



IBM Software Group

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

Document Flow Configuration Use Case: Sending TA1 Acknowledgement for Incoming EDI



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This presentation goes into the details of the configuration steps to generated EDI TA1 acknowledgement 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. As an example, this presentation uses EDI to XML use case, however it would apply to any use case with EDI as in input document.

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



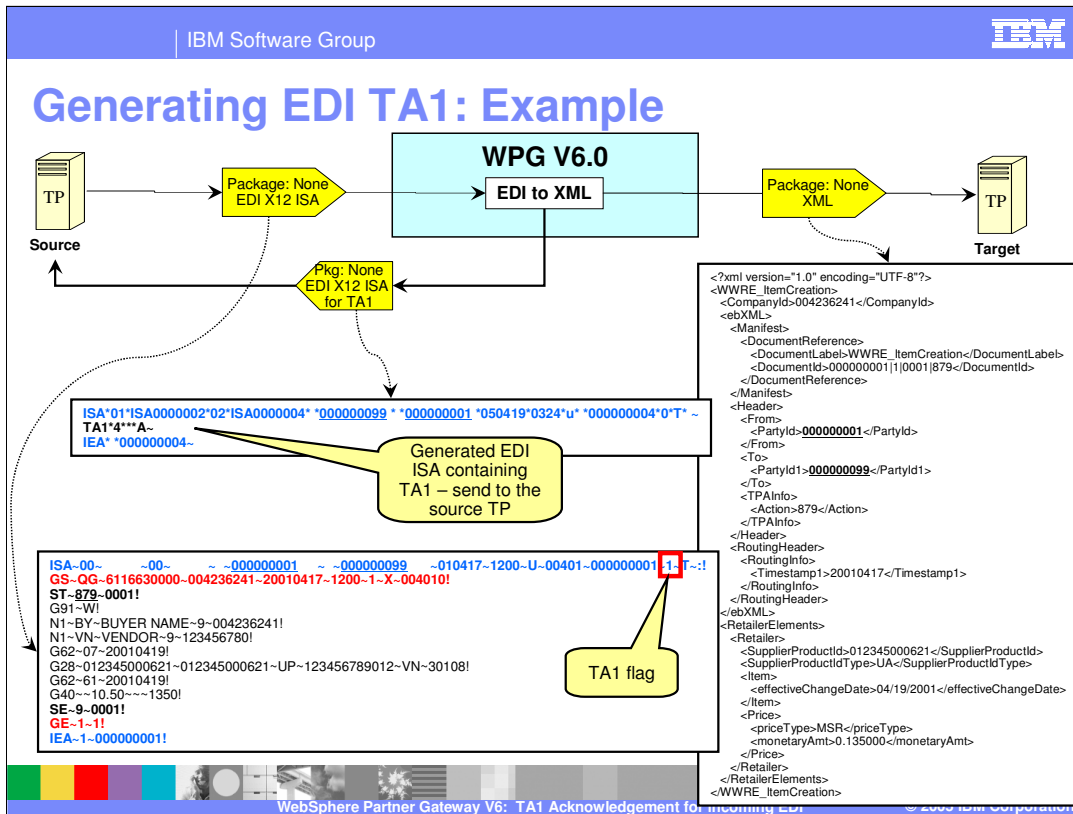
There are 2 types of acknowledgement in EDI X12 documents. A high level acknowledgement for the entire EDI Interchange called TA1 acknowledgement. The incoming EDI document specifies to the document manager that a TA1 acknowledgement is required by the sender trading partner. This is done by setting 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 acknowledgement. WPG does not handle that acknowledgement yet.



Shown on this page is the EDI to XML use case that generates a TA1 acknowledgement for the incoming EDI X12 document, based on the TA 1 flag in the ISA segment of the 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 TA1 transaction.

What is of importance here is the EDD X12 ISA containing the TA1 transaction.

Section

Generating TA1 Transaction Configuration Step

The next section will show how to configuration steps to generate TA1 transaction for the incoming EDI.

