



Managing an Invalid HTTP Request

When receiving an invalid HTTP request, the iWay non-blocking HTTP (nHTTP) 1.1 listener will generate (as expected) the following error and send a status code of 200:

```
<?xml version="1.0" encoding="ISO-8859-1" ?><eda><error timestamp="2016-11-17T19:10:29Z"
code="3" stage="PARSE" source="Parser">Parser error in XML file: XD[FAIL] cause: 0
subcause: 0 message: Problems parsing XML file: Parse failure:
org.xml.sax.SAXParseException; lineNumber: 1; columnNumber: 1; Content is not allowed in
prolog.
```

However, it is also possible for a more defined error code to be sent rather than the standard 200 (“OK”) code that acknowledges the received request. The 5xx Server Error codes are more appropriate. For this particular invalid request, the 550 error code, which indicates a system error, should be sent.

The following sample files are provided with this how-to:

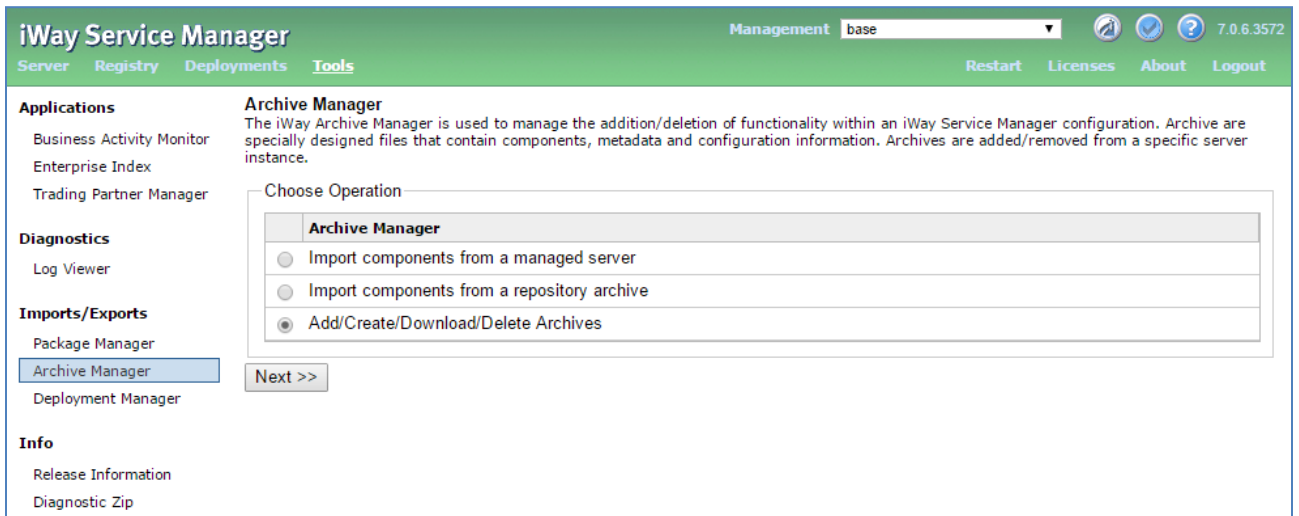
- **HTTP_TEST.zip** – This channel archive contains a nHTTP listener that is configured to handle invalid requests by sending a 550 error code.
- **Parse_Failure_Flow.iwp** – The pre-configured process flow that is called if the XML parsing fails for the incoming message.

Importing the Channel Archive (HTTP_TEST.zip)

This section describes how to import the channel archive (HTTP_TEST.zip) that is included with this how-to.

1. Log on to the iSM Administration Console.
2. Click *Tools* in the menu bar located on the top of the iSM Administration Console and then click *Archive Manager* in the left pane.

The Archive Manager pane opens, as shown in the following image.



3. Select *Add/Create/Download/Delete Archives* and then click *Next*.

The Archive Manager - Add/Create/Download/Delete Archives pane opens.

4. Click *Add*.

The Archive Manager - Upload pane opens.

