

Technical Note #033

Oracle B2B MQ Connectivity through JMS

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Background

This document intends to capture the high-level information about using “IBM MQ JMS Transport” in Oracle B2B.

Many enterprises wish to transfer the messages using IBM MQ JMS for the integration. This can be achieved by using B2B JMS transport connectivity.

Prerequisite

The following binaries are required to connect IBM MQ.

- com.ibm.mqjms.jar
- dhbcore.jar
- com.ibm.mq.jar
- com.ibm.mq.jmqi.jar
- mqcontext.jar
- com.ibm.mq.pcf.jar
- com.ibm.mq.commonservices.jar
- com.ibm.mq.headers.jar

Add the above jars into domain library directory and the directory usually located at \$DOMAIN_DIR/lib.

The jars located in this(\$DOMAIN_DIR/lib) directory will be picked up and added dynamically to the end of the server classpath at server startup.

For eg. <fmwhome>/user_projects/domains/<domainname>/lib/

Alternatively the above jar's can also be added as part of the setDomainEnv.sh.

Configuration Details

Outbound

To send a message to IBM MQ, as of part of trading partner delivery channel select protocol as “Generic JMS” and provide the following details,

| Parameter Name | Description | Example |
|----------------------|---|--|
| Destination Name | MQ Queue Name | B2B.Q1 |
| Connection Factory | MQ Queue Manager Name | QM_SRAVANI |
| Destination Provider | java.naming.factory.initial= com.ibm.mq.jms.context.WMQInitialContextFactory; java.naming.provider.url= <host>:<QM Listen port>/<MQ Channel Name>; | java.naming.factory.initial= com.ibm.mq.jms.context.WMQInitialContextFactory; java.naming.provider.url= <Host>:1414/SYSTEM.DEF.SVR CONN; |
| User Name | MQ User Name | Mqm |
| Password | MQ password to connect to the queue manager | Mqpassword |

Channel Details

Transport Protocol JMS

Transport Protocol Parameters
Channel Attributes
Exchange Protocol Parameters

| | |
|--|---|
| Destination name <input style="width: 90%;" type="text" value="B2B.Q1"/> | Use JMS id <input type="checkbox"/> |
| Connection Factory <input style="width: 90%;" type="text" value="QM_SRAVANI"/> | Destination Provider <input style="width: 90%;" type="text" value="java.naming.factory.initial=com.ibm"/> |
| Is topic <input type="checkbox"/> | User name <input style="width: 90%;" type="text" value="mqm"/> |
| Polling interval <input style="width: 90%;" type="text" value="5"/> | Password <input style="width: 90%;" type="password" value="••••••"/> |
| Message type Bytes | ConfirmPassword <input style="width: 90%;" type="password" value="••••••"/> |
| Is Map Payload Alone <input type="checkbox"/> | Subscriber id <input style="width: 90%;" type="text"/> |

Create an outbound Agreement, deploy and send messages.

Inbound

To receive message from IBM MQ, as part of listening delivery channel select protocol as “Generic JMS” and provide the following details,

To send a messages to IBM MQ, as of part of trading partner delivery channel select protocol as “Generic JMS” and provide the following details,

| Parameter Name | Description | Example |
|----------------------|---|---|
| Destination Name | MQ Queue Name | B2B.Q1 |
| Connection Factory | MQ Queue Manager Name | QM_SRAVANI |
| Destination Provider | java.naming.factory.initial= com.ibm.mq.jms.context.WMQInitialContextFactory; java.naming.provider.url= <host>:<QM Listen port>/<MQ Channel Name>; | java.naming.factory.initial= com.ibm.mq.jms.context.WMQInitialContextFactory; java.naming.provider.url= <host>:1414/SYSTEM.DEF.SVR.CONN; |
| User Name | MQ User Name | Mqm |
| Password | MQ password to connect to the queue manager | Mqpassword |

Channel Details

Transport Protocol JMS

Transport Protocol Parameters | Channel Attributes | Exchange Protocol Parameters

| | |
|---|--|
| Destination name B2B.Q1 | Use JMS id <input type="checkbox"/> |
| Connection factory QM_SRAVANI | Destination Provider java.naming.factory.initial=com.ibn |
| Is topic <input type="checkbox"/> | User name mqm |
| Polling interval 5 | Password ●●●●●● |
| Message type Bytes | ConfirmPassword ●●●●●● |
| Is Map Payload Alone <input type="checkbox"/> | Subscriber id |

Note: Please make sure appropriate B2B headers are set as part of Message in IBM MQ to process the message successfully in B2B.

Create an inbound Agreement and deploy it.

Conclusion

In summary, this tech note explains how to configure MQ connectivity using JMS delivery channel.

Discuss this technical note in the [SOA Suite Discussion Forum](#) or [Oracle B2B Discussion Forum](#).