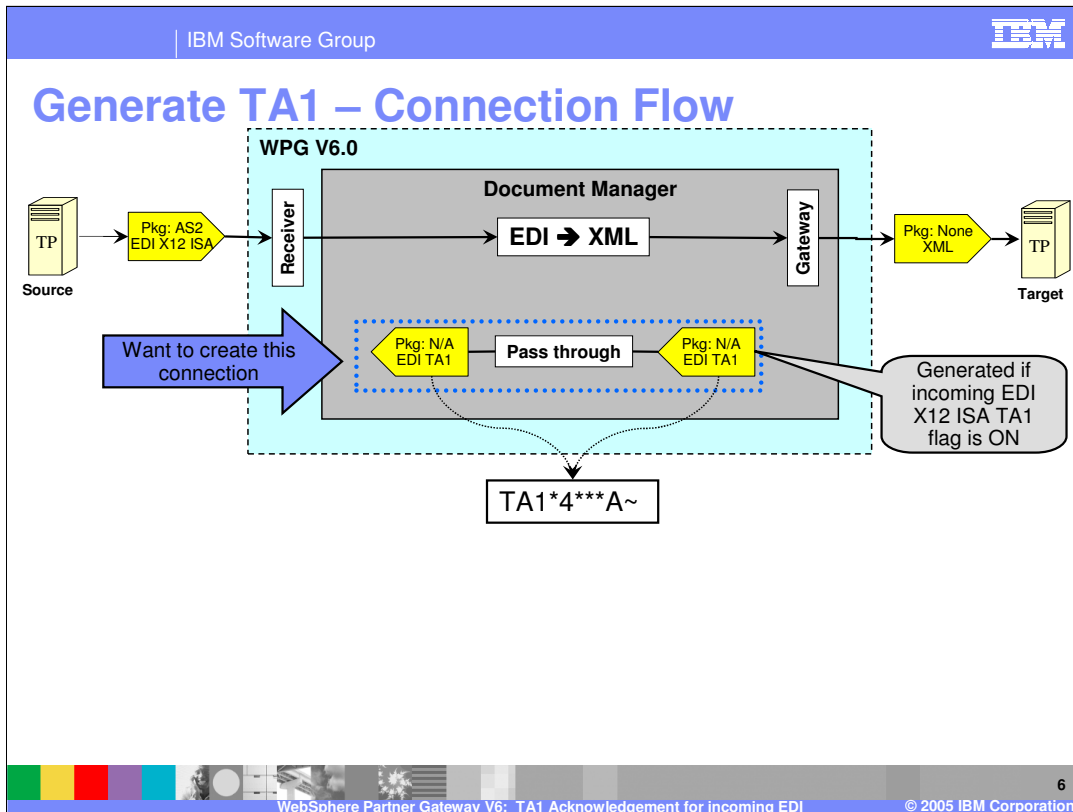
TA1 Acknowledgment Generation Steps

- During EDI validation, if TA1 flag in the incoming EDI X12 ISA is determined to be ON, the hub will generate EDI TA1 acknowledgement
- General steps are:
 1. Generate EDI TA1 transaction
 2. Envelope TA1 transaction and generate EDI X12 ISA document to be send to the source trading partner



