NSResolver

### Syntax

```
public interface NSResolver
```

### All Known Implementing Classes:

[XMLElement](#)

### Description

This interface provides support for resolving Namespaces

---

### Member Summary

#### Methods

[resolveNamespacePrefix\(String\)](#) Find the namespace definition in scope for a given namespace prefix

---

### Methods

#### resolveNamespacePrefix(String)

```
public java.lang.String resolveNamespacePrefix(java.lang.String prefix)
```

Find the namespace definition in scope for a given namespace prefix

#### Parameters

`prefix` - Namespace prefix to be resolved

#### Returns

the resolved Namespace (null, if prefix could not be resolved)

## oracle.xml.parser.v2 oraxsl

### Syntax

```
public class oraxsl extends java.lang.Object
```

```
java.lang.Object
|
+--oracle.xml.parser.v2.oraxsl
```

### Description

The oraxsl class provides a command-line interface to applying stylesheets on multiple XML documents. It accepts a number of command-line options that dictate how it should behave. The following is its invocation syntax:

```
java oraxsl options* source? stylesheet? result?
-w                               Show warnings
-e <error log>                   A file to write errors to
-l <xml file list>               List of files to transform
-d <directory>                  Directory with files to transform
-x <source extension>           Extensions to exclude
-i <source extension>           Extensions to include
-s <stylesheet>                 Stylesheet to use
-r <result extension>           Extension to use for results
-o <result extension>           Directory to place results
-p <param list>                 List of Params
-t <# of threads>               Number of threads to use
-v                               Verbose mode
```

---

### Member Summary

---

#### Constructors

[oraxsl\(\)](#)

#### Methods

[main\(String\[\]\)](#) Invokes the oraxsl driver

---

---

### Inherited Member Summary

---

Methods inherited from class java.lang.Object

---

**Inherited Member Summary**

---

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

---

**Constructor****oraxsl()**

```
public oraxsl()
```

**Methods****main(String[])**

```
public static void main(java.lang.String[] args)
```

Invokes the oraxsl driver

**Parameters**

`args` - command line arguments

## oracle.xml.parser.v2 SAXAttrList

### Syntax

```
public class SAXAttrList extends java.lang.Object implements  
org.xml.sax.AttributeList
```

```
java.lang.Object  
|  
+--oracle.xml.parser.v2.SAXAttrList
```

### All Implemented Interfaces

```
org.xml.sax.AttributeList
```

### Description

This class implements the SAX `AttributeList` interface and also provides Namespace support. Applications that require Namespace support can explicitly cast any attribute list returned by an Oracle parser class to `SAXAttrList` and use the methods described here.

---

## Member Summary

---

### Methods

<a href="#">getExpandedName(int)</a>	Get the expanded name for an attribute in the list (by position)
<a href="#">getLength()</a>	Return the number of attributes in this list.
<a href="#">getLocalName(int)</a>	Get the local name for an attribute in the list (by position)
<a href="#">getName(int)</a>	Return the name of an attribute in this list (by position).
<a href="#">getNamespace(int)</a>	Get the resolved namespace for an attribute in the list (by position)
<a href="#">getPrefix(int)</a>	Get the namespace prefix for an attribute in the list (by position)
<a href="#">getQualifiedName(int)</a>	Get the qualified name for an attribute in the list (by position)
<a href="#">getType(int)</a>	
<a href="#">getType(String)</a>	Return the type of an attribute in the list (by name).
<a href="#">getValue(int)</a>	Return the value of an attribute in the list (by position).
<a href="#">getValue(String)</a>	Return the value of an attribute in the list (by name).

---

---

## Inherited Member Summary

---

Methods inherited from class `java.lang.Object`

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

---

## Methods

### `getExpandedName(int)`

```
public java.lang.String getExpandedName(int i)
```

Get the expanded name for an attribute in the list (by position)

#### Parameters

`i` - The index of the attribute in the list.

#### Returns

The expanded name for the attribute

### `getLength()`

```
public int getLength()
```

Return the number of attributes in this list.

The SAX parser may provide attributes in any arbitrary order, regardless of the order in which they were declared or specified. The number of attributes may be zero.

#### Specified By

`org.xml.sax.AttributeList.getLength()` in interface `org.xml.sax.AttributeList`

#### Returns

The number of attributes in the list.

### `getLocalName(int)`

```
public java.lang.String getLocalName(int i)
```

Get the local name for an attribute in the list (by position)

**Parameters**

*i* - The index of the attribute in the list.

**Returns**

The local name for the attribute

**getName(int)**

```
public java.lang.String getName(int i)
```

Return the name of an attribute in this list (by position).

The names must be unique: the SAX parser shall not include the same attribute twice. Attributes without values (those declared #IMPLIED without a value specified in the start tag) will be omitted from the list.

If the attribute name has a namespace prefix, the prefix will still be attached.

**Specified By**

`org.xml.sax.AttributeList.getName(int)` in interface `org.xml.sax.AttributeList`

**Parameters**

*i* - The index of the attribute in the list (starting at 0).

**Returns**

The name of the indexed attribute, or null if the index is out of range.

**See Also**

[getLength\(\)](#)

**getNamespace(int)**

```
public java.lang.String getNamespace(int i)
```

Get the resolved namespace for an attribute in the list (by position)

**Parameters**

*i* - The index of the attribute in the list.

**Returns**

The resolved namespace for the attribute

**getPrefix(int)**

```
public java.lang.String getPrefix(int i)
```

Get the namespace prefix for an attribute in the list (by position)

**Parameters**

*i* - The index of the attribute in the list.

**Returns**

The namespace prefix for the attribute

**getQualifiedName(int)**

```
public java.lang.String getQualifiedName(int i)
```

Get the qualified name for an attribute in the list (by position)

**Parameters**

*i* - The index of the attribute in the list.

**Returns**

The qualified name for the attribute

**getType(int)**

```
public java.lang.String getType(int i)
```

**Specified By**

`org.xml.sax.AttributeList.getType(int)` in interface `org.xml.sax.AttributeList`

**getType(String)**

```
public java.lang.String getType(java.lang.String s)
```

Return the type of an attribute in the list (by name).

The return value is the same as the return value for `getType(int)`.

If the attribute name has a namespace prefix in the document, the application must include the prefix here.

**Specified By**

`org.xml.sax.AttributeList.getType(String)` in interface `org.xml.sax.AttributeList`

**Parameters**

`name` - The name of the attribute.

**Returns**

The attribute type as a string, or null if no such attribute exists.

**See Also**

[getType\(int\)](#)

**getValue(int)**

```
public java.lang.String getValue(int i)
```

Return the value of an attribute in the list (by position).

If the attribute value is a list of tokens (IDREFS, ENTITIES, or NMTOKENS), the tokens will be concatenated into a single string separated by whitespace.

**Specified By**

`org.xml.sax.AttributeList.getValue(int)` in interface `org.xml.sax.AttributeList`

**Parameters**

`i` - The index of the attribute in the list (starting at 0).

**Returns**

The attribute value as a string, or null if the index is out of range.

**See Also**

[getLength\(\)](#), [getValue\(String\)](#)

**getValue(String)**

```
public java.lang.String getValue(java.lang.String s)
```

Return the value of an attribute in the list (by name).

The return value is the same as the return value for `getValue(int)`.

If the attribute name has a namespace prefix in the document, the application must include the prefix here.

**Specified By**

`org.xml.sax.AttributeList.getValue(String)` in interface `org.xml.sax.AttributeList`

**Parameters**

`i` - The index of the attribute in the list.

**Returns**

The attribute value as a string, or null if no such attribute exists.

**See Also**

[getValue\(int\)](#)

## oracle.xml.parser.v2 SAXParser

### Syntax

public class SAXParser extends [XMLParser](#) implements [org.xml.sax.Parser](#),  
[oracle.xml.parser.v2.XMLConstants](#)

```
java.lang.Object
|
+--XMLParser
   |
   +--oracle.xml.parser.v2.SAXParser
```

### All Implemented Interfaces

[org.xml.sax.Parser](#), [oracle.xml.parser.v2.XMLConstants](#)

### Description

This class implements an eXtensible Markup Language (XML) 1.0 SAX parser according to the World Wide Web Consortium (W3C) recommendation. Applications can register a SAX handler to receive notification of various parser events.

---

### Member Summary

---

#### Constructors

[SAXParser\(\)](#) Creates a new parser object.

#### Methods

[setDocumentHandler\(DocumentHandler\)](#) SAX applications can use this to register a new document event handler.

[setDTDHandler\(DTDHandler\)](#) SAX applications can use this to register a new DTD event handler.

[setEntityResolver\(EntityResolver\)](#) SAX applications can use this to register a new entity resolver

[setErrorHandler\(ErrorHandler\)](#) SAX applications can use this to register a new error event handler.

---

---

### Inherited Member Summary

---

Fields inherited from class [XMLParser](#)

---

## Inherited Member Summary

---

AMP, ASTERISK, cANY, cATTLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREF, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cNDATA, cNMTOKEN, cNMTOKENS, cNOTATION, COLON, COMMA, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNamespace, nameXMLNSNamespace, nameXMLSpace, nameXSLPI, NONVALIDATING, OR, PERCENT, PLUS, QMARK, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

Fields inherited from interface oracle.xml.parser.v2.XMLConstants

AMP, ASTERISK, cANY, cATTLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREF, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cNDATA, cNMTOKEN, cNMTOKENS, cNOTATION, COLON, COMMA, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNamespace, nameXMLNSNamespace, nameXMLSpace, nameXSLPI, NONVALIDATING, OR, PERCENT, PLUS, QMARK, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

Methods inherited from class [XMLParser](#)

[getReleaseVersion\(\)](#), [getValidationMode\(\)](#), [parse\(InputSource\)](#), [parse\(InputStream\)](#), [parse\(Reader\)](#), [parse\(String\)](#), [parse\(URL\)](#), [setBaseURL\(URL\)](#), [setDoctype\(DTD\)](#), [setLocale\(Locale\)](#), [setPreserveWhitespace\(boolean\)](#), [setValidationMode\(boolean\)](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface Parser

[parse\(InputSource\)](#), [parse\(String\)](#), [setLocale\(Locale\)](#)

---

## Constructor

### SAXParser()

```
public SAXParser()
Creates a new parser object.
```

## Methods

### setDocumentHandler(DocumentHandler)

```
public void setDocumentHandler(org.xml.sax.DocumentHandler handler)
```

SAX applications can use this to register a new document event handler.

**Specified By**

`org.xml.sax.Parser.setDocumentHandler(DocumentHandler)` in interface `org.xml.sax.Parser`

**Parameters**

`handler` - `DocumentHandler` being registered

**See Also**

`org.xml.sax.Parser.setDocumentHandler(DocumentHandler)`, `org.xml.sax.DocumentHandler`

**setDTDHandler(DTDHandler)**

```
public void setDTDHandler(org.xml.sax.DTDHandler handler)
```

SAX applications can use this to register a new DTD event handler.

**Specified By**

`org.xml.sax.Parser.setDTDHandler(DTDHandler)` in interface `org.xml.sax.Parser`

**Parameters**

`handler` - `DTDHandler` being registered

**See Also**

`org.xml.sax.Parser.setDTDHandler(DTDHandler)`, `org.xml.sax.DTDHandler`

**setEntityResolver(EntityResolver)**

```
public void setEntityResolver(org.xml.sax.EntityResolver resolver)
```

SAX applications can use this to register a new entity resolver

**Specified By**

`org.xml.sax.Parser.setEntityResolver(EntityResolver)` in interface `org.xml.sax.Parser`

**Parameters**

`resolver` - `EntityResolver` being registered

**See Also**

`org.xml.sax.Parser.setEntityResolver(EntityResolver)`, `org.xml.sax.DTDHandler`

**setErrorHandler(ErrorHandler)**

```
public void setErrorHandler(org.xml.sax.ErrorHandler handler)
```

SAX applications can use this to register a new error event handler. This replaces any previous setting for error handling.

**Specified By**

`org.xml.sax.Parser.setErrorHandler(ErrorHandler)` in interface `org.xml.sax.Parser`

**Parameters**

`handler` - `ErrorHandler` being registered

**See Also**

`org.xml.sax.Parser.setErrorHandler(ErrorHandler)`, `org.xml.sax.ErrorHandler`

## oracle.xml.parser.v2 XMLAttr

### Syntax

```
public class XMLAttr extends XMLNode implements org.w3c.dom.Attr, NSName,  
java.io.Serializable
```

```
java.lang.Object  
|  
+--XMLNode  
|  
+--oracle.xml.parser.v2.XMLAttr
```

### All Implemented Interfaces

```
org.w3c.dom.Attr, java.lang.Cloneable, org.w3c.dom.Node, NSName,  
java.io.Serializable, oracle.xml.parser.v2.XMLConstants
```

### Description

This class implements the DOM Attr interface and holds information on each attribute of an element.

### See Also

[org.w3c.dom.Attr](#), [NodeFactory](#), [setNodeFactory\(NodeFactory\)](#)

---

## Member Summary

---

### Constructors

[XMLAttr\(String, String\)](#) Construct attribute with given name and value.

[XMLAttr\(String, String, String, String\)](#) Namespace support

### Methods

[cloneNode\(boolean\)](#) Returns a duplicate of this node, i.e., serves as a generic copy constructor for nodes.

[getExpandedName\(\)](#) Get the fully resolved Name for this attribute

[getLocalName\(\)](#) Get the local Name for this attribute

[getName\(\)](#) Gets the attribute name.

---

## Member Summary

---

<a href="#">getNamespace()</a>	Get the resolved Namespace for this attribute
<a href="#">getNodeValue()</a>	Gets the value of this node, depending on its type
<a href="#">getParentNode()</a>	Gets the parent of this node.
<a href="#">getPrefix()</a>	Get the namespace prefix for this attribute
<a href="#">getQualifiedName()</a>	Gets the qualified name for this attribute
<a href="#">getSpecified()</a>	Returns true if the attribute was specified explicitly in the element
<a href="#">getValue()</a>	Gets the attribute value.
<a href="#">setNodeValue(String)</a>	Sets the value of this node, depending on its type
<a href="#">setValue(String)</a>	Sets the value.

---



---

## Inherited Member Summary

---

### Fields inherited from class [XMLNode](#)

AMP, ASTERISK, [ATTRDECL](#), cANY, cATTLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREf, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cNDATA, cNMTOKEN, cNMTOKENS, cNOTATION, COLON, COMMA, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, [ELEMENTDECL](#), EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNameSpace, nameXMLNSNameSpace, nameXMLSpace, nameXSLPI, NONVALIDATING, OR, PERCENT, PLUS, QMARK, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

### Fields inherited from interface [Node](#)

ATTRIBUTE\_NODE, CDATA\_SECTION\_NODE, COMMENT\_NODE, DOCUMENT\_FRAGMENT\_NODE, DOCUMENT\_NODE, DOCUMENT\_TYPE\_NODE, ELEMENT\_NODE, ENTITY\_NODE, ENTITY\_REFERENCE\_NODE, NOTATION\_NODE, PROCESSING\_INSTRUCTION\_NODE, TEXT\_NODE

### Fields inherited from interface [oracle.xml.parser.v2.XMLConstants](#)



## Methods

### cloneNode(boolean)

```
public org.w3c.dom.Node cloneNode(boolean deep)
```

Returns a duplicate of this node, i.e., serves as a generic copy constructor for nodes. The duplicate node has no parent (`parentNode` returns `null`). Cloning an `Element` copies all attributes and their values, including those generated by the XML processor to represent defaulted attributes, but this method does not copy any text it contains unless it is a deep clone, since the text is contained in a child `Text` node. Cloning any other type of node simply returns a copy of this node.

