

Applies to:

File to JDBC Asynchronous scenario

Summary

File to JDBC Asynchronous scenario in detail explanation of all part with screen shot. Release SAP Netweaver 7.0.

Author: Kalenthirababu Paulsamy

Company: Eminentlabs Software Pvt Ltd

Created on: 28 October 2007

Author Bio

Kalenthirababu Paulsamy is currently working with EminentLabs as a SAP XI Consultant. I involved in the most complicated integration scenarios and has got experienced in areas of SAP XI, MDM and got MCAD certification from Microsoft Corporation.

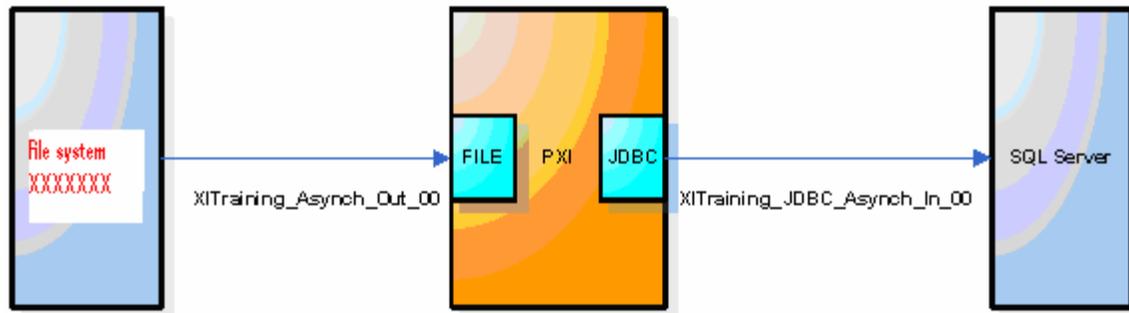
Table of Contents

Create a Table of Contents in Microsoft Word. To change, right-click on the TOC and select Update Field.

Data Type.....	3
Message Type.....	4
Message Interface.....	4
Message Mapping.....	4
Interface Mapping.....	6
Receiver Determination.....	8

File to JDBC

This scenario deals with reading an XML file from shared location using file adapter and inserting the records to SQL Server database.



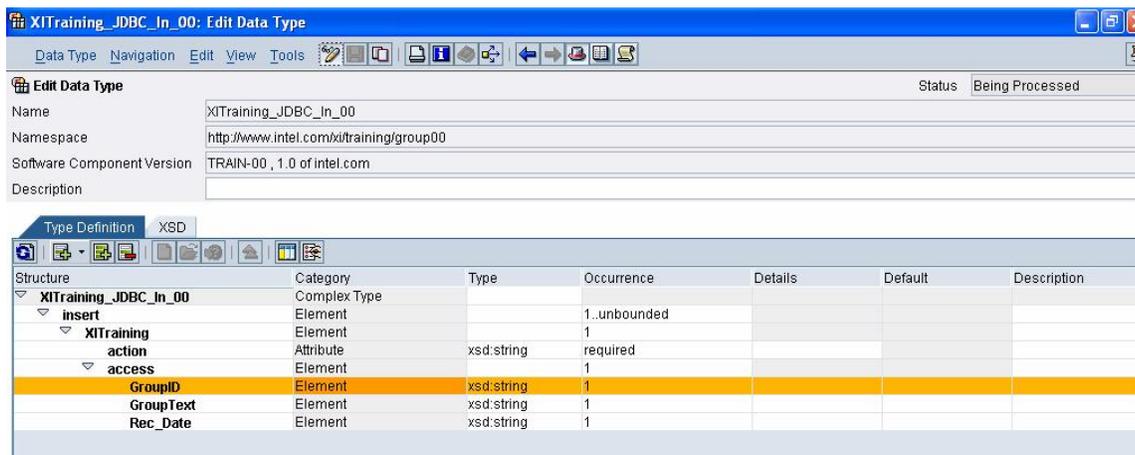
Integration Repository Configurations

Note: This scenario assumes that basic settings such as Software Component and Namespaces are already created.