5. Click *Choose File*.

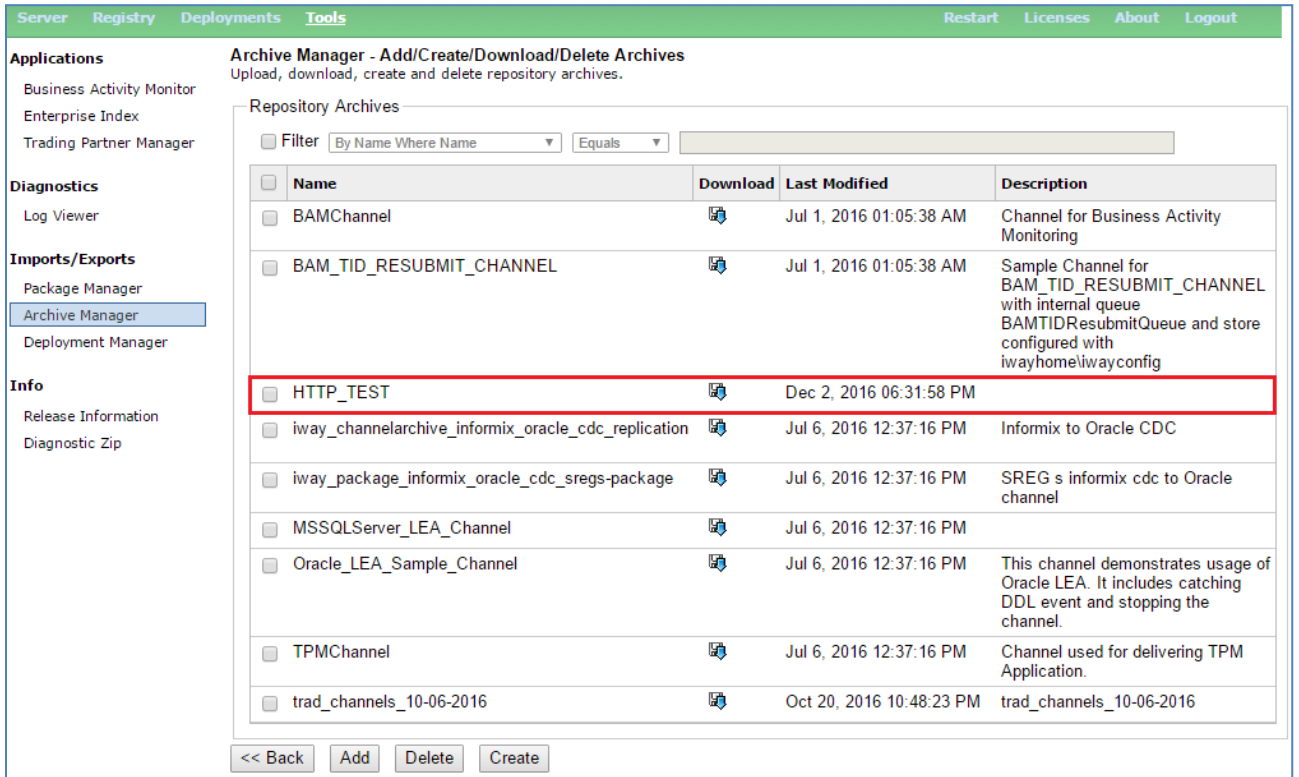
The Open dialog is displayed.

