#### IBM WEBSPHERE PARTNER GATEWAY V6.0- LAB EXERCISE

# **ROD to EDI Configuration**

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**NOTE:** Education materials and other documentation as applicable including programming manuals, operating guides, physical planning manuals and installation manuals related to the IBM Products may be early versions subject to change.

### What this exercise is about

This document describes how to configure WebSphere Partner Gateway to accept a ROD document, translate it to EDI transaction which is enveloped and sent to destination Trading Partner gateway.

## **Lab Requirements**

List of system and software required for the student to complete the lab.

- WebSphere MQ 5.3 with CSD 08 installed
- DB2 8.2 Enterprise server installed
- Data Interchange Services Client 6.0 installed
- WebSphere Partner Gateway V 6.0 (WPG) software installed (This includes the DB loader and the runtime servers)

## What you should be able to do

At the end of this lab you should be able to:

Configure WebSphere Partner Gateway to accept a ROD document, translate it to EDI transaction which is enveloped and sent to the target Participant.

### **Exercise Instructions**

Some instructions in this lab may be Windows operating-system specific. If you plan on running the lab on an operating-system other than Windows, you will need to execute the appropriate commands, and use appropriate files ( .sh vs. .bat) for your operating system. The directory locations are specified in the lab instructions using symbolic references, for example:

Reference Variable	Windows Location	UNIX Location	
<wpg_home></wpg_home>	C:\IBM\WPG\bcghub	/opt/IBM/WPG/bcghub	
<lab_files></lab_files>	C:\LabfilesWPG	/tmp/LabfilesWPG	
<temp></temp>	C:\temp	/tmp	

WPG users can be categorized into 3 administrative roles.

**Community Operator:** The Community Operator is responsible for managing the day-to-day operation of the hub community. Pre-defined user— cannot be deleted. Acts as "sysadmin" for WPG. Defines and maintains the WPG's capabilities. Typically does NOT send or receive documents



Community Participant: External business partners to WPG. Can be as many defined as desired



**Community Manager:** The Community Manager is the primary driving force within the hub community. Also a participant, but is the principle one. Can only have one Community Manager in WPG. Operational manager for the community



## Lab Files

You would need a copy of the following files in your <LAB\_FILES>

MAP File: S\_DT\_ADF\_TO\_EDI.eif

Input File: adf2edi.inp

### **Part 1: Introduction**

## **Objective:**

The source trading partner sends an ROD/XML document which needs to be converted to EDI and sent to the target trading partner.

#### Figure-1

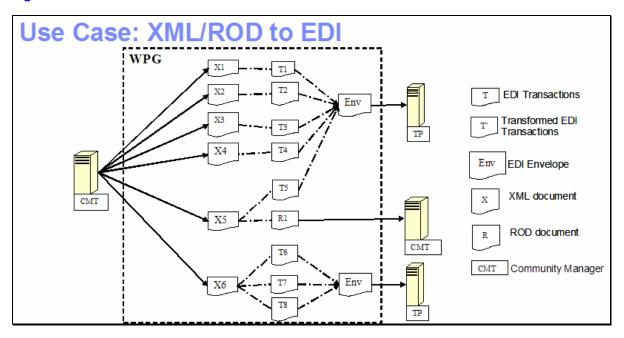
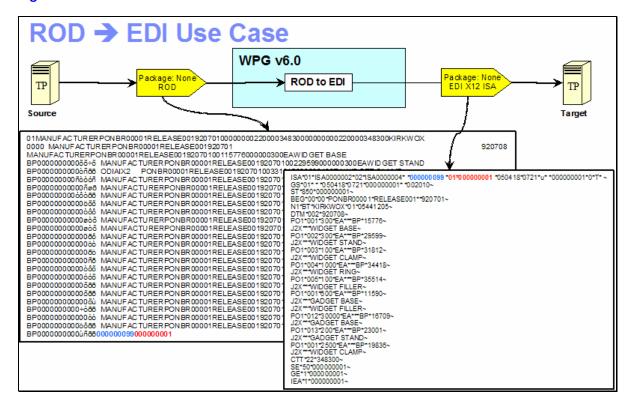


Figure-1 shows the high level representation of the actions that take place in an ROD/XML to EDI flow between 2 trading partners

#### Figure-2



**Figure-2** shows the final outcome of the ROD to EDI lab. An incoming ROD with None packaging from the source trading partner passes through the hub where the ROD is translated to EDI document and the EDI document is sent to the target trading partner..

