Oracle8*i*

Supplied Java Packages Reference

Release 3 (8.1.7)

September 2000

Part No. A85456-01

ORACLE

Oracle8*i* Supplied Java Packages Reference, Release 3 (8.1.7)

Part No. A85456-01

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Contents

2 Package oracle.jms

3 Package oracle.ODCI

4 Package oracle.xml.parser.v2

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Preface

This preface discusses the following topics:

What This Guide Has to Offer

This reference book presents the Java packages supplied with Oracle8*i*. Interfaces, classes, and exceptions are summarized in a table, then each is listed in alphabetical order, with its syntax, a member summary, and an inherited-member summary. This is followed by details about the fields, constructors, and methods.

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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1

Package oracle.AQ

Package oracle.AQ Description

Class Summary	
Interfaces	
AQSession	Open a session to the queuing system
AQQueueTable	AQ Queue Table interface
AQQueueAdmin	AQ Queue administrative interfaces
AQQueue	AQ Queue operational interfaces
AQMessage	AQ message
AQRawPayload	AQ Raw Payload
AQObjectPayload	AQ Object Payload
Classes: Common	
AQConstants	Constants used in AQ operations
AQAgent	AQ Agent
AQDriverManager	Driver Manager for various AQ drivers
AQEnqueueOption	AQ Enqueue Options
AQDequeueOption	AQ Dequeue options
AQMessageProperty	AQ Message properties
AQQueueProperty	AQ Queue properties
AQQueueTableProperty	AQ Queue Table properties
Classes: Oracle8i	[These classes are not described in this manual]
AQOracleSession	Oracle server implementation of AQSession
AQOracleMessage	Oracle Server implementation of AQMessage
AQOracleDriver	Oracle server implementation of AQDriver
AQOracleQueue	Oracle server implementation of AQQueue
AQOracleQueueTable	Oracle server implementation of AQQueueTable
AQOracleRawPayload	Oracle server implementation of AQRawPayload
AQOracleObjectPayload	Oracle server implementation of AQObjectPayload

Class Summary

Exceptions

AQException

AQOracleSQLException

Introduction

The 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. You need not 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 Oracle8*i* and Oracle Lite.
- This document describes the common interfaces and their corresponding Oracle8*i* implementations, which are 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 Oracle8*i* 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 Queuing, Appendix A, 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 1-10.

The way to create a multi-consumer queue is described in the "AQSession" on page 1-8.

AQDriverManager

The various implementations of the Java AQ API are managed via an AQDriverManager. Both OLite and Oracle8*i* 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 Oracle8*i* 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_ADMINSTRATOR_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. With Oracle8*i*, the driver is loaded using the Clas.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 1-10.

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 Oracle8*i* 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.

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
`owner`	schema (user) in which to create the queue table
`q_name`	name of the queue table
`property`	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
`owner`	schema (user) in which the queue table resides
`name`	name of the queue table

Returns

`AQQueueTable` object

createQueue

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

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.

Parameter	Meaning
q_table	queue table in which to create queue
name	name of the queue to be created
q_property	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
owner	schema (user) in which the queue table resides
name	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");
}
```

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
```

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.

Parameter	Meaning
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.

Parameter	Meaning
protocol	Agent protocol

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
`p_type`	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
`p_type`	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 "Setup for oracle.AQ Examples" on page 1-10.

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);
}
```

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
`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	
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

Example

Set up the test_aqjava class as described in the Setup for oracle.AQ Examples section on on page 1-10.

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  */
}
```

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 on page 1-10, 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.

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 startEnqueue() 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

Parameter	Meaning
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	AQQueueProperty object with new property values. Note that only max_retries, retry_delay, retention_time and comment 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
`privilege`	specifies the privilege to be granted: ENQUEUE, DEQUEUE or ALL
`grantee`	specifies the grantee(s); the grantee(s) can be a user, a role or the PUBLIC roles
`grant_option`	TRUE — the grantee is allowed to use this method to grant access to others FALSE — 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
`privilege`	specifies the privilege to be revoked: ENQUEUE, DEQUEUE or ALL
`grantee`	specifies the grantee(s); the grantee(s) can be a user, a role or the PUBLIC 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.
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 1-10

1. Create a queue and start enqueue/dequeue

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

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

     /* 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
{
     AQQueueTableProperty    qtable_prop;
     AQQueueProperty         queue_prop;
     AQQueueTable            q_table;
     AQQueue                 queue;
     AQAgent                 subs1, subs2;

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

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	AQEnqueOption object
message	AQMessage to be enqueued

Returns

Message id of 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

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

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

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

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 NO_DELAY 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 NEVER, 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

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.

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.

AQOracleSQLException

`AQOracleSQLException` extends `AQException`.

When using Oracle8*i* AQ driver, some errors may be raised from the client side and some from the RDBMS. The Oracle8*i* 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`.

2

Package oracle.jms

Package oracle.jms Description

Class Summary	
Interfaces	
AdtMessage	This interface extends the Message interface and represents messages containing Oracle object type payloads - this is an AQ extension to JMS.
AQjmsQueueReceiver	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
AQjmsQueueSender	This interface extends QueueSender and defines AQ extensions to JMS. A client uses a QueueSender to send messages to a Queue
AQjmsTopicPublisher	This interface extends TopicPublisher and defines AQ extensions to JMS. A client uses a TopicPublisher for publishing messages to a Topic
AQjmsTopicReceiver	This interface extends the TopicReceiver interface that defines AQ extensions for remote subscribers and explicitly specified recipients (in point-to-mulitpoint communication). A TopicReceiver is used to receive messages from a Topic
AQjmsTopicSubscriber	This interface extends TopicSubscriber and defines AQ extensions to JMS. A client uses a TopicSubscriber to receive messages published on a Topic
TopicReceiver	This interface extends MessageConsumer to allow remote subscribers and explicitly specified recipients (in point-to-multipoint communication) to receive messages
Classes	
AQjmsAdtMessage	This class implements the AdtMessage interface. An AdtMessage is used to send a message containing Oracle object type payloads
AQjmsAgent	This class implements the Destination interface. It is used to define remote subscribers and ReplyTo Destinations

Class Summary	
AQjmsBytesMessage	This class implements the BytesMessage interface. A BytesMessage is used to send a message containing a stream of uninterpreted bytes
AQjmsConnection	This class implements the Connection interface. This is an active connection to the JMS provider
AQjmsConnectionMetaData	class AQjmsConnectionMetaData represents the Meta Data information available for a JMS Connection.
AQjmsConstants	This class defines the constants used in the oracle.jms package
AQjmsConsumer	This class implements the MessageConsumer interface
AQjmsDestination	This class implements administered objects, Queue and Topic
AQjmsDestinationProperty	This class defines Destination properties
AQjmsFactory	This class is used for accessing administered ConnectionFactory objects in Oracle's implementation of JMS.
AQjmsMapMessage	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
AQjmsMessage	This class implements the Message interface. This is the superclass of all JMS messages
AQjmsObjectMessage	This class implements the ObjectMessage interface. An ObjectMessage is used to send a message that contains a serializable java object
AQjmsOracleDebug	AQ Oracle Debug class - not to be used unless instructed by Oracle Support
AQjmsProducer	This class implements the MessageProducer interface. A MessageProducer is used to send messages to a Destination
AQjmsQueueBrowser	This class implements the QueueBrowser interface. A QueueBrowser is used to look at messages in a Queue without removing them.

Class Summary	
AQjmsQueueConnectionFactory	This class implements the QueueConnectionFactory interface. A QueueConnectionFactory is used to create QueueConnections
AQjmsSession	This class implements the javax.jms.Session interface. A Session is a single threaded context for producing a consuming messages
AQjmsStreamMessage	This class implements the StreamMessage interface. A StreamMessage is used to send a stream of java primitives
AQjmsTextMessage	This class implements the TextMessage interface. A TextMessage is used to send a message containing a java.lang.StringBuffer
AQjmsTopicConnectionFactory	This class implements the TopicConnectionFactory interface. A TopicConnectionFactory is used to create TopicConnections
Exceptions	
AQjmsException	This exception extends JMSException - adds Oracle error codes. This is the root of all JMS exceptions
AQjmsInvalidDestinationException	This exception extends InvalidDestinationException. It is thrown when a Destination is not valid
AQjmsInvalidSelectorException	This exception extends InvalidSelectorException. It is thrown when the specified MessageSelector is not valid
AQjmsMessageEOFException	This exception extends MessageEOFException. It is thrown when an unexpected end of stream has been reached when a StreamMessage or BytesMessage is being read
AQjmsMessageFormatException	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
AQjmsMessageNotReadableException	This exception extends MessageNotReadableException. It is thrown when a client attempts to read a write-only message
AQjmsMessageNotWriteableException	This exception extends MessageNotWriteableException. It is thrown when a client attempts to write a read-only message

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

`getAdtPayload()`	Get the CustomDatum object containing this Adt message's data.
`setAdtPayload(CustomDatum)`	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

Inherited Member Summary

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.