#### Specified By

`org.w3c.dom.Node.cloneNode(boolean)` in interface `org.w3c.dom.Node`

#### Overrides

[cloneNode\(boolean\)](#) in class [XMLNode](#)

#### Parameters

`deep` - If `true`, recursively clone the subtree under the specified node; if `false`, clone only the node itself (and its attributes, if it is an `Element`).

#### Returns

The duplicate node.

### getExpandedName()

```
public java.lang.String getExpandedName()  
Get the fully resolved Name for this attribute
```

#### Specified By

[getExpandedName\(\)](#) in interface [NSName](#)

#### Returns

the fully resolved Name

### getLocalName()

```
public java.lang.String getLocalName()  
Get the local Name for this attribute
```

**Specified By**

[getLocalName\(\)](#) in interface [NSName](#)

**Returns**

the local Name

**getName()**

```
public java.lang.String getName()
```

Gets the attribute name.

**Specified By**

[org.w3c.dom.Attr.getName\(\)](#) in interface [org.w3c.dom.Attr](#)

**Returns**

attribute name

**getNamespace()**

```
public java.lang.String getNamespace()
```

Get the resolved Namespace for this attribute

**Specified By**

[getNamespace\(\)](#) in interface [NSName](#)

**Returns**

the resolved Namespace

**getNodeValue()**

```
public java.lang.String getNodeValue()
```

Gets the value of this node, depending on its type

**Specified By**

[org.w3c.dom.Node.getNodeValue\(\)](#) in interface [org.w3c.dom.Node](#)

**Overrides**

[getNodeValue\(\)](#) in class [XMLNode](#)

**Returns**

Value of this node

**Throws**

`org.w3c.dom.DOMException - NO_MODIFICATION_ALLOWED_ERR`: Raised when the node is readonly. `DOMSTRING_SIZE_ERR`: Raised when it would return more characters than fit in a `DOMString` variable on the implementation platform.

**getParentNode()**

```
public org.w3c.dom.Node getParentNode()
```

Gets the parent of this node. All nodes, except `Document`, `DocumentFragment`, and `Attr` may have a parent. However, if a node has just been created and not yet added to the tree, or if it has been removed from the tree, this is `null`.

**Specified By**

`org.w3c.dom.Node.getParentNode()` in interface `org.w3c.dom.Node`

**Overrides**

[getParentNode\(\)](#) in class [XMLNode](#)

**Returns**

The parent of this node

**getPrefix()**

```
public java.lang.String getPrefix()
```

Get the namespace prefix for this attribute

**Specified By**

[getPrefix\(\)](#) in interface [NSName](#)

**Returns**

the namespace prefix

**getQualifiedName()**

```
public java.lang.String getQualifiedName()
```

Gets the qualified name for this attribute

**Specified By**

[getQualifiedName\(\)](#) in interface [NSName](#)

**Returns**

the qualified name

**getSpecified()**

```
public boolean getSpecified()
```

Returns true if the attribute was specified explicitly in the element

**Specified By**

[org.w3c.dom.Attr.getSpecified\(\)](#) in interface [org.w3c.dom.Attr](#)

**Returns**

true, if the attribute was specified explicitly, false, if it was not

**getValue()**

```
public java.lang.String getValue()
```

Gets the attribute value.

**Specified By**

[org.w3c.dom.Attr.getValue\(\)](#) in interface [org.w3c.dom.Attr](#)

**Returns**

attribute value

**setNodeValue(String)**

```
public void setNodeValue(java.lang.String nodeValue)
```

Sets the value of this node, depending on its type

**Specified By**

[org.w3c.dom.Node.setNodeValue\(String\)](#) in interface [org.w3c.dom.Node](#)

**Overrides**

[setNodeValue\(String\)](#) in class [XMLNode](#)

**Throws**

org.w3c.dom.DOMException - `NO_MODIFICATION_ALLOWED_ERR`: Raised when the node is readonly. `DOMSTRING_SIZE_ERR`: Raised when it would return more characters than fit in a `DOMString` variable on the implementation platform.

**setValue(String)**

```
public void setValue(java.lang.String arg)
```

Sets the value.

**Specified By**

org.w3c.dom.Attr.setValue(String) in interface org.w3c.dom.Attr

**Parameters**

arg - Value to set

## oracle.xml.parser.v2 XMLCDATA

### Syntax

public class XMLCDATA extends [XMLText](#) implements [org.w3c.dom.CDATASection](#),  
[java.io.Serializable](#)

```
java.lang.Object
|
+--XMLNode
   |
   +--oracle.xml.parser.v2.CharData
      |
      +--XMLText
         |
         +--oracle.xml.parser.v2.XMLCDATA
```

### All Implemented Interfaces

[org.w3c.dom.CDATASection](#), [org.w3c.dom.CharacterData](#), [java.lang.Cloneable](#),  
[org.w3c.dom.Node](#), [java.io.Serializable](#), [org.w3c.dom.Text](#),  
[oracle.xml.parser.v2.XMLConstants](#)

### Description

This class implements the DOM CDATASection interface.

### See Also

[org.w3c.dom.CDATASection](#), [NodeFactory](#), [setNodeFactory\(NodeFactory\)](#)

---

### Member Summary

---

#### Constructors

[XMLCDATA\(String\)](#)                      Creates a CDATA node having the given name and text.

---

---

### Inherited Member Summary

---

Fields inherited from class [XMLNode](#)



---

## Inherited Member Summary

---

`splitText(int)`

Methods inherited from interface `CharacterData`

`appendData(String)`, `deleteData(int, int)`, `getData()`, `getLength()`, `insertData(int, String)`, `replaceData(int, int, String)`, `setData(String)`, `substringData(int, int)`

Methods inherited from interface `Node`

`appendChild(Node)`, `cloneNode(boolean)`, `getAttributes()`, `getChildNodes()`, `getFirstChild()`, `getLastChild()`, `getNextSibling()`, `getNodeName()`, `getNodeType()`, `getNodeValue()`, `getOwnerDocument()`, `getParentNode()`, `getPreviousSibling()`, `hasChildNodes()`, `insertBefore(Node, Node)`, `removeChild(Node)`, `replaceChild(Node, Node)`, `setNodeValue(String)`

---

## Constructor

### XMLCDATA(String)

```
public XMLCDATA(java.lang.String text)
```

Creates a CDATA node having the given name and text.

#### Parameters

`text` - Text of the node

---

## oracle.xml.parser.v2 XMLComment

### Syntax

public class XMLComment extends oracle.xml.parser.v2.CharData implements org.w3c.dom.Comment, java.io.Serializable

```
java.lang.Object
|
+--XMLNode
   |
   +--oracle.xml.parser.v2.CharData
      |
      +--oracle.xml.parser.v2.XMLComment
```

### All Implemented Interfaces

org.w3c.dom.CharacterData, java.lang.Cloneable, org.w3c.dom.Comment, org.w3c.dom.Node, java.io.Serializable, oracle.xml.parser.v2.XMLConstants

### Description

This class implements the DOM Comment interface.

### See Also

org.w3c.dom.Comment, [NodeFactory](#), [setNodeFactory\(NodeFactory\)](#)

---

### Member Summary

#### Constructors

[XMLComment\(String\)](#)      Creates a new Comment node.

---

---

### Inherited Member Summary

Fields inherited from class [XMLNode](#)



---

**Inherited Member Summary**

---

appendChild(Node), cloneNode(boolean), getAttributes(), getChildNodes(), getFirstChild(), getLastChild(), getNextSibling(), getNodeName(), getNodeValue(), getOwnerDocument(), getParentNode(), getPreviousSibling(), hasChildNodes(), insertBefore(Node, Node), removeChild(Node), replaceChild(Node, Node), setNodeValue(String)

---

**Constructor****XMLComment(String)**

```
public XMLComment(java.lang.String text)
```

Creates a new Comment node.

**Parameters**

text - Text of the comment node

## oracle.xml.parser.v2 XMLDocument

### Syntax

```
public class XMLDocument extends XMLNode implements org.w3c.dom.Document ,
java.io.Serializable
```

```
java.lang.Object
|
+--XMLNode
|
+--oracle.xml.parser.v2.XMLDocument
```

### All Implemented Interfaces

```
java.lang.Cloneable, org.w3c.dom.Document, org.w3c.dom.Node,
java.io.Serializable, oracle.xml.parser.v2.XMLConstants
```

### Description

This class implements the DOM Document interface, represents an entire XML document and serves the root of the Document Object Model tree. Each XML tag can either represent a node or a leaf of this tree.

According to the XML specification, the root of the tree consists of any combination of comments and processing instructions, but only one root element. A helper method `getDocumentElement` is provided as a short cut to finding the root element.

---

### Member Summary

---

#### Constructors

[XMLDocument\(\)](#) Creates an empty document.

#### Methods

[cloneNode\(boolean\)](#) Returns a duplicate of this document node.

[createAttribute\(String\)](#) Creates an `Attr` of the given name.

[createCDATASection\(String\)](#) Creates a `CDATASection` node whose value is the specified string.

[createComment\(String\)](#) Creates a `Comment` node given the specified string.

---

**Member Summary**

---

<code>createDocumentFragment()</code>	Creates an empty <code>DocumentFragment</code> object.
<code>createElement(String)</code>	Creates an element of the type specified.
<code>createEntityReference(String)</code>	Creates an <code>EntityReference</code> object.
<code>createProcessingInstruction(String, String)</code>	Creates a <code>ProcessingInstruction</code> node given the specified name and data strings.
<code>createTextNode(String)</code>	Creates a <code>Text</code> node given the specified string.
<code>expectedElements(Element)</code>	Returns vector of element names that can be appended to the element.
<code>getDoctype()</code>	The Document Type Declaration (DTD) associated with this document.
<code>getDocumentElement()</code>	This is a convenience attribute that allows direct access to the child node that is the root element of the document.
<code>getElementsByTagName(String)</code>	Returns a <code>NodeList</code> of all the <code>Elements</code> with a given tag name in the order in which they would be encountered in a preorder traversal of the <code>Document</code> tree.
<code>getEncoding()</code>	Retrieves the character encoding information.
<code>getImplementation()</code>	The <code>DOMImplementation</code> object that handles this document.
<code>getOwnerDocument()</code>	The <code>Document</code> object associated with this node.
<code>getStandalone()</code>	Retrieves the standalone information.
<code>getVersion()</code>	Retrieves the version information.
<code>print(OutputStream)</code>	Writes the contents of this document to the given output stream.
<code>print(OutputStream, String)</code>	Writes the contents of this document to the given output stream.
<code>print(PrintWriter)</code>	Writes the contents of this document to the given output stream.
<code>printExternalDTD(OutputStream)</code>	Writes the contents of this document to the given output stream.
<code>printExternalDTD(OutputStream, String)</code>	Writes the contents of the external DTD to the given output stream.
<code>printExternalDTD(PrintWriter)</code>	Writes the contents of this document to the given output stream.
<code>replaceChild(Node, Node)</code>	Replaces the child node <code>oldChild</code> with <code>newChild</code> in the list of children, and returns the <code>oldChild</code> node.
<code>setEncoding(String)</code>	Sets the character encoding for output.
<code>setLocale(Locale)</code>	Sets the locale for error reporting
<code>setStandalone(String)</code>	Sets the standalone information stored in the <code>&lt;?xml ...?&gt;</code> tag.



---

## Inherited Member Summary

---

`appendChild(Node)`, `getAttributes()`, `getChildNodes()`, `getFirstChild()`, `getLastChild()`, `getNextSibling()`, `getNodeName()`, `getNodeType()`, `getNodeValue()`, `getParentNode()`, `getPreviousSibling()`, `hasChildNodes()`, `insertBefore(Node, Node)`, `removeChild(Node)`, `setNodeValue(String)`

---

## Constructor

### XMLDocument()

```
public XMLDocument()
```

Creates an empty document.

## Methods

### cloneNode(boolean)

```
public org.w3c.dom.Node cloneNode(boolean deep)
```

Returns a duplicate of this document node.

### Specified By

`org.w3c.dom.Node.cloneNode(boolean)` in interface `org.w3c.dom.Node`

### Overrides

[cloneNode\(boolean\)](#) in class [XMLNode](#)

### Parameters

`deep` - If `true`, recursively clone the subtree under the document; if `false`, clone only the document itself

### Returns

The duplicate document node.

### createAttribute(String)

```
public org.w3c.dom.Attr createAttribute(java.lang.String name)
```

Creates an `Attr` of the given name. Note that the `Attr` instance can then be set on an `Element` using the `setAttribute` method.

**Specified By**

`org.w3c.dom.Document.createAttribute(String)` in interface `org.w3c.dom.Document`

**Parameters**

`name` - The name of the attribute.

**Returns**

A new `Attr` object.

**Throws**

`org.w3c.dom.DOMException - INVALID_CHARACTER_ERR`: Raised if the specified name contains an invalid character.

**createCDATASection(String)**

`public org.w3c.dom.CDATASection createCDATASection(java.lang.String data)`  
Creates a `CDATASection` node whose value is the specified string.

**Specified By**

`org.w3c.dom.Document.createCDATASection(String)` in interface `org.w3c.dom.Document`

**Parameters**

`data` - The data for the `CDATASection` contents.

**Returns**

The new `CDATASection` object.

**Throws**

`org.w3c.dom.DOMException` - A `DOMException` could be thrown.

**createComment(String)**

`public org.w3c.dom.Comment createComment(java.lang.String data)`  
Creates a `Comment` node given the specified string.

**Specified By**

`org.w3c.dom.Document.createComment(String)` in interface `org.w3c.dom.Document`

**Parameters**

`data` - The data for the node.

**Returns**

The new `Comment` object.

**createDocumentFragment()**

```
public org.w3c.dom.DocumentFragment createDocumentFragment()
```

Creates an empty `DocumentFragment` object.

**Specified By**

`org.w3c.dom.Document.createDocumentFragment()` in interface `org.w3c.dom.Document`

**Returns**

A new `DocumentFragment`.

**createElement(String)**

```
public org.w3c.dom.Element createElement(java.lang.String tagName)
```

Creates an element of the type specified. Note that the instance returned implements the `Element` interface, so attributes can be specified directly on the returned object.

**Specified By**

`org.w3c.dom.Document.createElement(String)` in interface `org.w3c.dom.Document`

**Parameters**

`tagName` - The name of the element type to instantiate. The name is treated as case-sensitive.

**Returns**

A new `Element` object.

**Throws**

`org.w3c.dom.DOMException - INVALID_CHARACTER_ERR`: Raised if the specified name contains an invalid character.

### **createEntityReference(String)**

```
public org.w3c.dom.EntityReference createEntityReference(java.lang.String name)
```

Creates an EntityReference object.

#### **Specified By**

org.w3c.dom.Document.createEntityReference(String) in interface org.w3c.dom.Document

#### **Parameters**

name - The name of the entity to reference.

#### **Returns**

The new EntityReference object.

