Community TechNote

software AG

Using webMethods Integration Server with ActiveMQ

Abstract

Integration Server (IS) supports sending and receiving messages with the most widely used JMS providers through its JMS features.

This document describes how to configure a JMS connection to an ActiveMQ JMS provider, which is not described in the standard documentation.

Applicability	
Product:	Integration Server
Versions:	7.1.x, 8.0, 8.2

Important Note
Software AG has not formally tested and explicitly does not support this type of connection with ActiveMQ JMS. The configuration described here has been found to work in the field and anyone using this configuration does so at their own risk.

Configuration

1. Add activemq-all-5.2.0.jar to <IntegrationServer>/lib/jars
2. Restart the Integration server
3. Create JNDI provider alias by navigating to Settings > Messaging > JNDI Settings in the IS admin console

JNDI Provider Alias

JNDI Alias Name	**ActiveMQ_JNDI_Provider**
Description	**ActiveMQ JNDI Provider**
Initial Context Factory	**org.apache.activemq.jndi.ActiveMQInitialContextFactory**
Provider URL	**tcp://localhost:61616**
Security Principal	
Security Credentials	
Other Properties	java.naming.security.authentication=simple

Settings > Messaging > JNDI Settings > JNDI Provider Alias

- Return to JNDI Settings
- Edit JNDI Provider Alias

JNDI Provider Alias

JNDI Alias Name	**ActiveMQ_JNDIProvider**
Description	**JNDI for Active MQ provider**
Initial Context Factory	**org.apache.activemq.jndi.ActiveMQInitialContextFactory**
Provider URL	**tcp://localhost:61616**
Security Principal	
Security Credentials	
Other Properties	

4. On using the 'Test Lookup' feature you should be able to see the connection factories and destinations on Active MQ

Settings > Messaging > JNDI Settings

• Return to Messaging

• Create JNDI Provider Alias

JNDI Provider Alias Definitions

JNDI Alias Name	Description	Test Lookup	De
ActiveMQ_JNDIProvider	JNDI for Active MQ provider	▶	

ConnectionFactory: org.apache.activemq.ActiveMQConnectionFactory
QueueConnectionFactory: org.apache.activemq.ActiveMQConnectionFactory
TopicConnectionFactory: org.apache.activemq.ActiveMQConnectionFactory
dynamicQueues: org.apache.activemq.jndi.ActiveMQInitialContextFactory$1
dynamicTopics: org.apache.activemq.jndi.ActiveMQInitialContextFactory$2

5. Create JMS connection alias using the JNDI provider alias create above

Settings > Messaging > JMS Settings > JMS Connection Alias

• Return to JMS Settings

• Edit JMS Connection Alias

General Settings	
Connection Alias Name	**ActiveMQ_JMS_Connection**
Enabled	✔**Yes**
Description	**JMS connection alias for Active MQ**
Transaction Type	**NO_TRANSACTION**
Connection Client ID	**ActiveMQ_Client**
User	
Password	
Connection Protocol Settings	
Create Connection Using	**JNDI LOOKUP**
JNDI Provider Alias	**ActiveMQ_JNDIProvider**
Connection Factory Lookup Name	**ConnectionFactory**
Advanced Settings	
Class Loader	**INTEGRATION_SERVER**
Maximum CSQ Size	**UNLIMITED**
Drain CSQ In Order	**Yes**
* Enabled Connection Aliases can not be edited.	