The 1st step in the hub after receiving the ROD document is to translate the ROD to EDI transactions. The EDI transactions are enveloped and are routed back into the document manager to be processed, based on the connection configuration for that transaction.

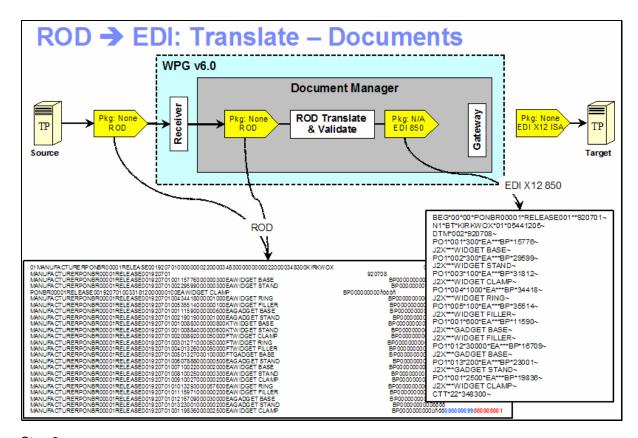
Detailed steps of a simple flow of the incoming ROD/XML document mapped to an outgoing EDI document are as follows.

#### Step 1:

The target receiver receives the ROD document from TP1. The target needs to be to configured for ROD splitter. This target can then be used for an EDI file containing multiple EDI envelopers. The ROD splitter will parse the document and create the meta data that will be used by the document manager to extract the routing trading partner information.

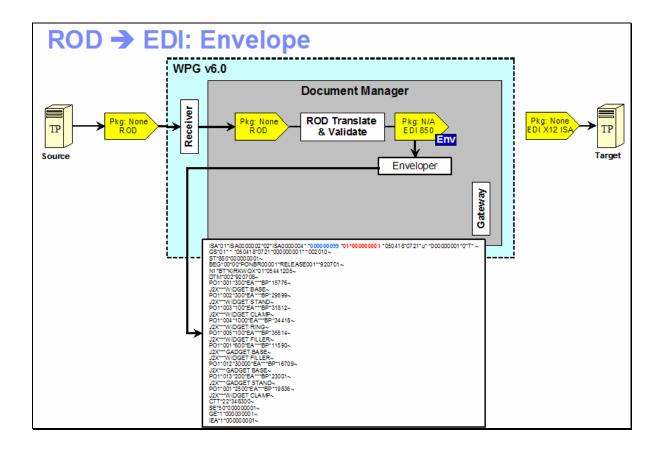
#### Step 2:

The ROD document gets translated into EDI transactions through the "ROD translate and Validate" action. The output transaction needs to be enveloped. Here, an envelope profile is used to define the envelope properties. A pre-requisite step is that the map has already been imported using the IBM Data Interchange Services(DIS) client tool or the DIS import function.



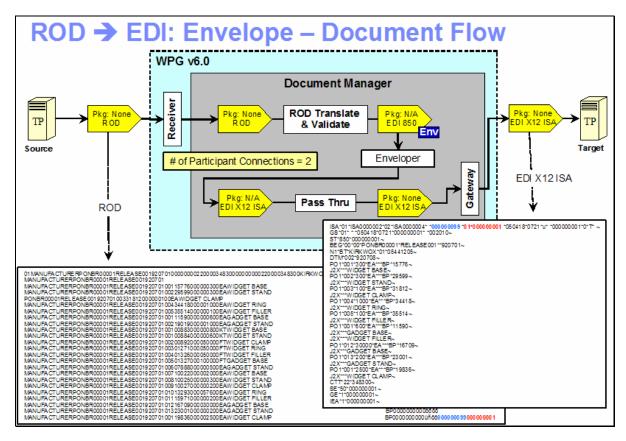
#### Step 3:

The EDI transaction that was generated in the translation phase goes through the enveloping phase. Based on the scheduling of the enveloper and other rules, the ready EDI transactions will be enveloped into an EDI X12 ISA envelope.



