

ORACLE ENTERPRISE MESSAGING SERVICE

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FEATURES INCLUDE

- JMS 1.1 and JCA 1.5 compliance
- Enterprise quality JMS message provider
- Messaging Gateway (MGW) extends AQ propagation to non-Oracle message providers
 - IBM WebsphereMQ 5.3
 - Tibco Rendezvous 7.3
- JMS Router for content based routing to/from non-Oracle message providers
 - SonicMQ 6.0
 - Tibco Enterprise JMS 3.1.0
 - WebsphereMQ 5.3
- JMS Connector for integrating non-Oracle message providers
 - SonicMQ 6.0
 - Tibco Enterprise JMS 3.1.0
 - WebsphereMQ 5.3
- Native interface to database persistent destinations

As application integration in distributed computing and Service-Oriented Architecture (SOA) environments becomes increasingly important, it is vital that the underlying infrastructure be built on an enterprise quality messaging service that allows for maximum agility, scalability, and performance required in these distributed, and often global, environments. The Oracle Enterprise Messaging Service (OEMS) provides the standards based environment and flexible choices required for building these types of distributed systems and can seamlessly integrate with existing non-Oracle messaging systems.

Overview

The Oracle Enterprise Messaging Service provides a robust architecture for integrating business-critical applications. Built on Java 2 Enterprise Edition (J2EE) standards such as the Java Message Service (JMS) and the J2EE Connector Architecture (JCA), OEMS reduces the time, cost, and effort required to build integrated and distributed applications. Through a common interface, JMS, OEMS offers developers a quality of service (QoS) choice for persisting messages. For customers who want to integrate their existing messaging technology with the Oracle 10g platform, the OEMS JCA Connector implementation supports WebSphereMQ, Tibco Enterprise JMS, and SonicMQ integration.

Quality of Service

The foundation of OEMS is the Oracle Application Server 10g and the Oracle Database 10g platforms. The Oracle 10g platform allows developers a choice of storage models to choose from for message persistence.

Quality of Service	Volatile	File	DB
JMS 1.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Exception Handling	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Guaranteed Delivery	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Lightweight	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Recoverable	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
XML Support	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Clustering	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Auditing / Tracking / History	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Figure 1: Quality of Service Properties

By implementing a JMS 1.1 compliant interface, OEMS makes the choice

KEY BENEFITS:

- Single, compliant JMS interface for QoS choices
- Quality of Service choice between in-memory, file-based, or database for persistence
- Flexible options for integrating non-Oracle message providers:
 - WebSphereMQ
 - Tibco Enterprise JMS
 - SonicMQ

RELATED PRODUCTS

The following products are available from Oracle:

- Oracle Application Server
- Oracle BPEL Process Manager
- Oracle Streams Advanced Queuing

configurable when architecting and integrating distributed applications. For a lightweight solution you can choose to persist messages in-memory or to the file system. For a more robust solution, Oracle Streams Advanced Queuing (AQ) in the Oracle Database can be used to store messages.

Integration Capabilities

Besides providing a common API and quality of service choice for building distributed and service-oriented applications, OEMS also provides features that allow for flexibility to integrate your existing non-Oracle messaging systems with the Oracle 10g platform.

JMS Router

The JMS Router provides message propagation and content based routing for the OEMS JMS in-memory, file-based, and database systems between WebSphereMQ, Tibco Enterprise for JMS, and SonicMQ. This integration option is an excellent solution for hub-and-spoke architectures where the spokes tend to be lightweight message implementations while the hub typically offers more robust message persistence. The JMS Router can easily be deployed with OC4J out onto the spokes while the hub can be anchored with the OEMS's database persistence option.

Messaging Gateway

The Oracle Messaging Gateway (MGW) seamlessly extends the integration capabilities of Oracle Streams Advanced Queuing (AQ) to existing non-Oracle messaging systems in a distributed environment. Through an administrative interface, MGW provides the ability to propagate messages either to or from these non-Oracle message providers and AQ. Simply configure MGW to monitor a source destination and it will guarantee delivery of messages, in order, to the target destination.

JMS Connector

The J2EE Connector Architecture 1.5 (JCA) defines a standard way to integrate JMS providers with J2EE application servers. The Oracle Enterprise Messaging Service bases the JMS Connector on this standard for integrating the Oracle Application Server Containers for J2EE (OC4J) with non-Oracle messaging systems. Customers who want to integrate existing messaging systems like WebSphereMQ, Tibco Enterprise for JMS, or SonicMQ can now accomplish this using a standards based resource adapter implementation from Oracle. This means business logic developed to run in OC4J can now respond to messages sent from these non-Oracle messaging systems.