6. Enable the JMS connection – it should be enabled without errors

Settings > Messaging > JMS Settings
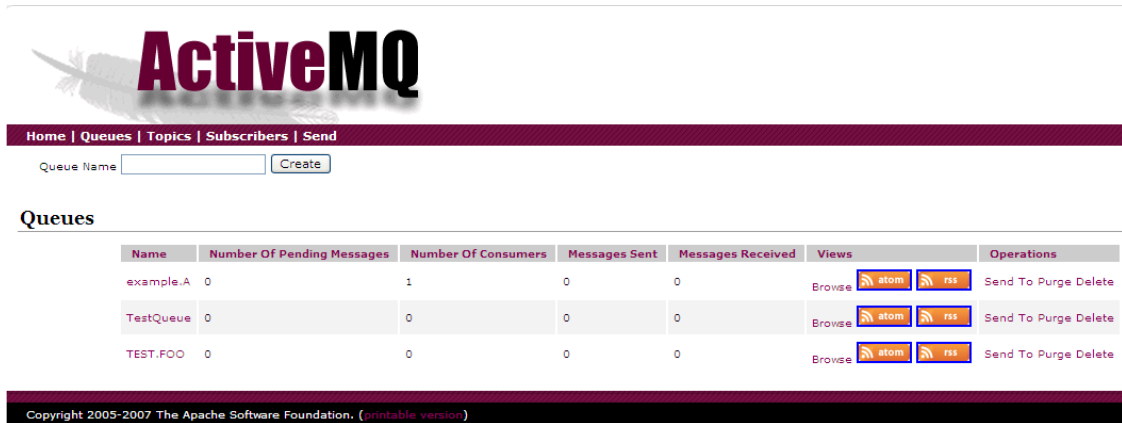
JMS Connection Alias "ActiveMQ_JMS_Connection" set to enabled.

• Return to Messaging
• Create JMS Connection Alias
• Refresh Page

JMS Connection Alias Definitions

Connection Alias Name	Description	Transaction Type	CSQ Count	Enabled
ActiveMQ_JMS_Connection	JMS connection alias for Active MQ	NO TRANSACTION	0	✔Yes

Receiving Messages
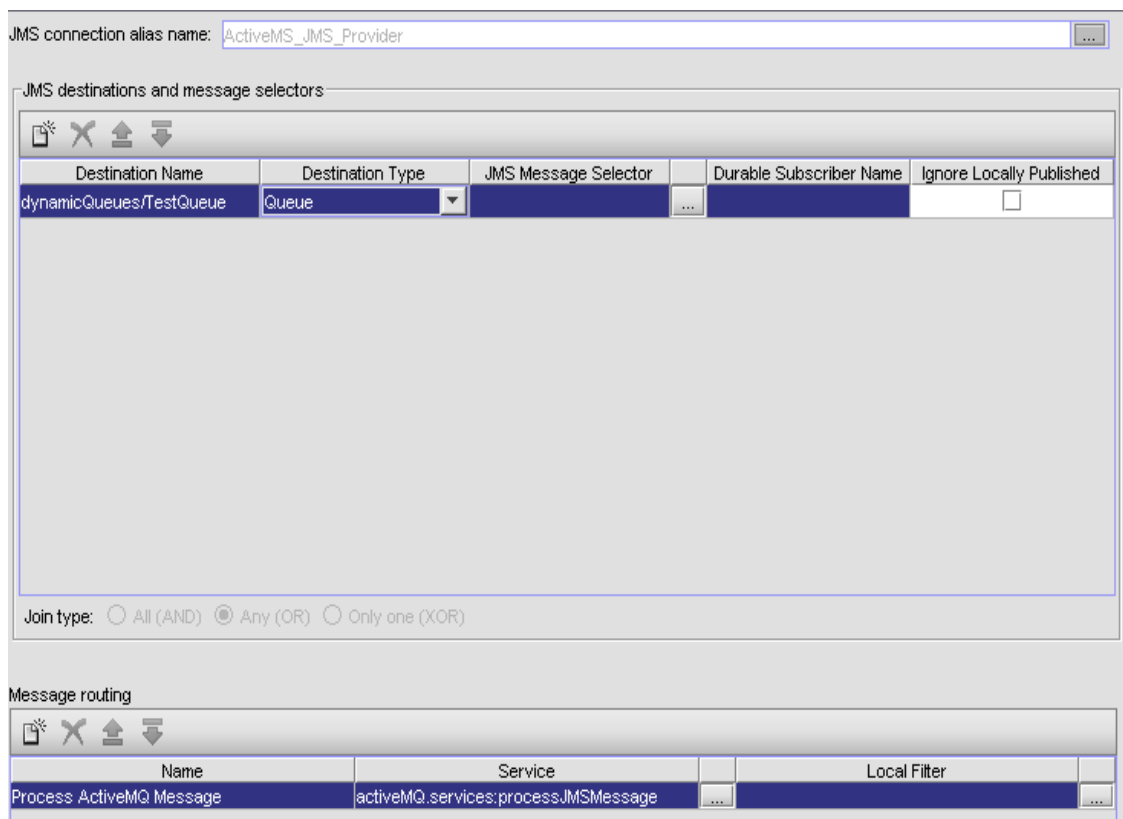
1. Assuming a queue named 'TestQueue' has already been created on Active MQ