#### Step 4:

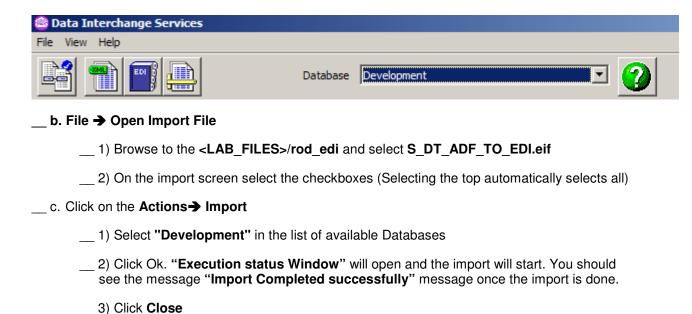
The enveloped EDI X12 ISA then flows back through the document manager, for any final packaging that has been configured by the connection. The EDI is then sent to the receiver Trading partner through the Gateway for target trading partner.



Two participant connections need to be configured, as shown in the diagram. One for the translation and enveloping and another for the EDI document to be sent to the target gateway.

## Part 2: Exporting the Map to WPG Database from DIS Client

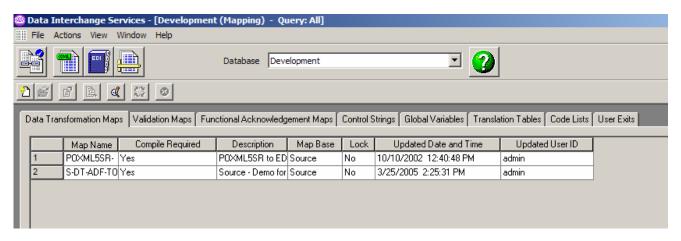
- 1. Launch the DIS Client Application. If you haven't already configured the ODBC data source for the bcgapps DB2 database and created a new database in the DIS Client, refer the lab "Creating DB2 ODBC Data Source Creation and Installation and Configuration of IBM DIS Client V6.0". If you have already finished the configuring ODBC data source and created a new database in DIS Client, follow the instructions below
- 2. Importing the Map into your development database
  - \_\_ a. Select the "Development" database from the Database dropdown menu



\_\_\_\_ 3. Click on the icon "Mapping".

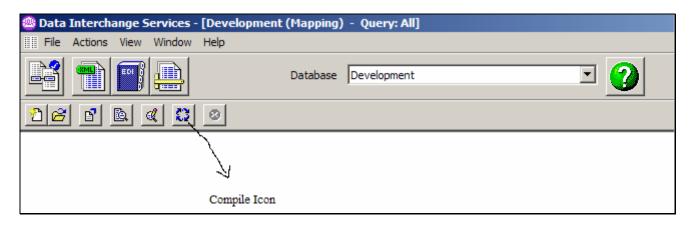


\_\_ a. A new window is opened



- \_\_ b. Click on the Data Transformation Maps tab.
- \_\_ c. The Map name S\_DT\_ADF\_TO\_EDI Should be listed with the Compile required option as "Yes".
- \_\_ d. Select this map and click on the Compile Icon. Alternatively go to the top menu. Click Actions → Compile
  - "Execution status Window" will open and the import will start. You should see the message "Compile Completed Successfully" message once the import is done.

Click Close.



- 4. Importing the compiled map into the WPGDatabase
  - \_\_ a. Go to the "Control Strings" tab
  - \_\_ b. Select the row for the map name "S\_DT\_ADF\_TO\_EDI". If you do not see the map, refresh the panel (From the DIS Client menu bar, select View and then select Refresh)
  - c. Select Top menu. Click Actions → Export to Other Database
    - 1) Select the **WPGDatabase** from the list and Click **Ok**
    - \_\_\_ 2) If you are prompted for the username and password, provide the DB2 username and password information

For this Lab, the information is as follows:

Passwd: lab1user	
3) On the "Export with control string" screen	
a) Click <b>Select All</b> and then <b>Ok</b> .	
b) "Execution status Window" will open and the compilation will start. Yo should see the message "Export Completed Successfully" message one compiling is done.	
c) Click <b>Close</b>	