6. Select the *HTTP_TEST.zip* file, which includes the sample channel archive and then click *Open*.

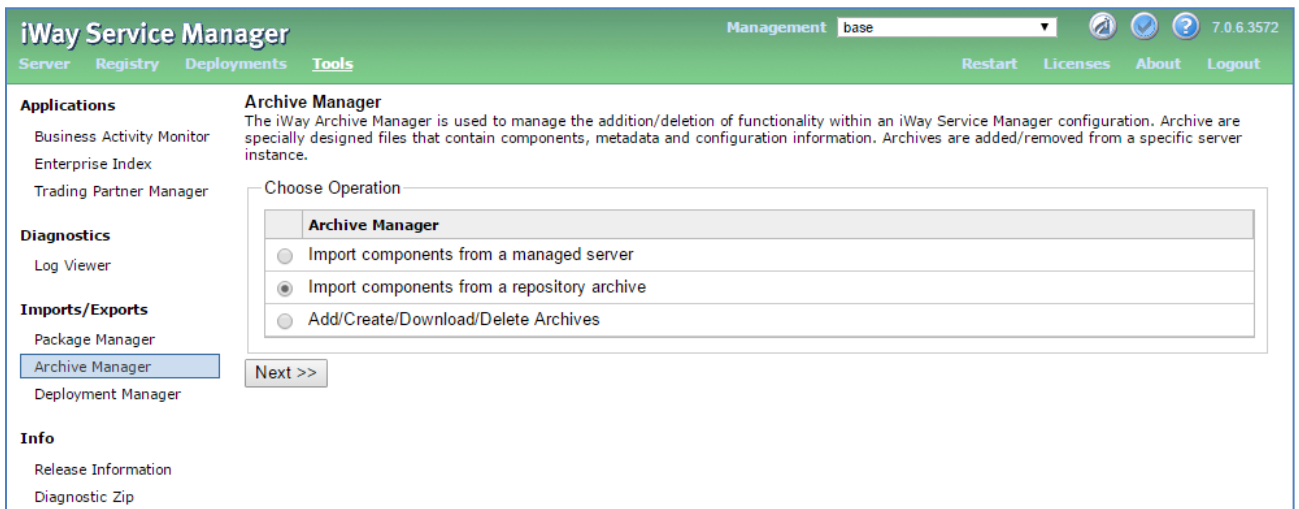
You are returned to the Archive Manager - Upload pane.

7. Click *Finish*.

You are returned to the Archive Manager - Add/Create/Download/Delete Archives pane where the archive you uploaded is now listed (*HTTP_TEST*), as shown in the following image.



- From the Archive Manager pane, select *Import components from a repository archive* and then click *Next*, as shown in the following image.



The Archive Manager - Import components from a repository archive pane opens, as shown in the following image.

Archive Manager - Import components from a repository archive
 Import configuration components from a managed server or from a repository archive. To import an archive you need to first have it uploaded to the server. Repository archive files can be uploaded on the Manage Archives page.

Select repository archive to import

Filter

Name	Last Modified	Description
<input type="radio"/> BAMChannel	Jul 1, 2016 01:05:38 AM	Channel for Business Activity Monitoring
<input type="radio"/> BAM_TID_RESUBMIT_CHANNEL	Jul 1, 2016 01:05:38 AM	Sample Channel for BAM_TID_RESUBMIT_CHANNEL with internal queue BAMTIDResubmitQueue and store configured with iwayhome\iwayconfig
<input checked="" type="radio"/> HTTP_TEST	Dec 2, 2016 06:31:58 PM	
<input type="radio"/> iway_channelarchive_informix_oracle_cdc_replication	Jul 6, 2016 12:37:16 PM	Informix to Oracle CDC
<input type="radio"/> iway_package_informix_oracle_cdc_sregs-package	Jul 6, 2016 12:37:16 PM	SREG s informix cdc to Oracle channel
<input type="radio"/> MSSQLServer_LEA_Channel	Jul 6, 2016 12:37:16 PM	
<input type="radio"/> Oracle_LEA_Sample_Channel	Jul 6, 2016 12:37:16 PM	This channel demonstrates usage of Oracle LEA. It includes catching DDL event and stopping the channel.
<input type="radio"/> TPMChannel	Jul 6, 2016 12:37:16 PM	Channel used for delivering TPM Application.
<input type="radio"/> trad_channels_10-06-2016	Oct 20, 2016 10:48:23 PM	trad_channels_10-06-2016

9. Select the archive you uploaded (HTTP_TEST) and click *Next*.

The Select components to overwrite pane opens, as shown in the following image.

Archive Manager
 Import configuration components from a managed server or from a repository archive. To import an archive you need to first have it uploaded to the server. Repository archive files can be uploaded on the Manage Archives page.