Data Type

1. Expand the Integration Objects and go to the Data Types.
 - a. Create Data type name as XITraining_Out_XX (Group ID)
 - i. GroupID
 1. Occurrence: 0..1
 2. Type: String
 - ii. Text
 1. Occurrence: 0..1
 2. Type: String
2. Create the data type for inbound interface.
 - a. XITraining_JDBC_In_00
 - i. Insert
 1. XITraining (*this is table name which we are going to reference*).
 - a. Action (*This is attribute category node which is attached to XITraining node.*)
 - i. Type: String
 - ii. Category: Attribute
 - iii. Occurrence: Required
 - b. Access
 - i. GroupID:
 1. Type: String
 2. Occurrence: 1
 - ii. Rec_Date
 1. Type: String
 2. Occurrence: 1
3. Save the newly created Data type.

Note: Please create your structure strictly according to following structure otherwise JDBC adapter will throw unexpected errors during run time. JDBC only supports communication in certain format according to the scenario. We are preparing scenario for Asynchronous communication and we are going to insert the records to the SQL Table. After creating the structure it should look like following screen.



Message Type

Go to Message Type Option and right make sure that you already have a message type with name XITraining_Out_XX.

1. Create one or more message type **XITraining_JDBC_In_XX** using Data type **XITraining_JDBC_In_XX** using the F4 help.
2. Save newly created message type.

Message Interface

1. Go to the Message Interface option make sure that you already have a message interface with name XITraining_Asynch_Out_XX
2. Create one more Message Interface XITraining_JDBC_Asynch_In_XX.
3. Select mode as Asynchronous and direction as Inbound for second interface.
4. Save the interface definition.

Message Mapping

1. Go to Mapping Objects and go to Message Mapping section. Right click and create a new mapping
2. Use name as XITraining_Out_XX_To_XITraining_JDBC_In_XX.
3. Select XITraining_Out_XX as source message type.
4. Select XITraining_JDBC_In_XX as target message type.
5. Map GroupID to GroupID and Text to Text.
6. From standard function selection option, select "Date" which will display all the date related standard functions. Double click the "Date" from target message and use "current Date" function for mapping to Date field from target message (If you are not able to locate this function, please ask instructor and they will help you out)

The screenshot shows the 'Edit Message Mapping' dialog with the following details:

- Name: XITraining_Out_00_To_XITraining_JDBC_In_00
- Namespace: http://www.intel.com/xi/training/group00
- Software Component Version: TRAIN-00 , 1.0 of intel.com
- Description:

The 'Messages' tab is active, showing two message types:

- Message Type: XITraining_Out_00**

Tree	Occurrences	Type	Details	Description
XITraining_Out_00	1..1	XITraining_Out_...		
GroupID	0..1	xsd:string		
Text	0..1	xsd:string		
- Message Type: XITraining_JDBC_In_00**

Tree	Occurrences	Type	Details	Description
XITraining_JDBC_In_00	1..1	XITraining_JDB...		
insert	1..unbounded			
XITraining	1..1			
action	required	xsd:string		
access	1..1			
GroupID	1..1	xsd:string		
GroupText	1..1	xsd:string		
Rec_Date	1..1	xsd:string		

The mapping diagram shows a 'CurrentDate' block connected to a 'Rec_Date' block.