You have successfully exported the Map into the WPGDatabase

# Part 3: Starting MQ Components and WPG Servers

Note: Make sure that the database server is started

<u>Star</u>	Starting the required MQ services:						
Open	Open a command window and issue the following commands.						
1.	Start MQ queue manager						
	strmqm bcg.queue.manager						
2.	Start MQ Broker						
	strmqbrk -m bcg.queue.manager						
3.	Start services on the Queue manager						
	strmqcsv bcg.queue.manager						
4.	Run MQ listener (9999 is the default port used by the installer)						
	runmqlsr -t tcp -p 9999 -m bcg.queue.manager						
<u>Star</u>	ting WPG Servers						
Open	a command window and change directories to <wpg_home>/bin</wpg_home>						
1.	1. Starting Console						
	bcgstartserver bcgconsole						
2.	Starting Receiver						
	bcgstartserver bcgreceiver						
3.	Starting Doc. Manager						
	bcgstartserver bcgdocmgr						

## Part 4: Logging into the Community Console

\_\_\_\_ 1. If you have already logged into the Community console previously and followed the instructions in wpgv6\_basic\_configuration lab, use the following authentication information

User Name: hubadmin

Password: hub1admin

Company Name: Operator

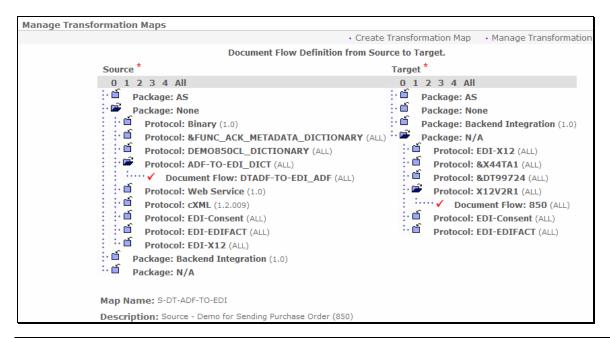
## Part 5: Checking the import of maps

Community Operator has the privilege for checking the Map import



#### 1. Checking Map import

- \_ a. Hub Admin → Hub Configuration → Maps → Transformation Maps. The map S\_DT\_ADF\_TO\_EDI should be listed
- \_\_ b. Click on the view icon Punder Actions. The Document Flow Definition from Source to Target is listed as



#### Note:

The values ADF-TO-EDI\_DICT for the protocol and DTAF-TO-EDI\_ADF for the document flow on source side correspond to the Dictionary Name and Document Definition Name defined in the Source Document Definition of the map S\_DT\_ADF\_TO\_EDI you imported.

The values X12V2R1 for the protocol and 850 for the document flow on target side correspond to the **Dictionary Name** and **Document Definition Name** defined in the **Target Document Definition** of the map **S\_DT\_ADF\_TO\_EDI** you imported.

You have successfully verified that the map S DT ADF TO EDI has been imported.

# Part 6: Creating Targets

Note: You have already created the "rodfiletarget" before in the "WPG Basic Configuration" Lab. If not please complete the "WPG Basic Configuration" Lab before you proceed.

## **Part 7: Creating Participants**

Note: You have already created the Manager and TP1 participants before in the "WPG Basic Configuration" Lab. If not please complete the "WPG Basic Configuration" Lab before you proceed.

## Part 8: Creating Gateways for the Participants

Note: You have already created the file gateways for the Manager and TP1 profile before in the "WPG Basic Configuration" Lab. If not please complete the "WPG Basic Configuration" Lab before you proceed.

### **Part 9: Create Interactions**

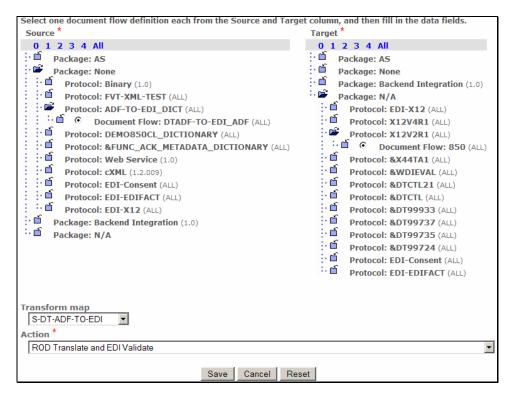
New Interactions can be created only by Community Operators.