AQjmsAdtMessage

Syntax

```
public class AQjmsAdtMessage extends AQjmsMessage implements AdtMessage

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

All 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

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

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

Inherited Member Summary

Fields inherited from interface javax.jms.Message

Inherited Member Summary

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), 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

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

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

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.

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

`JMSException` - if JMS fails to get Property due to some internal JMS error.

`MessageFormatException` - if this type conversion is invalid.

getByteProperty(String)

```
public byte getByteProperty(java.lang.String name)
```
Return the byte property value with the given name.

Specified By

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

Overrides

getByteProperty(String) in class AQjmsMessage

Parameters

`name` - the name of the byte property

Returns

the byte property value with the given name.

Throws

`JMSException` - 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

JMSException - 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

JMSException - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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 (i.e. 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - if JMS fails to set Property due to some internal JMS error.

`MessageNotWriteableException` - if properties are read-only

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

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

`clearBody()`	Clear out the message body.
`clearProperties()`	Clear a message's properties.
`readBoolean()`	Read a `boolean` from the stream message.
`readByte()`	Read a signed 8-bit value from the stream message.
`readBytes(byte[])`	Read a byte array from the stream message.
`readBytes(byte[], int)`	Read a portion of the bytes message.
`readChar()`	Read a Unicode character value from the stream message.
`readDouble()`	Read a `double` from the stream message.
`readFloat()`	Read a float from the stream message.
`readInt()`	Read a signed 32-bit integer from the stream message.
`readLong()`	Read a signed 64-bit integer from the stream message.
`readShort()`	Put the message in read-only mode, and reposition the stream of bytes to the beginning.

Member Summary	
readUnsignedByte()	Read an unsigned 8-bit number from the stream message.
readUnsignedShort()	Read an unsigned 16-bit number from the stream message.
readUTF()	Read in a string that has been encoded using a modified UTF-8 format from the stream message.
reset()	Put the message in read-only mode, and reposition the stream of bytes to the beginning.
writeBoolean(boolean)	Write a `boolean` to the stream message as a 1-byte value.
writeByte(byte)	Write out a `byte` to the stream message as a 1-byte value.
writeBytes(byte[])	Write a byte array to the stream message.
writeBytes(byte, int, int)	Write a portion of a byte array to the stream message.
writeChar(char)	Write a `char` to the stream message as a 2-byte value, high byte first.
writeDouble(double)	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.
writeFloat(float)	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.
writeInt(int)	Write an `int` to the stream message as four bytes, high byte first.
writeLong(long)	Write a `long` to the stream message as eight bytes, high byte first.
writeObject(Object)	Write a Java object to the stream message.
writeShort(short)	Write a `short` to the stream message as two bytes, high byte first.
writeUTF(String)	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

Inherited Member Summary

DEFAULT_DELIVERY_MODE, DEFAULT_PRIORITY, DEFAULT_TIME_TO_LIVE

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), 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

JMSException - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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. JMSException - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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.

`JMSException` - 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.

JMSException - 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.

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - if JMS fails to write message due to some internal JMS error.

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

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.
createQueueSession(boolean, int)	create a queue session
createTopicSession(boolean, int)	Create a TopicSession
getClientID()	Get the client identifier for this connection.
getCurrentJmsSession()	gets the current session
getMetaData()	Get the meta data for this connection.
setClientID(String)	Set the client identifier for this connection.
start()	Start (or restart) a Connection's delivery of incoming messages.
stop()	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

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

Throws

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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 Connections'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

`JMSException` - 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

`JMSException` - 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()`

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

`getJMSMajorVersion()`	Get the JMS major version number.
`getJMSMinorVersion()`	Get the JMS minor version number.
`getJMSProviderName()`	Get the JMS provider name.
`getJMSVersion()`	Get the JMS version.
`getProviderMajorVersion()`	Get the JMS provider major version number.
`getProviderMinorVersion()`	Get the JMS provider minor version number.
`getProviderVersion()`	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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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.

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()
```

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

`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.
`getMessageListener()`	Get the message consumer's MessageListener.
`getMessageSelector()`	Get the message consumer's message selector expression.
`getNavigationMode()`	Get the navigation mode for the consumer
`getNoLocal()`	Get the NoLocal attribute for this TopicSubscriber.
`getQueue()`	Get the queue associated with this queue receiver.
`getTopic()`	Get the topic associated with this subscriber.
`receive()`	Receive the next message produced for this message consumer.
`receive(long)`	Receive the next message that arrives within the specified timeout interval.
`receiveNoData()`	Consume the message without returning it to the user.

Member Summary	
receiveNoData()	Consume the message without returning it to the user.
receiveNoWait()	Receive the next message if one is immediately available.
setMessageListener(MessageListener)	Set the message consumer's MessageListener.
setNavigationMode(int)	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

JMSException - 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

`JMSException` - 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

`JMSException` - 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
`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

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

`alter(Session, AQjmsDestinationProperty)`	alter the properties of the queue / topic
`alterPropagationSchedule(Session, String, Double, String, Double)`	alter propagation schedule between the topic and the destination database
`disablePropagationSchedule(Session, String)`	disable propagation schedule
`drop(Session)`	drop the queue / topic
`enablePropagationSchedule(Session, String)`	enable propagation schedule
`getCompleteName()`	Get the complete name of the queue / topic, of the form, [schema].name
`getCompleteTableName()`	Get the complete name of the queue table of the queue / topic of the form, [schema].name
`getQueueName()`	Get the name of the queue
`getQueueOwner()`	Get the owner of the queue
`getTopicName()`	Get the name of the Topic

Member Summary	
getTopicOwner()	Get the schema of the topic
grantQueuePrivilege(Session, String, String, boolean)	Grant enqueue or dequeue privilege on the queue to a database user
grantTopicPrivilege(Session, String, String, boolean)	Grant a topic privilege
revokeQueuePrivilege(Session, String, String)	Revoke a queue privilege
revokeTopicPrivilege(Session, String, String)	Revoke a topic privilege
schedulePropagation(Session, String, Date, Double, String, Double)	Schedule propagation from the topic for the given destination database
start(Session, boolean, boolean)	start the queue / topic for enqueue or dequeue or both
stop(Session, boolean, boolean, boolean)	stop the queue / topic for enqueue or dequeue or both
toString()	Get the queue / topic as a string, of the form [schema].name
unschedulePropagation(Session, String)	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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

JMSException - 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

JMSException - 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

JMSException - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

javax.jms.Queue.toString() in interface javax.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.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

AQjmsDestinationProperty

```
public class AQjmsDestinationProperty
oracle.jms.AQjmsDestinationProperty
```
This class defines Destination properties

Member Summary	
Fields	
NORMAL_QUEUE	
EXCEPTION_QUEUE	
INFINITE	infinite retention
Constructors	
AQjmsDestinationProperty()	Constructor - initializes object with default destination properties
Methods	
getQueueType	This method gets the queue type.
setQueueType	This method is used to set the queue type.
getMaxRetries	This method gets the maximum retries for dequeue with REMOVE mode.
setMaxRetries	This method sets the maximum retries for dequeue with REMOVE mode.
setRetryInterval	This method sets the retry interval, that is the time before this message is scheduled for processing after an application rollback. Default is 0.
getRetryInterval	This method gets the retry interval.
getRetentionTime	This method gets the retention time.
setRetentionTime	This method gets the retention time.
getComment	This method gets the queue comment.
setComment	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()
```
Constructor - 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

AQjmsException

Syntax

```
public class AQjmsException extends javax.jms.JMSException

java.lang.Object
  |
  +--java.lang.Throwable
        |
        +--java.lang.Exception
              |
              +--javax.jms.JMSException
                    |
                    +--oracle.jms.AQjmsException
```

All Implemented Interfaces

```
java.io.Serializable
```

Description

This exception extends JMSException - adds Oracle error codes. This is the root of all JMS exceptions

Member Summary

Methods

getErrorNumber()	Get the Oracle Error code for the exception

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
```

Methods

getErrorNumber()

```
public int getErrorNumber()
```

Get the Oracle Error code for the exception

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

getQueueConnectionFactory(String, Properties)	get a Queue Connection Factory
getQueueConnectionFactory(String, String, int, String)	get a Queue Connection Factory
getTopicConnectionFactory(String, Properties)	get a Topic Connection Factory
getTopicConnectionFactory(String, String, int, String)	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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - if JMS fails to get a queue connection factory due to some JMS error

AQjmsInvalidDestinationException

Syntax

```
public class AQjmsInvalidDestinationException
   extends javax.jms.InvalidDestinationException

java.lang.Object
  |
  +--java.lang.Throwable
        |
        +--java.lang.Exception
              |
              +--javax.jms.JMSException
                    |
                    +--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.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`

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
```

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

`clearBody()`	Clear out the message body.
`clearProperties()`	Clear a message's properties.
`getBoolean(String)`	Return the boolean value with the given name.
`getByte(String)`	Return the byte value with the given name.
`getBytes(String)`	Return the byte array value with the given name.
`getChar(String)`	Return the Unicode character value with the given name.
`getDouble(String)`	Return the double value with the given name.
`getFloat(String)`	Return the float value with the given name.
`getInt(String)`	Return the integer value with the given name.
`getLong(String)`	Return the long value with the given name.
`getMapNames()`	Return an Enumeration of all the Map message's names.

