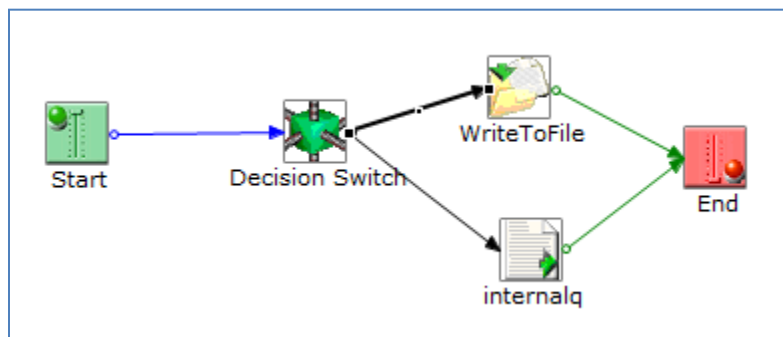


## Retry Pending Messages

This how-to describes an iWay Integration Application (iIA) that invokes a Decision Switch object in a process flow, which can also be substituted by other object such as a SQL object if required. Based on the condition of the Decision Switch object response, the message is either directed to the pending queue by the process flow, or will process further downstream in the application layer.



The *Retry\_Sample.zip* archive that is provided contains the completed iIA (*RETRYSAMPLE.iia*) that is referenced by this how-to. You can import this iIA into your environment for testing purposes.

---

## Configuring the iWay Integration Application and Process Flow

An Internal queue is created, which is enabled to *pend* messages.

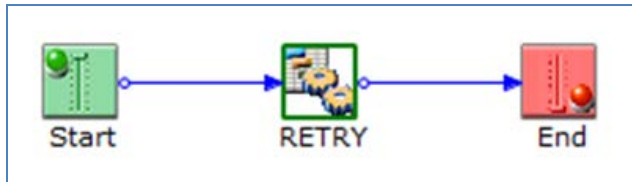
The following image displays the configured components that are included in the packaged iIA (*RETRYSAMPLE.iia*).

| Name        | Type          | Auto Start | Location                                 |
|-------------|---------------|------------|--|
| RETRY       | process       |            | /RETRYFROMQUEUE/Flows/RETRY.iwp          |
| SendToQueue | process       |            | /RETRYFROMQUEUE/Flows/SendToQueue.iwp    |
| TESTQCH     | inlineChannel | yes        | /RETRYFROMQUEUE/Channels/TESTQCH.iwic... |

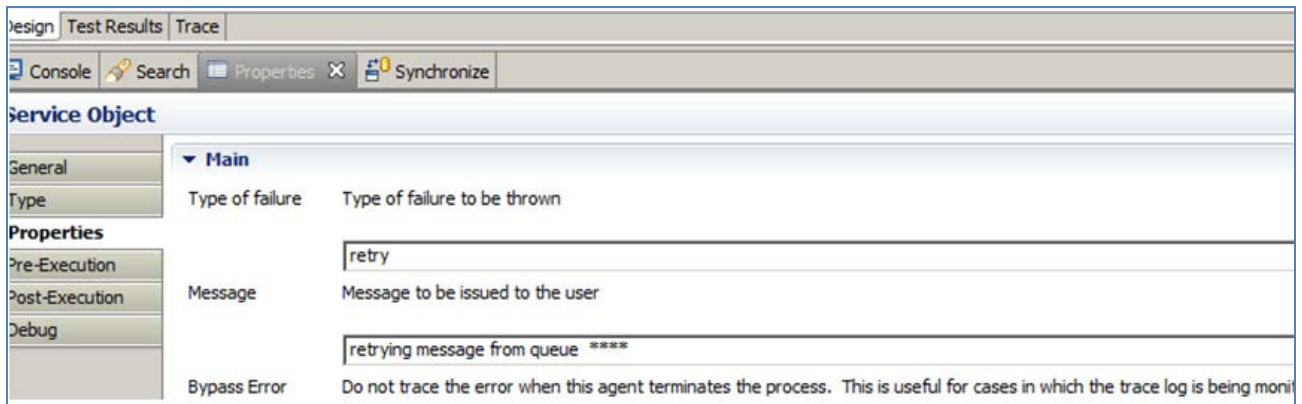
This iIA also includes a process flow (*SendToQueue*) that will put messages in the queue based on the criteria in a Decision Switch object.