For the ROD to EDI Scenario, We need to create 2 interactions. One interaction corresponding to the transformation of ROD to EDI message (850 in this lab) and envelope it and the second one corresponds to sending the enveloped EDI message to the Target Partner

,	
Create t	he Transformation Interaction
_ a. Go to	Hub Admin → Hub Configuration → Document Flow Definition
	1) Click Manage Interactions located at right corner of the screen
	2) Select "Create Interaction"
	3) Create the following source to target interaction
	Package: None Protocol: ADF-TO-EDI_DICT (ALL) Document Flow: DTAF-TO-EDI_ADF (ALL)
	то
	Package: N/A Protocol: X12V2R1 (ALL) Document Flow: 850 (ALL)
	a) Click on the icon next to <b>Package: None</b> under the Source. This should list all the protocols available under <b>Package: None</b> .
	b) Click on the icon next to <b>Protocol: ADF-TO-EDI_DICT (ALL)</b> under the Source. This should list all the Document Flows available under <b>Protocol: ADF-TO-EDI_DICT (ALL)</b> .
	c) Click on the radio button next to <b>Document Flow</b> : <b>DTAF-TO-EDI_ADF (ALL)</b> under the Source.
	d) Click on the icon next to <b>Package: N/A</b> under the Target. This should list all the protocols available under <b>Package: N/A</b> .
	e) Click on the icon next to <b>Protocol: X12V2R1 (ALL)</b> under the Target. This should list all the Document Flows available under <b>Protocol: X12V2R1 (ALL)</b> .
	f) Click on the radio button next to <b>Document Flow</b> : <b>850 (ALL)</b> under the Target.
	g) Select the " <b>S-DT-ADF-TO-EDI</b> " from the <b>Transformation Map</b> drop down menu
	h) Select "ROD Translate and EDI Validate " from the Action drop down menu.

i) Click Save.



#### 2. Create the Interaction to send the Enveloped EDI message to the Target Partner

a Go to Hub	Admin →	Hub Co	nfiguration	Documen	t Flow Definition
a. Go io Hub	Auiiiii 7	TIUD CU	niiluulalioii	<b>7</b> DUCUIIICII	LI IOW DEIIIIIIIII

- 1) Click **Manage Interactions located** at right corner of the screen
- 2) Select "Create Interaction"
- \_\_\_ 3) Create the following source to target interaction.

Package: N/A

Protocol: **EDI-X12 (ALL)**Document Flow: **ISA (ALL)** 

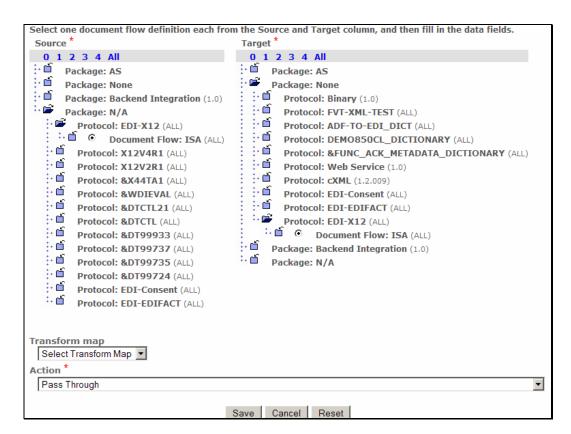
To

Package: None

Protocol: EDI-X12 (ALL)
Document Flow: ISA (ALL)

- \_ a) Click on the icon next to **Package: N/A** under the **Source**. This should list all the protocols available under **Package: N/A**.
- \_\_ b) Click on the icon next to **Protocol: EDI-X12 (ALL)** under the **Source**. This should list all the Document Flows available under **Protocol: EDI-X12 (ALL)**.
- \_\_ c) Click on the radio button next to **Document Flow: ISA (ALL)** under the **Source**.

\_\_\_\_\_d) Click on the \_\_\_\_\_i icon next to Package: None under the Target . This should list all the protocols available under Package: None.
\_\_\_\_\_e) Click on the \_\_\_\_\_i icon next to Protocol: EDI-X12 (ALL) under the Target. This should list all the Document Flows available under Protocol: EDI-X12 (ALL).
\_\_\_\_\_f) Click on the radio button next to Document Flow: ISA (ALL) under the Target.
\_\_\_\_\_g) Select "Pass Through" from the Action drop down menu.
\_\_\_\_\_ h) Click Save.



