IIB Failed Event Management Store and Forward

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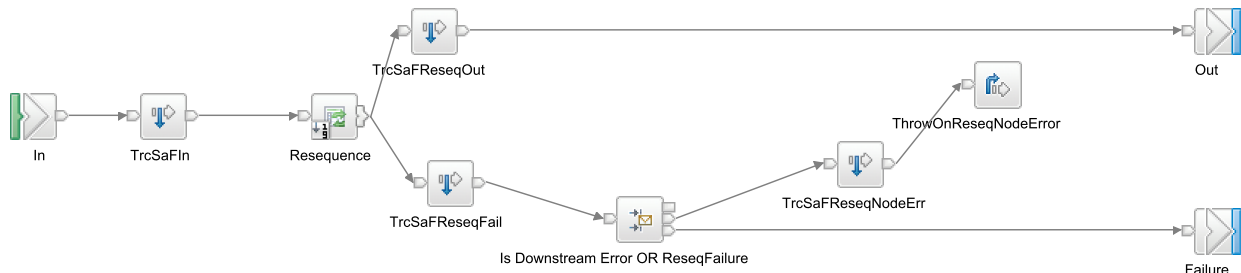
Table of contents

1 Message Flow   "StoreAndForward"

/IOBKApplication/StoreAndForward.subflow

1.1 Overview

1.1.1 Short Description

StoreAndForward contains the Resequence node configured in Retry Mechanism = 'failure' mode. This causes the resequence node to catch failed messages and "block" subsequent messages with the same sequence groupID

1.1.2 Long Description

The Resequence node has been enhanced in IIB v9.0.0.2 via an iFix to add the Retry Mechanism mode (to enable StoreAndForward style processing). This subflow cannot be used without the iFix.

StoreAndForward contains the Resequence node configured in Retry Mechanism = 'failure' mode.
This causes the resequence node to catch failed messages and "block" subsequent messages with the same sequence groupID.
The resequence node assigns a sequence number to messages by sequence groupID (i.e. it is tolerant of no sequence number)
The path to sequence group ID on the Resequence node is a promoted property that identifies how a developer wants to group their messages - an employee ID for example.
All other parameters on the Resequence node can be left as configured.

The StoreAndForward subflow also uses a filter node to identify if a Failure Event is due to a downstream error being thrown back to the resequence node or of the resequence node itself has suffered an exception.
If the resequence node itself suffers an exception then the Failed Event is not propagated on as downstream failure. Instead it is thrown back to be caught upstream as a FATAL error.
It should then trigger the stopping of the containing message flow.

1.2 ResequenceNode - "Resequence"

Short Description	Resequence Node configured in Retry Mechanism = Failure mode.
Long Description	The Resequence node running in failure mode will catch downstream exceptions and propagate them to its failure terminal. It will then block messages (storing them on MQ system queues) of the same Sequence GroupID until the original failure message is fed back into the Resequence Node via the Failed Event Management Wrapper, Tooling Wrapper and

operational tooling. Basic Properties Path to Sequence Number: $LocalEnvironment/Sequence/Number Path to Sequence Group ID: Promoted (repeatedly through the StoreAndForward/Wrapper/ToolingWrapper) to containing message flow to be set by the developer. The Group ID is the "key" typically made up of one of more elements from the headers or data payload by which the resequence node will group messages. Missing Message Timeout: 999999 Start of Sequence Definition: Literal:1 End of Sequence Definition: Automatic:300 (seconds of inactivity for that groupID) Advanced Properties Persistence Mode: Non-persistent for testing purposes (restarting the queue manager will clean up the grouping messages and events on the systems queues. Persistence Mode: Persistent may be the preferred setting for production Retry Properties Retry Mechanism: Failure Instances Additional Instances: 0 - The output side of the resequence node is a separate thread. Single thread the output side such that sequence is maintained.

1.3 Is Downstream Error OR ReseqFailureNode - "Is Downstream Error OR ReseqFailure"

Short Description	Filter out exceptions thrown by the Resequence Node itself
Long Description	If the Resequence node itself failed rather than a downstream error there will be no LocalEnvironment/Sequence/Group. Resequence Node exceptions will be thrown back to the containing message flow as a FATAL error. The containing message flow should then be stopped.

1.4 ThrowOnReseqNodeErrorNode - "ThrowOnReseqNodeError"

Short Description	3001 to 3049 available for users
Long Description	

1.5 TrcSaFReseqOutNode - "TrcSaFReseqOut"

Short Description	
Long Description	

1.6 TrcSaFReseqFailNode - "TrcSaFReseqFail"

Short Description	
Long Description	

1.7 Node - "In"

Short Description	Servicing: Inbound messages from the containing message flow via the Wrapper
Long Description	Data content - Transport Headers:MQRFH2:payload data

1.8 Node - "Out"

Short Description	Driving: Downstream processing out through the Failed Event Wrapper
Long Description	Messages that will flow through this terminal are: First time , replayed, redirecting, control and linked (unblocked)

1.9 Node - "Failure"

Short Description	Driving: Failed Events back to the Failed Event Wrapper
Long Description	Messages that have failed to be delivered downstream will flow through

this terminal having been thrown back and caught by the Resequence Node configured for Retry Mechanism = Failure If the resequence node it-self suffers an exceptions that will have been filtered out and thrown back.

1.10 TrcSaFInNode - "TrcSaFIn"

Short Description
Long Description

1.11 TrcSaFReseqNodeErrNode - "TrcSaFReseqNodeErr"

Short Description
Long Description

2 Cross Reference

The tables in this section show how resources are related to one another.

3 Documentation generation settings

General settings

Title:	IIB Failed Event Management Store and Forward
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TOC nesting level:	7

Utilized documentation units

Source	Documentation unit	Documentation type
StoreAndForward.subflow	SubFlow Documentation Unit	detailed