2. Create a trigger. Ensure that you specify the destination name as dynamicQueues/TestQueue.

3. Use a trigger service that prints out the message
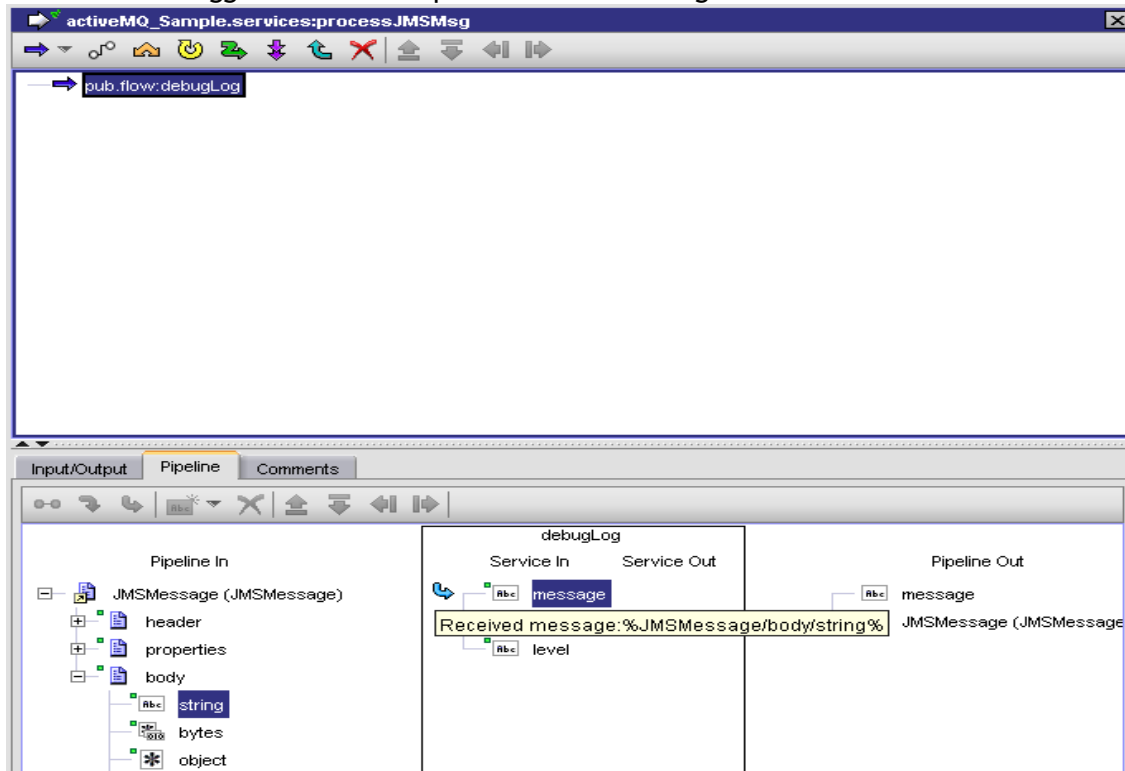
4. Click on "Send To" on the Active MQ UI