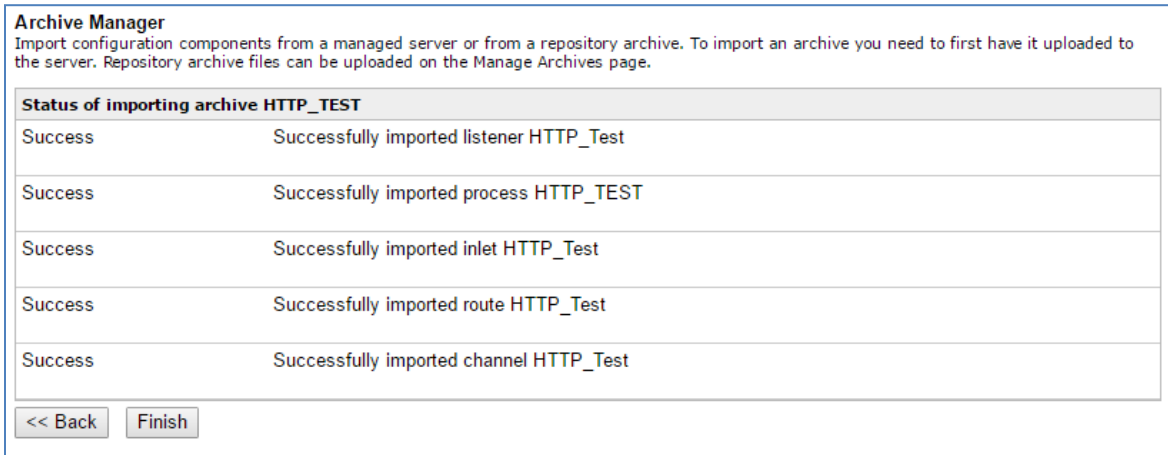
Select components to overwrite

Some or all components contained in the archive are already in the repository. Select the repository components you would like to have replaced with versions from the archive.

<input type="checkbox"/>	Component Name	Component Type	Description
<input type="checkbox"/>	default.outlet	Outlet	The default.outlet defines an empty outlet. An outlet that does not contain an emitter is considered a default outlet whose emitter is defined by the channels inlet listener.

10. Click *Next*.

A status pane opens, which lists all of the iWay components that have been imported from the selected archive (HTTP_TEST).