#### **Throws**

org.w3c.dom.DOMException - INVALID\_CHARACTER\_ERR: Raised if the specified name contains an invalid character.

### **createProcessingInstruction(String, String)**

```
public org.w3c.dom.ProcessingInstruction  
createProcessingInstruction(java.lang.String target, java.lang.String data)
```

Creates a ProcessingInstruction node given the specified name and data strings.

#### **Specified By**

org.w3c.dom.Document.createProcessingInstruction(String, String) in interface org.w3c.dom.Document

#### **Parameters**

target - The target part of the processing instruction.

data - The data for the node.

#### **Returns**

The new ProcessingInstruction object.

#### **Throws**

org.w3c.dom.DOMException - INVALID\_CHARACTER\_ERR: Raised if an invalid character is specified.

## **createTextNode(String)**

```
public org.w3c.dom.Text createTextNode(java.lang.String data)
```

Creates a `Text` node given the specified string.

### **Specified By**

`org.w3c.dom.Document.createTextNode(String)` in interface `org.w3c.dom.Document`

### **Parameters**

`data` - The data for the node.

### **Returns**

The new `Text` object.

## **expectedElements(Element)**

```
public java.util.Vector expectedElements(org.w3c.dom.Element e)
```

Returns vector of element names that can be appended to the element.

### **Parameters**

`e` - `Element`

### **Returns**

Vector of names

## **getDoctype()**

```
public org.w3c.dom.DocumentType getDoctype()
```

The Document Type Declaration (DTD) associated with this document. For XML documents without a DTD, this returns `null`. Note that the DOM Level 1 specification does not support editing the DTD.

### **Specified By**

`org.w3c.dom.Document.getDoctype()` in interface `org.w3c.dom.Document`

### **Returns**

The associated DTD

**See Also**

`org.w3c.dom.DocumentType`

**getDocumentElement()**

```
public org.w3c.dom.Element getDocumentElement()
```

This is a convenience attribute that allows direct access to the child node that is the root element of the document.

**Specified By**

`org.w3c.dom.Document.getDocumentElement()` in interface `org.w3c.dom.Document`

**Returns**

The root element

**getElementsByTagName(String)**

```
public org.w3c.dom.NodeList getElementsByTagName(java.lang.String tagname)
```

Returns a `NodeList` of all the `Elements` with a given tag name in the order in which they would be encountered in a preorder traversal of the `Document` tree.

**Specified By**

`org.w3c.dom.Document.getElementsByTagName(String)` in interface `org.w3c.dom.Document`

**Parameters**

`tagname` - The name of the tag to match on. The special value "\*" matches all tags.

**Returns**

A new `NodeList` object containing all the matched `Elements`.

**getEncoding()**

```
public final java.lang.String getEncoding()
```

Retrieves the character encoding information.

**Returns**

the encoding information stored in the `<?xml ...?>` tag or the user-defined output encoding if it has been more recently set.

## getImplementation()

```
public org.w3c.dom.DOMImplementation getImplementation()
```

The `DOMImplementation` object that handles this document. A DOM application may use objects from multiple implementations.

### Specified By

`org.w3c.dom.Document.getImplementation()` in interface `org.w3c.dom.Document`

### Returns

The associated DOM implementation.

## getOwnerDocument()

```
public org.w3c.dom.Document getOwnerDocument()
```

The `Document` object associated with this node. Since this node is a `Document` this is `null`.

### Specified By

`org.w3c.dom.Node.getOwnerDocument()` in interface `org.w3c.dom.Node`

### Overrides

[getOwnerDocument\(\)](#) in class [XMLNode](#)

### Returns

`null`

## getStandalone()

```
public final java.lang.String getStandalone()
```

Retrieves the standalone information.

### Returns

the standalone attribute stored in the `<?xml ...?>` tag.

## getVersion()

```
public final java.lang.String getVersion()
```

Retrieves the version information.

**Returns**

the version number stored in the `<?xml ...?>` tag.

**print(OutputStream)**

```
public void print(java.io.OutputStream out)
```

Writes the contents of this document to the given output stream.

**Overrides**

[print\(OutputStream\)](#) in class [XMLNode](#)

**Parameters**

`out` - `OutputStream` to write to

**Throws**

`IOException` - if an error occurs

**print(OutputStream, String)**

```
public void print(java.io.OutputStream out, java.lang.String enc)
```

Writes the contents of this document to the given output stream.

**Overrides**

[print\(OutputStream, String\)](#) in class [XMLNode](#)

**Parameters**

`out` - `OutputStream` to write to

`enc` - Encoding to use for the output

**Throws**

`IOException` - if an invalid encoding was specified or if any other error occurs

**print(PrintWriter)**

```
public void print(java.io.PrintWriter out)
```

Writes the contents of this document to the given output stream.

**Overrides**

[print\(PrintWriter\)](#) in class [XMLNode](#)

**Parameters**

out - `PrintWriter` to write to

**Throws**

`IOException` - if an error occurs

**printExternalDTD(OutputStream)**

```
public void printExternalDTD(java.io.OutputStream out)
```

Writes the contents of this document to the given output stream.

**Parameters**

out - `OutputStream` to write to

**Throws**

`IOException` - if an error occurs

**printExternalDTD(OutputStream, String)**

```
public void printExternalDTD(java.io.OutputStream out, java.lang.String enc)
```

Writes the contents of the external DTD to the given output stream.

**Parameters**

out - `OutputStream` to write to

enc - Encoding to use for the output

**Throws**

`IOException` - if an invalid encoding was specified or if any other error occurs

**printExternalDTD(PrintWriter)**

```
public void printExternalDTD(java.io.PrintWriter out)
```

Writes the contents of this document to the given output stream.

**Parameters**

out - `PrintWriter` to write to

**Throws**

`IOException` - if an error occurs

## replaceChild(Node, Node)

```
public org.w3c.dom.Node replaceChild(org.w3c.dom.Node newChild,  
org.w3c.dom.Node oldChild)
```

Replaces the child node `oldChild` with `newChild` in the list of children, and returns the `oldChild` node. If the `newChild` is already in the tree, it is first removed. This is an override of the `XMLNode.removeChild` method

### Specified By

`org.w3c.dom.Node.replaceChild(Node, Node)` in interface `org.w3c.dom.Node`

### Overrides

[replaceChild\(Node, Node\)](#) in class [XMLNode](#)

### Parameters

`newChild` - The new node to put in the child list.

`oldChild` - The node being replaced in the list.

### Returns

The node replaced.

### Throws

`org.w3c.dom.DOMException - HIERARCHY_REQUEST_ERR`: Raised if this node is of a type that does not allow children of the type of the `newChild` node. `WRONG_DOCUMENT_ERR`: Raised if `newChild` was created from a different document than this one. `NOT_FOUND_ERR`: Raised if `oldChild` is not a child of this node.

## setEncoding(String)

```
public final void setEncoding(java.lang.String encoding)
```

Sets the character encoding for output. Eventually it sets the `ENCODING` stored in the `<?xml ...?>` tag, but not until the document is saved. You should not call this method until the Document has been loaded.

### Parameters

`encoding` - The character encoding to set

## setLocale(Locale)

```
public final void setLocale(java.util.Locale locale)
```

Sets the locale for error reporting

### Parameters

`locale` - Locale for error reporting.

## setStandalone(String)

```
public final void setStandalone(java.lang.String value)
```

Sets the standalone information stored in the `<?xml ...?>` tag.

### Parameters

`value` - The attribute value ('yes' or 'no').

## setVersion(String)

```
public final void setVersion(java.lang.String version)
```

Sets the version number stored in the `<?xml ...?>` tag.

### Parameters

`version` - The version information to set.

## validateElementContent(Element)

```
public boolean validateElementContent(org.w3c.dom.Element e)
```

Validates the content of a element node.

### Parameters

`e` - Element to be validated

### Returns

True if valid, else false

## oracle.xml.parser.v2 XMLDocumentFragment

### Syntax

```
public class XMLDocumentFragment extends XMLNode implements  
org.w3c.dom.DocumentFragment, java.io.Serializable
```

```
java.lang.Object  
|  
+--XMLNode  
|  
+--oracle.xml.parser.v2.XMLDocumentFragment
```

### All Implemented Interfaces

```
java.lang.Cloneable, org.w3c.dom.DocumentFragment, org.w3c.dom.Node,  
java.io.Serializable, oracle.xml.parser.v2.XMLConstants
```

### Description

This class implements the DOM DocumentFragment interface.

### See Also

[org.w3c.dom.DocumentFragment](#), [NodeFactory](#), [setNodeFactory\(NodeFactory\)](#)

---

### Member Summary

---

#### Constructors

[XMLDocumentFragment\(\)](#)                      Creates an empty document fragment

#### Methods

[getParentNode\(\)](#)                              Gets the parent of this node

---

---

### Inherited Member Summary

---

Fields inherited from class [XMLNode](#)



## Constructor

### XMLDocumentFragment()

```
public XMLDocumentFragment()  
Creates an empty document fragment
```

## Methods

### getParentNode()

```
public org.w3c.dom.Node getParentNode()  
Gets the parent of this node
```

#### Specified By

`org.w3c.dom.Node.getParentNode()` in interface `org.w3c.dom.Node`

#### Overrides

`getParentNode()` in class [XMLNode](#)

#### Returns

The parent of this node (always null)

---

## oracle.xml.parser.v2 XMLDocumentHandler

### Syntax

```
public interface XMLDocumentHandler extends org.xml.sax.DocumentHandler
```

### All Superinterfaces

org.xml.sax.DocumentHandler

### All Known Implementing Classes

[oracle.xml.parser.v2](#)

### Description

This interface extends the `org.xml.sax.DocumentHandler` interface. SAX Applications requiring Namespace support must implement this interface and register with the SAX Parser via `Parser.setDocumentHandler()`.

---

### Member Summary

---

#### Methods

<a href="#">CDATASection(char[], int, int)</a>	Receive notification of a CDATA Section.
<a href="#">comment(String)</a>	Receive notification of a comment.
<a href="#">endDoctype()</a>	Receive notification of end of the DTD.
<a href="#">endElement(NSName)</a>	Receive notification of the end of an element.
<a href="#">setDoctype(DTD)</a>	Receive notification of a DTD (Document Type node).
<a href="#">setTextDecl(String, String)</a>	Receive notification of a Text XML Declaration.
<a href="#">setXMLDecl(String, String, String)</a>	Receive notification of a XML Declaration.
<a href="#">startElement(NSName, SAXAttrList)</a>	Receive notification of the beginning of an element.

---

---

### Inherited Member Summary

---

Methods inherited from interface `DocumentHandler`

---

**Inherited Member Summary**

---

characters(char[], int, int), endDocument(), endElement(String), ignorableWhitespace(char[], int, int), processingInstruction(String, String), setDocumentLocator(Locator), startDocument(), startElement(String, AttributeList)

---

**Methods****cDATASection(char[], int, int)**

```
public void cDATASection(char[] ch, int start, int length)
```

Receive notification of a CDATA Section.

The Parser will invoke this method once for each CDATA Section found.

**Parameters**

`ch` - The CDATA section characters.

`start` - The start position in the character array.

`length` - The number of characters to use from the character array.

**Throws**

org.xml.sax.SAXException - Any SAX exception, possibly wrapping another exception.

**comment(String)**

```
public void comment(java.lang.String data)
```

Receive notification of a comment.

The Parser will invoke this method once for each comment found: note that comment may occur before or after the main document element.

**Parameters**

`data` - The comment data, or null if none was supplied.

**Throws**

org.xml.sax.SAXException - Any SAX exception, possibly wrapping another exception.

## endDoctype()

```
public void endDoctype()
```

Receive notification of end of the DTD.

### Throws

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

## endElement(NSName)

```
public void endElement(NSName elem)
```

Receive notification of the end of an element. The SAX parser will invoke this method at the end of every element in the XML document; there will be a corresponding `startElement()` event for every `endElement()` event (even when the element is empty).

By implementing this method instead of

`org.xml.sax.DocumentHandler.endElement`, SAX Applications can get the Namespace support provided by `NSName`.

### Parameters

`elem` - `NSName` object

### Throws

`org.xml.sax.SAXException` - A `SAXException` could be thrown.

### See Also

`org.xml.sax.DocumentHandler.endElement(String)`

## setDoctype(DTD)

```
public void setDoctype(DTD dtd)
```

Receive notification of a DTD (Document Type node).

The Parser will invoke this method after calling `startDocument` to register the DTD used.

### Parameters

`DTD` - The DTD node

### Throws

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

### **setTextDecl(String, String)**

```
public void setTextDecl(java.lang.String version, java.lang.String encoding)
```

Receive notification of a Text XML Declaration.

The Parser will invoke this method once for each text XML Decl

### Parameters

`version` - The version number (or null, if not specified)

`encoding` - The encoding name

### Throws

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

### **setXMLDecl(String, String, String)**

```
public void setXMLDecl(java.lang.String version, java.lang.String standalone,  
java.lang.String encoding)
```

Receive notification of a XML Declaration.

The Parser will invoke this method once for XML Decl

### Parameters

`version` - The version number

`standalone` - The standalone value (or null, if not specified)

`encoding` - The encoding name (or null, if not specified)

### Throws

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

### **startElement(NSName, SAXAttrList)**

```
public void startElement(NSName elem, SAXAttrList attrlist)
```

Receive notification of the beginning of an element. The Parser will invoke this method at the beginning of every element in the XML document; there will be a corresponding `endElement()` event for every `startElement()` event (even when the element is empty). All of the element's content will be reported, in order, before the corresponding `endElement()` event.

By implementing this method instead of

`org.xml.sax.DocumentHandler.startElement`, SAX Applications can get the Namespace support provided by `NSName` and `SAXAttrList`.

### Parameters

`elem` - `NSName` object

`attrlist` - `SAXAttrList` for the element

### Throws

`org.xml.sax.SAXException` - A `SAXException` could be thrown.

### See Also

`org.xml.sax.DocumentHandler.startElement(String, AttributeList)`

## oracle.xml.parser.v2 XMLElement

### Syntax

public class XMLElement extends [XMLNode](#) implements [org.w3c.dom.Element](#),  
[java.io.Serializable](#), [NSName](#), [NSResolver](#)

```
java.lang.Object
|
+--XMLNode
   |
   +--oracle.xml.parser.v2.XMLElement
```

### All Implemented Interfaces

[java.lang.Cloneable](#), [org.w3c.dom.Element](#), [org.w3c.dom.Node](#), [NSName](#), [NSResolver](#),  
[java.io.Serializable](#), [oracle.xml.parser.v2.XMLConstants](#)

### Description

This class implements the DOM `Element` interface. Elements are created by the XML parser using the default `NodeFactory` or the user defined `NodeFactory` if registered using `setNodeFactory()` method.