You have successfully created the interactions required for the rod-edi scenario

## Part 10: Enabling B2B Capabilities

B2B capabilities can be enabled by Community Operators, Community Manager and Community Participants







**Community Operator:** Can enable B2B Capabilities for all the participants including the

Community Manager Profile

**Community Manager:** Can enable B2B Capabilities for its own profile

Community Participant: Can enable B2B Capabilities for its own profile

B2B Capabilities specify what particular Package, Protocol, and Document Flows the Participant Supports. Enabled B2B capabilities for a participant define the types of documents the participant will be allowed to send and/or receive. The B2B capabilities for a partner are a subset of the Package, Protocol, and Document Flows that Hub supports.

Note: Some of the B2B Capabilities for the participants may have already been enabled from previous scenarios.

1.	Enable B2B	<b>Capabilities</b>	for the Source	<b>Trading</b>	<b>Partner</b>
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- \_\_ a. Go to **Account Admin → Profiles → Community Participant** and click on Search button. This should list all the Participants created
  - \_\_ 1) Select the Source Trading Partner, **Manager** by clicking on the Picon. This will activate the **Manager** profile
- \_\_ b. Click on **B2B Capabilities** menu item.

Since we are enabling the B2B capabilities of the source trading partner, we only need to enable the Package, Protocol and Document for source side.

Enable the following **Package**, **Protocol**, **and Document Flow** by following the instructions below

Package: None (N/A)

Protocol: ADF-TO-EDI\_DICT (ALL)

Document Flow: DTADF-TO-EDI ADF (ALL)

#### Perform the following steps under the "Set Source" column of the B2B Capabilities

- \_\_ 1) Click on the icon in the row corresponding to **Package**: **None.** is should be changed to
- \_ 2) Click on the icon next to **Package: None**. This should list all the protocols available under **Package: None**.
- \_\_ 3) Click on the icon in the row corresponding to **Protocol**: **ADF-TO-EDI\_DICT (ALL).** should be changed to

 4) Click on the $oxdot$ icon next to <b>Protocol</b> : <b>ADF-TO-EDI_D</b>	ICT (	(ALL).This	should lis	st all the
Document Flows available under Protocol: ADF-TO-EDI	_DIC	T (ALL)		

\_\_ 5) Click on the icon in the row corresponding to **Document Flow**: **DTADF-TO-EDI\_ADF (ALL)**. Is should be changed to

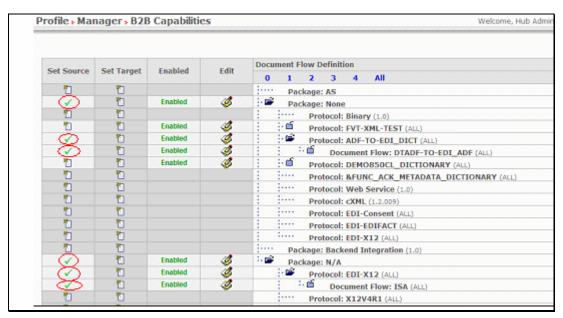
.

Enable the following **Package**, **Protocol**, **and Document Flow** by following the instructions below

Package: N/A (N/A)
Protocol: EDI-X12 (ALL)
Document Flow: ISA (ALL)

### Perform the following steps under the "Set Source" column of the B2B Capabilities

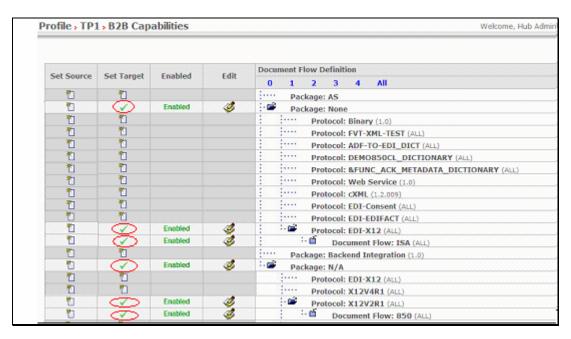
- \_\_\_ 1) Click on the icon in the row corresponding to Package: N/A. should be changed to
- \_\_ 2) Click on the icon next to **Package: N/A**. This should list all the protocols available under **Package: N/A**.
- \_\_ 3) Click on the icon in the row corresponding to **Protocol**: **EDI-X12 (ALL).** should be changed to
- \_\_ 4) Click on the icon next to **Protocol**: **EDI-X12 (ALL)**. This should list all the Document Flows available under **Protocol**: **EDI-X12 (ALL)**
- \_\_ 5) Click on the icon in the row corresponding to **Document Flow**: **ISA (ALL).** is should be changed to