5. Enter a message in the body and press 'Send'
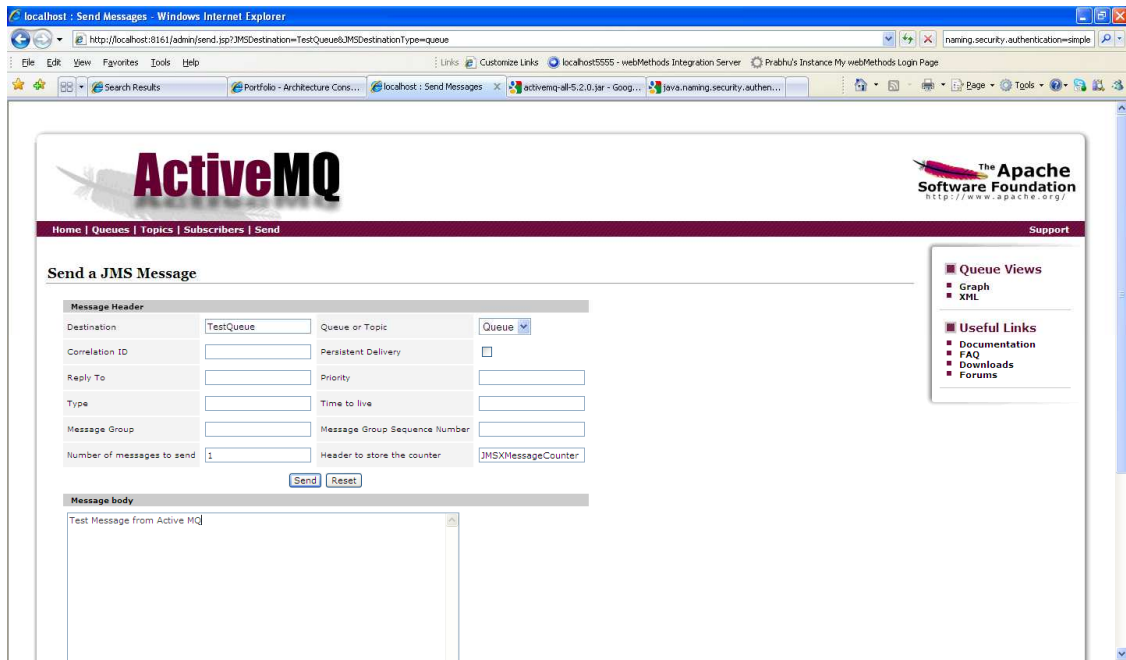
6. You should see a message in the IS server log, indicating successful subscription from IS