### See Also

[org.w3c.dom.Element](#), [XMLParser](#), [NodeFactory](#), [setNodeFactory\(NodeFactory\)](#)

---

## Member Summary

---

### Constructors

- |  |   |
|--|---|
| <a href="#">XMLElement(String)</a>                 | Creates an element with the given name                        |
| <a href="#">XMLElement(String, String, String)</a> | Creates an element with the given name, prefix, and namespace |

### Methods

- |  |   |
|--|---|
| <a href="#">checkNamespace(String, String)</a> | Returns if the element belongs to the namespace specified.                              |
| <a href="#">cloneNode(boolean)</a>             | Returns a duplicate of this node, i.e., serves as a generic copy constructor for nodes. |
| <a href="#">getAttribute(String)</a>           | Retrieves an attribute value by name.   |
| <a href="#">getAttributeNode(String)</a>       | Retrieves an <code>Attr</code> node by name.  |

---

**Member Summary**

---

<a href="#">getAttributes()</a>	A <code>NamedNodeMap</code> containing the attributes of this node (if it is an <code>Element</code> ) or <code>null</code> otherwise.
<a href="#">getChildrenByTagName(String)</a>	Returns a <code>NodeList</code> of all immediate children with a given tag name,
<a href="#">getChildrenByTagName(String, String)</a>	Returns a <code>NodeList</code> of all immediate children with a given tag name and namespace
<a href="#">getElementsByTagName(String)</a>	Returns a <code>NodeList</code> of all descendant elements with a given tag name, in the order in which they would be encountered in a preorder traversal of the <code>Element</code> tree.
<a href="#">getElementsByTagName(String, String)</a>	Returns a <code>NodeList</code> of all descendant elements with a given tag name, and namespace in the order in which they would be encountered in a preorder traversal of the <code>Element</code> tree.
<a href="#">getExpandedName()</a>	Get the fully resolved name for this element.
<a href="#">getLocalName()</a>	Get the local Name for this element.
<a href="#">getNamespace()</a>	Get the resolved Namespace for this element.
<a href="#">getPrefix()</a>	Get the namespace prefix for this element.
<a href="#">getQualifiedName()</a>	Get the qualified name for this element.
<a href="#">getTagName()</a>	Gets the name of the element.
<a href="#">normalize()</a>	Puts all <code>Text</code> nodes in the full depth of the sub-tree underneath this <code>Element</code> into a "normal" form where only markup (e.g., tags, comments, processing instructions, CDATA sections, and entity references) separates <code>Text</code> nodes, i.e., there are no adjacent <code>Text</code> nodes.
<a href="#">removeAttribute(String)</a>	Removes an attribute by name.
<a href="#">removeAttributeNode(Attr)</a>	Removes the specified attribute.
<a href="#">resolveNamespacePrefix(String)</a>	Given a namespace prefix, find the namespace definition in scope in this element.
<a href="#">setAttribute(String, String)</a>	Adds a new attribute.
<a href="#">setAttributeNode(Attr)</a>	Adds a new attribute.

---

**Inherited Member Summary**

---

Fields inherited from class [XMLNode](#)

---

**Inherited Member Summary**

---

AMP, ASTERISK, [ATTRDECL](#), cANY, cATTLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREF, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cNDATA, cNMOKEN, cNMTOKENS, cNOTATION, COLON, COMMA, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, [ELEMENTDECL](#), EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNamespace, nameXMLNSNamespace, nameXMLSpace, nameXSLPI, NONVALIDATING, OR, PERCENT, PLUS, QMARK, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

**Fields inherited from interface Node**

ATTRIBUTE\_NODE, CDATA\_SECTION\_NODE, COMMENT\_NODE, DOCUMENT\_FRAGMENT\_NODE, DOCUMENT\_NODE, DOCUMENT\_TYPE\_NODE, ELEMENT\_NODE, ENTITY\_NODE, ENTITY\_REFERENCE\_NODE, NOTATION\_NODE, PROCESSING\_INSTRUCTION\_NODE, TEXT\_NODE

**Fields inherited from interface oracle.xml.parser.v2.XMLConstants**

AMP, ASTERISK, cANY, cATTLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREF, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cNDATA, cNMOKEN, cNMTOKENS, cNOTATION, COLON, COMMA, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNamespace, nameXMLNSNamespace, nameXMLSpace, nameXSLPI, NONVALIDATING, OR, PERCENT, PLUS, QMARK, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

**Methods inherited from class [XMLNode](#)**

[appendChild\(Node\)](#), [getChildNodes\(\)](#), [getFirstChild\(\)](#), [getLastChild\(\)](#), [getNextSibling\(\)](#), [getNodeName\(\)](#), [getNodeType\(\)](#), [getNodeValue\(\)](#), [getOwnerDocument\(\)](#), [getParentNode\(\)](#), [getPreviousSibling\(\)](#), [hasChildNodes\(\)](#), [insertBefore\(Node, Node\)](#), [print\(OutputStream\)](#), [print\(OutputStream, String\)](#), [print\(PrintWriter\)](#), [removeChild\(Node\)](#), [replaceChild\(Node, Node\)](#), [selectNodes\(String, NSResolver\)](#), [selectSingleNode\(String, NSResolver\)](#), [setNodeValue\(String\)](#), [transformNode\(XSLStylesheet\)](#), [valueOf\(String, NSResolver\)](#)

**Methods inherited from class java.lang.Object**

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

**Methods inherited from interface Node**

[appendChild\(Node\)](#), [getChildNodes\(\)](#), [getFirstChild\(\)](#), [getLastChild\(\)](#), [getNextSibling\(\)](#), [getNodeName\(\)](#), [getNodeType\(\)](#), [getNodeValue\(\)](#), [getOwnerDocument\(\)](#), [getParentNode\(\)](#), [getPreviousSibling\(\)](#), [hasChildNodes\(\)](#), [insertBefore\(Node, Node\)](#), [removeChild\(Node\)](#), [replaceChild\(Node, Node\)](#), [setNodeValue\(String\)](#)

---

## Constructor

### **XMLElement(String)**

```
public XMLElement(java.lang.String tag)
```

Creates an element with the given name

### **XMLElement(String, String, String)**

```
public XMLElement(java.lang.String name, java.lang.String prefix,  
java.lang.String namespace)
```

Creates an element with the given name, prefix, and namespace

## Methods

### **checkNamespace(String, String)**

```
public boolean checkNamespace(java.lang.String localname, java.lang.String ns)
```

Returns if the element belongs to the namespace specified.

#### **Parameters**

`ns` - Expanded namespace string

#### **Returns**

true - if the element belongs to the namespace

### **cloneNode(boolean)**

```
public org.w3c.dom.Node cloneNode(boolean deep)
```

Returns a duplicate of this node, i.e., serves as a generic copy constructor for nodes. The duplicate node has no parent (`parentNode` returns null.). Cloning an `Element` copies all attributes and their values, including those generated by the XML processor to represent defaulted attributes, but this method does not copy any text it contains unless it is a deep clone, since the text is contained in a child `Text` node. Cloning any other type of node simply returns a copy of this node.

#### **Specified By**

`org.w3c.dom.Node.cloneNode(boolean)` in interface `org.w3c.dom.Node`

#### **Specified By**

`org.w3c.dom.Node.cloneNode(boolean)` in interface `org.w3c.dom.Node`

**Overrides**

[cloneNode\(boolean\)](#) in class [XMLNode](#)

**Parameters**

`deep` - If `true`, recursively clone the subtree under the specified node; if `false`, clone only the node itself (and its attributes, if it is an `Element`).

**Returns**

The duplicate node.

**getAttribute(String)**

```
public java.lang.String getAttribute(java.lang.String name)
```

Retrieves an attribute value by name.

**Specified By**

[org.w3c.dom.Element.getAttribute\(String\)](#) in interface [org.w3c.dom.Element](#)

**Parameters**

`name` - The name of the attribute to retrieve.

**Returns**

The `Attr` value as a string, or the empty string if that attribute does not have a specified or default value.

**getAttributeNode(String)**

```
public org.w3c.dom.Attr getAttributeNode(java.lang.String name)
```

Retrieves an `Attr` node by name.

**Specified By**

[org.w3c.dom.Element.getAttributeNode\(String\)](#) in interface [org.w3c.dom.Element](#)

**Parameters**

`name` - The name of the attribute to retrieve.

**Returns**

The `Attr` node with the specified attribute name or `null` if there is no such attribute.

## getAttributes()

```
public org.w3c.dom.NamedNodeMap getAttributes()
```

A `NamedNodeMap` containing the attributes of this node (if it is an `Element`) or `null` otherwise.

### Specified By

`org.w3c.dom.Node.getAttributes()` in interface `org.w3c.dom.Node`

### Overrides

[getAttributes\(\)](#) in class `XMLNode`

### Returns

The list of attributes of this element

## getChildrenByTagName(String)

```
public org.w3c.dom.NodeList getChildrenByTagName(java.lang.String name)
```

Returns a `NodeList` of all immediate children with a given tag name,

### Parameters

`name` - The name of the tag to match on.

### Returns

A list of matching children

## getChildrenByTagName(String, String)

```
public org.w3c.dom.NodeList getChildrenByTagName(java.lang.String name,  
java.lang.String ns)
```

Returns a `NodeList` of all immediate children with a given tag name and namespace

### Parameters

`name` - The name of the tag to match on. (should be local name)

`ns` - The name space

### Returns

A list of matching children

## getElementsByTagName(String)

```
public org.w3c.dom.NodeList getElementsByTagName(java.lang.String name)
```

Returns a `NodeList` of all descendant elements with a given tag name, in the order in which they would be encountered in a preorder traversal of the `Element` tree.

### Specified By

`org.w3c.dom.Element.getElementsByTagName(String)` in interface `org.w3c.dom.Element`

### Parameters

`name` - The name of the tag to match on. The special value "\*" matches all tags.

### Returns

A list of matching `Element` nodes.

## getElementsByTagName(String, String)

```
public org.w3c.dom.NodeList getElementsByTagName(java.lang.String name,  
java.lang.String ns)
```

Returns a `NodeList` of all descendant elements with a given tag name, and namespace in the order in which they would be encountered in a preorder traversal of the `Element` tree.

### Parameters

`name` - The name of the tag to match on. The special value "\*" matches all tags. (should be local name)

`ns` - The namespace of the elements

### Returns

A list of matching `Element` nodes.

## getExpandedName()

```
public java.lang.String getExpandedName()
```

Get the fully resolved name for this element.

### Specified By

[getExpandedName\(\)](#) in interface `NSName`

**Returns**

the fully resolved name

**getLocalName()**

```
public java.lang.String getLocalName()
```

Get the local Name for this element.

**Specified By**

[getLocalName\(\)](#) in interface [NSName](#)

**Returns**

the local Name

**getNamespace()**

```
public java.lang.String getNamespace()
```

Get the resolved Namespace for this element.

**Specified By**

[getNamespace\(\)](#) in interface [NSName](#)

**Returns**

the resolved Namespace

**getPrefix()**

```
public java.lang.String getPrefix()
```

Get the namespace prefix for this element.

**Specified By**

[getPrefix\(\)](#) in interface [NSName](#)

**Returns**

the namespace prefix

**getQualifiedName()**

```
public java.lang.String getQualifiedName()
```

Get the qualified name for this element.

**Specified By**

[getQualifiedName\(\)](#) in interface [NSName](#)

**Returns**

the qualified name

**getTagName()**

```
public java.lang.String getTagName()
```

Gets the name of the element. For example, in: `<elementExample id="demo"> ... </elementExample>`, `tagName` has the value `"elementExample"`. Note that this is case-preserving in XML, as are all of the operations of the DOM. The HTML DOM returns the `tagName` of an HTML element in the canonical uppercase form, regardless of the case in the source HTML document.

**Specified By**

[org.w3c.dom.Element.getTagName\(\)](#) in interface [org.w3c.dom.Element](#)

**Returns**

The element name

**normalize()**

```
public void normalize()
```

Puts all `Text` nodes in the full depth of the sub-tree underneath this `Element` into a "normal" form where only markup (e.g., tags, comments, processing instructions, CDATA sections, and entity references) separates `Text` nodes, i.e., there are no adjacent `Text` nodes. This can be used to ensure that the DOM view of a document is the same as if it were saved and re-loaded, and is useful when operations (such as `XPointer` lookups) that depend on a particular document tree structure are to be used.

**Specified By**

[org.w3c.dom.Element.normalize\(\)](#) in interface [org.w3c.dom.Element](#)

**removeAttribute(String)**

```
public void removeAttribute(java.lang.String name)
```

Removes an attribute by name. If the removed attribute has a default value it is immediately replaced.

**Specified By**

`org.w3c.dom.Element.removeAttribute(String)` in interface `org.w3c.dom.Element`

**Parameters**

`name` - The name of the attribute to remove.

**Throws**

`org.w3c.dom.DOMException - NO_MODIFICATION_ALLOWED_ERR`: Raised if this node is readonly.

**removeAttributeNode(Attr)**

```
public org.w3c.dom.Attr removeAttributeNode(org.w3c.dom.Attr oldAttr)
Removes the specified attribute.
```

**Specified By**

`org.w3c.dom.Element.removeAttributeNode(Attr)` in interface `org.w3c.dom.Element`

**Parameters**

`oldAttr` - The `Attr` node to remove from the attribute list. If the removed `Attr` has a default value it is immediately replaced.

**Returns**

The `Attr` node that was removed.

**Throws**

`org.w3c.dom.DOMException - NO_MODIFICATION_ALLOWED_ERR`: Raised if this node is readonly. `NOT_FOUND_ERR`: Raised if `oldAttr` is not an attribute of the element.

**resolveNamespacePrefix(String)**

```
public java.lang.String resolveNamespacePrefix(java.lang.String prefix)
Given a namespace prefix, find the namespace definition in scope in this element.
```

**Specified By**

[resolveNamespacePrefix\(String\)](#) in interface [NSResolver](#)

**Parameters**

`prefix` - Namespace prefix to be resolved

**Returns**

the resolved Namespace (null, if prefix could not be resolved)

**setAttribute(String, String)**

```
public void setAttribute(java.lang.String name, java.lang.String value)
```

Adds a new attribute. If an attribute with that name is already present in the element, its value is changed to be that of the value parameter. This value is a simple string, it is not parsed as it is being set. So any markup (such as syntax to be recognized as an entity reference) is treated as literal text, and needs to be appropriately escaped by the implementation when it is written out. In order to assign an attribute value that contains entity references, the user must create an `Attr` node plus any `Text` and `EntityReference` nodes, build the appropriate subtree, and use `setAttributeNode` to assign it as the value of an attribute.

**Specified By**

`org.w3c.dom.Element.setAttribute(String, String)` in interface `org.w3c.dom.Element`

**Parameters**

`name` - The name of the attribute to create or alter.

`value` - Value to set in string form.

**Throws**

`org.w3c.dom.DOMException` - `INVALID_CHARACTER_ERR`: Raised if the specified name contains an invalid character. `NO_MODIFICATION_ALLOWED_ERR`: Raised if this node is readonly.

**setAttributeNode(Attr)**

```
public org.w3c.dom.Attr setAttributeNode(org.w3c.dom.Attr newAttr)
```

Adds a new attribute. If an attribute with that name is already present in the element, it is replaced by the new one.

**Specified By**

`org.w3c.dom.Element.setAttributeNode(Attr)` in interface `org.w3c.dom.Element`

**Parameters**

`newAttr` - The `Attr` node to add to the attribute list.

**Returns**

If the `newAttr` attribute replaces an existing attribute with the same name, the previously existing `Attr` node is returned, otherwise `null` is returned.

**Throws**

`org.w3c.dom.DOMException - WRONG_DOCUMENT_ERR`: Raised if `newAttr` was created from a different document than the one that created the element. `NO_MODIFICATION_ALLOWED_ERR`: Raised if this node is readonly. `INUSE_ATTRIBUTE_ERR`: Raised if `newAttr` is already an attribute of another `Element` object. The DOM user must explicitly clone `Attr` nodes to re-use them in other elements.