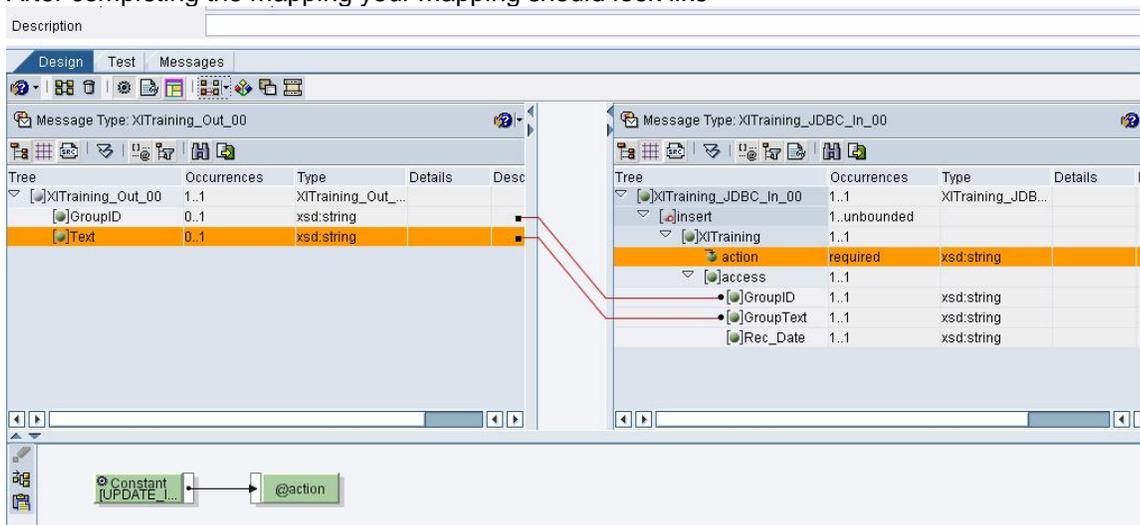
- 7.
8. Follow same procedure above to go to default values option. This will display multiple options for defining defaults during mapping. Click first option which will display a CONSTANT block in the mapping editor. Double click it to change the default value to "INSERT" and map it to the OPTION field from target structure.

The screenshot shows the 'Edit Message Mapping' dialog with the same details as above.

The mapping diagram shows a 'Constant [UPDATE_...]' block connected to an '@action' block.

- 9.
10. Save The Message mapping.

After completing the mapping your mapping should look like



Interface Mapping

1. Go to Mapping Objects and create a new Interface Mapping.
2. Use XITraining_Asynch_Out_XX_To_XItraining_JDBC_Asynch_In_XX as Interface mapping name.
3. Select Source interface as XITraining_Asynch_Out_XX and Target interface as XITraining_JDBC_Asynch_In_XX
4. Click "Read Interfaces"
5. Select your message mapping (XITraining_Out_XX_To_XITraining_JDBC_In_XX)
6. Save the Interface Mapping.

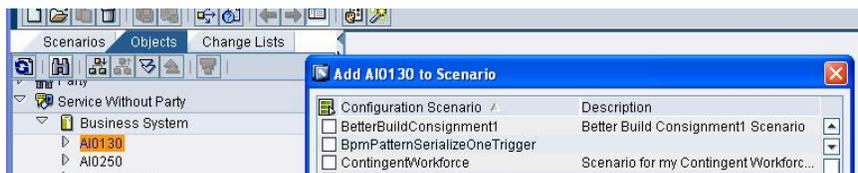
Note: Please activate all the changes. Try to activate all the created or changed objects in one go. If you are having trouble in activating the objects try activating it one by one. While activating individual objects make sure that you are following the sequence Fault Message Types, Software Component (if changed) Data Type, Message Type, Message Interface, Message mapping and Interface Mapping. If not activated, these objects will not be visible in directory while doing the configuration.

Integration Directory changes

Login to Integration Directory.