IST [ISP.0090.0003C] Received message:Test Message from Active MQ

Sending Messages

1. Create a flow service which uses the use the built-in service pub:jms:send to send a message to the ActiveMQ queue
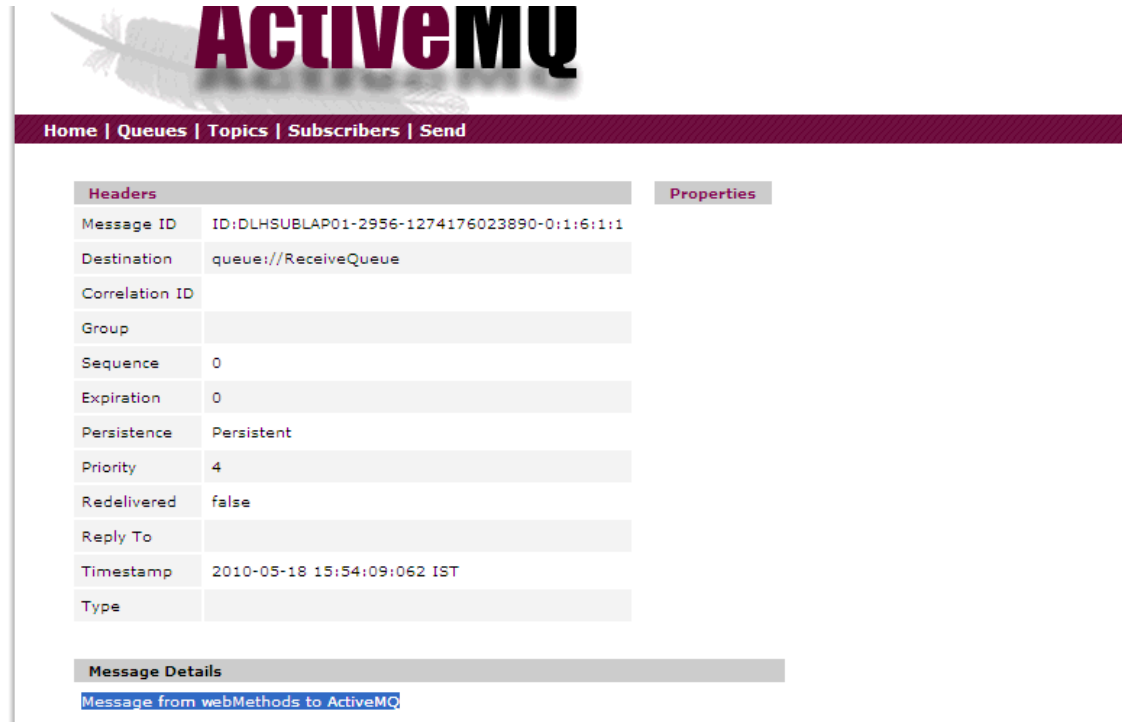2. Specify the connection alias and destination name and type