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

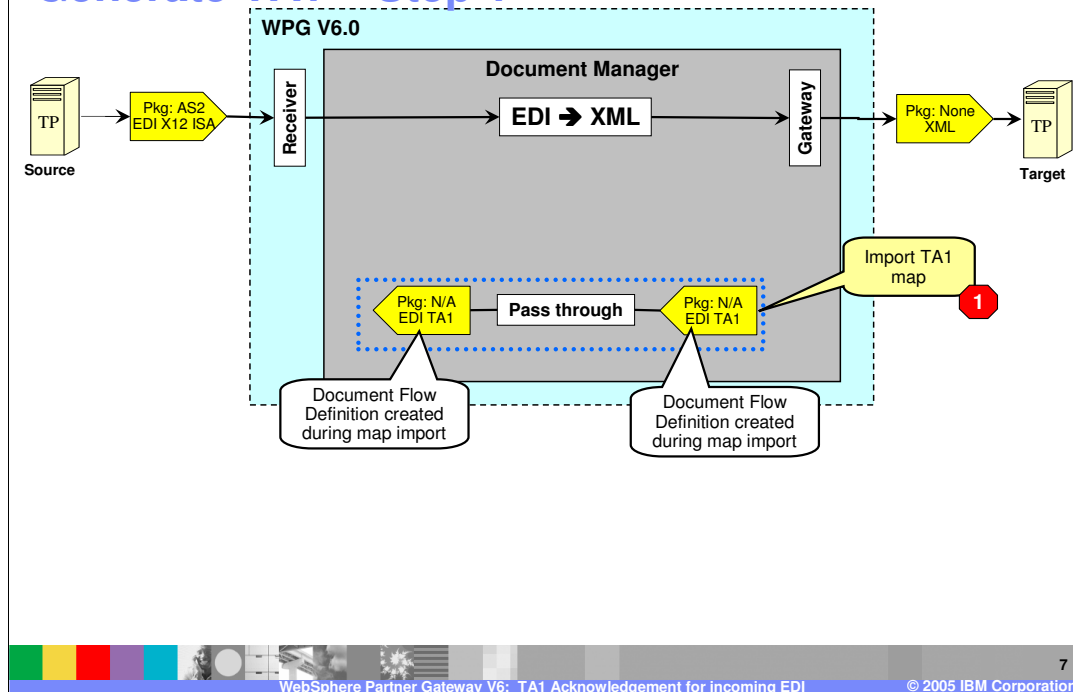


This shows the 1st part of the setup, of generating the TA1 transaction. The connection that flows the TA1 transaction is shown on the page with the sample of a generated TA1.

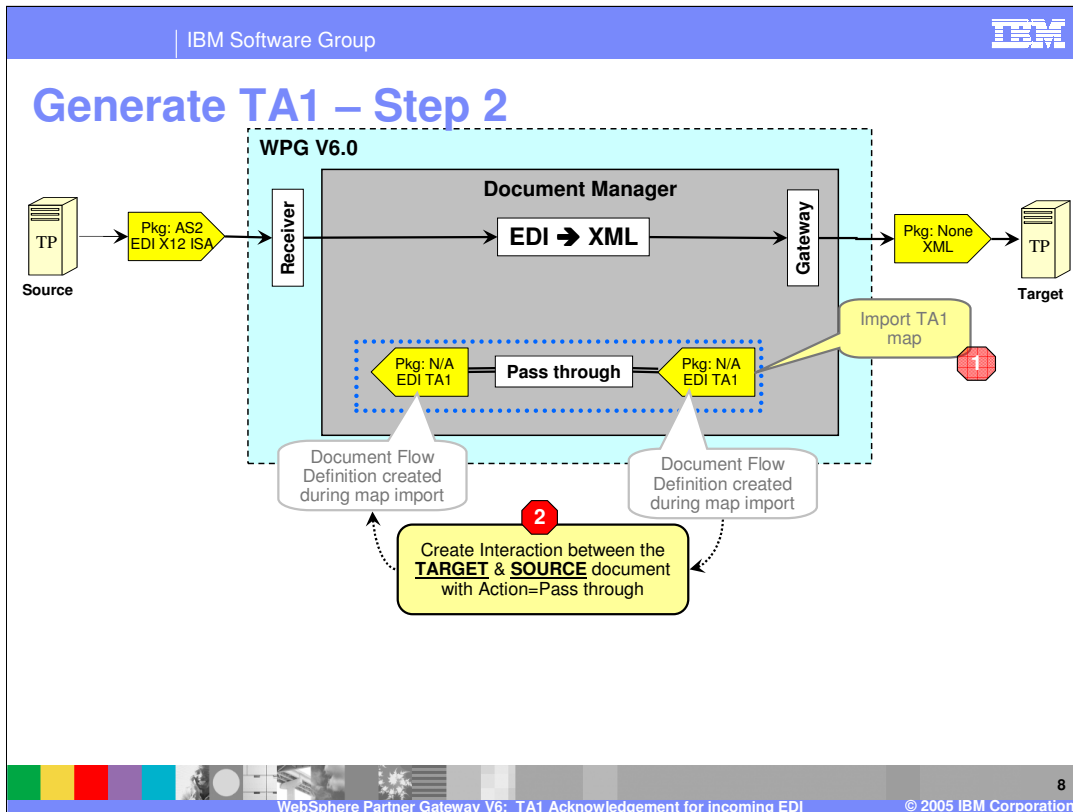
Note that this connection is set where the source and the target trading partners are opposite to the incoming EDI flow. The original target TP is the source of the FA and the original source is the target of the TA1.

The next few pages will walk through the detailed steps of creating the connection to generate the TA1 transaction.

Generate TA1 – Step 1



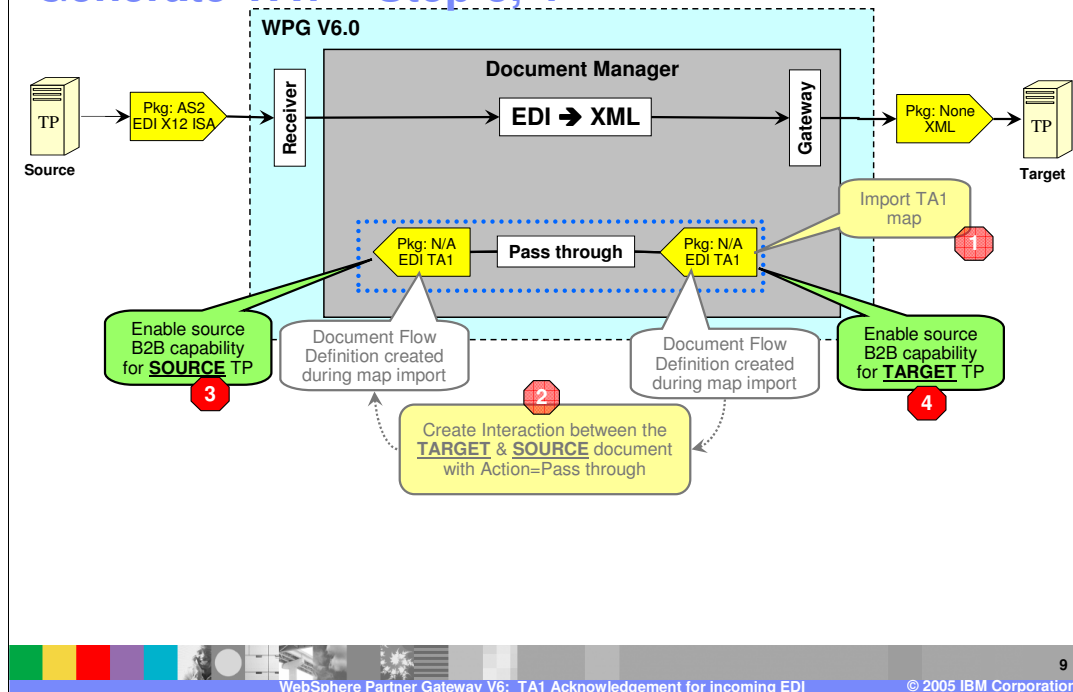
The TA1 map needs to be imported into the hub, using the DIS Client tool or the bcgDISImport command line tool. Once the map is imported, the appropriate document flow definitions are already created and enabled, by the import process, and they appear in the document flow definitions panel in the console.



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.

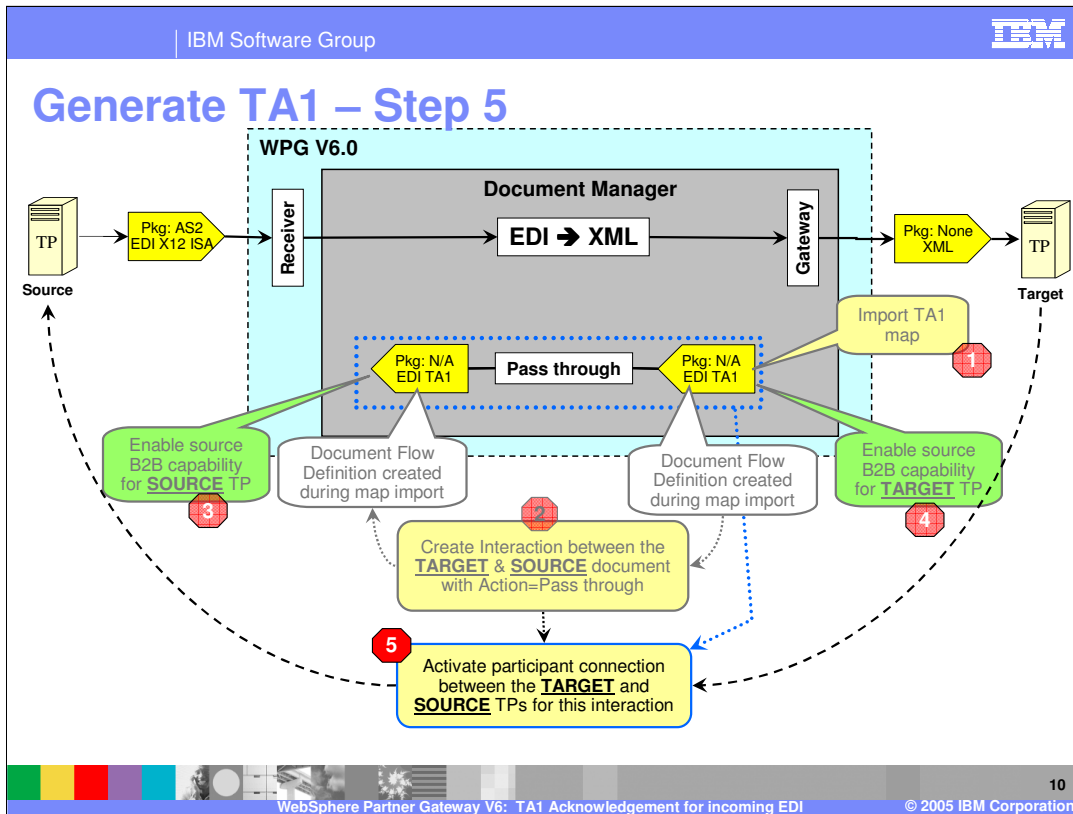
With this step, the hub is now enabled to support TA1, as long as the trading partners support that capability.

Generate TA1 – Step 3, 4



The next step is to specify the capabilities of the trading partners to support the TA1 documents. These are the B2B capabilities of the trading partners. The page shows the B2B capabilities of the source and the target trading partner.

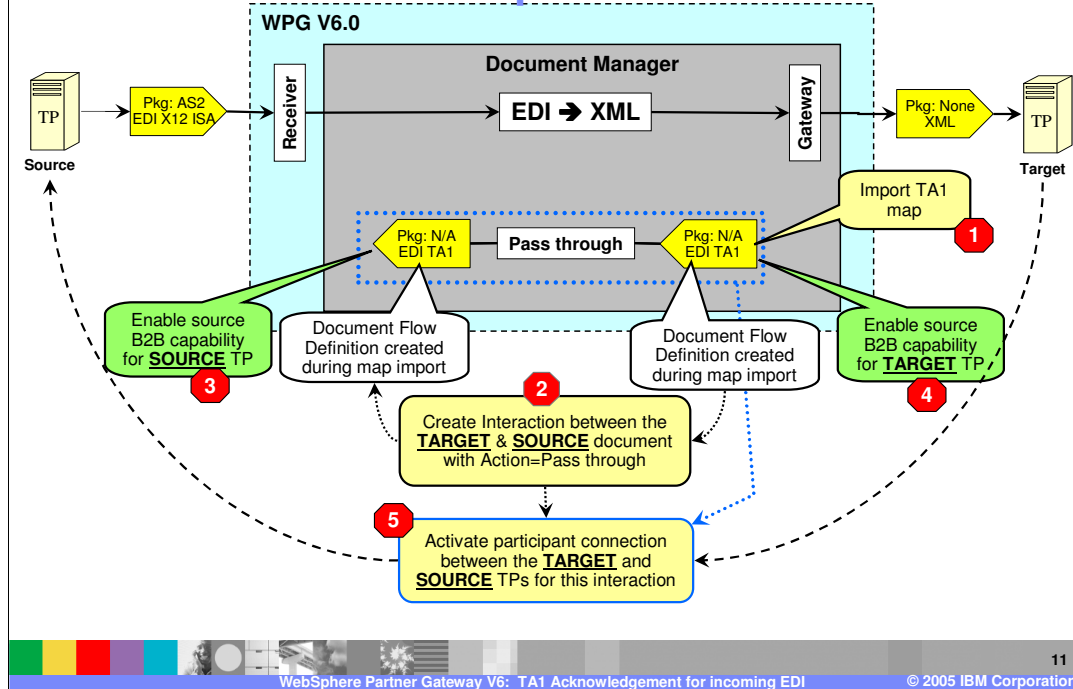
With this step, the trading partners are now capable for passing the TA1 transaction, provided the connection between the trading partners is enabled.



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 TA1 transaction will be created for an incoming EDI that has the TA1 flag on its ISA segment.

Generate TA1 – All Steps At a Glance



This page summarizes all the steps, from the importing of the TA1 map, 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.