Based on the input (see *Sample XML Messages*), the process flow will send the message to the Internal queue (if the XPATH returns *SENDTOPENDQ*), or it will place the message in a file (representing downstream processing).

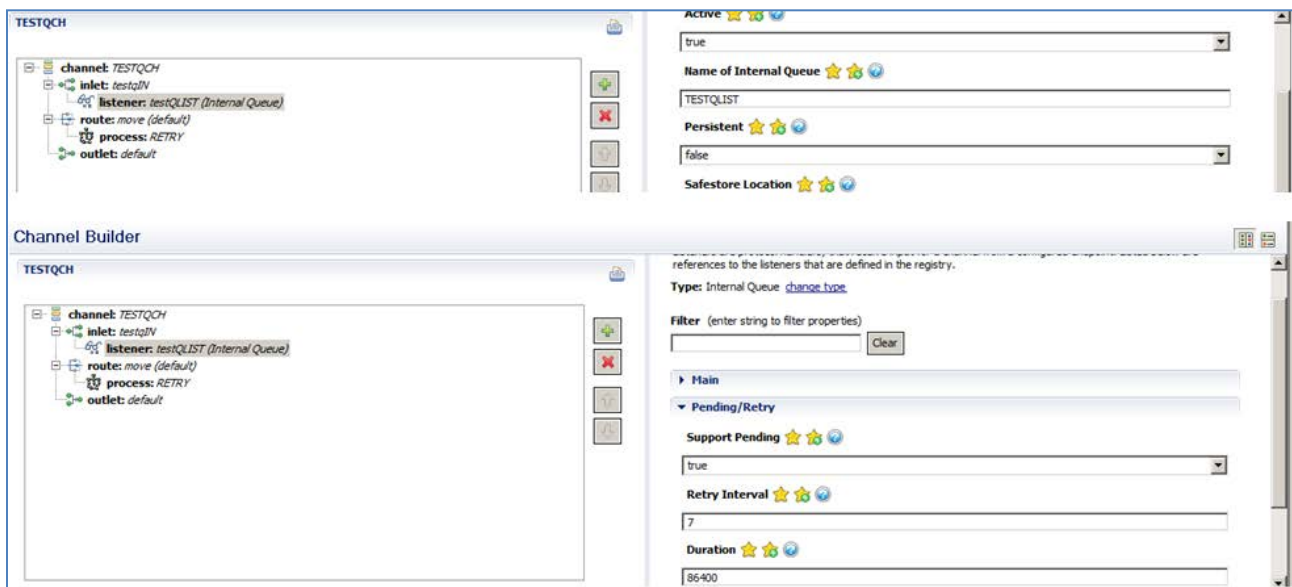
Once the messages are placed in the Internal queue, this queue can call another process flow to determine if the messages need to be retried. For example:



In this example, the Internal queue will unconditionally call the Fail Service (com.ibi.agents.XDFailAgent) with the *retry* switch enabled, as shown in the following image.



This will cause pending messages to be retried based on the settings of the Retry Interval and Duration parameters in the Listener. In addition, ensure that the Support Pending parameter is set to *true*, as shown in the following image.



You can change the Internal queue channel to call a process flow that calls the SQL object, followed by a service object that calls the Fail Service (com.ibi.agents.XDFailAgent) with the *retry* option enabled. In this scenario, ensure that the Fail Service is only called when the pending message in the queue needs to be

retried. Once all dependency requirements are met, you can just process the message, and not call the Fail Service. The SQL object scenario would place messages in pending status based on the data returned from the DBMS, or even if there is a connection exception, which can be corrected in a timely fashion.

For more information on the iWay services that are referenced in this how-to, see the *iWay Service Manager Component Reference Guide*.

### **Sample XML Messages**

The sample XML messages below are either routed to a queue or to a file based on the logic of the process flow.

- Sample Message #1:

```
<?xml version="1.0" encoding="UTF-8"?>  
<Test>SENDTOPENDQ</Test>
```

- Sample Message #2:

```
<?xml version="1.0" encoding="UTF-8"?>  
<Test>PROCESS</Test>
```