## oracle.xml.parser.v2 XMLEntityReference

### Syntax

```
public class XMLEntityReference extends XMLNode implements  
org.w3c.dom.EntityReference, oracle.xml.parser.v2.XMLConstants,  
java.lang.Cloneable, java.io.Serializable
```

```
java.lang.Object  
|  
+--XMLNode  
|  
+--oracle.xml.parser.v2.XMLEntityReference
```

### All Implemented Interfaces

```
java.lang.Cloneable, org.w3c.dom.EntityReference, org.w3c.dom.Node,  
java.io.Serializable, oracle.xml.parser.v2.XMLConstants
```

### Description

---

#### Member Summary

---

##### Constructors

[XMLEntityReference\(String\)](#)

---

---

#### Inherited Member Summary

---

##### Fields inherited from class XMLNode

AMP, ASTERISK, [ATTRDECL](#), cANY, cATTLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREF, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cNDATA, cNMTOKEN, cNMTOKENS, cNOTATION, COLON, COMMA, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, [ELEMENTDECL](#), EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNamespace, nameXMLNSNamespace, nameXMLSpace, nameXSLPI, NONVALIDATING, OR, PERCENT, PLUS, QMARK, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

##### Fields inherited from interface Node



## oracle.xml.parser.v2 XMLNode

### Syntax

public class XMLNode extends java.lang.Object implements org.w3c.dom.Node, oracle.xml.parser.v2.XMLConstants, java.lang.Cloneable, java.io.Serializable

```
java.lang.Object
|
+--oracle.xml.parser.v2.XMLNode
```

### Direct Known Subclasses

[AttrDecl](#), [oracle.xml.parser.v2.CharData](#), [DTD](#), [ElementDecl](#), [XMLAttr](#), [XMLDocument](#), [XMLDocumentFragment](#), [XMLElement](#), [XMLEntityReference](#)

### All Implemented Interfaces

java.lang.Cloneable, org.w3c.dom.Node, java.io.Serializable, oracle.xml.parser.v2.XMLConstants

### Description

Implements the DOM `Node` interface and serves as the primary datatype for the entire Document Object Model. It represents a single node in the document tree.

The attributes `nodeName`, `nodeValue` and `attributes` are included as a mechanism to get at node information without casting down to the specific derived instance. In cases where there is no obvious mapping of these attributes for a specific `nodeType` (e.g., `nodeValue` for an `Element` or `attributes` for a `Comment`), this returns `null`. Note that the derived classes may contain additional and more convenient mechanisms to get and set the relevant information.

---

### Member Summary

---

#### Fields

- |                             |                              |
|-----------------------------|------------------------------|
| <a href="#">ATTRDECL</a>    | A attribute declaration node |
| <a href="#">ELEMENTDECL</a> | An element declaration node. |

#### Methods

- |                                   |  |
|-----------------------------------|--|
| <a href="#">appendChild(Node)</a> | Adds the node <code>newChild</code> to the end of the list of children of this node. |
|-----------------------------------|--|

---

**Member Summary**

---

<a href="#">cloneNode(boolean)</a>	Returns a duplicate of this node, i.e., serves as a generic copy constructor for nodes.
<a href="#">getAttributes()</a>	Gets a <code>NamedNodeMap</code> containing the attributes of this node (if it is an <code>Element</code> ) or <code>null</code> otherwise.
<a href="#">getChildNodes()</a>	Gets a <code>NodeList</code> that contains all children of this node.
<a href="#">getFirstChild()</a>	Gets the first child of this node.
<a href="#">getLastChild()</a>	Gets the last child of this node.
<a href="#">getNextSibling()</a>	Gets The node immediately following this node.
<a href="#">getNodeName()</a>	Gets the name of this node, depending on its type
<a href="#">getNodeType()</a>	Gets a code representing the type of the underlying object
<a href="#">getNodeValue()</a>	Gets the value of this node, depending on its type
<a href="#">getOwnerDocument()</a>	Gets the <code>Document</code> object associated with this node.
<a href="#">getParentNode()</a>	Gets the parent of this node.
<a href="#">getPreviousSibling()</a>	Gets the node immediately preceding this node.
<a href="#">hasChildNodes()</a>	This is a convenience method to allow easy determination of whether a node has any children.
<a href="#">insertBefore(Node, Node)</a>	Inserts the node <code>newChild</code> before the existing child node <code>refChild</code> .
<a href="#">print(OutputStream)</a>	Writes the contents of this node to the given output stream.
<a href="#">print(OutputStream, String)</a>	Writes the contents of this node to the given output stream.
<a href="#">print(PrintWriter)</a>	Writes the contents of this node using the given print writer.
<a href="#">removeChild(Node)</a>	Removes the child node indicated by <code>oldChild</code> from the list of children, and returns it.
<a href="#">replaceChild(Node, Node)</a>	Replaces the child node <code>oldChild</code> with <code>newChild</code> in the list of children, and returns the <code>oldChild</code> node.
<a href="#">selectNodes(String, NSResolver)</a>	Selects nodes from the tree which match the given pattern
<a href="#">selectSingleNode(String, NSResolver)</a>	Selects the first node from the tree that matches the given pattern
<a href="#">setNodeValue(String)</a>	Sets the value of this node, depending on its type
<a href="#">transformNode(XSLStylesheet)</a>	Transforms a node in the tree using the given stylesheet
<a href="#">valueOf(String, NSResolver)</a>	Selects the value of the first node from the tree that matches the given pattern

---

---

## Inherited Member Summary

---

Fields inherited from interface Node

ATTRIBUTE\_NODE, CDATA\_SECTION\_NODE, COMMENT\_NODE, DOCUMENT\_FRAGMENT\_NODE, DOCUMENT\_NODE, DOCUMENT\_TYPE\_NODE, ELEMENT\_NODE, ENTITY\_NODE, ENTITY\_REFERENCE\_NODE, NOTATION\_NODE, PROCESSING\_INSTRUCTION\_NODE, TEXT\_NODE

Fields inherited from interface oracle.xml.parser.v2.XMLConstants

AMP, ASTERISK, cANY, cATTLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREF, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cNDATA, cNMTOKEN, cNMTOKENS, cNOTATION, COLON, COMMA, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNamespace, nameXMLNSNamespace, nameXMLSpace, nameXSLPI, NONVALIDATING, OR, PERCENT, PLUS, QMARK, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

Methods inherited from class java.lang.Object

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

---

## Fields

### ATTRDECL

```
public static final short ATTRDECL
A attribute declaration node
```

### ELEMENTDECL

```
public static final short ELEMENTDECL
An element declaration node.
```

## Methods

### appendChild(Node)

```
public org.w3c.dom.Node appendChild(org.w3c.dom.Node newChild)
Adds the node newChild to the end of the list of children of this node. If the newChild is already in the tree, it is first removed.
```

### Specified By

org.w3c.dom.Node.appendChild(Node) in interface org.w3c.dom.Node

### Parameters

`newChild` - The node to add. If it is a `DocumentFragment` object, the entire contents of the document fragment are moved into the child list of this node

### Returns

The node added.

### Throws

`org.w3c.dom.DOMException` - `HIERARCHY_REQUEST_ERR`: Raised if this node is of a type that does not allow children of the type of the `newChild` node, or if the node to append is one of this node's ancestors. `WRONG_DOCUMENT_ERR`: Raised if `newChild` was created from a different document than the one that created this node. `NO_MODIFICATION_ALLOWED_ERR`: Raised if this node is readonly.

## `cloneNode(boolean)`

```
public org.w3c.dom.Node cloneNode(boolean deep)
```

Returns a duplicate of this node, i.e., serves as a generic copy constructor for nodes. The duplicate node has no parent (`parentNode` returns `null`). Cloning an `Element` copies all attributes and their values, including those generated by the XML processor to represent defaulted attributes, but this method does not copy any text it contains unless it is a deep clone, since the text is contained in a child `Text` node. Cloning any other type of node simply returns a copy of this node.

### Specified By

`org.w3c.dom.Node.cloneNode(boolean)` in interface `org.w3c.dom.Node`

### Parameters

`deep` - If `true`, recursively clone the subtree under the specified node; if `false`, clone only the node itself (and its attributes, if it is an `Element`).

### Returns

The duplicate node.

## `getAttributes()`

```
public org.w3c.dom.NamedNodeMap getAttributes()
```

Gets a `NamedNodeMap` containing the attributes of this node (if it is an `Element`) or `null` otherwise.

**Specified By**

`org.w3c.dom.Node.getAttributes()` in interface `org.w3c.dom.Node`

**Returns**

the attributes of this node

**getChildNodes()**

```
public org.w3c.dom.NodeList getChildNodes()
```

Gets a `NodeList` that contains all children of this node. If there are no children, this is a `NodeList` containing no nodes. The content of the returned `NodeList` is "live" in the sense that, for instance, changes to the children of the node object that it was created from are immediately reflected in the nodes returned by the `NodeList` accessors; it is not a static snapshot of the content of the node. This is true for every `NodeList`, including the ones returned by the `getElementsByTagName` method.

**Specified By**

`org.w3c.dom.Node.getChildNodes()` in interface `org.w3c.dom.Node`

**Returns**

The children of this node

**getFirstChild()**

```
public org.w3c.dom.Node getFirstChild()
```

Gets the first child of this node. If there is no such node, this returns `null`.

**Specified By**

`org.w3c.dom.Node.getFirstChild()` in interface `org.w3c.dom.Node`

**Returns**

The first child of this node

**getLastChild()**

```
public org.w3c.dom.Node getLastChild()
```

Gets the last child of this node. If there is no such node, this returns `null`.

**Specified By**

`org.w3c.dom.Node.getLastChild()` in interface `org.w3c.dom.Node`

**Returns**

The last child of this node

**getNextSibling()**

```
public org.w3c.dom.Node getNextSibling()
```

Gets The node immediately following this node. If there is no such node, this returns null.

**Specified By**

org.w3c.dom.Node.getNextSibling() in interface org.w3c.dom.Node

**Returns**

the next node

**getNodeName()**

```
public java.lang.String getNodeName()
```

Gets the name of this node, depending on its type

**Specified By**

org.w3c.dom.Node.getNodeName() in interface org.w3c.dom.Node

**Returns**

Name of this node

**getNodeType()**

```
public short getNodeType()
```

Gets a code representing the type of the underlying object

**Specified By**

org.w3c.dom.Node.getNodeType() in interface org.w3c.dom.Node

**Returns**

type of the node

**getNodeValue()**

```
public java.lang.String getNodeValue()
```

Gets the value of this node, depending on its type

**Specified By**

`org.w3c.dom.Node.getNodeValue()` in interface `org.w3c.dom.Node`

**Returns**

Value of this node

**Throws**

`org.w3c.dom.DOMException - NO_MODIFICATION_ALLOWED_ERR`: Raised when the node is readonly. `DOMSTRING_SIZE_ERR`: Raised when it would return more characters than fit in a `DOMString` variable on the implementation platform.

**getOwnerDocument()**

```
public org.w3c.dom.Document getOwnerDocument()
```

Gets the `Document` object associated with this node. This is also the `Document` object used to create new nodes. When this node is a `Document` this is `null`.

**Specified By**

`org.w3c.dom.Node.getOwnerDocument()` in interface `org.w3c.dom.Node`

**Returns**

The document associated with this node

**getParentNode()**

```
public org.w3c.dom.Node getParentNode()
```

Gets the parent of this node. All nodes, except `Document`, `DocumentFragment`, and `Attr` may have a parent. However, if a node has just been created and not yet added to the tree, or if it has been removed from the tree, this is `null`.

**Specified By**

`org.w3c.dom.Node.getParentNode()` in interface `org.w3c.dom.Node`

**Returns**

The parent of this node

## getPreviousSibling()

```
public org.w3c.dom.Node getPreviousSibling()
```

Gets the node immediately preceding this node. If there is no such node, this returns null.

### Specified By

org.w3c.dom.Node.getPreviousSibling() in interface org.w3c.dom.Node

### Returns

the previous node

## hasChildNodes()

```
public boolean hasChildNodes()
```

This is a convenience method to allow easy determination of whether a node has any children.

### Specified By

org.w3c.dom.Node.hasChildNodes() in interface org.w3c.dom.Node

### Returns

true if the node has any children, false if the node has no children.

## insertBefore(Node, Node)

```
public org.w3c.dom.Node insertBefore(org.w3c.dom.Node newChild,  
org.w3c.dom.Node refChild)
```

Inserts the node newChild before the existing child node refChild. If refChild is null, insert newChild at the end of the list of children. If newChild is a DocumentFragment object, all of its children are inserted, in the same order, before refChild. If the newChild is already in the tree, it is first removed.

### Specified By

org.w3c.dom.Node.insertBefore(Node, Node) in interface org.w3c.dom.Node

### Parameters

newChild - The node to insert.

refChild - The reference node, i.e., the node before which the new node must be inserted.

**Returns**

The node being inserted.

**Throws**

`org.w3c.dom.DOMException - HIERARCHY_REQUEST_ERR`: Raised if this node is of a type that does not allow children of the type of the `newChild` node, or if the node to insert is one of this node's ancestors. `WRONG_DOCUMENT_ERR`: Raised if `newChild` was created from a different document than the one that created this node. `NO_MODIFICATION_ALLOWED_ERR`: Raised if this node is readonly. `NOT_FOUND_ERR`: Raised if `refChild` is not a child of this node.

**print(OutputStream)**

```
public void print(java.io.OutputStream out)
```

Writes the contents of this node to the given output stream.

**Parameters**

`out` - `OutputStream` to write to

**Throws**

`IOException` - if an error occurs

**print(OutputStream, String)**

```
public void print(java.io.OutputStream out, java.lang.String enc)
```

Writes the contents of this node to the given output stream.

**Parameters**

`out` - `OutputStream` to write to

`enc` - Encoding to use for the output

**Throws**

`IOException` - if an invalid encoding was specified or if any other error occurs

**print(PrintWriter)**

```
public void print(java.io.PrintWriter out)
```

Writes the contents of this node using the given print writer.

**Parameters**

out - `PrintWriter` to use

**Throws**

`IOException` - if an error occurs

**removeChild(Node)**

```
public org.w3c.dom.Node removeChild(org.w3c.dom.Node oldChild)
```

Removes the child node indicated by `oldChild` from the list of children, and returns it.

**Specified By**

`org.w3c.dom.Node.removeChild(Node)` in interface `org.w3c.dom.Node`

**Parameters**

`oldChild` - The node being removed.

**Returns**

The node removed.

**Throws**

`org.w3c.dom.DOMException - NO_MODIFICATION_ALLOWED_ERR`: Raised if this node is readonly. `NOT_FOUND_ERR`: Raised if `oldChild` is not a child of this node.

**replaceChild(Node, Node)**

```
public org.w3c.dom.Node replaceChild(org.w3c.dom.Node newChild,  
org.w3c.dom.Node oldChild)
```

Replaces the child node `oldChild` with `newChild` in the list of children, and returns the `oldChild` node. If the `newChild` is already in the tree, it is first removed.