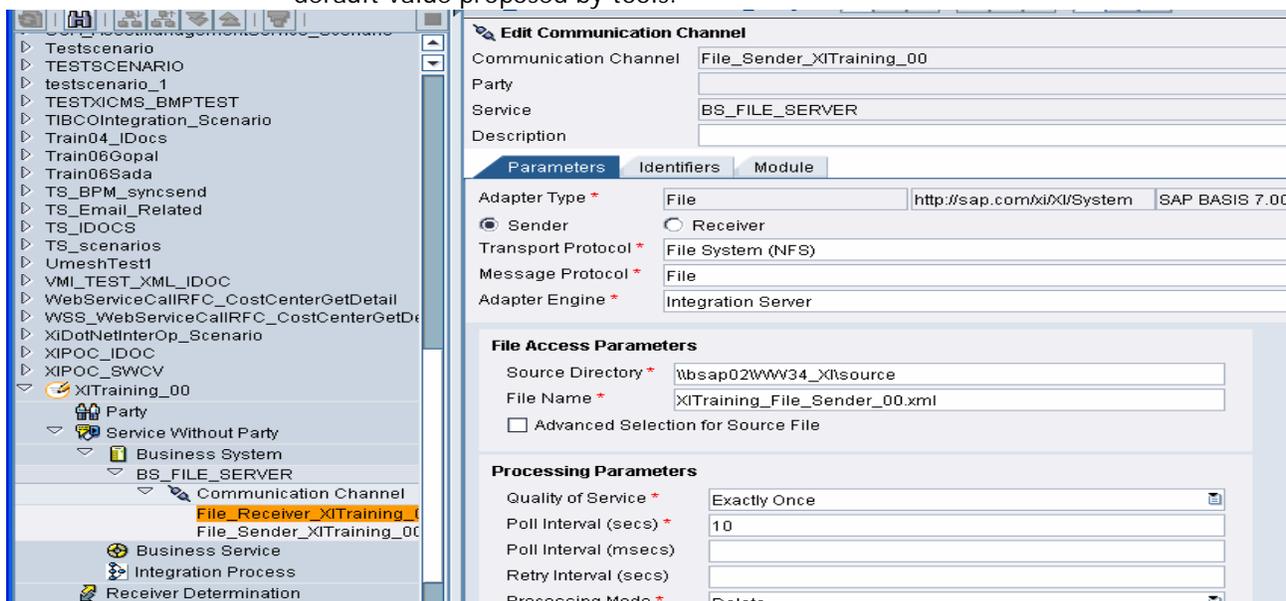
Check if we have Business System XXXXXX available in the system (Ask instructors if you don't have the business system available).

1. Make sure that you have your business scenario in the tool. Locate XITraining_XX scenario and check all your objects created in scenario exist there.
2. Go to the "Service without Party" and locate BS_FILE_SERVER business system. Right click on this and assign this business system to your scenario.



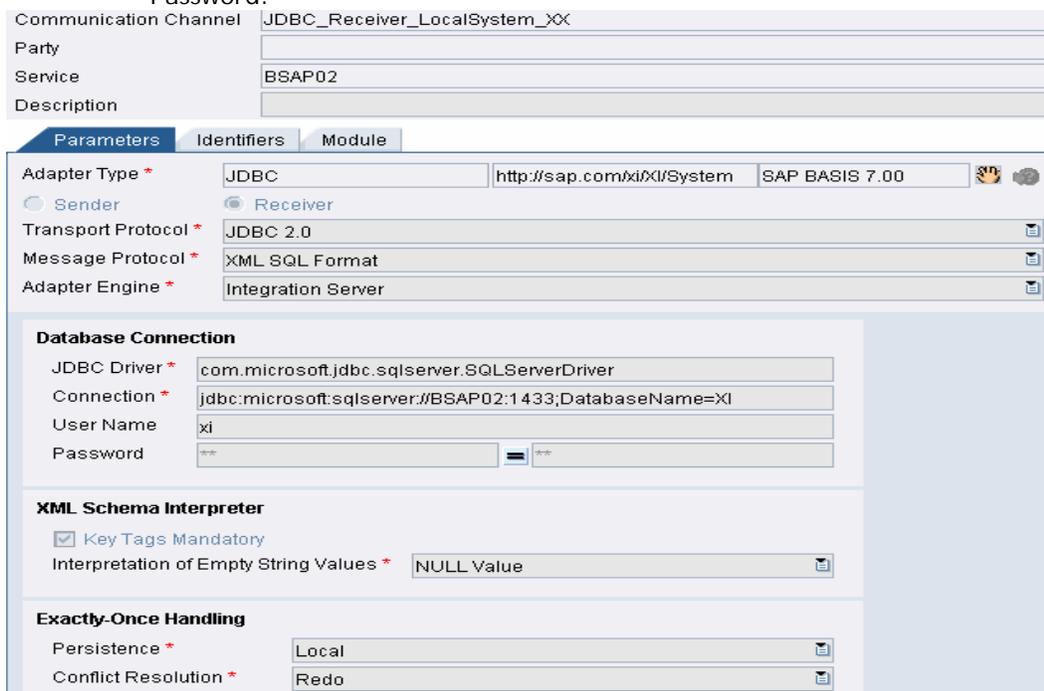
3. Go to your scenario and go the "Service without Party" make sure that communication channel File_Sender_XITraining_XX exists under the BS_FILE_SERVER with following options.
 - a. Communication Channel 1: File_Sender_XITraining_XX
 - i. Adapter Type: File
 - ii. Direction: Sender
 - iii. File Type: Binary
 - iv. QoS: Exactly Once
 - v. Processing Mode: Delete. (Please don't select TEST mode)