Member Summary	
getObject(String)	Return the Java object value with the given name.
getShort(String)	Return the short value with the given name.
getString(String)	Set a String value with the given name, into the Map.
itemExists(String)	Check if an item exists in this MapMessage.
setBoolean(String, boolean)	Set a boolean value with the given name, into the Map.
setByte(String, byte)	Set a byte value with the given name, into the Map.
setBytes(String, byte[])	Set a byte array value with the given name, into the Map.
setBytes(String, byte[], int, int)	Set a portion of the byte array value with the given name, into the Map.
setChar(String, char)	Set a Unicode character value with the given name, into the Map.
setDouble(String, double)	Set a double value with the given name, into the Map.
setFloat(String, float)	Set a float value with the given name, into the Map.
setInt(String, int)	Set an integer value with the given name, into the Map.
setLong(String, long)	Set a long value with the given name, into the Map.
setObject(String, Object)	Set a Java object value with the given name, into the Map.
setShort(String, short)	Set a short value with the given name, into the Map.
setString(String, String)	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), 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), 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. 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
`JMSException` - 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

JMSException - if JMS fails to read message due to some internal JMS error.

MessageFormatException - if this type conversion is invalid.

getByte(String)

```
public byte getByte(java.lang.String name)
```
Return the byte value with the given name.

Specified By

javax.jms.MapMessage.getByte(java.lang.String) in interface javax.jms.MapMessage

Parameters

name - the name of the byte

Returns

the byte value with the given name.

Throws

JMSException - 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

JMSException - 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

JMSException - 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

JMSException - 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

JMSException - 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

JMSException - 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

JMSException - 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

`JMSException` - 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 (i.e. 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

`JMSException` - 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

JMSException - 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

JMSException - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - if JMS fails to write message due to some internal JMS error.

`MessageNotWriteableException` - if message in read-only mode.

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

Methods

clearBody()	Clear out the message body.
clearProperties()	Clear a message's properties.
getBooleanProperty(String)	Return the boolean property value with the given name.
getByteProperty(String)	Return the byte property value with the given name.
getDoubleProperty(String)	Return the double property value with the given name.
getFloatProperty(String)	Return the float property value with the given name.
getIntProperty(String)	Return the integer property value with the given name.
getJMSCorrelationID()	Get the correlation ID for the message.

Member Summary	
getJMSCorrelationIDAsBytes()	Get the correlation ID as an array of bytes for the message.
getJMSDeliveryMode()	Get the delivery mode for this message.
getJMSDestination()	Get the destination for this message.
getJMSExpiration()	Get the message's expiration value.
getJMSMessageID()	Get the message ID.
getJMSMessageIDAsBytes()	Get the message ID.
getJMSPriority()	Get the message priority.
getJMSRedelivered()	Get an indication of whether this message is being redelivered.
getJMSReplyTo()	Get the replyTo field for this message
getJMSTimestamp()	Get the message timestamp.
getJMSType()	Get the message type.
getLongProperty(String)	Return the long property value with the given name.
getObjectProperty(String)	Return the Java object property value with the given name.
getPropertyNames()	Return an Enumeration of all the property names.
getSenderID()	Get the message's senderID.
getShortProperty(String)	Return the short property value with the given name.
getStringProperty(String)	Return the String property value with the given name.
propertyExists(String)	Check if a property value exists.
setBooleanProperty(String, boolean)	Set a boolean property value with the given name, into the Message.
setByteProperty(String, byte)	Set a byte property value with the given name, into the Message.
setDoubleProperty(String, double)	Set a double property value with the given name, into the Message.
setFloatProperty(String, float)	Set a float property value with the given name, into the Message.

Member Summary	
setIntProperty(String, int)	Set an integer property value with the given name, into the Message.
setJMSCorrelationID(String)	Set the correlation ID for the message.
setJMSCorrelationIDAsBytes(byte[])	Set the correlation ID as an array of bytes for the message.
setJMSDestination(Destination)	Set the destination for this message.
setJMSExpiration(long)	Set the message's expiration value Providers set this field when a message is sent.
setJMSMessageID(String)	Set the message ID.
setJMSPriority(int)	Set the priority for this message.
setJMSRedelivered(boolean)	Set to indicate whether this message is being redelivered.
setJMSReplyTo(Destination)	Set where a reply to this message should be sent.
setJMSTimestamp(long)	Set the message timestamp.
setJMSType(String)	Set the message type.
setLongProperty(String, long)	Set a long property value with the given name, into the Message.
setObjectProperty(String, Object)	Set a Java object property value with the given name, into the Message.
setSenderID(AQjmsAgent)	Set the message's senderID.
setShortProperty(String, short)	Set a short property value with the given name, into the Message.
setStringProperty(String, String)	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 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

`JMSException` - 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

JMSException - if JMS fails to get Property

MessageFormatException - if this type conversion is invalid.

getByteProperty(String)

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

Return the byte property value with the given name.

Specified By

javax.jms.Message.getByteProperty(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

JMSException - 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

JMSException - 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

JMSException - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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 (i.e. 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - if JMS fails to set correlationId due to some internal JMS error.

setJMSDestination(Destination)

```
public void setJMSDestination(javax.jms.Destination destination)
```

Set the destination for this message. Providers set this field when a message is sent.

Specified By

javax.jms.Message.setJMSDestination(javax.jms.Destination) in interface javax.jms.Message

Parameters

`destination` - the destination for this message.

Throws

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - if JMS fails to set Property

`MessageNotWriteableException` - if properties are read-only

AQjmsMessageEOFException

Syntax

```
public class AQjmsMessageEOFException
   extends javax.jms.MessageEOFException

java.lang.Object
  |
  +--java.lang.Throwable
        |
        +--java.lang.Exception
              |
              +--javax.jms.JMSException
                    |
                    +--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.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`

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`

AQjmsMessageNotReadableException

Syntax

```
public class AQjmsMessageNotReadableException
   extends javax.jms.MessageNotReadableException

java.lang.Object
  |
  +--java.lang.Throwable
        |
        +--java.lang.Exception
              |
              +--javax.jms.JMSException
                    |
                    +--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.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`

AQjmsMessageNotWriteableException

Syntax

```
public class AQjmsMessageNotWriteableException
   extends javax.jms.MessageNotWriteableException

java.lang.Object
  |
  +--java.lang.Throwable
        |
        +--java.lang.Exception
              |
              +--javax.jms.JMSException
                    |
                    +--javax.jms.MessageNotWriteableException
                       |
                        +--oracle.jms.AQjmsMessageNotWriteableException
```

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.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`

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

`clearBody()`	Clear out the message body.
`clearProperties()`	Clear a message's properties.
`getObject()`	Get the serializable object containing this message's data.
`setObject(Serializable)`	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), 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.

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

`JMSException` - 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

`JMSException` - if JMS fails to set object due to some internal JMS error.

`MessageFormatException` - if object serialization fails

`MessageNotWriteableException` - if message in read-only mode.

