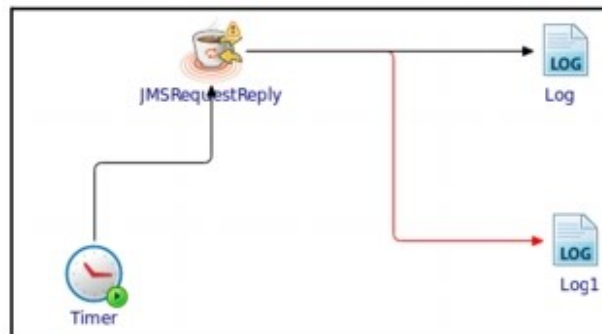## Lab D - Exercise 3: Test Temporary Topics

Overview

In this exercise you create a TopicRequestor process which will publish a message on a topic and wait for a reply from the subscriber. You then create TopicReplier which will consume the message from the same topic and then reply back to TopicRequestor. The reply is sent over temporary topics created automatically on the session.

Steps

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1. Create the TopicRequestor process and configure the activities and transitions.

- Create a new process in *EMS206Project/Processes/**LabD***
    - ◆ Process Name: **`TopicRequestor`**
- Add the following activities
    - ◆ **Timer**
    - ◆ **JMS Request Reply**
    - ◆ Two **Log** activities
- Add transitions as shown below

- ◆ Configure the transition to **Log1**
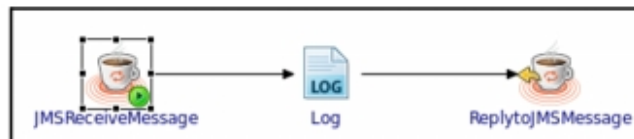   - – Condition Type: **Error**
- ◆ **Save**

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2. Configure the activities and mappings for the TopicRequestor process.

- Select the **JMSRequestReply** activity
    - ◆ In *Properties* > *General*, configure the following:
        - – Messaging Style: **Topic** (from dropdown)
        - – JMS Connection: Browse and select **EMS206project.JMSConn**
        - – Destination: **`dynamic.order.ship`**
    - ◆ Select *Properties* > *Advanced*
        - – Verify that the **Reply To Destination** is empty
    - ◆ Select *Properties* > *Input* and map:

– Activity Input > Body: **"This is a Temp Message"**
- Select the **Log** activity
  - Select *Properties* > *Input*
    – From the available *Data Source* on the left, select the element **$JMSRequestReply/Body**
    – Drag it to **ActivityInput/message** (on the right)
- Configure the **Log1** activity
  - Select *Properties* > *Input*
    – Select the element
      $_error_JMSRequestReply/tns1:ActivityTimedOutException/msg and
      drag it to **ActivityInput/message** (on the right)
- **Save** the project

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3. Create the TempSubscriber process and configure the activities and transitions.

- Create a new process in *EMS206Project/Processes/**LabD***
  - Process Name: **TempSubscriber**
- Add the following activities
  - **JMS Receive Message**
  - **Log**
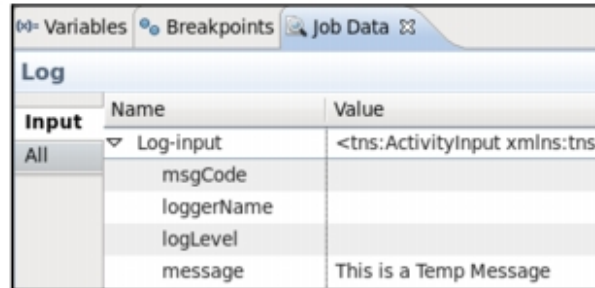 - **Reply to JMS Message**
- Add transitions as shown below

- Select the **JMSReciveMessage** activity
  - In *Properties* > *General*, configure the following:
    – Messaging Style: **Topic** (from dropdown)
    – JMS Connection: Browse and select **EMS206project.JMSConn**
    – Destination: **dynamic.order.ship**
- Select the **Log** activity
  - Select *Properties* > *Input*
    – Create mapping from **$JMSReceiveMessage/Body** to **ActivityInput/message**
- Select the **ReplytoJMSMessage** activity
  - Select *Properties* > *General*
    – Reply for Event: **JMSReceiveMessage** (select from dropdown)
  - Select *Properties* > *Input*
    – Map the ActivityInput using the following XPath Expression:
      concat("Sending reply to "
      $JMSReceiveMessage/JMSHeaders/ns:JMSReplyTo)
- **Save** the project

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4. Test your Request/Reply implementation.