**Specified By**

`org.w3c.dom.Node.replaceChild(Node, Node)` in interface `org.w3c.dom.Node`

**Parameters**

`newChild` - The new node to put in the child list.

`oldChild` - The node being replaced in the list.

### Returns

The node replaced.

### Throws

`org.w3c.dom.DOMException` - `HIERARCHY_REQUEST_ERR`: Raised if this node is of a type that does not allow children of the type of the `newChild` node, or if the node to put in is one of this node's ancestors. `WRONG_DOCUMENT_ERR`: Raised if `newChild` was created from a different document than the one that created this node. `NO_MODIFICATION_ALLOWED_ERR`: Raised if this node is readonly. `NOT_FOUND_ERR`: Raised if `oldChild` is not a child of this node.

## **selectNodes(String, NSResolver)**

```
public org.w3c.dom.NodeList selectNodes(java.lang.String pattern, NSResolver nsr)
```

Selects nodes from the tree which match the given pattern

### Parameters

`pattern` - XSL pattern to match

`nsr` - NSResolver to resolve any prefixes that occur in given pattern

### Returns

a list of matching nodes

### Throws

[XSLEException](#) - Raised if there is an error while doing the match

## **selectSingleNode(String, NSResolver)**

```
public org.w3c.dom.Node selectSingleNode(java.lang.String pattern, NSResolver nsr)
```

Selects the first node from the tree that matches the given pattern

### Parameters

`pattern` - XSL pattern to match

`nsr` - NSResolver to resolve any prefixes that occur in given pattern

**Returns**

matching node

**Throws**

[XSLError](#) - Raised if there is an error while doing the match

**setNodeValue(String)**

```
public void setNodeValue(java.lang.String nodeValue)
```

Sets the value of this node, depending on its type

**Specified By**

`org.w3c.dom.Node.setNodeValue(String)` in interface `org.w3c.dom.Node`

**Throws**

`org.w3c.dom.DOMException - NO_MODIFICATION_ALLOWED_ERR`: Raised when the node is readonly. `DOMSTRING_SIZE_ERR`: Raised when it would return more characters than fit in a `DOMString` variable on the implementation platform.

**transformNode(XSLStylesheet)**

```
public org.w3c.dom.DocumentFragment transformNode(XSLStylesheet xsl)
```

Transforms a node in the tree using the given stylesheet

**Parameters**

`xsl` - `XSLStylesheet` to be used for transformation

**Returns**

a document fragment

**Throws**

[XSLError](#) - Raised if there is an error while doing the XSL transformation.

**valueOf(String, NSResolver)**

```
public java.lang.String valueOf(java.lang.String pattern, NSResolver nsr)
```

Selects the value of the first node from the tree that matches the given pattern

### **Parameters**

`pattern` - XSL pattern to match

`nsr` - NSResolver to resolve any prefixes that occur in given pattern

### **Returns**

value of the matching node

### **Throws**

[XSLException](#) - Raised if there is an error while doing the match

---

## oracle.xml.parser.v2 XMLParseException

### Syntax

```
public class XMLParseException extends org.xml.sax.SAXParseException
```

```
java.lang.Object
|
+--java.lang.Throwable
    |
    +--java.lang.Exception
        |
        +--org.xml.sax.SAXException
            |
            +--org.xml.sax.SAXParseException
                |
                +--oracle.xml.parser.v2.XMLParseException
```

### All Implemented Interfaces

```
java.io.Serializable
```

### Description

Indicates that a parsing exception occurred while processing an XML document

---

### Member Summary

---

#### Fields

<a href="#">ERROR</a>	Code for non-fatal error
<a href="#">FATAL_ERROR</a>	Code for fatal error
<a href="#">WARNING</a>	Code for warning

#### Constructors

```
XMLParseException(String, String,  
String, int, int, int)
```

#### Methods

<a href="#">getColumnNumber(int)</a>	Get the column number of error at specified index
<a href="#">getException(int)</a>	Get the exception (if exists) that occurred in error at specified index

---

**Member Summary**

---

<a href="#">getLineNumber(int)</a>	Get the line number of error at specified index
<a href="#">getMessage(int)</a>	Get the error message at specified index
<a href="#">getMessageType(int)</a>	Get the type of the error message at specified index
<a href="#">getNumMessages()</a>	Return the total number of errors/warnings found during parsing
<a href="#">getPublicId(int)</a>	Get the public ID of input when error at specified index occurred
<a href="#">getSystemId(int)</a>	Get the system ID of input when error at specified index occurred

---

---

**Inherited Member Summary**

---

Methods inherited from interface SAXParseException

[getColumnNumber\(\)](#), [getLineNumber\(\)](#), [getPublicId\(\)](#), [getSystemId\(\)](#)

Methods inherited from interface SAXException

[getException\(\)](#), [getMessage\(\)](#), [toString\(\)](#)

Methods inherited from class java.lang.Throwable

[fillInStackTrace\(\)](#), [getLocalizedMessage\(\)](#), [printStackTrace\(\)](#), [printStackTrace\(\)](#), [printStackTrace\(\)](#)

Methods inherited from class java.lang.Object

[clone\(\)](#), [equals\(\)](#), [finalize\(\)](#), [getClass\(\)](#), [hashCode\(\)](#), [notify\(\)](#), [notifyAll\(\)](#), [wait\(\)](#), [wait\(\)](#), [wait\(\)](#)

---

**Fields****ERROR**

```
public static final int ERROR  
Code for non-fatal error
```

**FATAL\_ERROR**

```
public static final int FATAL_ERROR  
Code for fatal error
```

**WARNING**

```
public static final int WARNING  
Code for warning
```

## Constructor

### XMLParseException(String, String, String, int, int, int)

```
public XMLParseException(java.lang.String msg, java.lang.String pubId,  
java.lang.String sysId, int line, int col, int type)
```

## Methods

### getColumnNumber(int)

```
public int getColumnNumber(int i)  
Get the column number of error at specified index
```

#### Returns

The column number

### getException(int)

```
public java.lang.Exception getException(int i)  
Get the exception (if exists) that occurred in error at specified index
```

#### Returns

The exception

### getLineNumber(int)

```
public int getLineNumber(int i)  
Get the line number of error at specified index
```

#### Returns

The line number

### getMessage(int)

```
public java.lang.String getMessage(int i)  
Get the error message at specified index
```

#### Returns

The error message

### **getMessageType(int)**

```
public int getMessageType(int i)
```

Get the type of the error message at specified index

#### **Returns**

The error message type

### **getNumMessages()**

```
public int getNumMessages()
```

Return the total number of errors/warnings found during parsing

#### **Returns**

The number of errors/warnings

### **getPublicId(int)**

```
public java.lang.String getPublicId(int i)
```

Get the public ID of input when error at specified index occurred

#### **Returns**

The public ID

### **getSystemId(int)**

```
public java.lang.String getSystemId(int i)
```

Get the system ID of input when error at specified index occurred

#### **Returns**

The system ID

---

## oracle.xml.parser.v2 XMLParser

### Syntax

```
public abstract class XMLParser extends java.lang.Object implements  
oracle.xml.parser.v2.XMLConstants
```

```
java.lang.Object  
|  
+--oracle.xml.parser.v2.XMLParser
```

### Direct Known Subclasses

DOMParser, [SAXParser](#)

### All Implemented Interfaces

oracle.xml.parser.v2.XMLConstants

### Description

This class serves as a base class for the `DOMParser` and `SAXParser` classes. It contains methods to parse eXtensible Markup Language (XML) 1.0 documents according to the World Wide Web Consortium (W3C) recommendation. This class can not be instantiated (applications may use the DOM or SAX parser depending on their requirements).

---

### Member Summary

---

#### Methods

<a href="#">getReleaseVersion()</a>	Returns the release version of the Oracle XML Parser
<a href="#">getValidationMode()</a>	Returns the validation mode
<a href="#">parse(InputSource)</a>	Parses the XML from given input source
<a href="#">parse(InputStream)</a>	Parses the XML from given input stream.
<a href="#">parse(Reader)</a>	Parses the XML from given input stream.
<a href="#">parse(String)</a>	Parses the XML from the URL indicated
<a href="#">parse(URL)</a>	Parses the XML document pointed to by the given URL and creates the corresponding XML document hierarchy.

---

**Member Summary**

---

<a href="#">setBaseURL(URL)</a>	Set the base URL for loading external entities and DTDs.
<a href="#">setDoctype(DTD)</a>	Set the DTD
<a href="#">setLocale(Locale)</a>	Applications can use this to set the locale for error reporting.
<a href="#">setPreserveWhitespace(boolean)</a>	Set the white space preserving mode
<a href="#">setValidationMode(boolean)</a>	Set the validation mode

---

---

**Inherited Member Summary**

---

Fields inherited from interface `oracle.xml.parser.v2.XMLConstants`

AMP, ASTERISK, cANY, cATTLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREF, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cNDATA, cNMTOKEN, cNMTOKENS, cNOTATION, COLON, COMMA, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNamespace, nameXMLNSNamespace, nameXMLSpace, nameXSLPI, NONVALIDATING, OR, PERCENT, PLUS, QMARK, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

Methods inherited from class `java.lang.Object`

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

---

**Methods****getReleaseVersion()**

```
public static java.lang.String getReleaseVersion()  
Returns the release version of the Oracle XML Parser
```

**Returns**

the release version string

**getValidationMode()**

```
public boolean getValidationMode()  
Returns the validation mode
```

**Returns**

true if the XML parser is validating false if not

**parse(InputSource)**

```
public final void parse(org.xml.sax.InputSource in)
```

Parses the XML from given input source

**Parameters**

in - the org.xml.sax.InputSouce to parse

**Throws**

[XMLParseException](#) - if syntax or other error encountered.

org.xml.sax.SAXException - Any SAX exception, possibly wrapping another exception.

IOException - IO Error.

**parse(InputStream)**

```
public final void parse(java.io.InputStream in)
```

Parses the XML from given input stream. The base URL should be set for resolving external entities and DTD.

**Parameters**

in - the InputStream containing XML data to parse.

**Throws**

[XMLParseException](#) - if syntax or other error encountered.

org.xml.sax.SAXException - Any SAX exception, possibly wrapping another exception.

IOException - IO Error.

**See Also**

[setBaseURL\(URL\)](#)

**parse(Reader)**

```
public final void parse(java.io.Reader r)
```

Parses the XML from given input stream. The base URL should be set for resolving external entities and DTD.

**Parameters**

`r` - the `Reader` containing XML data to parse.

**Throws**

[XMLParseException](#) - if syntax or other error encountered.

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

`IOException` - IO Error.

**See Also**

[setBaseURL\(URL\)](#)

**parse(String)**

```
public final void parse(java.lang.String in)
```

Parses the XML from the URL indicated

**Parameters**

`in` - the `String` containing the URL to parse from

**Throws**

[XMLParseException](#) - if syntax or other error encountered.

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

`IOException` - IO Error.

**parse(URL)**

```
public final void parse(java.net.URL url)
```

Parses the XML document pointed to by the given URL and creates the corresponding XML document hierarchy.

**Parameters**

`url` - the url points to the XML document to parse.

**Throws**

[XMLParseException](#) - if syntax or other error encountered.

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

IOException - IO Error.

### setBaseURL(URL)

```
public void setBaseURL(java.net.URL url)
```

Set the base URL for loading external entities and DTDs. This method should be called if the `parse(InputStream)` is used to parse the XML Document

#### Parameters

`url` - The base URL

### setDoctype(DTD)

```
public void setDoctype(DTD dtd)
```

Set the DTD

#### Parameters

`dtd` - DTD to set and used while parsing

### setLocale(Locale)

```
public void setLocale(java.util.Locale locale)
```

Applications can use this to set the locale for error reporting.

#### Parameters

`locale` - Locale to set

#### Throws

`org.xml.sax.SAXException` - A `SAXException` could be thrown.

#### See Also

`org.xml.sax.Parser.setLocale(Locale)`

### setPreserveWhitespace(boolean)

```
public void setPreserveWhitespace(boolean flag)
```

Set the white space preserving mode

#### Parameters

`flag` - preserving mode

### **setValidationMode(boolean)**

```
public void setValidationMode(boolean yes)  
Set the validation mode
```

#### **Parameters**

*yes* - determines whether the XML parser should be validating

## oracle.xml.parser.v2 XMLPI

### Syntax

public class XMLPI extends oracle.xml.parser.v2.CharData implements org.w3c.dom.ProcessingInstruction, java.io.Serializable

```

java.lang.Object
|
+--XMLNode
    |
    +--oracle.xml.parser.v2.CharData
        |
        +--oracle.xml.parser.v2.XMLPI
  
```

### All Implemented Interfaces

org.w3c.dom.CharacterData, java.lang.Cloneable, org.w3c.dom.Node, org.w3c.dom.ProcessingInstruction, java.io.Serializable, oracle.xml.parser.v2.XMLConstants

### Description

This class implements the DOM Processing Instruction interface.

### See Also

org.w3c.dom.ProcessingInstruction, [NodeFactory](#), [setNodeFactory\(NodeFactory\)](#)

---

### Member Summary

#### Constructors

[XMLPI\(String, String\)](#) Creates a new ProcessingInstruction node with the given target and the data.

#### Methods

[getTarget\(\)](#) Returns the target of this PI.

---



---

### Inherited Member Summary

Fields inherited from class [XMLNode](#)



---

## Inherited Member Summary

---

appendChild(Node), cloneNode(boolean), getAttributes(), getChildNodes(), getFirstChild(), getLastChild(), getNextSibling(), getNodeName(), getNodeName(), getNodeValue(), getOwnerDocument(), getParentNode( ), getPreviousSibling(), hasChildNodes(), insertBefore(Node, Node), removeChild(Node), replaceChild(Node, Node), setNodeValue(String)

Methods inherited from interface CharacterData

appendData(String), deleteData(int, int), getLength(), insertData(int, String), replaceData(int, int, String), substringData(int, int)

---

## Constructor

### XMLPI(String, String)

```
public XMLPI(java.lang.String target, java.lang.String data)
```

Creates a new ProcessingInstruction node with the given target and the data.

#### Parameters

`target` - The target of this PI

`data` - The content of this PI

## Methods

### getTarget()

```
public java.lang.String getTarget()
```

Returns the target of this PI. XML defines this as the first token following markup that begins the processing instruction.

#### Specified By

org.w3c.dom.ProcessingInstruction.getTarget() in interface  
org.w3c.dom.ProcessingInstruction

#### Returns

The target of the PI.

## oracle.xml.parser.v2 XMLText

### Syntax

public class XMLText extends oracle.xml.parser.v2.CharData implements org.w3c.dom.Text, java.io.Serializable

```
java.lang.Object
|
+--XMLNode
   |
   +--oracle.xml.parser.v2.CharData
      |
      +--oracle.xml.parser.v2.XMLText
```

### Direct Known Subclasses:

[XMLCDATA](#)

### All Implemented Interfaces

org.w3c.dom.CharacterData, java.lang.Cloneable, org.w3c.dom.Node, java.io.Serializable, org.w3c.dom.Text, oracle.xml.parser.v2.XMLConstants

### Description

This class implements the DOM Text interface.

### See Also

org.w3c.dom.Text, [NodeFactory](#), [setNodeFactory\(NodeFactory\)](#)

---

## Member Summary

---

### Constructors

[XMLText\(String\)](#)

### Methods

[getNodeValue\(\)](#)

[splitText\(int\)](#)

Breaks Text node into two Text nodes at specified offset, so they are both siblings, and the node only contains content up to the offset.