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	
getLogStream()	Get log stream
setLogStream(OutputStream)	Set log stream
setTraceLevel(int)	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

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

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.
getDeliveryMode()	Get the producer's default delivery mode.
getDisableMessageID()	Get an indication of whether message IDs are disabled.
getDisableMessageTimestamp()	Get an indication of whether message timestamps are disabled.
getPriority()	Get the producer's default priority.
getQueue()	Get the queue associated with this queue sender.
getTimeToLive()	Get the default length of time in milliseconds from its dispatch time that a produced message should be retained by the message system.
getTopic()	Get the topic associated with this publisher.
publish(Message)	Publish a Message to the topic

Member Summary	
publish(Message, AQjmsAgent[])	Publish a Message to a specific list of recipients
publish(Message, AQjmsAgent[], int, int, long)	Publish a Message to a topic by specifying a list of recipients, delivery mode, priority and time to live
publish(Message, int, int, long)	Publish a Message to the topic specifying delivery mode, priority and time to live to the topic.
publish(Topic, Message)	Publish a Message to a topic for an unidentified message producer.
publish(Topic, Message, AQjmsAgent[])	Publish a Message to a topic by specifying a list of recipients
publish(Topic, Message, AQjmsAgent[], int, int, long)	Publish a Message to a topic by specifying a list of recipients, delivery mode, priority and time to live
publish(Topic, Message, int, int, long)	Publish a Message to a topic for an unidentified message producer, specifying delivery mode, priority and time to live.
send(Message)	Send a message
send(Message, int, int, long)	Send a message.
send(Queue, Message)	Send a message.
send(Queue, Message, int, int, long)	Send a message.
setDeliveryMode(int)	Set the producer's default delivery mode.
setDisableMessageID(boolean)	Set whether message IDs are disabled.
setDisableMessageTimestamp(boolean)	Set whether message timestamps are disabled.
setPriority(int)	Set the producer's default priority.
setTimeToLive(int)	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

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 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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 deliveryMode, 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - if JMS fails to set Time to Live due to some internal error.

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

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.
getEnumeration()	Get an enumeration for browsing the current queue messages in the order they would be received.
getMessageSelector()	Get this queue browser's message selector expression.
getQueue()	Get the queue associated with this queue browser.
hasMoreElements()	Tests if this enumeration contains more elements.
nextElement()	Returns the next element of this enumeration.

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 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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.

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

`createQueueConnection()`	create a Queue Connection to the JMS Server hosting this Queue- ConnectionFactory.
`createQueueConnection(Connection)`	create a Queue Connection using the already open JDBC connection.
`createQueueConnection(String, String)`	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

`JMSException` - 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

`JMSException` - 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

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

`getNavigationMode()`	get the navigation mode used for receiving messages
`receiveNoData()`	Consume the message without returning it to the user.
`receiveNoData(long)`	Consume the message without returning it to the user.
`setNavigationMode(int)`	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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

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
```

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

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.
commit()	Commit all messages done in this transaction and releases any locks currently held.
createAdtMessage()	Create an AdtMessage.
createAdtMessage(CustomDatum)	Create an initialized AdtMessage.
createBrowser(Queue)	Create a QueueBrowser to peek at the messages on the specified queue.
createBrowser(Queue, CustomDatumFactory)	Create a QueueBrowser to peek at the messages on the specified queue containing ADT messages.
createBrowser(Queue, String)	Create a QueueBrowser to peek at the messages on the specified queue.
createBrowser(Queue, String, boolean)	Create a QueueBrowser to peek at the messages on the specified queue.

Member Summary	
createBrowser(Queue, String, CustomDatumFactory)	Create a QueueBrowser to peek at the messages on the specified queue containing ADT messages.
createBrowser(Queue, String, CustomDatumFactory, boolean)	Create a QueueBrowser to peek at the messages on the specified queue containing ADT messages.
createBytesMessage()	Create a BytesMessage.
createDurableSubscriber(Topic, String)	Create a durable Subscriber to the specified topic.
createDurableSubscriber(Topic, String, CustomDatumFactory)	Create a durable Subscriber to the specified topic.
createDurableSubscriber(Topic, String, String, boolean)	Create a durable Subscriber to the specified topic.
createDurableSubscriber(Topic, String, String, boolean, CustomDatumFactory)	Create a durable Subscriber to the specified topic.
createMapMessage()	Create a MapMessage.
createObjectMessage()	Create an ObjectMessage.
createObjectMessage(Serializable)	Create an initialized ObjectMessage.
createPublisher(Topic)	Create a Publisher for the specified topic.
createQueue(AQQueueTable, String, AQjmsDestinationProperty)	Create a queue.
createQueueTable(String, String, AQQueueTableProperty)	Create a Queue Table.
createReceiver(Queue)	Create a QueueReceiver to receive messages from the specified queue.
createReceiver(Queue, CustomDatumFactory)	Create a QueueReceiver to receive messages from the specified queue containing ADT messages.
createReceiver(Queue, String)	Create a QueueReceiver to receive messages from the specified queue.
createReceiver(Queue, String, CustomDatumFactory)	Create a QueueReceiver to receive messages from the specified queue containing ADT messages.

Member Summary	
createRemoteSubscriber(Topic, AQjmsAgent, String)	Create a remote subscriber for a topic.
createRemoteSubscriber(Topic, AQjmsAgent, String, CustomDatumFactory)	Create a remote subscriber for a topic.
createSender(Queue)	Create a QueueSender to send messages to the specified queue.
createStreamMessage()	Create a StreamMessage.
createSubscriber(Topic)	Create a non-durable Subscriber to the specified topic.
createSubscriber(Topic, String, boolean)	Create a non-durable Subscriber to the specified topic.
createTextMessage()	Create a TextMessage.
createTextMessage(StringBuffer)	Create an initialized TextMessage.
createTopic(AQQueueTable, String, AQjmsDestinationProperty)	Create a topic
createTopicReceiver(Topic, String, String)	Create a TopicReceiver to receive messages from the specified topic.
createTopicReceiver(Topic, String, String, CustomDatumFactory)	
getDBConnection()	
getJmsConnection()	
getMessageListener()	Return the session's distinguished message listener.
getQueue(String, String)	Get an existing queue.
getQueueTable(String, String)	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.
getTopic(String, String)	Get an existing topic.
getTransacted()	Checks if the session in transacted mode?

Member Summary	
grantSystemPrivilege(String, String, boolean)	Grant AQ system privileges to users / roles.
revokeSystemPrivilege(String, String)	Revoke AQ system privilege from user / roles
rollback()	Rollback any messages done in this transaction and releases any locks currently held.
run()	
setMessageListener(MessageListener)	Set the session's distinguished message listener.
unsubscribe(Topic, AQjmsAgent)	Unsubscribe a remote durable subscription that has been created by a client on the specified topic
unsubscribe(Topic, String)	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

`JMSException` - if JMS implementation fails to commit 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

`JMSException` - 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

JMSException - 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

JMSException - 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

`JMSException` - 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. All message IDs must be prefixed with "ID:"

b. JMSCorrelationID = 'RUSH' to retrieve messages that have a certain correlationID

Throws

`JMSException` - 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 AQ$_JMS_TEXT_MESSAGE, AQ$_JMS_STREAM_MESSAGE, AQ$_JMS_BYTES_MESSAGE, AQ$_JMS_MAP_MESSAGE or AQ$_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. All message IDs must be prefixed with "ID:"

b. JMSCorrelationID = 'RUSH' to retrieve messages that have a certain correlationID

Throws

JMSException - 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 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

`JMSException` - 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. All message IDs must be prefixed with "ID:"

b. JMSCorrelationID = 'RUSH' to retrieve messages that have a certain correlationID

Throws

`JMSException` - 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

`JMSException` - 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 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) in interface javax.jms.TopicSession

Parameters

`topic` - the topic to subscribe to

`name` - the name used to identify this subscription.

Throws

`JMSException` - 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

`JMSException` - 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) eg: - JMSPriority < 3 AND JMSCorrelationID = 'Fiction'

b. User defined message properties eg: - color IN ('RED', BLUE', 'GREEN') AND price < 30000 Operators allowed are:

-- logical operators in precedence order NOT, AND, OR

-- comparison operators =, >, >=, <, <=, <>, ! (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] pattern-value is a string literal where % refers to any sequence of characters and and _ refers to any single character. The optional escape-character is used to escape the special meaning of the '-' and '%' in pattern-value

-- identifier IS [NOT] NULL

Throws

`JMSException` - 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 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 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. eg:- tab.user_data.color = 'GREEN' AND tab.user_data.price < 30000

Throws

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - if the QueueTable cannot be created

See Also

`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

`JMSException` - 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

JMSException - 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

`JMSException` - 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. All message IDs must be prefixed with "ID:"

b. JMSCorrelationID = 'RUSH' to retrieve messages that have a certain correlationID

Throws

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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 order to create a TopicReceiver object for consumers that are not durable subscribers of the topic

Parameters

`topic` - the topic to access

Throws

`JMSException` - 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

`JMSException` - 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

JMSException - 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

JMSException - 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

JMSException - 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

`JMSException` - 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

ENQUEUE_ANY - users with this privilege are allowed to enqueue messages to any queue / topic in the database.

DEQUEUE_ANY - users with this privilege are allowed to dequeue messages from any queue / topic in the database.

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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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.

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

`clearBody()`	Clear out the message body.
`clearProperties()`	
`readBoolean()`	Reads a boolean from the stream message
`readByte()`	Reads a signed 8-bit value from the stream message
`readBytes(byte[])`	Read a byte array from the stream message
`readChar()`	Read a Unicode character value from the stream message
`readDouble()`	Read a double from the stream message
`readFloat()`	Read a float from the stream message
`readInt()`	Read a signed 32 bit integer from the stream message
`readLong()`	Read a signed 64 bit integer from the stream message
`readObject()`	Read a Java object from the stream message.
`readShort()`	Reads a signed 16-bit value from the stream message

Member Summary	
readString()	Read a string from the stream message
reset()	Put the message in read-only mode, and reposition the stream of bytes to the beginning.
writeBoolean(boolean)	Write a boolean to the stream message as a 1-byte value.
writeByte(byte)	Write out a byte to the stream message as a 1-byte value.
writeBytes(byte[])	Write a byte array to the stream message
writeBytes(byte[], int, int)	Write a portion of byte array to the stream message
writeChar(char)	Write a char to the stream as a 2-byte, high byte first
writeDouble(double)	Write a double to the stream as a 8-byte, high byte first
writeFloat(float)	Write a float to the stream as a 4-byte, high byte first
writeInt(int)	Write a int to the stream as a 4-byte, high byte first
writeLong(long)	Write a int to the stream as a 4-byte, high byte first
writeObject(Object)	Write a java object to the stream message
writeShort(short)	Write a short to the stream as a 2-byte, high byte first
writeString(String)	Writes a string to the underlying output stream

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), 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()
```

Specified By
javax.jms.Message.clearProperties() in interface javax.jms.Message

Overrides
clearProperties() in class AQjmsMessage

readBoolean()

```
public boolean readBoolean()
```
Reads a boolean from the stream message

Specified By
javax.jms.StreamMessage.readBoolean() in interface javax.jms.StreamMessage

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()
```
Reads a signed 8-bit value from the stream message

Specified By

javax.jms.StreamMessage.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.

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - 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

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - 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.

JMSException - 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.

JMSException - 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.

JMSException - 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.

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - 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.

`JMSException` - 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

`JMSException` - 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.

`JMSException` - 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.

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

`clearBody()`	
`clearProperties()`	Clear a message's properties.
`getText()`	Get the string containing this message's data.
`setText(String)`	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), 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

javax.jms.Message.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

`JMSException` - 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

`JMSException` - 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

`JMSException` - if JMS fails to set text due to some internal JMS error.

`MessageNotWriteableException` - if message in read-only mode.

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

`createTopicConnection()`	create a Topic Connection to the JMS Server hosting this Topic- connection factory.
`createTopicConnection(Connection)`	create a TopicConnection using the already open JDBC connection.
`createTopicConnection(String, String)`	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

`JMSException` - 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

`JMSException` - 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

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

publish(Message, AQjmsAgent[])	Publish a Message to a specific list of recipients
publish(Message, AQjmsAgent[], int, int, long)	Publish a Message to a topic by specifying a list of recipients, delivery mode, priority and time to live
publish(Topic, Message, AQjmsAgent[])	Publish a Message to a topic by specifying a list of recipients
publish(Topic, Message, AQjmsAgent[], int, int, long)	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

`JMSException` - 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

JMSException - 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

JMSException - 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

JMSException - if JMS fails to publish the message due to some internal error.

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-mulitpoint communication). A TopicReceiver is used to receive messages from a Topic

Member Summary

Methods

`getNavigationMode()`	get the navigation mode used for receiving messages
`receiveNoData()`	Consume the message without returning it to the user.
`receiveNoData(long)`	Consume the message without returning it to the user.
`setNavigationMode(int)`	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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

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	
`getNavigationMode()`	Consume the message without returning it to the user.
`receiveNoData()`	Consume the message without returning it to the user.
`receiveNoData(long)`	Consume the message without returning it to the user.
`setNavigationMode(int)`	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

`JMSException` - 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

`JMSException` - 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

`JMSException` - 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

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

getTopic()	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
ODCIColInfo
ODCIColInfoList
ODCIColInfoRef
ODCICost
ODCICostRef
ODCIFuncInfo
ODCIFuncInfoRef
ODCIIndexCtx
ODCIIndexCtxRef
ODCIIndexInfo
ODCIIndexInfoRef
ODCIObject
ODCIObjectList
ODCIObjectRef
ODCIPredInfo
ODCIPredInfoRef
ODCIQueryInfo
ODCIQueryInfoRef
ODCIRidList
ODCIStatsOptions
ODCIStatsOptionsRef

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)
```

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)`

`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)
```

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)
```

ODCIColInfo

Syntax

```
public class ODCIColInfo
```

oracle.ODCI.ODCIColInfo

Description

Member Summary

Fields

_SQL_NAME

_SQL_TYPECODE

Constructors

ODCIColInfo()

ODCIColInfo(Connection)

ODCIColInfo(ConnectionContext)

Methods

create(Datum, int)

getColname()

getColtypename()

getColtypeschema()

getFactory()

getTablename()

getTableschema()

setColname(String)

setColtypename(String)

setColtypeschema(String)

setTablename(String)

setTableschema(String)

Member Summary
toDatum(OracleConnection)

Fields

_SQL_NAME

```
public static final java.lang.String _SQL_NAME
```

_SQL_TYPECODE

```
public static final int _SQL_TYPECODE
```

Constructors

ODCIColInfo()

```
public  ODCIColInfo()
```

ODCIColInfo(Connection)

```
public  ODCIColInfo(java.sql.Connection c)
```

ODCIColInfo(ConnectionContext)

```
public  ODCIColInfo(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)
```

ODCIColInfoList

Syntax

```
public class ODCIColInfoList
```

oracle.ODCI.ODCIColInfoList

Description

Member Summary

Fields

_SQL_NAME

_SQL_TYPECODE

Constructors

ODCIColInfoList()

ODCIColInfoList(ODCIColInfo[])

Methods

create(Datum, int)

getArray()

getArray(long, int)

getBaseType()

getBaseTypeName()

getDescriptor()

getElement(long)

getFactory()

length()

setArray(ODCIColInfo[])

setArray(ODCIColInfo[], long)

setElement(ODCIColInfo, long)

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 ODCIColInfo getElement(long index)
```

getFactory()

```
public static oracle.sql.CustomDatumFactory getFactory()
```

length()

```
public int length()
```

setArray(ODCIColInfo[])

```
public void setArray(ODCIColInfo a)
```

setArray(ODCIColInfo[], long)

```
public void setArray(ODCIColInfo a, long index)
```

setElement(ODCIColInfo, long)

```
public void setElement(ODCIColInfo a, long index)
```

toDatum(OracleConnection)

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

ODCIColInfoRef

Syntax

```
public class ODCIColInfoRef
```

oracle.ODCI.ODCIColInfoRef

Description

Member Summary
Fields
_SQL_BASETYPE
_SQL_TYPECODE
Constructors
ODCIColInfoRef()
Methods
create(Datum, int)
getFactory()
getValue()
setValue(ODCIColInfo)
toDatum(OracleConnection)

Fields

_SQL_BASETYPE

```
public static final java.lang.String _SQL_BASETYPE
```

_SQL_TYPECODE

```
public static final int _SQL_TYPECODE
```

Constructors

ODCIColInfoRef()

```
public  ODCIColInfoRef()
```

Methods

create(Datum, int)

```
public oracle.sql.CustomDatum create(oracle.sql.Datum d,int sqlType)
```

getFactory()

```
public static oracle.sql.CustomDatumFactory getFactory()
```

getValue()

```
public ODCIColInfo getValue()
```

setValue(ODCIColInfo)

```
public void setValue(ODCIColInfo c)
```

toDatum(OracleConnection)

```
public oracle.sql.Datum toDatum(oracle.jdbc.driver.OracleConnection c)
```

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()

getIocost()

getNetworkcost()

setCpucost(BigDecimal)

setIocost(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)
```

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)
```

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)
```

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)
```

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)
```

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)
```

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(ODCIColInfoList)

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(ODCIColInfoList)

```
public void setIndexcols(ODCIColInfoList 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)
```

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)
```

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)
```

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)`

`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)
```

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)
```

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)
```

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)
```

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)
```

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)
```

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)

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)
```

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)
```

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)
```

4

Package oracle.xml.parser.v2

Package Oracle.xml.parser.v2 Description

Class Summary	
Interfaces	
NSName	This interface provides Namespace support for Element and Attr names
NSResolver	This interface provides support for resolving Namespaces
XMLDocumentHandler	This interface extends the `org.xml.sax.DocumentHandler` interface.
XMLToken	Basic interface for XMLToken
Classes	
AttrDecl	This class hold information about each attribute declared in an attribute list in the Document Type Definition.
DefaultXMLDocumentHandler	This class implements the default behavior for the `XMLDocumentHandler` interface.
DOMParser	This class implements an eXtensible Markup Language (XML) 1.0 parser according to the World Wide Web Consortium (W3C) recommendation.
DTD	Implements the DOM DocumentType interface and holds the Document Type Definition information for an XML document.
ElementDecl	This class represents an element declaration in a DTD.
NodeFactory	This class specifies methods to create various nodes of the DOM tree built during parsing.
oraxsl	The oraxsl class provides a command-line interface to applying stylesheets on multiple XML documents.
SAXAttrList	This class implements the SAX `AttributeList` interface and also provides Namespace support.
SAXParser	This class implements an eXtensible Markup Language (XML) 1.0 SAX parser according to the World Wide Web Consortium (W3C) recommendation.
XMLAttr	This class implements the DOM Attr interface and holds information on each attribute of an element.

