LAB- Using JMS Endpoint

STEP1

Create a project with name **01-jms-start**

We will be using activemq as message broker.

Download the activemq from
https://activemq.apache.org/components/classic/download/

Once you download the zip file, u can start activemq by going to bin/win64/activemq.bat

Once activemq starts, u can see the web ui of activemq by visiting
http://localhost:8161

Click on Manage ActiveMq. Username/password is admin/admin

1) Create a new Mule configuration file with name jms.xml .

Firstly, we need to add JMS module. Click on "Add Module" button in the mule palette and drag "JMS" module to the left side.

When ever POST request comes for http://localhost:8081/send , we want to send a message to JMS queue with name **inq.**

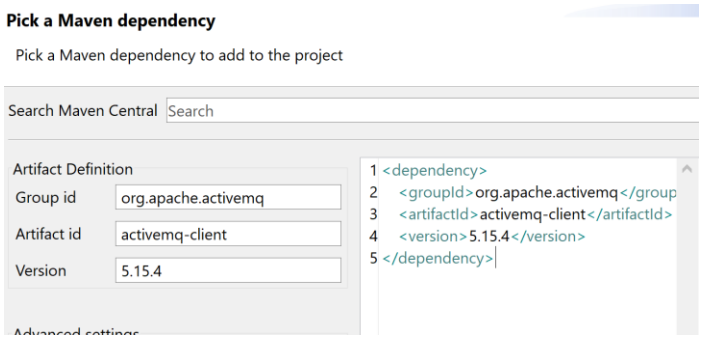
First, drag a Http Listener and configure it to listen at http://localhost:8081/send

Now Select JMS module and drag "Publish" component after Http Listener.

Click on "+" button to create a new Jms Configuration.

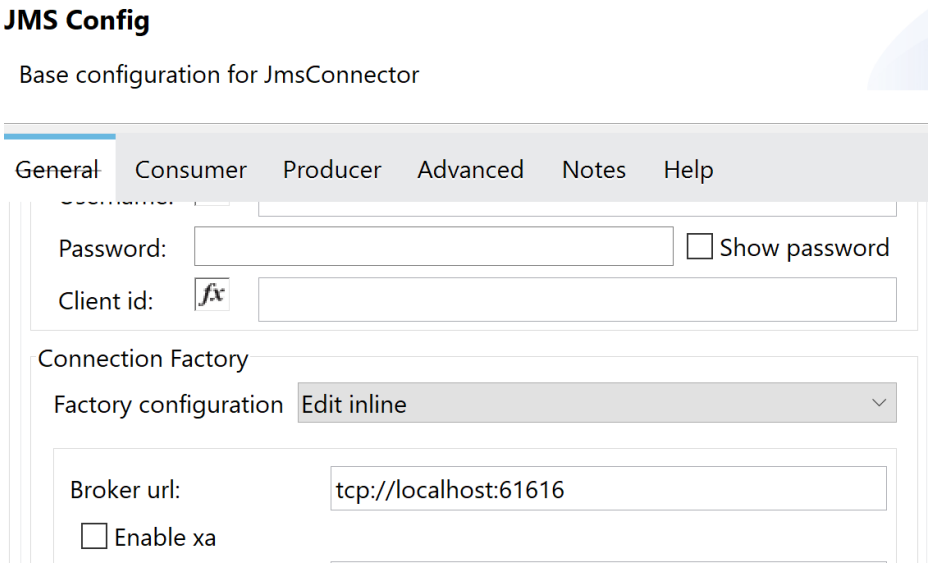
Select "ActiveMq Connection".

Configure ActiveMqClient Library Maven dependency as below and click ok



In the Connection Factory section, select edit inline for Factory Configuration.

Configure Broker URL as tcp://localhost:61616 and click ok



Now Configure destination as “**inq”** and destination type as QUEUE

Observe that in Body, expression is configured as “payload” .

Run the application and give a post request from post man. Send the post body as “Hello”.

You should get same “Hello” as response.

Open http://localhost:8161 and click on Manage Broker. Give username/password as admin/admin.

Click on Queues. You should observe that there is one message in **“inq”.**

You understood how to send a message to Jms Queue.

2) Now we want to receive Messages using a JMS Listener.

Drag “On New Message” in JMS Module.

Configure it with same JMS_Config.

Configure destination as “inq”

Configure Consumer type as Queue Consumer

Configure Inbound Content-Type as “text/plain” as we are expecting String as payload

Drag “SetPayload” transformer and set payload as `payload ++ 'Response'`

Drag a logger and configure it to log the payload.

Run the application and observe the log on console.

Again send a same Http Post post request to http://localhost:8081/send and observe that the message is sent to inq and received by JMS listener and “HelloResponse” message is logged..

3) We want to send Message to “inq” and want responses to be sent to “rq”.

Click on Publish .

Under Message Section, in ReplyTo , Select edit inline.

Configure destination as “rq”.

Again send a same Http Post post request to http://localhost:8081/send and observe that the message is sent to inq and received by JMS listener and “HelloResponse” message is logged and response is sent to rq.

Go to ActiveMq admin console at http://localhost:8161 and observe that there is response message in rq.

But did u receive the “HelloResponse” as response in post man?

If you want to send and receive message, you should use “Publish Consume” component instead of Publish.

Try to use it. Its configuration is similar to “Publish” component and straightforward.

This is the end of the Exercise