---



---

## Inherited Member Summary

---

`appendData(String)`, `deleteData(int, int)`, `getData()`, `getLength()`, `insertData(int, String)`, `replaceData(int, int, String)`, `setData(String)`, `substringData(int, int)`

Methods inherited from interface `Node`

`appendChild(Node)`, `cloneNode(boolean)`, `getAttributes()`, `getChildNodes()`, `getFirstChild()`, `getLastChild()`, `getNextSibling()`, `getNodeName()`, `getNodeType()`, `getOwnerDocument()`, `getParentNode()`, `getPreviousSibling()`, `hasChildNodes()`, `insertBefore(Node, Node)`, `removeChild(Node)`, `replaceChild(Node, Node)`, `setNodeValue(String)`

---

## Constructor

### XMLText(String)

```
public XMLText(java.lang.String text)
```

## Methods

### getNodeValue()

```
public java.lang.String getNodeValue()
```

#### Specified By

`getNodeValue()` in interface `org.w3c.dom.Node`

#### Overrides

`getNodeValue()` in class [XMLNode](#)

### splitText(int)

```
public org.w3c.dom.Text splitText(int offset)
```

Breaks `Text` node into two `Text` nodes at specified offset, so they are both siblings, and the node only contains content up to the offset. New node inserted as next sibling contains all content at and after the offset point.

#### Specified By

`splitText(int)` in interface `org.w3c.dom.Text`

#### Parameters

`offset` - Offset at which to split, starting from 0

**Returns**

New `Text` node

**Throws**

`org.w3c.dom.DOMException - INDEX_SIZE_ERR`: Raised if specified offset is negative or greater than number of characters in `data`. `NO_MODIFICATION_ALLOWED_ERR`: Raised if this node is readonly.

## oracle.xml.parser.v2

# XMLToken

### Syntax

```
public interface XMLToken
```

### Description

Basic interface for XMLToken

All XMLParser applications with Tokenizer feature must implement this interface. The interface has to be registered using XMLParser method `setTokenHandler(XMLToken handler)`.

If XMLtoken handler != null then for each registered and found token the parser calls the XMLToken call-back method `token(int token, String value)`. During tokenizing the parser doesn't validate the document and doesn't include/read internal/external entities. If XMLtoken handler == null then the parser parses as usual.

A request for XML token is registered (on/off) using XMLParser method `setToken(int token, boolean set)`. The requests could be registered during the parsing (from inside the call-back method) as well.

The XML tokens are defined as public constants in XMLToken interface. They correspond to the XML syntax variables from W3C XML Syntax Specification.

---

### Member Summary

---

#### Fields

<a href="#">AttListDecl</a>	<code>AttListDecl ::= '&lt;' '!' 'ATTLIST' S Name AttDef* S? '&gt;'</code>
<a href="#">AttName</a>	<code>AttName ::= Name</code>
<a href="#">Attribute</a>	<code>Attribute ::= AttName Eq AttValue</code>
<a href="#">AttValue</a>	<code>AttValue ::= '"' ([^&lt;&amp;"]   Reference)* '"'</code>

---

**Member Summary**


---

<a href="#">CDSect</a>	<code>CDSect ::= CDStart CData CDEnd</code>
<a href="#">CharData</a>	<code>CharData ::= [^&lt;&amp;]* - ([^&lt;&amp;]* ')]&gt;' [^&lt;&amp;]*</code>
<a href="#">Comment</a>	<code>Comment ::= '&lt;' '! '-' ((Char - '-')   ('-' (Char - '-')))* '-&gt;'</code>
<a href="#">DTDName</a>	<code>DTDName ::= name</code>
<a href="#">ElemDeclName</a>	<code>ElemDeclName ::= name</code>
<a href="#">elementdecl</a>	<code>elementdecl ::= '&lt;' 'ELEMENT' S ElemDeclName S contentspec S? '&gt;'</code>
<a href="#">EmptyElemTag</a>	<code>EmptyElemTag ::= '&lt;' STagName (S Attribute)* S? '/' '&gt;'</code>
<a href="#">EntityDecl</a>	<code>EntityDecl ::= '&lt;' '!' ENTITY' S EntityDeclName S EntityDef S? '&gt;'</code>
<a href="#">EntityDeclName</a>	<code>EntityValue ::= "" ([^%&amp;"   PEReference   Reference)* ""</code>
<a href="#">EntityValue</a>	<code>EntityDeclName ::= Name</code>
<a href="#">ETag</a>	<code>ETag ::= '&lt;' '/' ETagName S? '&gt;'</code>
<a href="#">ETagName</a>	<code>ETagName ::= Name</code>
<a href="#">ExternalID</a>	<code>ExternalID ::= 'SYSTEM' S SystemLiteral</code>
<a href="#">NotationDecl</a>	<code>NotationDecl ::= '&lt;' '!' NOTATION' S Name S (ExternalID   PublicID) S? '&gt;'</code>
<a href="#">PI</a>	<code>PI ::= '&lt;' '?' PITarget (S (Char* - (Char* '?&gt;' Char*)))? '?' '&gt;'</code>
<a href="#">PITarget</a>	<code>PITarget ::= Name - (('X'   'x') ('M'   'm') ('L'   'l'))</code>
<a href="#">Reference</a>	<code>Reference ::= EntityRef   CharRef   PEReference</code>
<a href="#">STag</a>	<code>S Tag ::= '&lt;' STagName (S Attribute)* S? '&gt;'</code>
<a href="#">STagName</a>	<code>S TagName ::= Name</code>
<a href="#">TextDecl</a>	<code>TextDecl ::= '&lt;' '?' 'xml' VersionInfo? EncodingDecl S? '?&gt;'</code>
<a href="#">XMLDecl</a>	<code>XMLDecl ::= '&lt;' '?' 'xml' VersionInfo EncodingDecl? SDDecl? S? '?' '&gt;'</code>
<a href="#">Methods</a>	
<a href="#">token(int, String)</a>	The interface call-back method.

---

**Fields****AttListDecl**

```
public static final int AttListDecl
AttListDecl ::= '<' '!' 'ATTLIST' S Name AttDef* S? '>'
```

**AttName**

```
public static final int AttName
AttName ::= Name
```

**Attribute**

```
public static final int Attribute
Attribute ::= AttName Eq AttValue
```

**AttValue**

```
public static final int AttValue
AttValue ::= "" ([^<&"] | Reference)* ""
| "" ([^<&'] | Reference)* ""
```

**CDSect**

```
public static final int CDSect
CDSect ::= CDStart CData CDEnd

CDStart ::= '<' '[' CDATA['
CData ::= (Char* - (Char* ']]>' Char*))
CDEnd ::= ']]>'
```

**CharData**

```
public static final int CharData
CharData ::= [^<&]* - ([^<&]* ']]>' [^<&]*
```

**Comment**

```
public static final int Comment
Comment ::= '<' '[' '--' ((Char - '-') | ('-' (Char - '-')))* '-->'
```

**DTDName**

```
public static final int DTDName
DTDName ::= name
```

**ElemDeclName**

```
public static final int ElemDeclName
ElemDeclName ::= name
```

**elementdecl**

```
public static final int elementdecl
elementdecl ::= '<' 'ELEMENT' S ElemDeclName S contentspec S? '>'
```

**EmptyElemTag**

```
public static final int EmptyElemTag
EmptyElemTag ::= '<' STagName (S Attribute)* S? '/' '>'
```

**EntityDecl**

```
public static final int EntityDecl
EntityDecl ::= '<' '!' ENTITY' S EntityDeclName S EntityDef S? '>'
| '<' '!' ENTITY' S '%' S EntityDeclName S PDef S? '>'
EntityDef ::= EntityValue | (ExternalID NDataDecl?)
PDef ::= EntityValue | ExternalID
```

**EntityDeclName**

```
public static final int EntityDeclName
EntityValue ::= "" ([^%&"] | PEReference | Reference)* ""
| "" ([^%&'] | PEReference | Reference)* ""
```

**EntityValue**

```
public static final int EntityValue
EntityDeclName ::= Name
```

**ETag**

```
public static final int ETag
ETag ::= '<' '/' ETagName S? '>'
```

**ETagName**

```
public static final int ETagName
ETagName ::= Name
```

**ExternalID**

```
public static final int ExternalID
ExternalID ::= 'SYSTEM' S SystemLiteral
```

| 'PUBLIC' S PubidLiteral S SystemLiteral

## NotationDecl

```
public static final int NotationDecl
NotationDecl ::= '<' '!NOTATION' S Name S (ExternalID | PublicID) S? '>'
```

## PI

```
public static final int PI
PI ::= '<' '?' PITarget (S (Char* - (Char* '?>' Char*)))? '?' '>'
```

## PITarget

```
public static final int PITarget
PITarget ::= Name - (('X' | 'x') ('M' | 'm') ('L' | 'l'))
```

## Reference

```
public static final int Reference
Reference ::= EntityRef | CharRef | PEReference
EntityRef ::= '&' Name ';'
PEReference ::= '%' Name ';'
CharRef ::= '&#' [0-9]+ ';' | '&#x' [0-9a-fA-F]+ ';'
```

## STag

```
public static final int STag
STag ::= '<' STagName (S Attribute)* S? '>'
```

## STagName

```
public static final int STagName
STagName ::= Name
```

## TextDecl

```
public static final int TextDecl
TextDecl ::= '<' '?' 'xml' VersionInfo? EncodingDecl S? '>'
```

## XMLDecl

```
public static final int XMLDecl
XMLDecl ::= '<' '?' 'xml' VersionInfo EncodingDecl? SDDecl? S? '?' '>'
```

## Methods

### `token(int, String)`

```
public void token(int token, java.lang.String value)
```

The interface call-back method. Receives an XML token and it's corresponding value

#### **Parameters**

`token` - The XML token constant as specified in the interface.

`value` - The corresponding substring from the parsed text.

---

## oracle.xml.parser.v2 XMLTokenizer

### Syntax

public class XMLTokenizer extends [oracle.xml.parser.v2](#) implements [oracle.xml.parser.v2.XMLConstants](#)

```
java.lang.Object
|
+--org.xml.sax.HandlerBase
   |
   +--oracle.xml.parser.v2
      |
      +--oracle.xml.parser.v2.XMLTokenizer
```

### All Implemented Interfaces

[org.xml.sax.DocumentHandler](#), [org.xml.sax.DTDHandler](#), [org.xml.sax.EntityResolver](#), [org.xml.sax.ErrorHandler](#), [oracle.xml.parser.v2.XMLConstants](#), [XMLDocumentHandler](#)

### Description

This class implements an eXtensible Markup Language (XML) 1.0 parser according to the World Wide Web Consortium (W3C) recommendation.

---

### Member Summary

---

#### Constructors

[XMLTokenizer\(\)](#) Creates a new Tokenizer object.

[XMLTokenizer\(XMLToken\)](#) Creates a new Tokenizer object.

#### Methods

[parseDocument\(\)](#) Document ::= Prolog Element Misc\*

[setErrorHandler\(ErrorHandler\)](#) Applications can use this to register a new error event handler.

[setErrorStream\(OutputStream\)](#) Register a output stream for errors

[setToken\(int, boolean\)](#) Applications can use this to register a new token for XML tokenizer.

[setTokenHandler\(XMLToken\)](#) Applications can use this to register a new XML tokenizer event handler.

---

**Member Summary**

---

<a href="#">tokenize(InputSource)</a>	Tokenizes the XML from given input source
<a href="#">tokenize(InputStream)</a>	Tokenizes the XML from given input stream.
<a href="#">tokenize(Reader)</a>	Tokenizes the XML from given input stream.
<a href="#">tokenize(String)</a>	Tokenizes the XML from the URL indicated
<a href="#">tokenize(URL)</a>	Tokenizes the XML document pointed to by the given URL and creates the corresponding XML document hierarchy.

---



---

**Inherited Member Summary**

---

Fields inherited from interface [oracle.xml.parser.v2.XMLConstants](#)

AMP, ASTERISK, cANY, cATTRLIST, cCDATA, cCDATAEND, cCDATASTART, cCOMMENTEND, cCOMMENTSTART, cDECCREF, cDECLSTART, cDOCTYPE, cELEMENT, cEMPTY, cEMPTYTAGEND, cENCODING, cENDTAGSTART, cENTITIES, cENTITY, cFIXED, cHEXCREF, cID, cIDREF, cIDREFS, cIGNORE, cIMPLIED, cINCLUDE, cNDATA, cNMTOKEN, cNMTOKENS, cNOTATION, COLON, COMMA, cPIEND, cPISTART, cPUBLIC, cREQUIRED, cSTANDALONE, cSYSTEM, cVERSION, cXML, DOUBLEQUOTE, EOF, EQ, ERROR, FATAL\_ERROR, FDIGIT, FLETTER, FMISCNAME, FSTARTNAME, FWHITESPACE, HASH, ICOUNT, ISTART, LEFTSQB, LPAREN, nameCDATA, nameCOMMENT, nameDOCUMENT, nameDOCUMENTFRAGMENT, nameENCODING, nameNameSpace, nameSpaceSeparator, nameSTANDALONE, nameTEXT, nameVERSION, nameXML, nameXMLLang, nameXMLNamespace, nameXMLNSNamespace, nameXMLSpace, nameXSLPI, NONVALIDATING, OR, PERCENT, PLUS, QMARK, QUOTE, RIGHTSQB, RPAREN, SEMICOLON, SLASH, TAGEND, TAGSTART, VALIDATING, WARNING

Methods inherited from class [oracle.xml.parser.v2](#)

[cDATASection\(char\[\], int, int\)](#), [comment\(String\)](#), [endDoctype\(\)](#), [endElement\(NSName\)](#), [setDoctype\(DTD\)](#), [setTextDecl\(String, String\)](#), [setXMLDecl\(String, String, String\)](#), [startElement\(NSName, SAXAttrList\)](#)

Methods inherited from class [HandlerBase](#)

[characters\(char\[\], int, int\)](#), [endDocument\(\)](#), [endElement\(String\)](#), [error\(SAXParseException\)](#), [fatalError\(SAXParseException\)](#), [ignorableWhitespace\(char\[\], int, int\)](#), [notationDecl\(String, String, String\)](#), [processingInstruction\(String, String\)](#), [resolveEntity\(String, String\)](#), [setDocumentLocator\(Locator\)](#), [startDocument\(\)](#), [startElement\(String, AttributeList\)](#), [unparsedEntityDecl\(String, String, String, String\)](#), [warning\(SAXParseException\)](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [XMLDocumentHandler](#)

[cDATASection\(char\[\], int, int\)](#), [comment\(String\)](#), [endDoctype\(\)](#), [endElement\(NSName\)](#), [setDoctype\(DTD\)](#), [setTextDecl\(String, String\)](#), [setXMLDecl\(String, String, String\)](#), [startElement\(NSName, SAXAttrList\)](#)

Methods inherited from interface [DocumentHandler](#)

---

## Inherited Member Summary

---

characters(char[], int, int), endDocument(), endElement(String), ignorableWhitespace(char[], int, int), processingInstruction(String, String), setDocumentLocator(Locator), startDocument(), startElement(String, AttributeList)

Methods inherited from interface EntityResolver

resolveEntity(String, String)

Methods inherited from interface DTDHandler

notationDecl(String, String, String), unparsedEntityDecl(String, String, String, String)

Methods inherited from interface ErrorHandler

error(SAXParseException), fatalError(SAXParseException), warning(SAXParseException)

---

## Constructors

### XMLTokenizer()

```
public XMLTokenizer()  
Creates a new Tokenizer object.
```

### XMLTokenizer(XMLToken)

```
public XMLTokenizer(XMLToken handler)  
Creates a new Tokenizer object.
```

## Methods

### parseDocument()

```
public void parseDocument()  
Document ::= Prolog Element Misc*
```

### setErrorHandler(ErrorHandler)

```
public void setErrorHandler(org.xml.sax.ErrorHandler handler)  
Applications can use this to register a new error event handler. This replaces any  
previous setting for error handling.
```

#### Parameters

handler - ErrorHandler being registered

**setErrorStream(OutputStream)**

```
public void setErrorStream(java.io.OutputStream out)
```

Register a output stream for errors

**setToken(int, boolean)**

```
public void setToken(int token, boolean val)
```

Applications can use this to register a new token for XML tokenizer.

