

ASSESSMENT - 05

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ACE11689

Topic: JMS using RabbitMQ

Task:

Queue Name : NameProcess_Queue

Exchange Name : NameProcess_Exchange (give any routing key)

Exchange Type : Header

Create a Proxy : NameProcessProxy - (publish and consume message from queue using same proxy)

Queue Publisher process :

In proxy put the initial log "Queue publish process initiated"

FirstName:{any name} - pass this in header to rabbitMq

{"LastName":""} - pass with payload to rabbitMq

Queue Consumer Process :

In proxy put the initial log "Queue consume process initiated"

Consume the header and body from NameProcess_Queue

Read the FirstName from header and LastName from body and concat them

In proxy put the log "Queue consume process success"

print the payload a below format

<Name>firstname Lastname</Name>

Code:

```
<?xml version="1.0" encoding="UTF-8"?>
<proxy name="NameProcessProxy" startOnLoad="true" transports="http https rabbitmq"
xmlns="http://ws.apache.org/ns/synapse">
  <target>
    <inSequence>
      <log level="custom">
        <property name="Message" value="Queue publish process initiated"/>
      </log>
      <property name="FirstName" scope="transport" type="STRING" expression="json-
eval($.FirstName)"/>
      <property name="OUT_ONLY" scope="default" type="STRING" value="true"/>
      <call>
        <endpoint>
          <address
uri="rabbitmq:/?rabbitmq.connection.factory=AMQPConnectionFactory&rabbitmq.queue
e.name=NameProcess_Queue&rabbitmq.queue.routing.key=fullname&rabbitmq.exc
hange.name=NameProcess_Exchange">
            <suspendOnFailure>
              <initialDuration>-1</initialDuration>
              <progressionFactor>1</progressionFactor>
            </suspendOnFailure>
            <markForSuspension>
              <retriesBeforeSuspension>0</retriesBeforeSuspension>
            </markForSuspension>
          </address>
        </endpoint>
      </call>
      <log level="custom">
        <property name="Message" value="Queue consume process initiated"/>
      </log>
      <property expression="$trp:FirstName" name="fname" scope="default"
type="STRING"/>
      <property expression="json-eval($.LastName)" name="lname" scope="default"
type="STRING"/>
      <property expression="concat($ctx:fname, $ctx:lname)" name="FullName"
scope="default" type="STRING"/>
      <log level="custom" separator="|">
        <property expression="$ctx:fname" name="first"/>
        <property expression="$ctx:lname" name="last"/>
        <property expression="$ctx:FullName" name="FULL"/>
      </log>
      <log level="custom">
        <property name="Message" value="Queue consume process success"/>
      </log>
      <payloadFactory media-type="xml">
        <format>
```

```

        <Name>$1</Name>
    </format>
    <args>
        <arg evaluator="xml" expression="$ctx:FullName"/>
    </args>
    </payloadFactory>
    <respond/>
</inSequence>
<outSequence/>
<faultSequence/>
</target>
<parameter name="rabbitmq.exchange.type">headers</parameter>
<parameter name="rabbitmq.exchange.name">NameProcess_Exchange</parameter>
<parameter name="rabbitmq.connection.factory">AMQPConnectionFactory</parameter>
<parameter name="rabbitmq.queue.name">NameProcess_Queue</parameter>
</proxy>

```

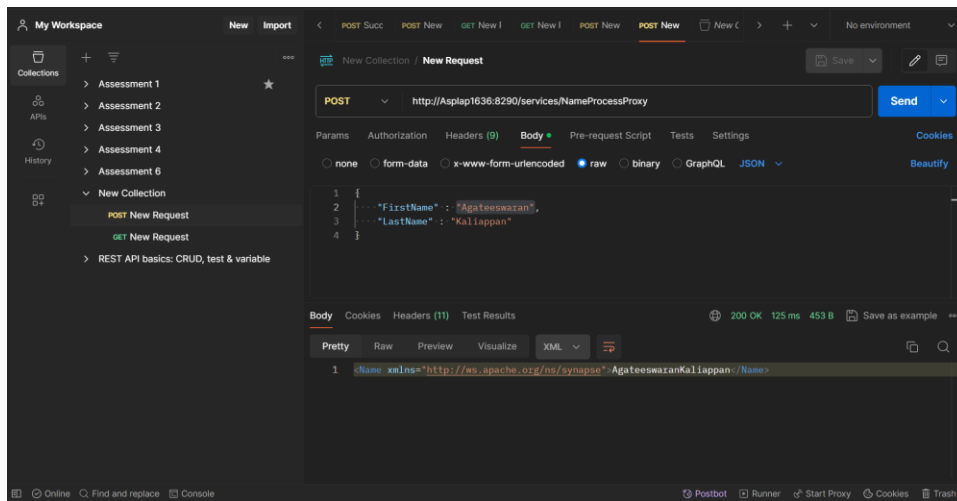
Output:

Success Case:

```

Micro Integrator Server 4.2.0 [Generic Server] C:\Users\agatees.kaliappan\Desktop\WSO2\IntegrationStudio\jdk-home\bin\java.exe (02-Apr-2024, 10:20:07 AM)
[2024-04-02 10:20:19,160] INFO {EventAdminConfigurationNotifier} - Logging configuration changed. (Event Admin service unavailable - no notification sent).
[2024-04-02 10:20:21,498] INFO {RabbitMQSender} - RABBITMQ Sender started
[2024-04-02 10:20:21,518] INFO {RabbitMQSender} - RabbitMQ AMQP Transport Sender initialized...
[2024-04-02 10:20:21,573] INFO {RabbitMQListener} - RabbitMQ AMQP Transport Receiver initialized...
[2024-04-02 10:20:23,075] INFO {Axis2SynapseEnvironment} - Continuation call is set to true
[2024-04-02 10:20:23,083] INFO {ProxyService} - {proxy:NameProcessProxy} Building Axis service for Proxy service : NameProcessProxy
[2024-04-02 10:20:23,084] INFO {ProxyService} - {proxy:NameProcessProxy} Adding service NameProcessProxy to the Axis2 configuration
[2024-04-02 10:20:23,084] INFO {ProxyService} - {proxy:NameProcessProxy} Successfully created the Axis2 service for Proxy service : NameProcessProxy
[2024-04-02 10:20:23,084] INFO {ProxyServiceDeployer} - ProxyService named 'NameProcessProxy' has been deployed from file : C:\Users\agatees.kaliappan\Desktop\WSO2\Int
[2024-04-02 10:20:23,084] INFO {AppDeployer} - Successfully Deployed Carbon Application : Assessment05CompositeExporter_1.0.0-SNAPSHOT(super-tenant)
[2024-04-02 10:20:23,084] INFO {AppDeployerServiceComponent} - Dashboard is configured. Initiating heartbeat component.
[2024-04-02 10:20:23,116] INFO {PassThroughListeningIOReactorManager} - Pass-through HTTP Listener started on 0.0.0.0:8298
[2024-04-02 10:20:23,117] INFO {PassThroughListeningIOReactorManager} - Pass-through HTTPS Listener started on 0.0.0.0:8253
[2024-04-02 10:20:23,117] INFO {RabbitMQListener} - RABBITMQ listener started
[2024-04-02 10:20:23,121] WARN {RabbitMQListener} - Unable to configure the service NameProcessProxy for the RABBITMQ transport: Service doesn't have configuration inf
[2024-04-02 10:20:23,121] WARN {RabbitMQListener} - Disabling the rabbitmq transport for the service NameProcessProxy, because it is not configured properly for the se
[2024-04-02 10:20:23,121] INFO {StartupFinalizer} - WSO2 Micro Integrator started in 6.68 seconds
[2024-04-02 10:20:23,193] INFO {PassThroughListeningIOReactorManager} - Pass-through EI_INTERNAL_HTTP_INBOUND_ENDPOINT Listener started on 0.0.0.0:9201
[2024-04-02 10:20:23,240] INFO {PassThroughListeningIOReactorManager} - Pass-through EI_INTERNAL_HTTPS_INBOUND_ENDPOINT Listener started on 0.0.0.0:9164
[2024-04-02 10:20:25,802] INFO {AuthenticationHandlerAdapter} - User admin logged in successfully
[2024-04-02 10:20:29,565] INFO {LogMediator} - {proxy:NameProcessProxy} Message = Queue publish process initiated
[2024-04-02 10:20:29,586] INFO {TimeoutHandler} - This engine will expire all callbacks after GLOBAL_TIMEOUT: 120 seconds, irrespective of the timeout action, after t
[2024-04-02 10:20:29,633] INFO {RabbitMQConnectionFactory} - [AMQPConnectionFactory] Successfully connected to RabbitMQ Broker
[2024-04-02 10:20:29,648] INFO {LogMediator} - {proxy:NameProcessProxy} Message = Queue consume process initiated
[2024-04-02 10:20:29,654] INFO {LogMediator} - {proxy:NameProcessProxy} first = Agateeswaran|last = Kaliappan|FULL = AgateeswaranKaliappan
[2024-04-02 10:20:29,654] INFO {LogMediator} - {proxy:NameProcessProxy} Message = Queue consume process success

```



Error Case:

