



IBM Software Group

## **IBM® WebSphere® Partner Gateway V6.0 Advanced and Enterprise Editions**

### ***Document Flow Configuration Use Case:***

### ***Sending FA (997) Acknowledgement for Incoming EDI***



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This presentation goes into the details of the EDI acknowledgements send by the hub when an EDI document is received from a trading partner. This would apply use cases, like EDI to ROD, EDI to XML.

## Generating EDI X12 Acknowledgements

- Acknowledgements are sent by the hub and provide to the sender the status of the incoming EDI document processing
- There are 2 types of acknowledgements:
  1. ISA acknowledgement for the entire EDI X12 ISA document – referred to as TA1 acknowledgement
    - ▶ The sender sets the TA1 field in the EDI Interchange ISA segment of the document (Field # 14) to notify the hub to send a TA1 back to the sender
    - ▶ Indicates a high level acknowledgement
    - ▶ Hub administrator can configure the hub to ignore the flag – by default this is not done
  2. EDI X12 Transaction acknowledgement – referred to as FA or 997
    - ▶ Specified as FA Map attribute value on the Participant Connection, B2B capabilities or Interaction of the EDI transaction



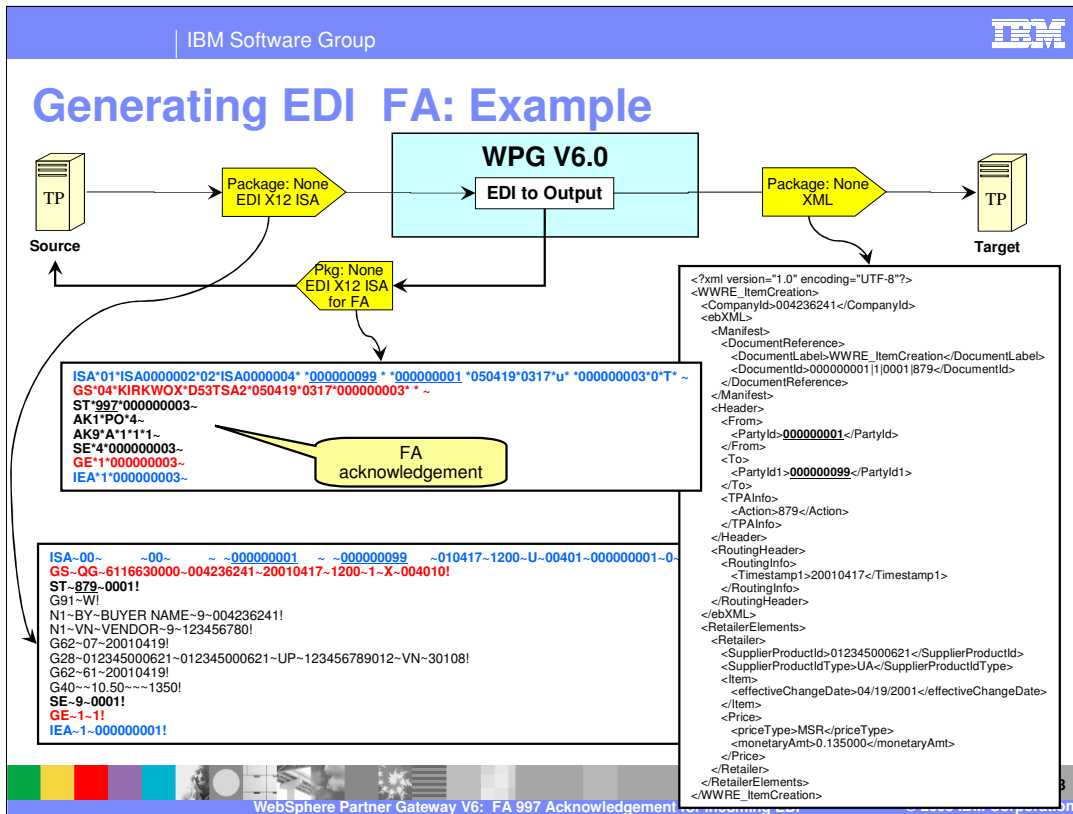
There are 2 types of acknowledgement in EDI X12 documents. A high level acknowledgement for the entire EDI Interchange called TA1 acknowledgement. The incoming EDI document specifies to the document manager that a TA1 acknowledgement is required by the sender trading partner. This is done by setting a flag in the ISA segment of the EDI document. An option is available in the hub to ignore the TA1 flag in the incoming EDI.

Another kind of acknowledgement is referred to as FA or 997 acknowledgement and is for the EDI transaction. This is specified by the administrator in the hub, based on the mutual understanding between the administrator and the sender trading partner. If FA acknowledgement is set, the hub will create one FA for each transaction, and then envelope these FA transactions into EDI interchange and send it to the sender of the original EDI document.

EDIFACT only has CONTRL acknowledgements and can cover various aspects of the entire Interchange, although their concept is the same as functional acknowledgement in EDI X12.

In UCS standard there is a 999 FA. WPG supports this by specifying FA map name "&DT\_FA999V3R3".

There is also a newer X12 999 FA acknowledgment. WPG does not handle that acknowledgment yet.



Shown on this page is the EDI to XML use case that generates a FA 997 acknowledgement for the EDI transactions in the incoming EDI X12 document.

Shown are the sample files for the incoming EDI X12 ISA, the output XML document and the generated EDI X12 ISA document containing the FA transaction.

What is of importance here is the EDD X12 ISA containing the FA transaction.

## Section

# ***Configuration Steps to generated FA 997 Transaction***

The next section will show how to configuration steps to generate FA for the EDI transaction present in the incoming EDI.

## FA (997) Acknowledgment Generation Steps

- FA acknowledgement is based on administrator to enable FA for a given type of EDI transaction (like 850)
  - ▶ This is done by setting the FA map attribute on the connection for the EDI transaction, with the value of the FA map to use to create the FA
- General steps performed by the hub:
  1. Generate EDI FA transaction
  2. Hub Envelope FA transaction and generate EDI X12 ISA document to be send to the source trading partner



Sending FA map for each EDI transaction is based on mutual agreements between the trading partners.

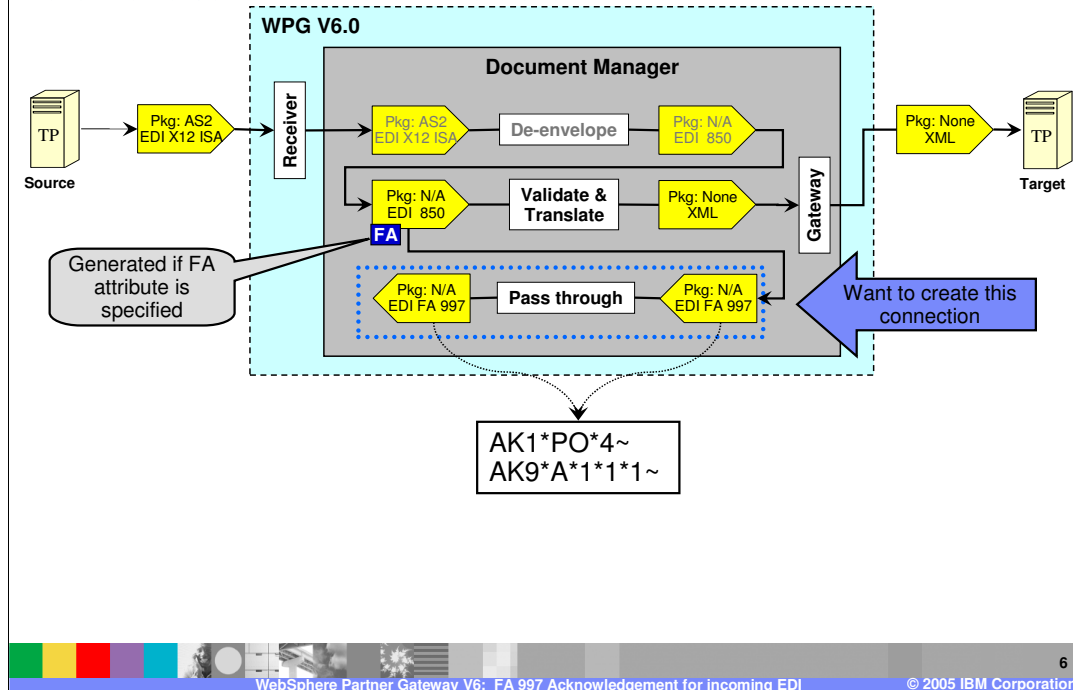
If FA needs to be send, the hub administrator specifies the FA map attribute on the EDI transaction connection.

The general steps performed by the hub are first to generate the EDI FA transaction and then envelope it in an EDI X12 ISA. The enveloped EDI X12 ISA is then send to the source trading partner's assigned gateway.

Whether to send the FA map Based on TA1 flag in the incoming EDI X12 ISA document, the hub may send an EDI TA1 to the document source trading partner.

The hub generates the EDI TA1 transaction and then envelopes the TA1 in an EDI ISA envelope to be send to the source trading partner using the gateway specified for the source trading partner

## Generate FA – Connection Flow



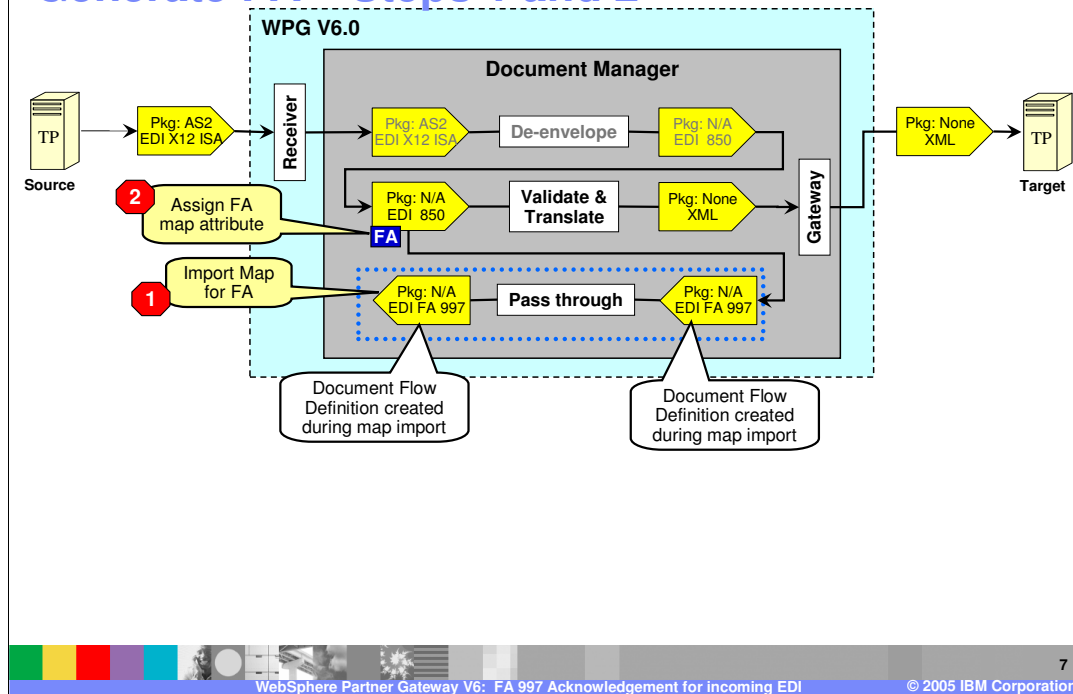
This shows the 1<sup>st</sup> part of the setup, of generating the FA 997 transaction. The connection that flows the FA transaction is shown on the page with the sample of a generated FA. The next few pages will walk through the detailed steps of creating the connection to generate the TA1 transaction.

The FA attribute assigned on the EDI transaction connection lets the hub know that it has to generate the FA.

Note that this connection is set where the source and the target trading partners are opposite to the incoming EDI flow. The original target TP is the source of the FA and the original source is the target of the TA1.

The next few pages will walk through the detailed steps of creating the connection to generate the FA transaction.

## Generate FA – Steps 1 and 2

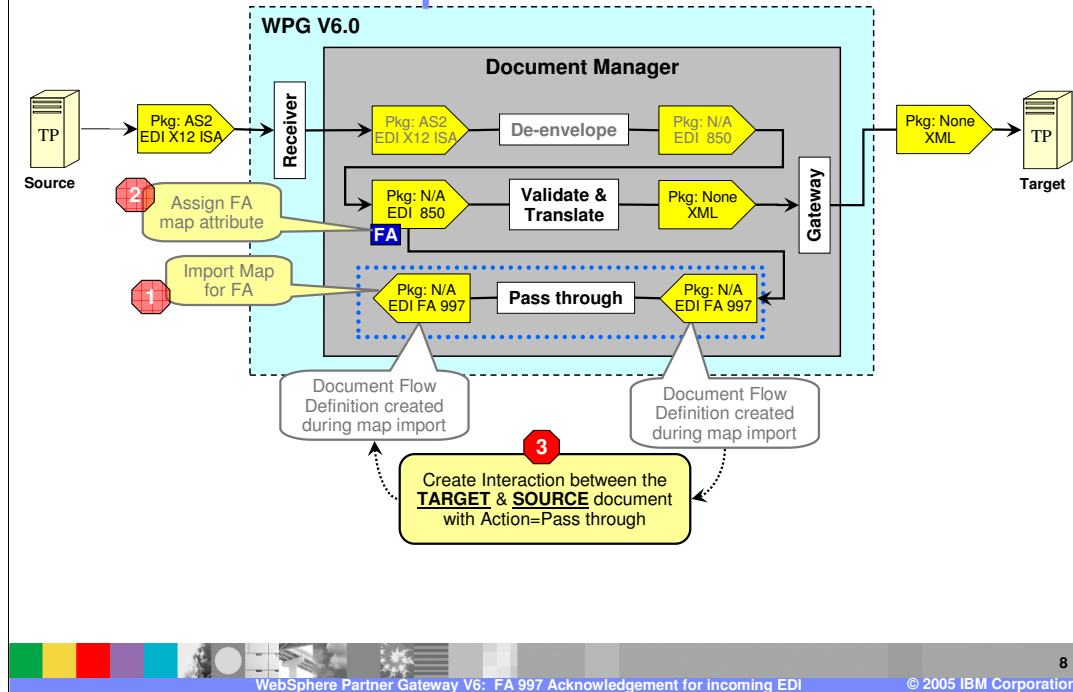


This page shows the 1<sup>st</sup> few steps of the configuration process.

The FA map needs to be imported into the hub, using the DIS Client tool or the bcgDISImport command line tool. Once the map is imported, the appropriate document flow definitions are already created and enabled, by the import process, and they appear in the document flow definitions panel in the console.

Then the FA attribute on the source side of the connection for EDI transaction translation step needs to be assigned to the value of the FA map. In the example shown, the FA attribute is assigned for the EDI 850 transaction in the EDI to XML translation flow.

## Generate FA – Step 3

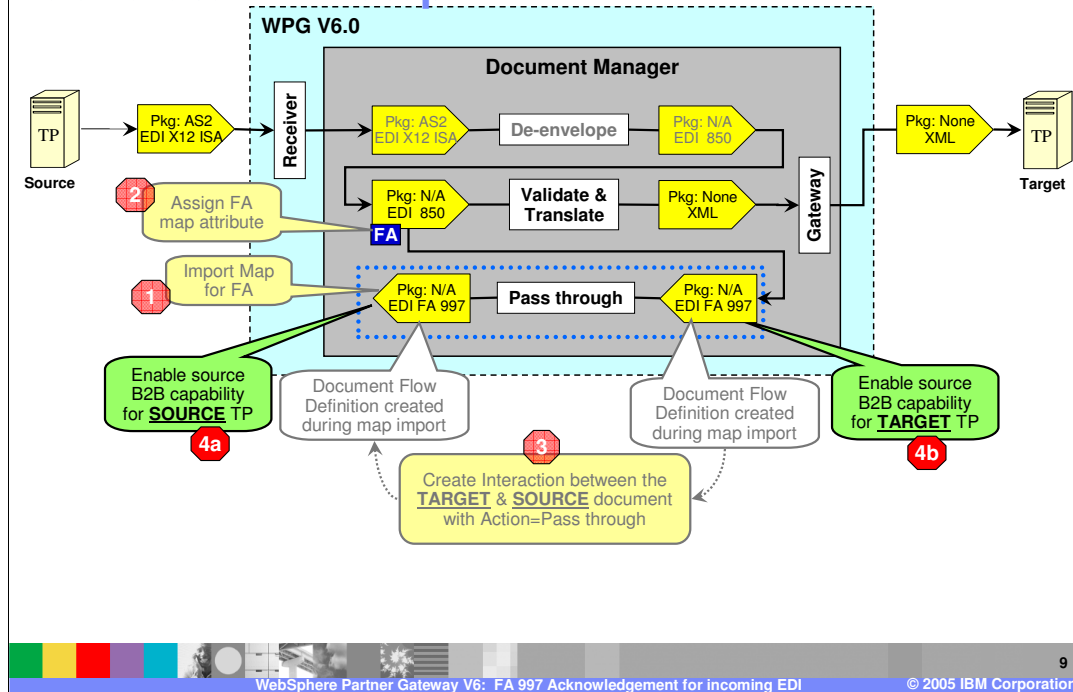


The next step is to create an interaction between the target trading partner and the source trading partner. The action on the interaction is simple pass through, since there is no translation being performed for this interaction.

With this step, the hub is now enabled to support FA generation, as long as the trading partners support that capability.



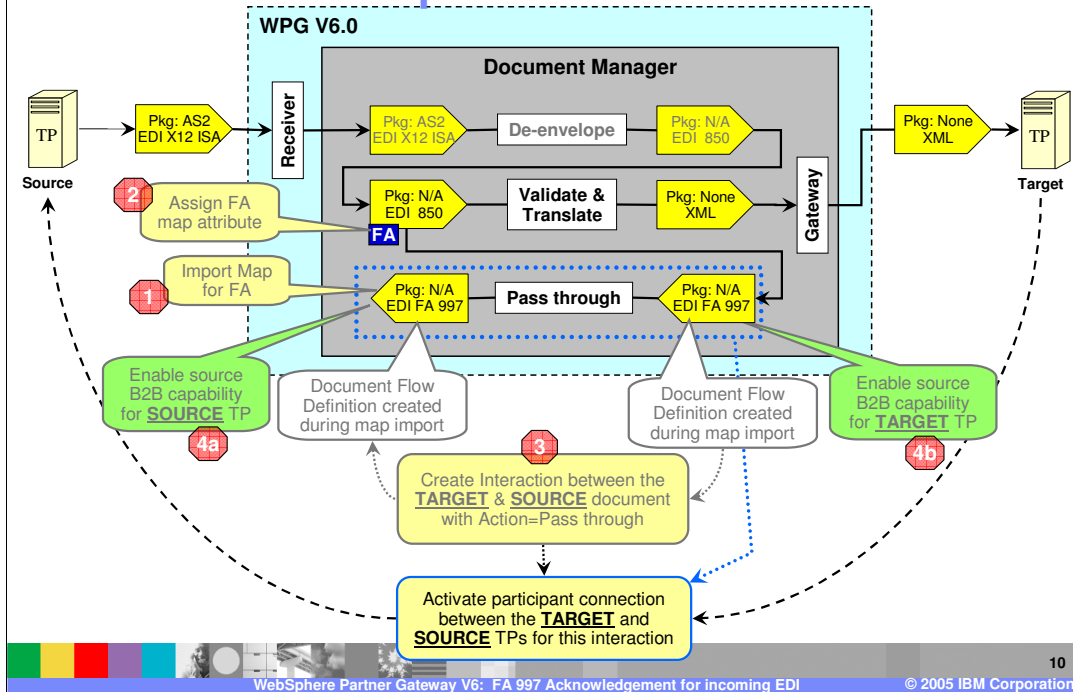
## Generate FA – Step 4



The next step is to specify the capabilities of the trading partners to support the FA documents. These are the B2B capabilities of the trading partners. The page shows the B2B capabilities of the source and the target trading partner.

With this step, the trading partners are now capable for passing the FA transaction, provided the connection is enabled.

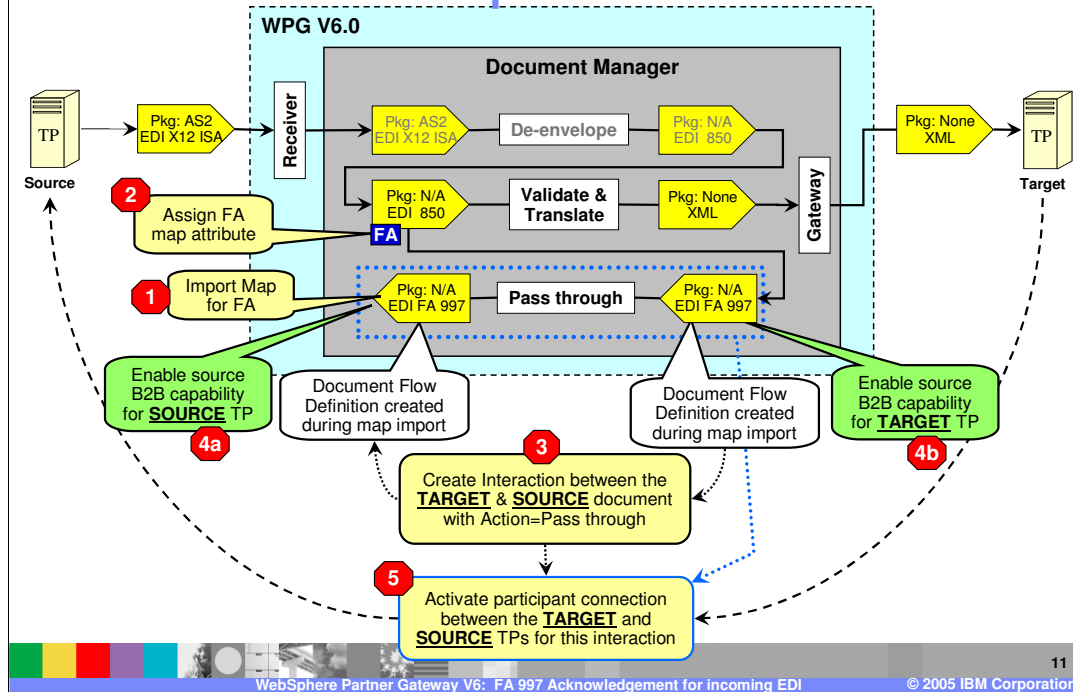
# Generate FA – Step 5



The last step is to activate the participant connection where the source of the connection is the target trading partner and the target is the source trading partner. Recall that the document is being send by the hub on behalf of the target trading partner to the source trading partner.

With the completion of this step, a EDI FA transaction will be created for the transaction within the incoming EDI for which FA attribute has been enabled.

## Generate FA – All Steps At a Glance



This page summarizes all the steps, from the importing of the FA map, to the assignment of the FA attribute, to the creation of the interaction, to the enabling of the B2B capabilities of the trading partners, and lastly, to the activation of the participant connection.

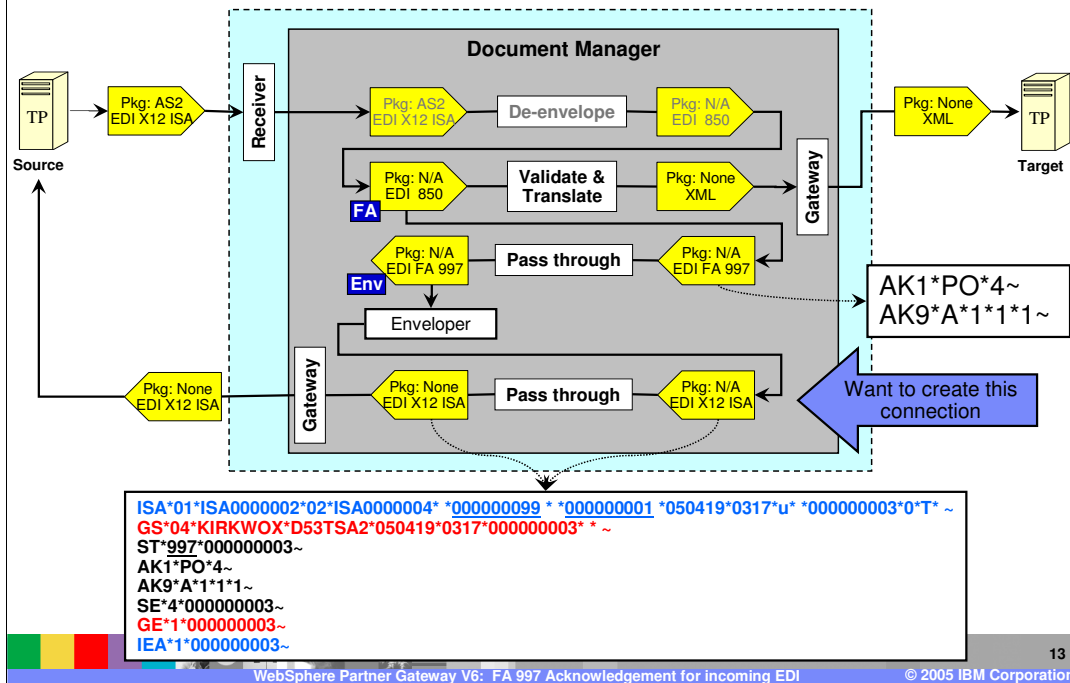
The EDI FA transaction that is generated is not ready for being send to the source trading partner. It needs to be enveloped in an EDI X12 ISA before it can be send to the source trading partner. Next step details the enveloping stages.

## Section

# ***Envelope FA 997 Transaction Configuration Step***

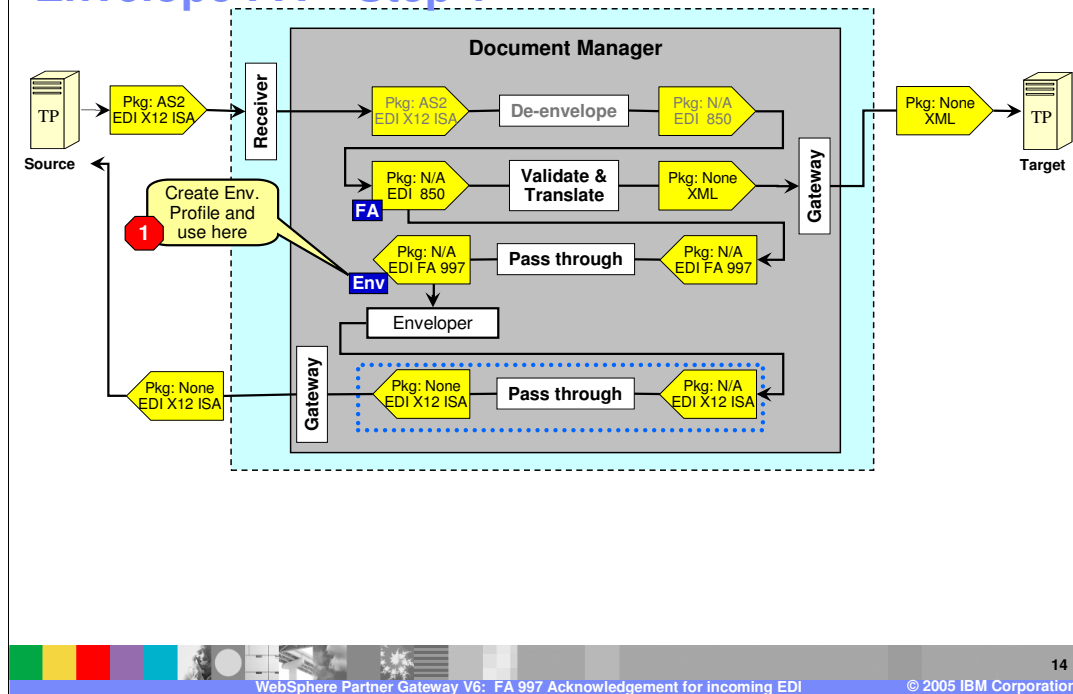
The next section will show how to configuration steps for enveloping the generated FA.

# Envelope FA – Connection Flow



The enveloper phase of the document processing envelopes the FA transaction. The example of the enveloped EDI X12 ISA containing the FA is shown here. The enveloped EDI X12 is send back through the document manager for any final packaging. Next few pages will describe the steps to enable enveloping and sending it to the trading partner.

## Envelope FA – Step 1

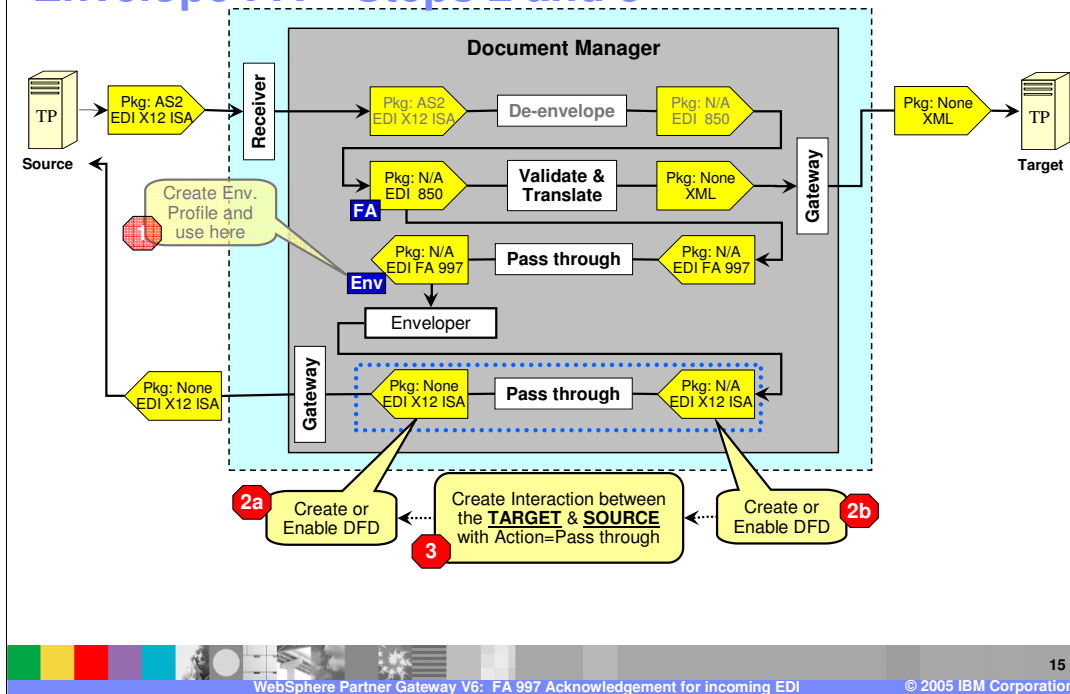


The 1<sup>st</sup> step is to assign an envelope profile on the generated FA transaction for the target connection. The target connection in this example is for the source trading partner that has send the incoming EDI. Prior to using an envelope profile, the administrator will need to create one.

The EDI FA transaction will be enveloped into an EDI ISA envelope, based on the scheduling of the enveloper.

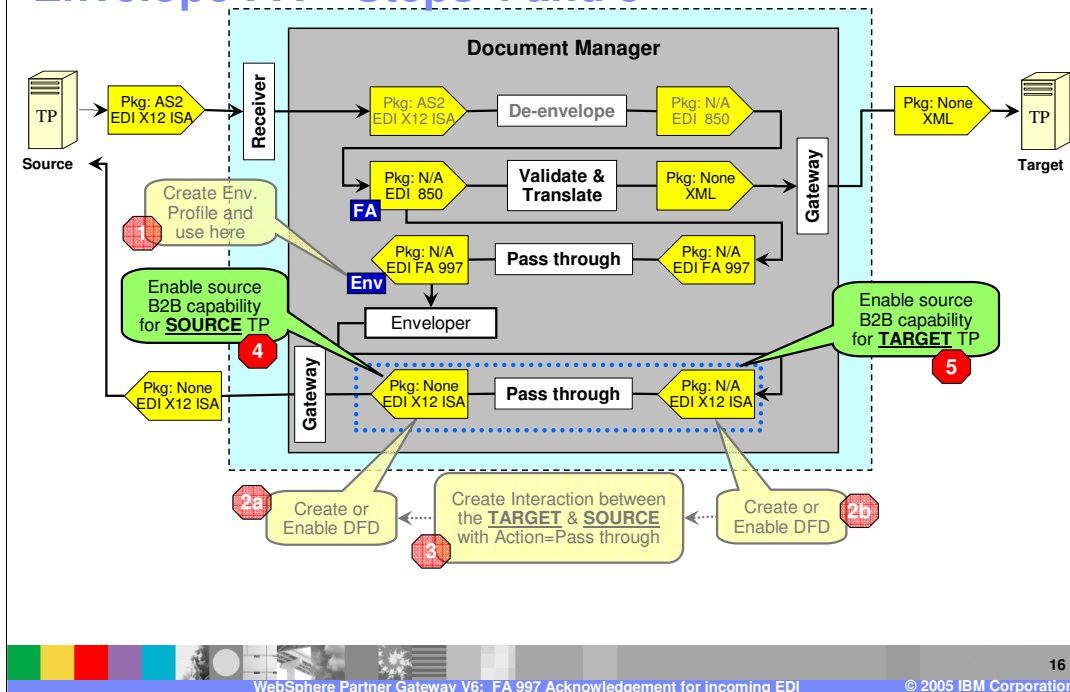
The enveloped EDI X12 ISA will then be rerouted through the document manager for any final packaging.

## Envelope FA – Steps 2 and 3



The next step is to enable the document flow definition for the source and the target trading partners, for the outgoing enveloped EDI connection. By default these document flow definitions should be enabled. From the document flow definition panel, a new interaction is created for source EDI document to the final packaged EDI document. In this example, there is no packaging done, and hence the None packaging.

## Envelope FA – Steps 4 and 5

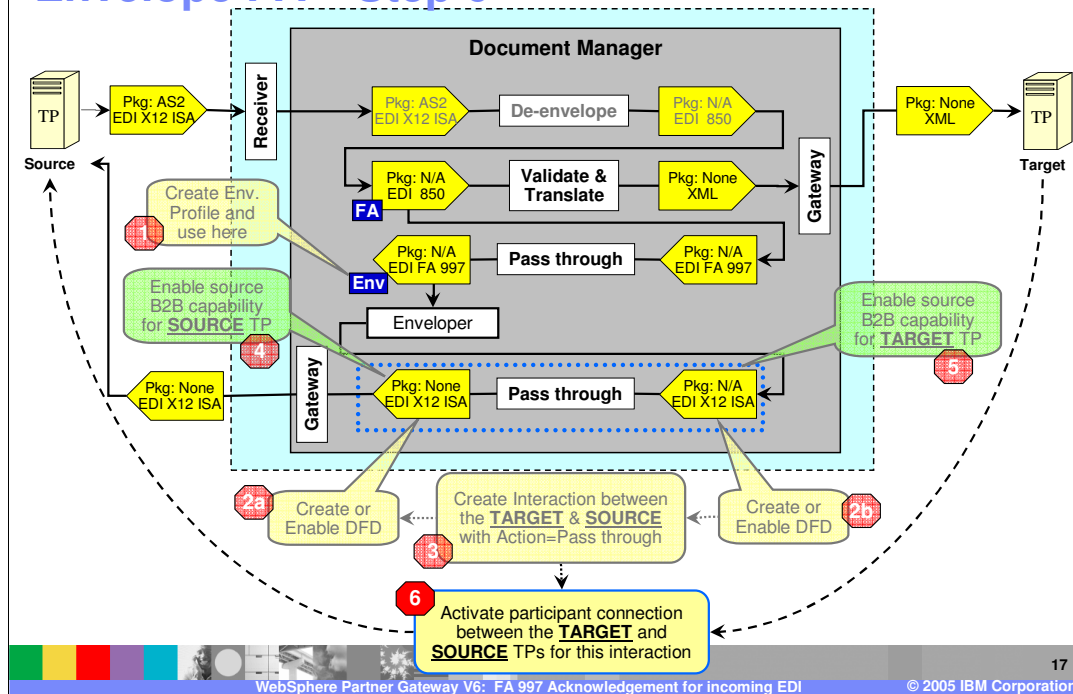


The next step is to specify the capabilities of the trading partners to support the enveloped EDI document. These are the B2B capabilities of the trading partners. The page shows the B2B capabilities of the source and the target trading partner.

With this step, the trading partners are now capable for passing the enveloped EDI X12 ISA document, provided the connection between the trading partners are activated.



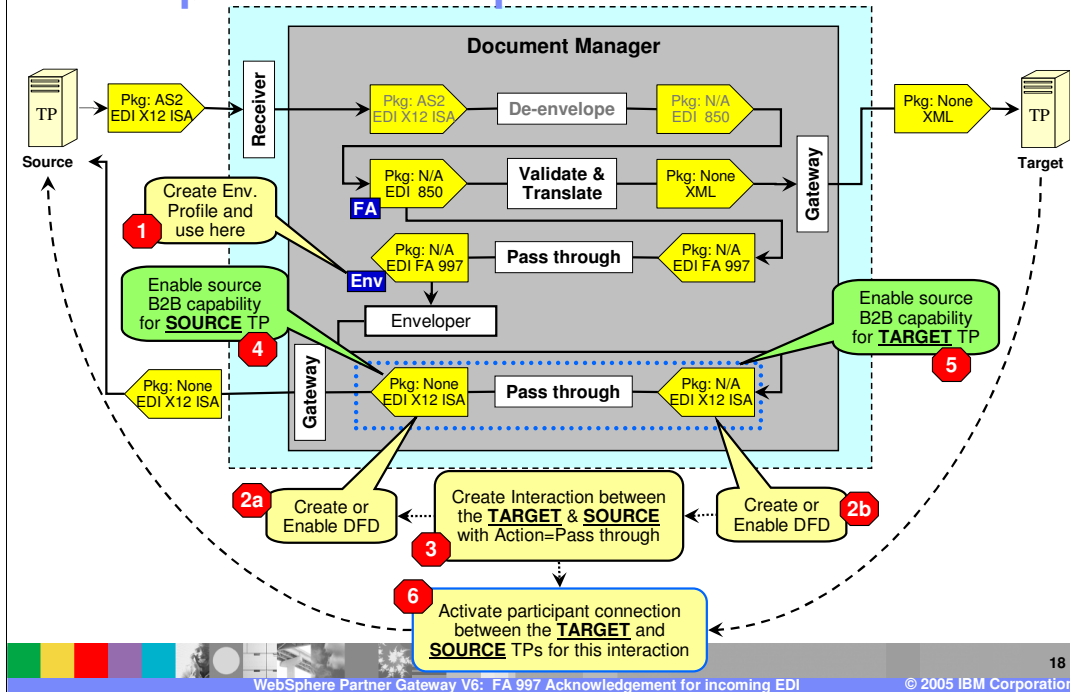
## Envelope FA – Step 6



The last step for the EDI envelope to be send to the source trading partner is to activate the participant connection where the source of the connection is the target trading partner and the target is the source trading partner. Recall that the document is being send by the hub on behalf of the target trading partner to the source trading partner of the original incoming EDI document.

With the completion of this step, a EDI X12 ISA envelope will be send to the source trading partner through its assigned gateway.

# Envelope FA – All Steps At a Glance



This page summarizes all the configuration steps, from 1 to 6, needed for enveloping the FA transaction and passing the generated EDI X12 ISA envelope in its final packaging to the source trading partner.

## Section

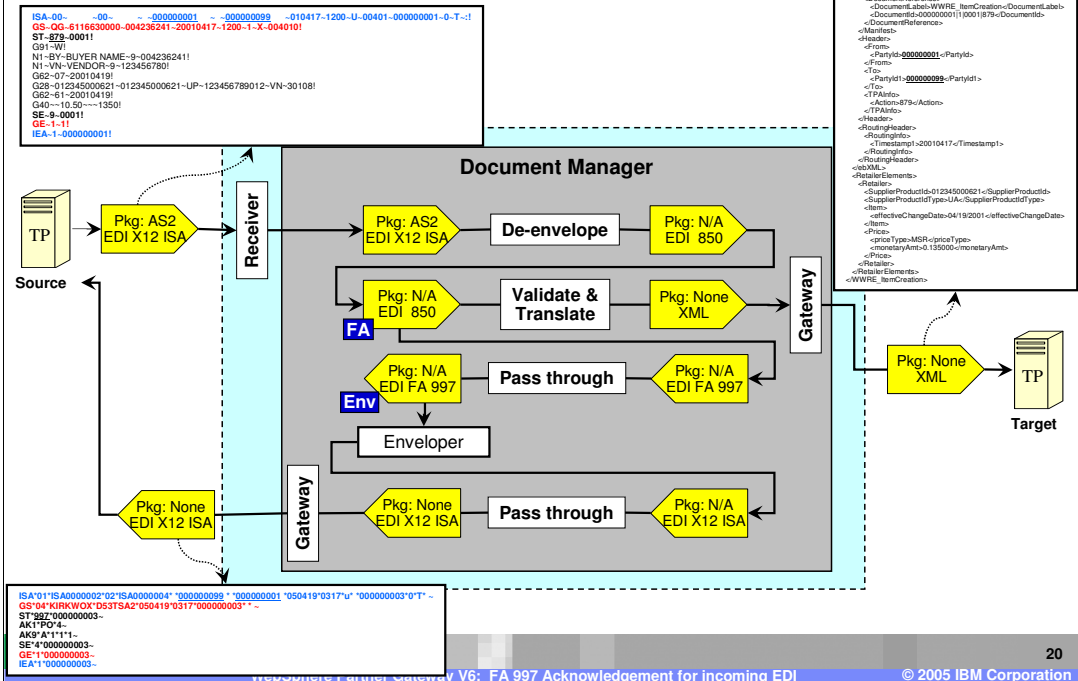
# ***Generate FA (997) acknowledgment for Incoming EDI X12 ISA***

## ***At a Glance***



The next section will summarize the connections needed to create an EDI FA acknowledgement with the examples.

# Generating EDI FA: Summary



This page summarizes the flow within the document manager of all the initial and final documents being received and send by the hub. Notice the output EDI containing the FA transaction being send to the source of the initial incoming EDI.

## Section

# *Summary*

The next section will provide a brief summary.

## Summary

- This presentation covered in details the steps needed for the administrator to generate FA 997 EDI acknowledgement for the incoming EDI X12 transaction
- If both TA1 and FA 997 acknowledgments are generated, they may be enveloped in a single EDI X12 ISA, based on the enveloper scheduling



Detailed configuration steps needed to generate FA 997 acknowledgement related to different types of EDI X12 transactions were shown in this presentation. These steps are needed only once for all EDI X12 ISAs being processed between 2 trading partners and for specific types of EDI transaction (like 850, 879, and so on).

When both TA1 and FA acknowledgments are generated, based on the EDI enveloper scheduling, they may be enveloped together in the same EDI X12 ISA.

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