#### 2. Enable B2B Capabilities for the Target Trading Partner

a. Go to <b>Account Admin</b> → <b>Profiles</b> → <b>Community Participant</b> and click on Search button.
b. This should list all the Participants created
c. Select the Target Trading Partner you created for this scenario by clicking on the Picon. In this document the Target Trading Partner is "TP1"
d. Click on B2B Capabilities menu item
Since we are enabling the B2B capabilities of the target trading partner, we only need to enable the Package, Protocol and Document Flow for target side.
Enable the following <b>Package</b> , <b>Protocol</b> , <b>and Document Flow</b> by following the instructions below
Package: N/A (N/A) Protocol: X12V2R1 (ALL) Document Flow: 850 (ALL)
Perform the following steps under the "Set Target" column of the B2B Capabilities
1) Click on the icon in the row corresponding to <b>Package</b> : <b>N/A</b> . should be changed to
2) Click on the icon next to <b>Package: N/A</b> . This should list all the protocols available under <b>Package: N/A</b> .
<ol> <li>Click on the icon in the row corresponding to Protocol: X12V2R1 (ALL). should be changed to ✓</li> </ol>
4) Click on the icon next to Protocol: X12V2R1 (ALL). This should list all the Document Flows available under Protocol: X12V2R1 (ALL)
5) Click on the Ticon in the row corresponding to Document Flow: 850 (ALL). Ticon should be changed to
Enable the following <b>Package</b> , <b>Protocol</b> , <b>and Document Flow</b> by following the instructions below
Package: None (N/A) Protocol: EDI-X12 (ALL) Document Flow: ISA (ALL)
1) Click on the icon in the row corresponding to <b>Package</b> : <b>None</b> . should be changed to
2) Click on the icon next to <b>Package: None</b> . This should list all the protocols available under <b>Package: None</b> .
3) Click on the <sup>1</sup> / <sub>2</sub> icon in the row corresponding to Protocol: EDI-X12 (ALL). <sup>1</sup> / <sub>2</sub> should be changed to ✓

- 4) Click on the icon next to Protocol: EDI-X12 (ALL)This should list all the Document Flows available under Protocol: EDI-X12 (ALL)
- 5) Click on the icon in the row corresponding to **Document Flow: ISA (ALL).** should be changed to



You have successfully enabled the B2B capabilities for the Manager and TP1 trading participants

## Part 11: Creating Envelope Profile

Note: You have already created the "EnvProfile 1" before in the "WPG Basic Configuration" Lab. If not please complete the "WPG Basic Configuration" Lab before you proceed.

## **Part 12: Creating Participant Connections**

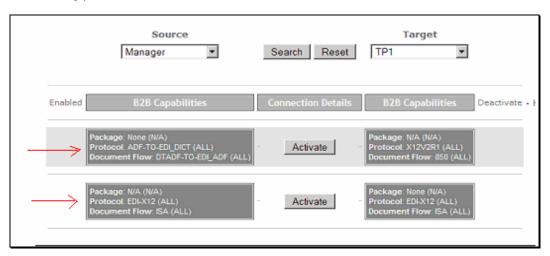
Participant Connections can be enabled by Community Operators and Community Manager





#### 1. Creating Participant connections

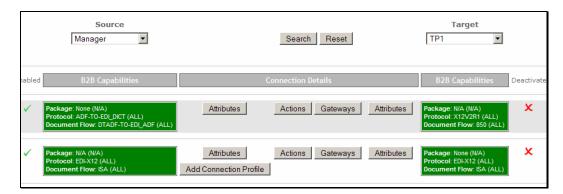
- \_\_ a. Go to Account Admin -> Participant Connections
  - \_\_\_ 1) Select **Manager** from the Source drop down menu.
  - \_\_ 2) Select **TP1** from the Target drop down menu.
  - 3) Click on Search.
  - \_\_ 4) Based on prior connections, there may be other connections that are not needed for this scenario.
  - \_\_\_ 5) De Activate the Connections those are green by clicking on the xicon. The connections should turn to grey when deactivated.
  - \_\_\_ 6) You should atleast have the two connections that are highlighted by red arrow in the following picture



The participant connection None(N/A):  $ADF-TO-EDI\_DICT(ALL)$ :  $DTAF-TO-EDI\_ADF(ALL)$  to N/A(N/A): X12V2R1(ALL): 850(ALL) is used for transforming the incoming ROD document to EDI message and envelope it

The participant connection N/A(N/A): EDI-X12(ALL): ISA(ALL) to None(N/A): EDI-X12(ALL): ISA(ALL) is used to send the enveloped 850 message to the Target Partner.