- Configure the Components list to run both *TopicRequestor* and *TempSubscriber*
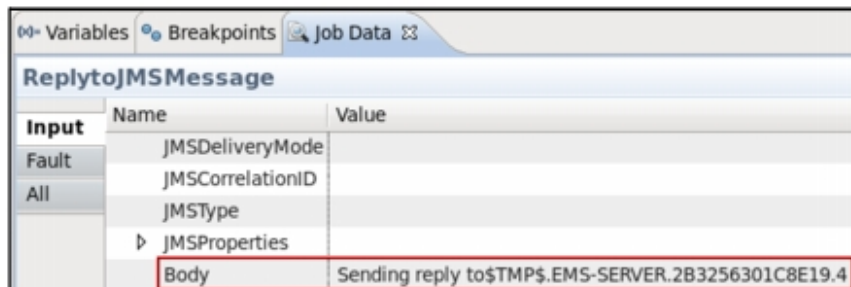- Launch the debugger

- ◆ Select *Console* view
  - – Verify that both request message and reply were logged in
- ◆ Select *BusinessWorks Jobs* view
  - – Verify that the message is consumed
  - – Click on the **Log** activity in *TempSubscriber* job
    - ◆ Select *Job Data > **Input*** verify that the message is received

Log	Name	Value
Input	▽ Log-input	<tns:ActivityInput xmlns:tns=
All	msgCode	
	loggerName	
	logLevel	
	message	This is a Temp Message

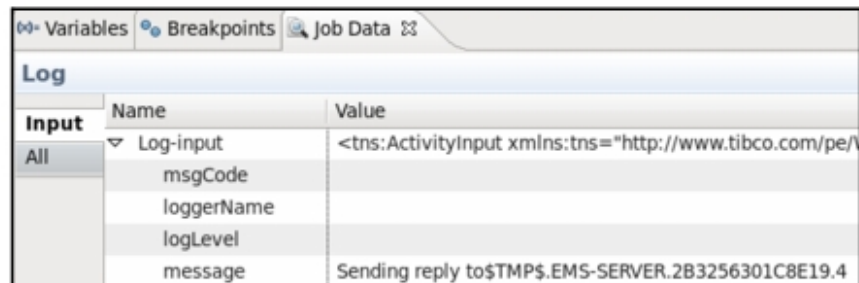5. Verify that the TempSubscriber replied to the request.

- ■ Select the **ReplytoJMSMessage** activity in *TempSubscriber* job
  - ◆ Click on *Job Data > **Input*** and verify message: **Sending reply to TMP <topic name>**

ReplytoJMSMessage	Name	Value
Input	JMSDeliveryMode	
Fault	JMSCorrelationID	
All	JMSType	
	▷ JMSProperties	
	Body	Sending reply toTMP.EMS-SERVER.2B3256301C8E19.4

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6. Verify that TopicRequestor received the reply.

- ■ Select the **Log** activity in the *TopicRequestor* job
- ■ In *Job Data > **Input***, verify that the reply is received

Log	Name	Value
Input	▽ Log-input	<tns:ActivityInput xmlns:tns="http://www.tibco.com/pe/\
All	msgCode	
	loggerName	
	logLevel	
	message	Sending reply toTMP.EMS-SERVER.2B3256301C8E19.4

- ■ **Terminate** the debugger when done
- ■ Switch to **Design** perspective
- ■ Select *File > **Close All*** to close all Process Editors