Class Summary	
XMLCDATA	This class implements the DOM CDATASection interface.
XMLComment	This class implements the DOM Comment interface.
XMLDocument	This class implements the DOM Document interface, represents an entire XML document and serves the root of the Document Object Model tree.
XMLDocumentFragment	This class implements the DOM DocumentFragment interface.
XMLElement	This class implements the DOM `Element` interface.
XMLEntityReference	
XMLNode	Implements the DOM `Node` interface and serves as the primary datatype for the entire Document Object Model.
XMLParser	This class serves as a base class for the `DOMParser` and `SAXParser` classes.
XMLPI	This class implements the DOM Processing Instruction interface.
XMLText	This class implements the DOM Text interface.
XMLTokenizer	This class implements an eXtensible Markup Language (XML) 1.0 parser according to the World Wide Web Consortium (W3C) recommendation.
XSLProcessor	This class provides methods to transform an input XML document using a previously constructed `XSLStylesheet`.
XSLStylesheet	The class holds XSL stylesheet information such as templates, keys, variables, and attribute sets.
Exceptions	
XMLParseException	Indicates that a parsing exception occurred while processing an XML document
XSLException	Indicates that an exception occurred during XSL transformation

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

CDATA	AttType - StringType - CDATA
DEFAULT	Attribute presence - Default
ENTITIES	AttType - TokenizedType - Entities
ENTITY	AttType - TokenizedType - Entity
ENUMERATION	AttType - EnumeratedType - Enumeration
FIXED	Attribute presence - Fixed
ID	AttType - TokenizedType - ID
IDREF	AttType - TokenizedType - ID reference
IDREFS	AttType - TokenizedType - ID references
IMPLIED	Attribute presence - Implied
NMTOKEN	AttType - TokenizedType - Name token
NMTOKENS	AttType - TokenizedType - Name tokens

Member Summary	
NOTATION	AttType - EnumeratedType - Notation
REQUIRED	Attribute presence - Required
Methods	
getAttrPresence()	Gets attribute presence
getAttrType()	Gets attribute type
getDefaultValue()	Gets attribute default value
getEnumerationValues()	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

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 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

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`

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 behavior 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.
endDoctype()	Receive notification of end of the DTD.
endElement(NSName)	Receive notification of the end of an element.
setDoctype(DTD)	Receive notification of DTD.

Member Summary	
setTextDecl(String, String)	Receive notification of a Text XML Declaration.
setXMLDecl(String, String, String)	Receive notification of an XML Declaration.
startElement(NSName, SAXAttrList)	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)

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

Member Summary	
parseDTD(URL, String)	Parses the XML External DTD document pointed to by the given URL and creates the corresponding XML document hierarchy.
setErrorStream(OutputStream)	Creates an output stream for the output of errors and warnings.
setErrorStream(OutputStream, String)	Creates an output stream for the output of errors and warnings.
setErrorStream(PrintWriter)	Creates an output stream for the output of errors and warnings.
setNodeFactory(NodeFactory)	Set the node factory.
showWarnings(boolean)	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, 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

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

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.InputSouce` 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

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

`cloneNode(boolean)`	Returns a duplicate of this node, i.e., serves as a generic copy constructor for nodes.
`findElementDecl(String)`	Finds an element declaration for the given tag name.
`findEntity(String, boolean)`	Finds a named entity in the DTD.
`findNotation(String)`	Retrieves the named notation from the DTD.
`getChildNodes()`	A `NodeList` that contains all children of this node.
`getElementDecls()`	A `NamedNodeMap` containing the element declarations in the DTD.
`getEntities()`	A `NamedNodeMap` containing the general entities, both external and internal, declared in the DTD.
`getName()`	Gets the name of the DTD; i.e., the name immediately following the `DOCTYPE` keyword.

Member Summary	
getNotations()	A NamedNodeMap containing the notations declared in the DTD.
getPublicId()	Gets The public identifier associated with the DTD, if specified.
getSystemId()	Gets the system identifier associated with the DTD, if specified.
hasChildNodes()	This is a convenience method to allow easy determination of whether a node has any children.
printExternalDTD(OutputStream)	Writes the contents of this document to the given output stream.
printExternalDTD(OutputStream, String)	Writes the contents of the external DTD to the given output stream.
printExternalDTD(PrintWriter)	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

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 XMLNode

appendChild(Node), getAttributes(), getFirstChild(), getLastChild(), getNextSibling(), getNodeName(), getNodeType(), 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(), getNodeType(), 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 element decls, 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

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

ANY	Element content type - Children can be any element
ASTERISK	ContentModelParseTreeNode type - "*" node (has one child)
COMMA	ContentModelParseTreeNode type - "," node (has two children)
ELEMENT	ContentModelParseTreeNode type - 'leaf' node (has no children)
ELEMENTS	Element content type - Children can be elements as per Content Model
EMPTY	Element content type - No Children
MIXED	Element content type - Children can be PCDATA and elements as per Content Model
OR	ContentModelParseTreeNode type - "|" node (has two children)
PLUS	ContentModelParseTreeNode type - "+" node (has one child)

Member Summary	
QMARK	ContentModelParseTreeNode type - "?" node (has one child)
Methods	
expectedElements(Element)	Returns vector of element names that can be appended to the element.
findAttrDecl(String)	Gets an attribute declaration object or null if not found
getAttrDecls()	Gets an enumeration of attribute declarations
getContentElements()	Returns Vector of elements that can be appended to this element
getContentType()	Returns content model of element
getParseTree()	Returns the root node of Content Model Parse Tree.
validateContent(Element)	Validates the content of a element node.

Inherited Member Summary

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

Inherited Member Summary

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

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

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 child)

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 and elements 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 child)

QMARK

```
public static final int QMARK
```
ContentModelParseTreeNode type - "?" node (has one child)

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 parse tree branches. `Node.getNodeType()` and `Node.getNodeName()` return 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

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.
`createComment(String)`	Creates a comment node with the specified text.
`createDocument()`	Creates a document node.
`createElement(String)`	Creates an Element node with the specified tag.

Member Summary	
createProcessingInstruction (String, String)	Creates a PI node with the specified tag, and text.
createTextNode(String)	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	
Methods	
getExpandedName()	Get the fully resolved name for this name
getLocalName()	Get the local name for this name
getNamespace()	Get the resolved Namespace for this name
getPrefix()	Get the prefix for this name
getQualifiedName()	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

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)

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

`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

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

`getExpandedName(int)`	Get the expanded name for an attribute in the list (by position)
`getLength()`	Return the number of attributes in this list.
`getLocalName(int)`	Get the local name for an attribute in the list (by position)
`getName(int)`	Return the name of an attribute in this list (by position).
`getNamespace(int)`	Get the resolved namespace for an attribute in the list (by position)
`getPrefix(int)`	Get the namespace prefix for an attribute in the list (by position)
`getQualifiedName(int)`	Get the qualified name for an attribute in the list (by position)
`getType(int)`	
`getType(String)`	Return the type of an attribute in the list (by name).

Member Summary	
getValue(int)	Return the value of an attribute in the list (by position).
getValue(String)	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 white space.

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)`

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

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

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.
`getNamespace()`	Get the resolved Namespace for this attribute

Member Summary	
getNodeValue()	Gets the value of this node, depending on its type
getParentNode()	Gets the parent of this node.
getPrefix()	Get the namespace prefix for this attribute
getQualifiedName()	Gets the qualified name for this attribute
getSpecified()	Returns true if the attribute was specified explicitly in the element
getValue()	Gets the attribute value.
setNodeValue(String)	Sets the value of this node, depending on its type
setValue(String)	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

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

Methods inherited from class XMLNode

appendChild(Node), getAttributes(), getChildNodes(), getFirstChild(), getLastChild(), getNextSibling(), getNodeName(), getNodeType(), getOwnerDocument(), getPreviousSibling(), hasChildNodes(), insertBefore(Node, Node), print(OutputStream), print(OutputStream, String), print(PrintWriter), removeChild(Node), replaceChild(Node, Node), selectNodes(String, NSResolver), selectSingleNode(String, NSResolver), 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(), getChildNodes(), getFirstChild(), getLastChild(), getNextSibling(), getNodeName(), getNodeType(), getOwnerDocument(), getPreviousSibling(), hasChildNodes(), insertBefore(Node, Node), removeChild(Node), replaceChild(Node, Node)

Constructor

XMLAttr(String, String)

```
public  XMLAttr(java.lang.String n, java.lang.String v)
```

Construct attribute with given name and value.

Parameters

n - Name of the attribute

v - Value of the attribute

XMLAttr(String, String, String, String)

```
public  XMLAttr(java.lang.String name, java.lang.String prefix,
java.lang.String ns, java.lang.String v)
```

Namespace support

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 read-only. 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 read-only. 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

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

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

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 XMLText

appendData, deleteData, getData, getLength, getNodeValue(), insertData, replaceData, setData, setNodeValue, splitText(int), substringData

Inherited Member Summary

Methods inherited from class oracle.xml.parser.v2.CharData

```
appendData, deleteData, getData, getLength, insertData,
replaceData, setData, setNodeValue, substringData
```

Methods inherited from class XMLNode

```
appendChild(Node), cloneNode(boolean), getAttributes(),
getChildNodes(), getFirstChild(), getLastChild(), getNextSibling(),
getNodeName(), getNodeType(), 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), 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 Text

```
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

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

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

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 oracle.xml.parser.v2.CharData

appendData, deleteData, getData, getLength, insertData, replaceData, setData, setNodeValue, substringData

Methods inherited from class XMLNode

Inherited Member Summary

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), 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 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

XMLComment(String)

```
public  XMLComment(java.lang.String text)
```

Creates a new Comment node.

Parameters

`text` - Text of the comment node

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.
`createDocumentFragment()`	Creates an empty `DocumentFragment` object.

Member Summary	
createElement(String)	Creates an element of the type specified.
createEntityReference(String)	Creates an EntityReference object.
createProcessingInstruction(String, String)	Creates a ProcessingInstruction node given the specified name and data strings.
createTextNode(String)	Creates a Text node given the specified string.
expectedElements(Element)	Returns vector of element names that can be appended to the element.
getDoctype()	The Document Type Declaration (DTD) associated with this document.
getDocumentElement()	This is a convenience attribute that allows direct access to the child node that is the root element of the document.
getElementsByTagName(String)	Returns a NodeList of all the Elements with a given tag name in the order in which they would be encountered in a pre-order traversal of the Document tree.
getEncoding()	Retrieves the character encoding information.
getImplementation()	The DOMImplementation object that handles this document.
getOwnerDocument()	The Document object associated with this node.
getStandalone()	Retrieves the standalone information.
getVersion()	Retrieves the version information.
print(OutputStream)	Writes the contents of this document to the given output stream.
print(OutputStream, String)	Writes the contents of this document to the given output stream.
print(PrintWriter)	Writes the contents of this document to the given output stream.
printExternalDTD(OutputStream)	Writes the contents of this document to the given output stream.
printExternalDTD(OutputStream, String)	Writes the contents of the external DTD to the given output stream.
printExternalDTD(PrintWriter)	Writes the contents of this document to the given output stream.

Member Summary	
replaceChild(Node, Node)	Replaces the child node oldChild with newChild in the list of children, and returns the oldChild node.
setEncoding(String)	Sets the character encoding for output.
setLocale(Locale)	Sets the locale for error reporting
setStandalone(String)	Sets the standalone information stored in the <?xml ...?> tag.
setVersion(String)	Sets the version number stored in the <?xml ...?> tag.
validateElementContent(Element)	Validates the content of a element node.

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, 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 XMLNode

appendChild(Node), getAttributes(), getChildNodes(), getFirstChild(), getLastChild(), getNextSibling(), getNodeName(), getNodeType(), getNodeValue(), getParentNode(), getPreviousSibling(), hasChildNodes(), insertBefore(Node, Node), removeChild(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(), 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 pre-order 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

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

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

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 XMLNode

Inherited Member Summary

appendChild(Node), cloneNode(boolean), getAttributes(), getChildNodes(), getFirstChild(), getLastChild(), getNextSibling(), getNodeName(), getNodeType(), getNodeValue(), getOwnerDocument(), 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(), getPreviousSibling(), hasChildNodes(), insertBefore(Node, Node), removeChild(Node), replaceChild(Node, Node), setNodeValue(String)

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)

XMLDocumentHandler

Syntax

```
public interface XMLDocumentHandler
   extends org.xml.sax.DocumentHandler
```

All Superinterfaces

`org.xml.sax.DocumentHandler`

All Known Implementing Classes

`DefaultXMLDocumentHandler`

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

`cDATASection(char[], int, int)`	Receive notification of a CDATA Section.
`comment(String)`	Receive notification of a comment.
`endDoctype()`	Receive notification of end of the DTD.
`endElement(NSName)`	Receive notification of the end of an element.
`setDoctype(DTD)`	Receive notification of a DTD (Document Type node).
`setTextDecl(String, String)`	Receive notification of a Text XML Declaration.
`setXMLDecl(String, String, String)`	Receive notification of a XML Declaration.
`startElement(NSName, SAXAttrList)`	Receive notification of the beginning of an element.

Inherited Member Summary

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

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)

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

ava.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 setNodeFactoty() method.

See Also

org.w3c.dom.Element, XMLParser, NodeFactory, setNodeFactory(NodeFactory)

Member Summary

Constructors	
XMLElement(String)	Creates an element with the given name
XMLElement(String, String, String)	Creates an element with the given name, prefix, and namespace
Methods	
checkNamespace(String, String)	Returns if the element belongs to the namespace specified.
cloneNode(boolean)	Returns a duplicate of this node, i.e., serves as a generic copy constructor for nodes.
getAttribute(String)	Retrieves an attribute value by name.

Member Summary	
getAttributeNode(String)	Retrieves an Attr node by name.
getAttributes()	A NamedNodeMap containing the attributes of this node (if it is an Element) or null otherwise.
getChildrenByTagName(String)	Returns a NodeList of all immediate children with a given tag name,
getChildrenByTagName(String, String)	Returns a NodeList of all immediate children with a given tag name and namespace
getElementsByTagName(String)	Returns a NodeList of all descendant elements with a given tag name, in the order in which they would be encountered in a pre-order traversal of the Element tree.
getElementsByTagName(String, String)	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 pre-order traversal of the Element tree.
getExpandedName()	Get the fully resolved name for this element.
getLocalName()	Get the local Name for this element.
getNamespace()	Get the resolved Namespace for this element.
getPrefix()	Get the namespace prefix for this element.
getQualifiedName()	Get the qualified name for this element.
getTagName()	Gets the name of the element.
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.
removeAttribute(String)	Removes an attribute by name.
removeAttributeNode(Attr)	Removes the specified attribute.
resolveNamespacePrefix(String)	Given a namespace prefix, find the namespace definition in scope in this element.
setAttribute(String, String)	Adds a new attribute.
setAttributeNode(Attr)	Adds a new attribute.

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

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 XMLNode

Inherited Member Summary

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 pre-order 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 pre-order 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 doc1ument 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 read-only.

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 read-only. 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 read-only.

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 read-only. 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.

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

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, 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

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 XMLNode

Inherited Member Summary

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)

Constructor

XMLEntityReference(String)

```
public  XMLEntityReference(java.lang.String tag)
```

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	
ATTRDECL	A attribute declaration node
ELEMENTDECL	An element declaration node.
Methods	
appendChild(Node)	Adds the node newChild to the end of the list of children of this node.