- vi. Polling Interval: 10 Secs
- vii. File Path: file path
- viii. File Name: XITraining_File_Sender_XX.xml all other settings should be left as default value proposed by tools.



4. Go to the Business XXXXXX and create a new communication channel with following properties:
 - a. Name: JDBC_Receiver_LocalSystem_XX
 - b. Give all details here.
 - c. Make sure that you are giving correct values in JDBC driver related information. We recommend that you copy paste these values from this document instead of typing manually to avoid the typing errors.

Protocol: JDBC 2.0
 JDBC Driver: com.microsoft.jdbc.sqlserver.SQLServerDriver
 Connection: jdbc:Microsoft:sqlserver://XXXXXX:1433;DatabaseName=XI
 User Name:
 Password:



Receiver Determination

- Go to the Receiver Determination and make sure that you already have a receiver system existing from scenario 1. You will see 2 options on this screen one for selecting the receivers which should be in the middle of the screen and second one configuring the receivers which should be at the bottom of screen. Add another line in the receiver selection screen. Select XXXXXX as second receiver. Save the changes. After saving you will see newly added service in "configure Receiver" option. Drop this new service in this option to see the values below it. Ideally nothing should be defined under XXXXXX service but if you get some option below, consult your instructor for more clarification.

Service: BS_FILE_SERVER
 Interface: XITraining_Asynch_Out_00
 Namespace: http://www.intel.com/xi/training/group00

Receiver
 Party: *
 Service: *
 Description:

Type of Receiver Determination
 Standard Extended

Configured Receivers

Condition	Party	Service
		BS_FILE_SERVER
		XXXXXX

If No Receiver Is Found, Proceed as Follows:
 Terminate Message Processing with Error (Restart Possible)
 End Message Processing Without Error (Restart not Possible)
 Continue Message Processing with the Following Receiver: Party: _____ Service: _____

Configuration Overview for Receiver Determination

Receiver (Partner Service)	Interface Mapping	Receiver Agreement (Communication Channel)
XXXXXX	Not Defined	Does Not Exist
BS_FILE_SERVER		Does Not Exist

- Right click under interface determination option and select the "Create New Specific" option. This should bring a new screen where you can select the inbound interface.
- Click on F4 help for selecting the inbound interface. This list will display all the interfaces related XXXXXX business system. Try to locate your interface XITraining_JDBC_Asynch_In_XX. If you are not able to locate your interface then click "ALL" radio button option from the top menu which will display the entire inbound interface created in the integration repository. Now you should be able to locate your interface.
- Click to select the corresponding interface mapping. Ideally this should just display one interface determination.