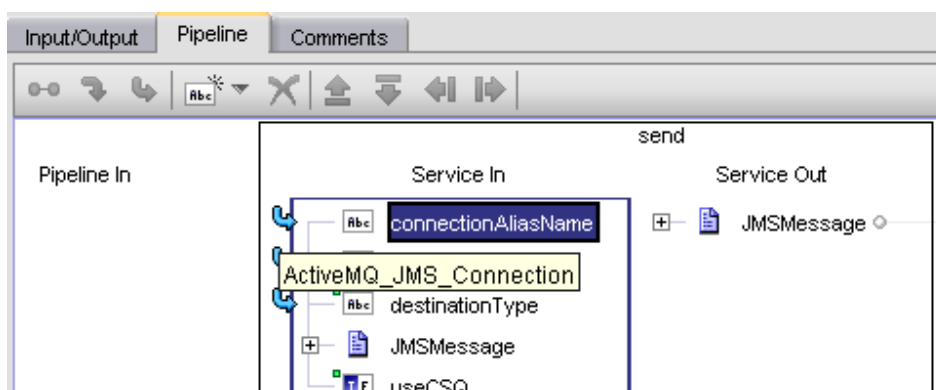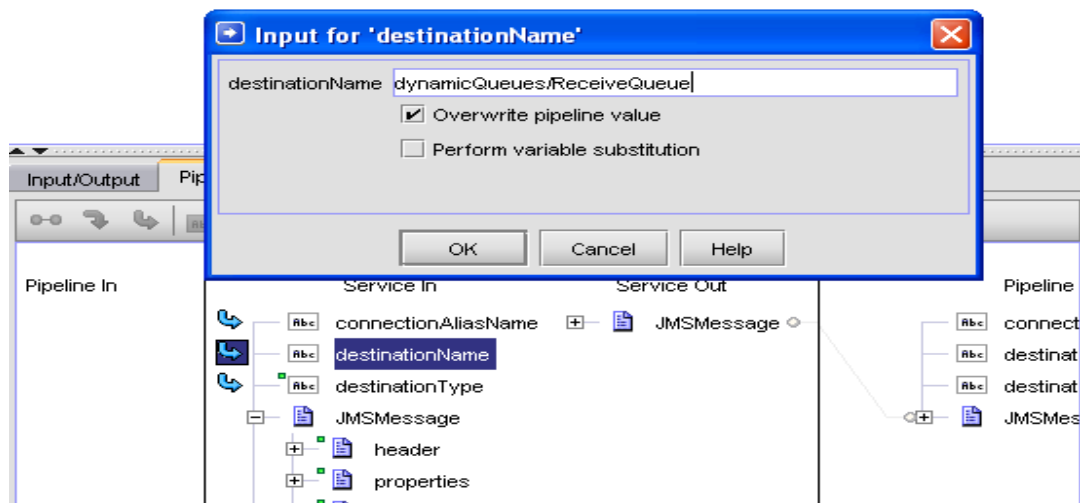
3. Add Test message and run the service
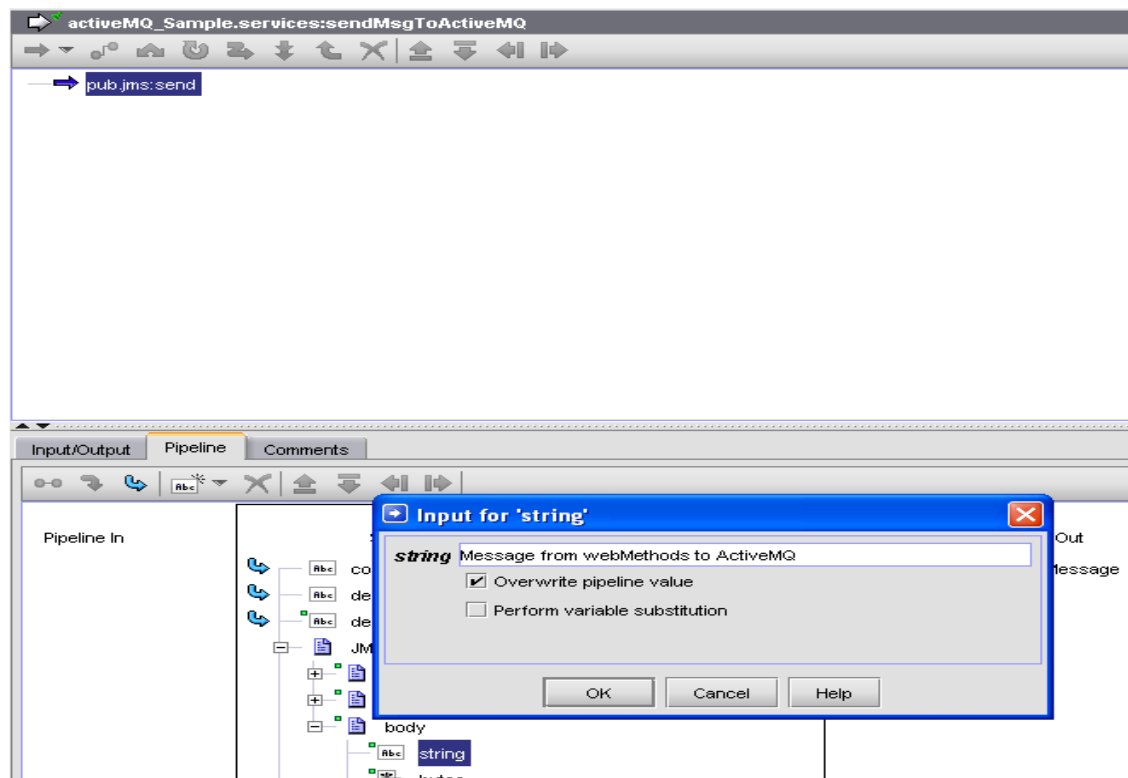
4. Browse the 'ReceiveQueue' on Active MQ UI, you should see the message with the appropriate content in the body

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