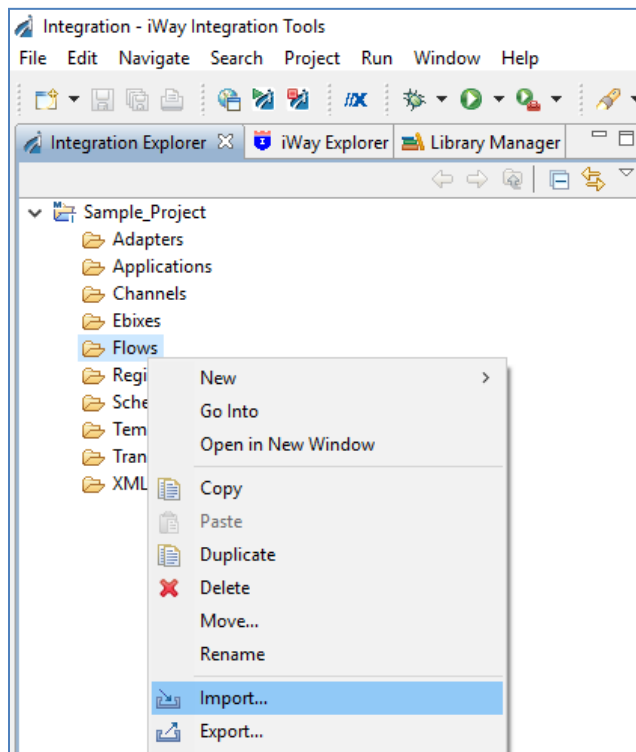


11. Click *Finish*.

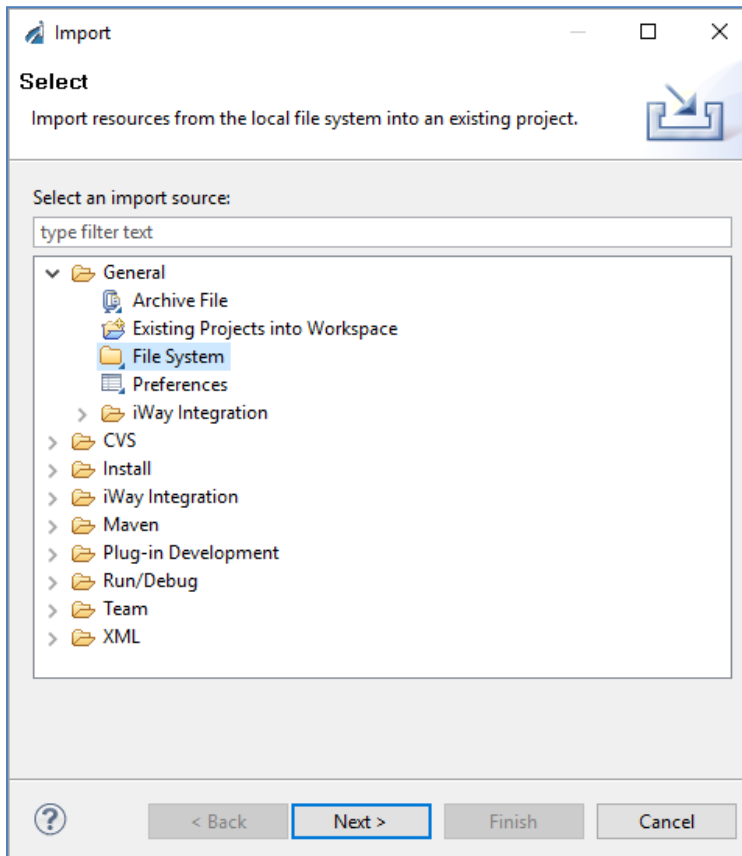
Importing the Process Flow (Parse_Failure_Flow.iwp)

This section describes how to import the process flow (Parse_Failure_Flow.iwp) that is included with this how-to.

1. Open iWay Integration Tools (iIT).
2. Expand your Integration Project, right-click the *Flows* folder, and select *Import* from the context menu, as shown in the following image.

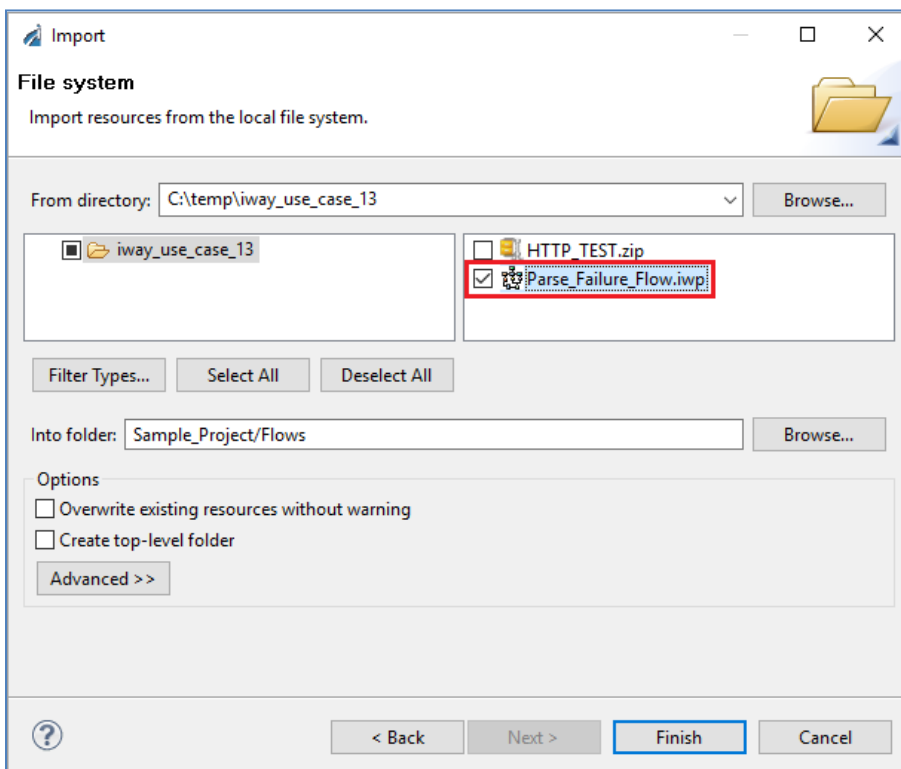


The Import dialog opens, as shown in the following image.