Member Summary	
`cloneNode(boolean)`	Returns a duplicate of this node, i.e., serves as a generic copy constructor for nodes.
`getAttributes()`	Gets a `NamedNodeMap` containing the attributes of this node (if it is an `Element`) or `null` otherwise.
`getChildNodes()`	Gets a `NodeList` that contains all children of this node.
`getFirstChild()`	Gets the first child of this node.
`getLastChild()`	Gets the last child of this node.
`getNextSibling()`	Gets The node immediately following this node.
`getNodeName()`	Gets the name of this node, depending on its type
`getNodeType()`	Gets a code representing the type of the underlying object
`getNodeValue()`	Gets the value of this node, depending on its type
`getOwnerDocument()`	Gets the `Document` object associated with this node.
`getParentNode()`	Gets the parent of this node.
`getPreviousSibling()`	Gets the node immediately preceding this node.
`hasChildNodes()`	This is a convenience method to allow easy determination of whether a node has any children.
`insertBefore(Node, Node)`	Inserts the node `newChild` before the existing child node `refChild`.
`print(OutputStream)`	Writes the contents of this node to the given output stream.
`print(OutputStream, String)`	Writes the contents of this node to the given output stream.
`print(PrintWriter)`	Writes the contents of this node using the given print writer.
`removeChild(Node)`	Removes the child node indicated by `oldChild` from the list of children, and returns it.
`replaceChild(Node, Node)`	Replaces the child node `oldChild` with `newChild` in the list of children, and returns the `oldChild` node.
`selectNodes(String, NSResolver)`	Selects nodes from the tree which match the given pattern

Member Summary

selectSingleNode(String, NSResolver)	Selects the first node from the tree that matches the given pattern
setNodeValue(String)	Sets the value of this node, depending on its type
transformNode(XSLStylesheet)	Transforms a node in the tree using the given stylesheet
valueOf(String, NSResolver)	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 read-only.

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 read-only. 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 read-only. 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 read-only. 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 it 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 read-only. 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

`XSLException` - 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

`XSLException` - 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 read-only. 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

`XSLException` - 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

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	
ERROR	Code for non-fatal error
FATAL_ERROR	Code for fatal error
WARNING	Code for warning
Constructors	
XMLParseException(String, String, String, int, int, int)	
Methods	
getColumnNumber(int)	Get the column number of error at specified index
getException(int)	Get the exception (if exists) that occurred in error at specified index

Member Summary	
getLineNumber(int)	Get the line number of error at specified index
getMessage(int)	Get the error message at specified index
getMessageType(int)	Get the type of the error message at specified index
getNumMessages()	Return the total number of errors / warnings found during parsing
getPublicId(int)	Get the public ID of input when error at specified index occurred
getSystemId(int)	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 mesg, 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

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

getReleaseVersion()	Returns the release version of the Oracle XML Parser
getValidationMode()	Returns the validation mode
parse(InputSource)	Parses the XML from given input source
parse(InputStream)	Parses the XML from given input stream.
parse(Reader)	Parses the XML from given input stream.
parse(String)	Parses the XML from the URL indicated
parse(URL)	Parses the XML document pointed to by the given URL and creates the corresponding XML document hierarchy.

Member Summary	
setBaseURL(URL)	Set the base URL for loading external entities and DTDs.
setDoctype(DTD)	Set the DTD
setLocale(Locale)	Applications can use this to set the locale for error reporting.
setPreserveWhitespace(boolean)	Set the white space preserving mode
setValidationMode(boolean)	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 to 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

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

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

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 oracle.xml.parser.v2.CharData

appendData, deleteData, getData, getLength, insertData, replaceData, setData, setNodeValue, substringData

Methods inherited from class XMLNode

Inherited Member Summary

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), 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 ProcessingInstruction

getData(), setData(String)

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)

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.

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

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

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 oracle.xml.parser.v2.CharData

appendData, deleteData, getData, getLength, insertData, replaceData, setData, setNodeValue, substringData

Methods inherited from class XMLNode

Inherited Member Summary

appendChild(Node), cloneNode(boolean), getAttributes(), getChildNodes(), getFirstChild(), getLastChild(), getNextSibling(), getNodeName(), getNodeType(), 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), 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 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(), 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

org.w3c.dom.Node.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

org.w3c.dom.Text.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 read-only.

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

`AttListDecl`	AttListDecl ::= '<' '!' 'ATTLIST' S Name AttDef* S? '>'
`AttName`	AttName ::= Name
`Attribute`	Attribute ::= AttName Eq AttValue
`AttValue`	AttValue ::= '"' ([^<&"] | Reference)* '"'
`CDSect`	CDSect ::= CDStart CData CDEnd
`CharData`	CharData ::= [^<&]* - ([^<&]* ']]>' [^<&]*)
`Comment`	Comment ::= '<' '!' '--' ((Char - '-') | ('-' (Char - '-')))* '-->'
`DTDName`	DTDName ::= name
`ElemDeclName`	ElemDeclName ::= name

Member Summary	
elementdecl	elementdecl ::= '<' '!ELEMENT' S ElemDeclName S contentspec S? '>'
EmptyElemTag	EmptyElemTag ::= '<' STagName (S Attribute)* S? '/' '>'
EntityDecl	EntityDecl ::= '<' '!' ENTITY' S EntityDeclName S EntityDef S? '>'
EntityDeclName	EntityValue ::= '"' ([^%&"] | PEReference | Reference)* '"'
EntityValue	EntityDeclName ::= Name
ETag	ETag ::= '<' '/' ETagName S? '>'
ETagName	ETagName ::= Name
ExternalID	ExternalID ::= 'SYSTEM' S SystemLiteral
NotationDecl	NotationDecl ::= '<' '!NOTATION' S Name S (ExternalID | PublicID) S? '>'
PI	PI ::= '<' '?' PITarget (S (Char* - (Char* '?>' Char*)))? '?' '>'
PITarget	PITarget ::= Name - (('X' | 'x') ('M' | 'm') ('L' | 'l'))
Reference	Reference ::= EntityRef | CharRef | PEReference
STag	STag ::= '<' STagName (S Attribute)* S? '>'
STagName	STagName ::= Name
TextDecl	TextDecl ::= '<' '?' 'xml' VersionInfo? EncodingDecl S? '?>'
XMLDecl	XMLDecl ::= '<' '?' 'xml' VersionInfo EncodingDecl? SDDecl? S? '?' '>'
Methods	
token(int, String)	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 PEDef S? '>'

EntityDef ::= EntityValue | (ExternalID NDataDecl?)

PEDef ::= 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.

XMLTokenizer

Syntax

```
public class XMLTokenizer extends DefaultXMLDocumentHandler
   implements oracle.xml.parser.v2.XMLConstants

java.lang.Object
  |
  +--org.xml.sax.HandlerBase
        |
        +--DefaultXMLDocumentHandler
              |
              +--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	
tokenize(InputSource)	Tokenizes the XML from given input source
tokenize(InputStream)	Tokenizes the XML from given input stream.
tokenize(Reader)	Tokenizes the XML from given input stream.
tokenize(String)	Tokenizes the XML from the URL indicated
tokenize(URL)	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, 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 DefaultXMLDocumentHandler

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

Inherited Member Summary

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

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.

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
```

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

`processXSL(XSLStylesheet, InputStream, URL)`	Transform input XML document using given InputStream and stylesheet.
`processXSL(XSLStylesheet, Reader, URL)`	Transform input XML document using given Reader and stylesheet.
`processXSL(XSLStylesheet, URL, URL)`	Transform input XML document using given URL and stylesheet.
`processXSL(XSLStylesheet, XMLDocument)`	Transform input XML document using given XMLDocument and stylesheet.
`processXSL(XSLStylesheet, XMLDocumentFragment)`	Transform input XML document using given XMLDocument and stylesheet.
`processXSL(XSLStylesheet, XMLDocumentFragment, OutputStream)`	Transform input XML using given XMLDocumentFragment and stylesheet.
`processXSL(XSLStylesheet, XMLDocumentFragment, PrintWriter)`	Transform input XML using given XMLDocumentFragment and stylesheet.
`processXSL(XSLStylesheet, XMLDocument, OutputStream)`	Transform input XML document using given XMLDocument and stylesheet.

Member Summary	
processXSL(XSLStylesheet, XMLDocument, PrintWriter)	Transform input XML document using given XMLDocument and stylesheet.
setErrorStream(OutputStream)	Creates an output stream for the output of warnings.
setLocale(Locale)	Applications can use this to set the locale for error reporting.
showWarnings(boolean)	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

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	
`XSLStylesheet(InputStream, URL)`	Constructs an XSLStylesheet using the given Inputstream
`XSLStylesheet(Reader, URL)`	Constructs an XSLStylesheet using the given Reader
`XSLStylesheet(URL, URL)`	Constructs an XSLStylesheet using the given URL
`XSLStylesheet(XMLDocument, URL)`	Constructs an XSLStylesheet using the given XMLDocument
Methods	
`setParam(String, String)`	Sets the value of a top-level stylesheet parameter.

Inherited Member Summary

Fields inherited from interface oracle.xml.parser.v2.XSLConstants

```
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