Party: _____
 Service: BS_FILE_SERVER
 Interface: XITraining_Asynch_Out_00
 Namespace: http://www.intel.com/xi/training/group00

Receiver
 Party: _____
 Service: XXXXXX
 Description:

Type of Interface Determination
 Standard Enhanced

Quality of Service
 Maintain Order At Runtime

Configured Inbound Interfaces

Inbound Interface	Interface Mapping
Name	Name
Namespace	Namespace
Software Component Version	
ining_JDBC_Asynch_In_00	XITraining_Asynch_Out_00_To_...
http://www.intel.com/xi/training/group00	http://www.intel.com/xi/training/g...
	TRAIN-00, 1.0 of intel.cor

- Go back to the original screen and refresh it.

6. Create the receiver agreement by selecting "JDBC_Receiver_LocalSystem_XX" as the communication channel.
7. Check that we already have a sender agreement with name "File_Sender_XITraining_XX" as the sender communication channel.

We are ready for testing. Drop the file by changing the name of the template file given by instructor according to your group name. After some time file will be deleted from the source directory and new file will be created in target directory.

Related Content

www.Help.sap.com

http://help.sap.com/saphelp_nw2004s/helpdata/en/64/ce4e886334ec4ea7c2712e11cc567c/content.htm

http://help.sap.com/saphelp_nw2004s/helpdata/en/0b/9a50465ccf84479e39a6d50c90fb3f/content.htm

Copyright

© 2008 SAP AG. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP AG. The information contained herein may be changed without prior notice.

Some software products marketed by SAP AG and its distributors contain proprietary software components of other software vendors.

Microsoft, Windows, Outlook, and PowerPoint are registered trademarks of Microsoft Corporation.

IBM, DB2, DB2 Universal Database, OS/2, Parallel Sysplex, MVS/ESA, AIX, S/390, AS/400, OS/390, OS/400, iSeries, pSeries, xSeries, zSeries, System i, System i5, System p, System p5, System x, System z, System z9, z/OS, AFP, Intelligent Miner, WebSphere, Netfinity, Tivoli, Informix, i5/OS, POWER, POWER5, POWER5+, OpenPower and PowerPC are trademarks or registered trademarks of IBM Corporation.

Adobe, the Adobe logo, Acrobat, PostScript, and Reader are either trademarks or registered trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Oracle is a registered trademark of Oracle Corporation.

UNIX, X/Open, OSF/1, and Motif are registered trademarks of the Open Group.

Citrix, ICA, Program Neighborhood, MetaFrame, WinFrame, VideoFrame, and MultiWin are trademarks or registered trademarks of Citrix Systems, Inc.

HTML, XML, XHTML and W3C are trademarks or registered trademarks of W3C®, World Wide Web Consortium, Massachusetts Institute of Technology.

Java is a registered trademark of Sun Microsystems, Inc.

JavaScript is a registered trademark of Sun Microsystems, Inc., used under license for technology invented and implemented by Netscape.

MaxDB is a trademark of MySQL AB, Sweden.

SAP, R/3, mySAP, mySAP.com, xApps, xApp, SAP NetWeaver, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world. All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.

These materials are subject to change without notice. These materials are provided by SAP AG and its affiliated companies ("SAP Group") for informational purposes only, without representation or warranty of any kind, and SAP Group shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP Group products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

These materials are provided "as is" without a warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement.

SAP shall not be liable for damages of any kind including without limitation direct, special, indirect, or consequential damages that may result from the use of these materials.

SAP does not warrant the accuracy or completeness of the information, text, graphics, links or other items contained within these materials. SAP has no control over the information that you may access through the use of hot links contained in these materials and does not endorse your use of third party web pages nor provide any warranty whatsoever relating to third party web pages.

Any software coding and/or code lines/strings ("Code") included in this documentation are only examples and are not intended to be used in a productive system environment. The Code is only intended better explain and visualize the syntax and phrasing rules of certain coding. SAP does not warrant the correctness and completeness of the Code given herein, and SAP shall not be liable for errors or damages caused by the usage of the Code, except if such damages were caused by SAP intentionally or grossly negligent.