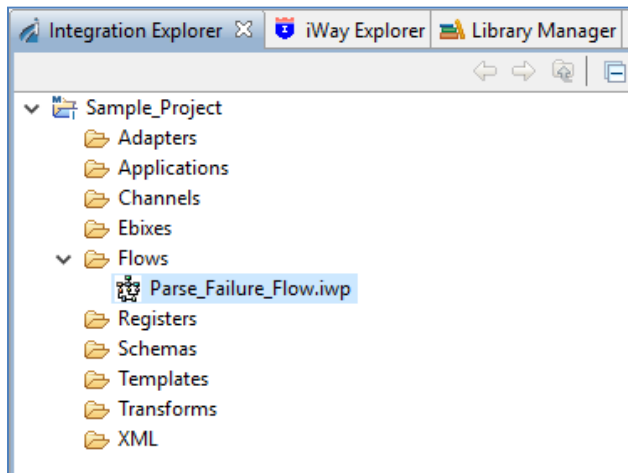
3. Expand the *General* folder, select *File System*, and then click *Next*.

The File system dialog opens, as shown in the following image.



- Browse to the location on your file system where the *Parse_Failure_Flow.iwp* file is located. Select the check box that corresponds to the *Parse_Failure_Flow.iwp* file.
- Click *Finish*.

The process flow (*Parse_Failure_Flow.iwp*) you imported is now listed under the *Flows* subfolder of your Integration Project, as shown in the following image.



- Deploy (do not publish) the process flow to the iWay Service Manager (iSM) runtime configuration where your channel will be deployed.

Functionality Overview

The channel archive (*HTTP_TEST.zip*) that you imported to the iSM Administration Console, includes a pre-configured channel named *HTTP_TEST*, which handles invalid HTTP requests by sending a 550 error message. This channel consists of an Inlet, Route, and an Outlet. The Inlet is an iWay non-blocking HTTP (nHTTP) 1.1 listener. The configuration settings for this nHTTP listener include the *HTTP Response Code* parameter that is set to the following value:

``_SREG(httpresp)`

For example:

<p>HTTP Response Code</p>	<p>HTTP status code to send with response. This parameter will be evaluated and you can prefix runtime functions with a backtick to defer evaluation until emit time. Leave blank for default HTTP 200 status. The HTTP status code of any NHTTP emits earlier in the process will be stored in the <i>httpstatus</i> special register in the response name space configured for the emitter.</p> <p><code>`_SREG(httpresp)</code></p>
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The *HTTP Response Code* parameter sets the Special Register (SREG) that will contain the 550 HTTP error code. As a result of specifying the grave accent (`) character, the *httpresp* SREG will be evaluated at the end of the worker running the process flow.

The pre-configured process flow (Parse_Failure_Flow) is called if the XML parsing fails for the incoming message.

The configuration settings for the nHTTP listener also includes the *Parse Failure Flow* parameter that is set to the following value:

Parse_Failure_Flow

For example:

Events	
Failed ReplyTo Flow	Name of published process flow to run if a message cannot be emitted on an address in its reply address list. <input type="text"/>
Dead Letter Flow	Name of published process flow to run if an error cannot be emitted on an address in its error address list. <input type="text"/>
Channel Failure Flow	Name of published process flow to run if this channel cannot start or fails during message use. The server will attempt to call this process flow during channel close down due to the error. <input type="text"/>
Parse Failure Flow	Name of published process flow to run if XML parsing fails for incoming message <input type="text" value="Parse_Failure_Flow"/>
Channel Startup Flow	Name of published process flow to run prior to starting the channel. <input type="text"/>
Channel Shutdown Flow	Name of published process flow to run when the channel is shut down <input type="text"/>

This process flow handles the execution of the *httpresp* SREG. When the XML parsing fails for an incoming message, the deployed process flow (Parse_Failure_Flow) will be called, which sets the *httpresp* SREG to error code 550 and returns this value by the listener.