**Parameters**

token - XMLToken being set

**setTokenHandler(XMLToken)**

```
public void setTokenHandler(XMLToken handler)
```

Applications can use this to register a new XML tokenizer event handler.

**Parameters**

handler - XMLToken being registered

**tokenize(InputSource)**

```
public final void tokenize(org.xml.sax.InputSource in)
```

Tokenizes the XML from given input source

**Parameters**

in - the org.xml.sax.InputSouce to parse

**Throws**

[XMLParseException](#) - if syntax or other error encountered.

org.xml.sax.SAXException - Any SAX exception, possibly wrapping another exception.

IOException - IO Error.

**tokenize(InputStream)**

```
public final void tokenize(java.io.InputStream in)
```

Tokenizes the XML from given input stream.

**Parameters**

`in` - the `InputStream` containing XML data to parse.

**Throws**

[XMLParseException](#) - if syntax or other error encountered.

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

`IOException` - IO Error.

**See Also**

[setBaseURL\(URL\)](#)

**tokenize(Reader)**

```
public final void tokenize(java.io.Reader r)

```

Tokenizes the XML from given input stream.

**Parameters**

`r` - the `Reader` containing XML data to parse.

**Throws**

[XMLParseException](#) - if syntax or other error encountered.

`org.xml.sax.SAXException` - Any SAX exception, possibly wrapping another exception.

`IOException` - IO Error.

**See Also**

[setBaseURL\(URL\)](#)

**tokenize(String)**

```
public final void tokenize(java.lang.String in)

```

Tokenizes the XML from the URL indicated

**Parameters**

`in` - the `String` containing the URL to parse from

**Throws**

[XMLParseException](#) - if syntax or other error encountered.

org.xml.sax.SAXException - Any SAX exception, possibly wrapping another exception.

IOException - IO Error.

**tokenize(URL)**

```
public final void tokenize(java.net.URL url)
```

Tokenizes the XML document pointed to by the given URL and creates the corresponding XML document hierarchy.

**Parameters**

url - the url points to the XML document to parse.

**Throws**

[XMLParseException](#) - if syntax or other error encountered.

org.xml.sax.SAXException - Any SAX exception, possibly wrapping another exception.

IOException - IO Error.

## oracle.xml.parser.v2 XSLException

### Syntax

```
public class XSLException extends java.lang.Exception
```

```
java.lang.Object
|
+--java.lang.Throwable
   |
   +--java.lang.Exception
      |
      +--oracle.xml.parser.v2.XSLException
```

### All Implemented Interfaces

```
java.io.Serializable
```

### Description

Indicates that an exception occurred during XSL transformation

---

### Inherited Member Summary

---

Methods inherited from class java.lang.Throwable

fillInStackTrace, getLocalizedMessage, getMessage, printStackTrace, printStackTrace, printStackTrace, toString

Methods inherited from class java.lang.Object

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

---

## oracle.xml.parser.v2 XSLProcessor

### Syntax

```
public class XSLProcessor extends java.lang.Object
```

```
java.lang.Object
|
+--oracle.xml.parser.v2.XSLProcessor
```

### Description

This class provides methods to transform an input XML document using a previously constructed `XSLStylesheet`. The transformation effected is as specified by the XSLT 1.0 specification.

---

### Member Summary

---

#### Constructors

[XSLProcessor\(\)](#)

#### Methods

<a href="#">processXSL(XSLStylesheet, InputStream, URL)</a>	Transform input XML document using given <code>InputStream</code> and stylesheet.
<a href="#">processXSL(XSLStylesheet, Reader, URL)</a>	Transform input XML document using given <code>Reader</code> and stylesheet.
<a href="#">processXSL(XSLStylesheet, URL, URL)</a>	Transform input XML document using given <code>URL</code> and stylesheet.
<a href="#">processXSL(XSLStylesheet, XMLDocument)</a>	Transform input XML document using given <code>XMLDocument</code> and stylesheet.
<a href="#">processXSL(XSLStylesheet, XMLDocumentFragment)</a>	Transform input XML document using given <code>XMLDocument</code> and stylesheet.
<a href="#">processXSL(XSLStylesheet, XMLDocumentFragment, OutputStream)</a>	Transform input XML using given <code>XMLDocumentFragment</code> and stylesheet.
<a href="#">processXSL(XSLStylesheet, XMLDocumentFragment, PrintWriter)</a>	Transform input XML using given <code>XMLDocumentFragment</code> and stylesheet.

---

**Member Summary**

---

<a href="#">processXSL(XSLStylesheet, XMLDocument, OutputStream)</a>	Transform input XML document using given XMLDocument and stylesheet.
<a href="#">processXSL(XSLStylesheet, XMLDocument, PrintWriter)</a>	Transform input XML document using given XMLDocument and stylesheet.
<a href="#">setErrorStream(OutputStream)</a>	Creates an output stream for the output of warnings.
<a href="#">setLocale(Locale)</a>	Applications can use this to set the locale for error reporting.
<a href="#">showWarnings(boolean)</a>	Switch to determine whether to output warnings.

---

---

**Inherited Member Summary**

---

Methods inherited from class java.lang.Object

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

---

**Constructor****XSLProcessor()**

```
public XSLProcessor()
```

**Methods****processXSL(XSLStylesheet, InputStream, URL)**

```
public XMLDocumentFragment processXSL(XSLStylesheet xsl, java.io.InputStream xml, java.net.URL ref)
```

Transforms input XML document using given InputStream and stylesheet.

**Parameters**

xsl - XSLStylesheet to be used for transformation

xml - XML input to be transformed (as a java.io.InputStream)

ref - Reference URL to resolve external entities in input xml file

**Returns**

XMLDocumentFragment

**Throws**

[XSLException](#) - on error.

**processXSL(XSLStylesheet, Reader, URL)**

```
public XMLDocumentFragment processXSL(XSLStylesheet xsl, java.io.Reader xml,  
java.net.URL ref)
```

Transform input XML document using given Reader and stylesheet.

**Parameters**

xsl - XSLStylesheet to be used for transformation

xml - XML input to be transformed (as a java.io.Reader)

ref - Reference URL to resolve external entities in input xml file

**Returns**

XMLDocumentFragment

**Throws**

[XSLException](#) - on error.

**processXSL(XSLStylesheet, URL, URL)**

```
public XMLDocumentFragment processXSL(XSLStylesheet xsl, java.net.URL xml,  
java.net.URL ref)
```

Transform input XML document using given URL and stylesheet.

**Parameters**

xsl - XSLStylesheet to be used for transformation

xml - XML input to be transformed (as a java.net.URL)

ref - Reference URL to resolve external entities in input xml file

**Returns**

XMLDocumentFragment

**Throws**

[XSLException](#) - on error.

**processXSL(XSLStylesheet, XMLDocument)**

```
public XMLDocumentFragment processXSL(XSLStylesheet xsl, XMLDocument xml)
```

Transform input XML document using given XMLDocument and stylesheet.

**Parameters**

xsl - XSLStylesheet to be used for transformation

xml - XML input to be transformed (as a DOM Tree)

**Returns**

XMLDocumentFragment

**Throws**

[XSLException](#) - on error.

**processXSL(XSLStylesheet, XMLDocumentFragment)**

```
public XMLDocumentFragment processXSL(XSLStylesheet xsl, XMLDocumentFragment inp)
```

Transform input XML document using given XMLDocument and stylesheet.

**Parameters**

xsl - XSLStylesheet to be used for transformation

xml - XML input to be transformed (as a DOM Tree)

**Returns**

XMLDocumentFragment

**Throws**

[XSLException](#) - on error.

**processXSL(XSLStylesheet, XMLDocumentFragment, OutputStream)**

```
public void processXSL(XSLStylesheet xsl, XMLDocumentFragment xml, java.io.OutputStream out)
```

Transform input XML using given XMLDocumentFragment and stylesheet.

**Parameters**

xsl - XSLStylesheet to be used for transformation

xml - XML input to be transformed (as a DOM Tree)

out - OutputStream to which the result is printed

### Throws

`XSLException`, - `IOException` on error.

## **processXSL(XSLStylesheet, XMLDocumentFragment, PrintWriter)**

```
public void processXSL(XSLStylesheet xsl, XMLDocumentFragment xml,
    java.io.PrintWriter pw)
```

Transform input XML using given XMLDocumentFragment and stylesheet.

### Parameters

xsl - XSLStylesheet to be used for transformation

xml - XML input to be transformed (as a DOM Tree)

pw - PrintWriter to which the result is printed

### Throws

`XSLException`, - `IOException` on error.

## **processXSL(XSLStylesheet, XMLDocument, OutputStream)**

```
public void processXSL(XSLStylesheet xsl, XMLDocument xml, java.io.OutputStream
    out)
```

Transform input XML document using given XMLDocument and stylesheet.

### Parameters

xsl - XSLStylesheet to be used for transformation

xml - XML input to be transformed (as a DOM Tree)

out - OutputStream to which the result is printed

### Throws

`XSLException`, - `IOException` on error.

## **processXSL(XSLStylesheet, XMLDocument, PrintWriter)**

```
public void processXSL(XSLStylesheet xsl, XMLDocument xml, java.io.PrintWriter
    pw)
```

Transform input XML document using given XMLDocument and stylesheet.

**Parameters**

xsl - XSLStylesheet to be used for transformation

xml - XML input to be transformed (as a DOM Tree)

pw - PrintWriter to which the result is printed

**Throws**

XSLException, - IOException on error.

**setErrorStream(OutputStream)**

```
public final void setErrorStream(java.io.OutputStream out)
```

Creates an output stream for the output of warnings. If an output stream for warnings is not specified, the processor will not output any warnings

**Parameters**

out - The output stream to use for errors and warnings

**setLocale(Locale)**

```
public void setLocale(java.util.Locale locale)
```

Applications can use this to set the locale for error reporting.

**Parameters**

locale - Locale to set

**showWarnings(boolean)**

```
public final void showWarnings(boolean yes)
```

Switch to determine whether to output warnings.

**Parameters**

yes - determines whether warnings should be shown By default, warnings are not output

---

## oracle.xml.parser.v2 XSLStylesheet

### Syntax

```
public class XSLStylesheet extends java.lang.Object implements  
oracle.xml.parser.v2.XSLConstants
```

```
java.lang.Object  
|  
+--oracle.xml.parser.v2.XSLStylesheet
```

### All Implemented Interfaces

```
oracle.xml.parser.v2.XSLConstants
```

### Description

The class holds XSL stylesheet information such as templates, keys, variables, and attribute sets. The same stylesheet, once constructed, can be used to transform multiple XML documents.

---

### Member Summary

---

#### Constructors

- |   |   |
|---|---|
| <a href="#">XSLStylesheet(InputStream, URL)</a> | Constructs an XSLStylesheet using the given Inputstream |
| <a href="#">XSLStylesheet(Reader, URL)</a>      | Constructs an XSLStylesheet using the given Reader      |
| <a href="#">XSLStylesheet(URL, URL)</a>         | Constructs an XSLStylesheet using the given URL         |
| <a href="#">XSLStylesheet(XMLDocument, URL)</a> | Constructs an XSLStylesheet using the given XMLDocument |

#### Methods

- |  |   |
|--|---|
| <a href="#">setParam(String, String)</a> | Sets the value of a top-level stylesheet parameter. |
|--|---|
- 

---

### Inherited Member Summary

---

Fields inherited from interface oracle.xml.parser.v2.XSLConstants

---

## Inherited Member Summary

---

APPLY\_IMPORTS, APPLY\_TEMPLATES, ATTRIBUTE, ATTRIBUTE\_SET, CALL\_TEMPLATE, CHOOSE, COMMENT, COPY, COPY\_OF, DISABLEOUTESC, ELEMENT, FOR\_EACH, HREF, IF, IMPORT, INCLUDE, KEY, LOCALE, MATCH, MESSAGE, NAME, NEGINFPRIORITY, NUMBER, ORACLE\_NAME, ORACLE\_URL, OTHERWISE, OUTPUT, PARAM, PARAM\_VARIABLE, PI, PRESERVE\_SPACE, RESULT\_ROOT, SORT, STRIP\_SPACE, TEMPLATE, TEXT, USE, USE\_ATTRIBUTE\_SETS, VALUE\_OF, VARIABLE, WHEN, XSL\_ROOT, XSLEXTFUNCNS, XSLNAMESPACE, XSLT\_SPEC\_VERSION

Methods inherited from class java.lang.Object

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

---

## Constructors

### XSLStylesheet(InputStream, URL)

```
public XSLStylesheet(java.io.InputStream xsl, java.net.URL ref)
Constructs an XSLStylesheet using the given Inputstream
```

#### Parameters

`xsl` - XSL input as an Inputstream

`ref` - Reference URL for include, import and external entities

#### Throws

[XSLException](#) - on error.

### XSLStylesheet(Reader, URL)

```
public XSLStylesheet(java.io.Reader xsl, java.net.URL ref)
Constructs an XSLStylesheet using the given Reader
```

#### Parameters

`xsl` - XSL input as a Reader

`ref` - Reference URL for include, import and external entities

#### Throws

[XSLException](#) - on error.

### XSLStylesheet(URL, URL)

```
public XSLStylesheet(java.net.URL xsl, java.net.URL ref)
```

Constructs an XSLStyleSheet using the given URL

**Parameters**

`xsl` - XSL input as a URL

`ref` - Reference URL for include, import and external entities

**Throws**

[XSLException](#) - on error.

**XSLStyleSheet(XMLDocument, URL)**

```
public XSLStyleSheet(XMLDocument xsl, java.net.URL ref)
```

Constructs an XSLStyleSheet using the given XMLDocument

**Parameters**

`xsl` - XSL input as a DOM Tree

`ref` - Reference URL for include, import

**Throws**

[XSLException](#) - on error.

**Methods****setParam(String, String)**

```
public void setParam(java.lang.String name, java.lang.String value)
```

Sets the value of a top-level stylesheet parameter. The parameter value is expected to be a valid XPath expression (note that string literal values would therefore have to be explicitly quoted).

**Parameters**

`name` - parameter name

`value` - parameter value as an XPath expression

**Throws**

[XSLException](#) - on error