\_\_ 7) Click on Activate button corresponding to each connection to activate the connection. It should turn to green indicating it is activated

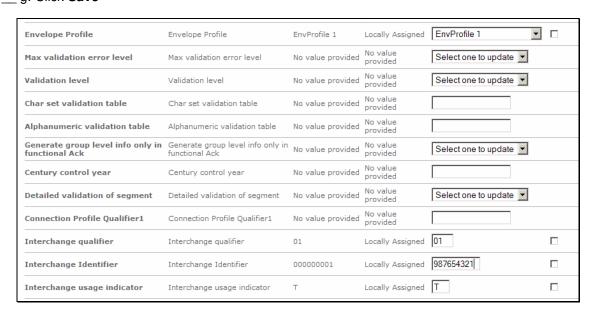


You have successfully completed creating and activating participant connections

## Part 13: Configuring the Attributes

In order for the 850 message which was generated to be enveloped, we need to configure some attributes in B2B Capabilities of the Participants

1.	Go to <b>Account Admin → Profiles → Community Participant</b> and click on Search button. This should list all the Participants created
_	_ a. Select the Target Trading Partner you created for this scenario by clicking on the 🎤 icon. In this document the Target Trading Partner is <b>TP1</b>
2.	Click on <b>B2B Capabilities</b> menu item
_	_a. Click on the icon 🗂 next to <b>Package: N/A.</b>
_	b. Click on icon onext to Protocol: <b>X12V2R1 (ALL)</b> . This should open a page where you can change the attributes
_	_ c. Locate the <b>Envelope Profile</b> attribute and select <b>EnvProfile 1</b> from the drop down menu
_	_ d. Locate Interchange Qualifier attribute and provide 01 as the value
_	_ e. Locate Interchanger identifier attribute and provide 987654321 as the value
_	$\_{\rm f.}$ Locate $Interchange$ usage indicator attribute and provide ${\bf T}$ as the value.
	_g. Click <b>Save</b>



You have successfully configured the attributes required for this scenario.

## Part 14: Running the Scenario

- \_\_\_\_\_1. Go to <LAB\_FILES> directory
- \_\_\_\_ 2. Open the adf2edi.inp file.
- \_\_\_ 3. The Source and Target participant id's can be located at the end of the input file.
- Look for the following string

BP000000000000nðð123456789**987654321** 

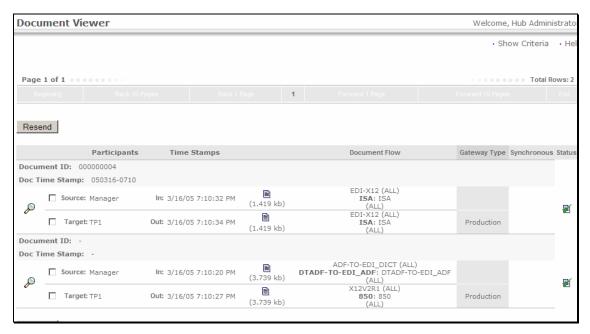
The first id is the source ID (underlined) and the second the target ID

- 5. Place the adf2edi.inp in the C:\WPGLabs\rodfiletarget\Documents\Production directory
- **6.** The ROD should be translated to EDI transaction.
- \_\_\_\_\_ 7. The transaction is enveloped

The status of the document in the system can be viewed by using the Document Viewer

#### Go to Viewers → Document Viewer

Provide the approximate start time when you actually started this transaction and click on Search.



8. The enveloped transaction is sent to the destination which is the TP1's gateway

The destination file gateway location is C:\WPGLabs\TP1\filegateway

## What you did in this exercise

In this exercise, you have created and target associated and ROD splitter handler, created two trading partners, created gateways, enabled B2B capabilities and created participant connections necessary for source trading partner to be able to send an ROD document, which is translated to EDI transaction making use of the map. The EDI transaction is then enveloped and sent to destination trading partner gateway.

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