Oracle Adapter for JMS

The Oracle Adapter for JMS provides standards based connectivity to various enterprise messaging software and provides comprehensive support for the JMS specification.

Figure 1: JMS Adapter Architecture Diagram

Comprehensive support for JMS specification
The Adapter supports the JMS 1.x specification.

It supports both point-to-point and publish/subscribe paradigms. It allows the creation of JMS Durable Subscribers and JMS persistent Topics and Queues. It offers multiple ways of filtering the JMS messages and supports the JMS Header and Property elements of the JMS Messages. The messages can be filtered based on the message selection string or based on correlation id. It is also capable of correlating 2 JMS messages to mimic a request-response scenario. The correlation ID of the JMS outbound message is set to the message ID of the JMS inbound message.

JMS Provider certification
The Adapter has been certified with Oracle JMS, OC4J JMS, TIBCO Enterprise Message Service and IBM Websphere MQ.
Extensive Data format support

The Adapter supports the various JMS data formats and is capable of receiving, translating and formatting non-XML enterprise data into XML and vice versa. The Adapter can process positional, delimited, binary, EBCDIC, COBOL copy books and XML (both DTD and XSD based) data.

The Adapter design-time component has a sophisticated Format Builder for sampling non-XML enterprise data and dynamically generating XSD schemas. At run-time the adapter uses the above schema to parse and format non-XML enterprise data to XML and back.

Standards Support and integration with Oracle Fusion Middleware product components

The Adapter for JMS support open standards such as JCA, XML, Web Services (WSDL) and Web Service Invocation Framework (WSIF) and is truly portable across J2EE platforms.

The Adapter seamlessly integrates with all Oracle Fusion Middleware product components and JMS services can be web-enabled, exposed as portlets or integrated with a business process without any coding effort.

Support for dynamic run-time parameters

The Adapter allows the manipulation of JMS Header and Message Property elements of a JMS message dynamically within a business process at run-time.

Robust architecture

- The Adapter supports extensive error handling and repair capabilities including setting up of a business process for handling correction of data errors.
- The Adapter SDK exposes performance metrics to provide visibility into the time spent on each processing step within the Adapter. The performance metrics can be monitored using the Oracle Enterprise Manager.
- The Adapter can dynamically scale run-time connections and exploits the underlying application server connection pooling service for the above.
- The Adapter is deployable in BPEL and Oracle Application Server clusters leading to a highly scalable architecture.
- The Adapter can be completely managed and monitored by the Oracle Application Server Console.

Summary

Oracle Adapter for JMS offers the most complete standards based connectivity solution for accessing enterprise messaging systems distributed throughout the enterprise.