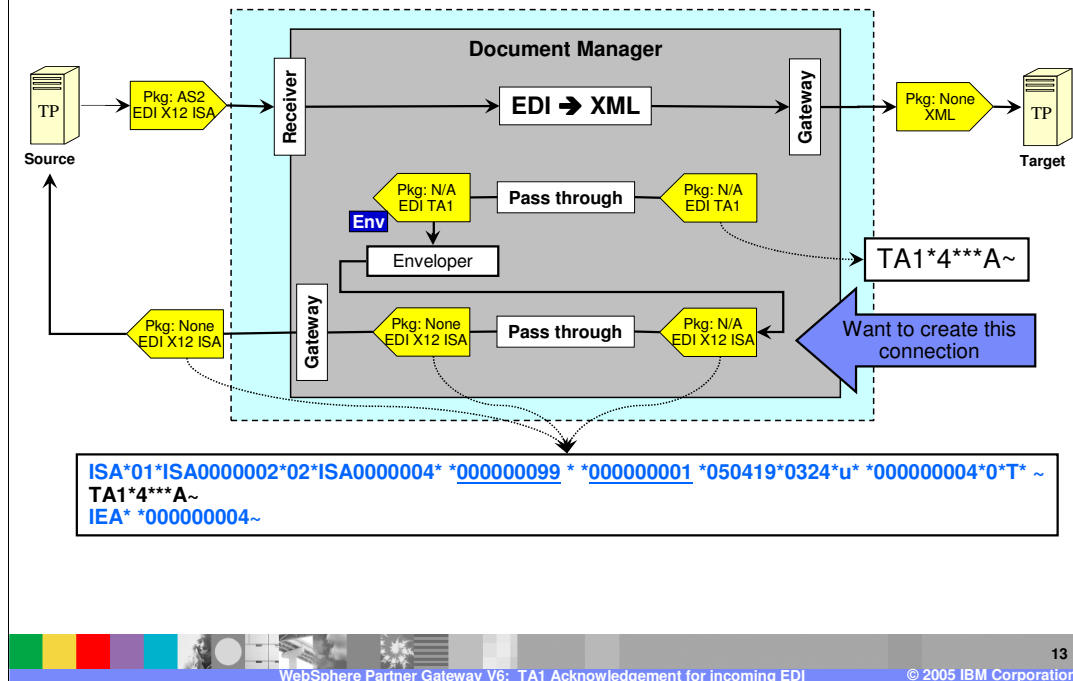
The EDI TA1 transaction that is generated is not ready for being send to the source trading partner. It needs to be enveloped in an EDI X12 ISA before it can be send to the source trading partner. Next step details the enveloping stages.

Section

Envelope TA1 Transaction Configuration Step

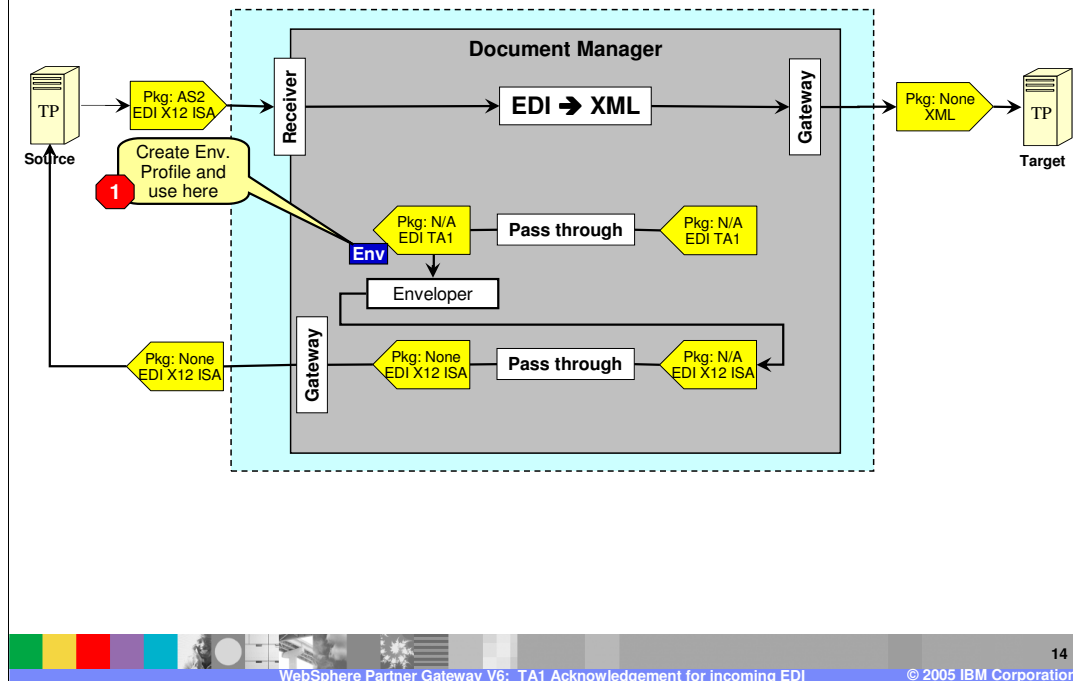
The next section will show how to enveloping step.

Envelope TA1: Connection Flow



The enveloper phase of the document processing envelops the TA1 transaction. The example of the enveloped EDI X12 ISA containing the TA1 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 TA1 – Step 1

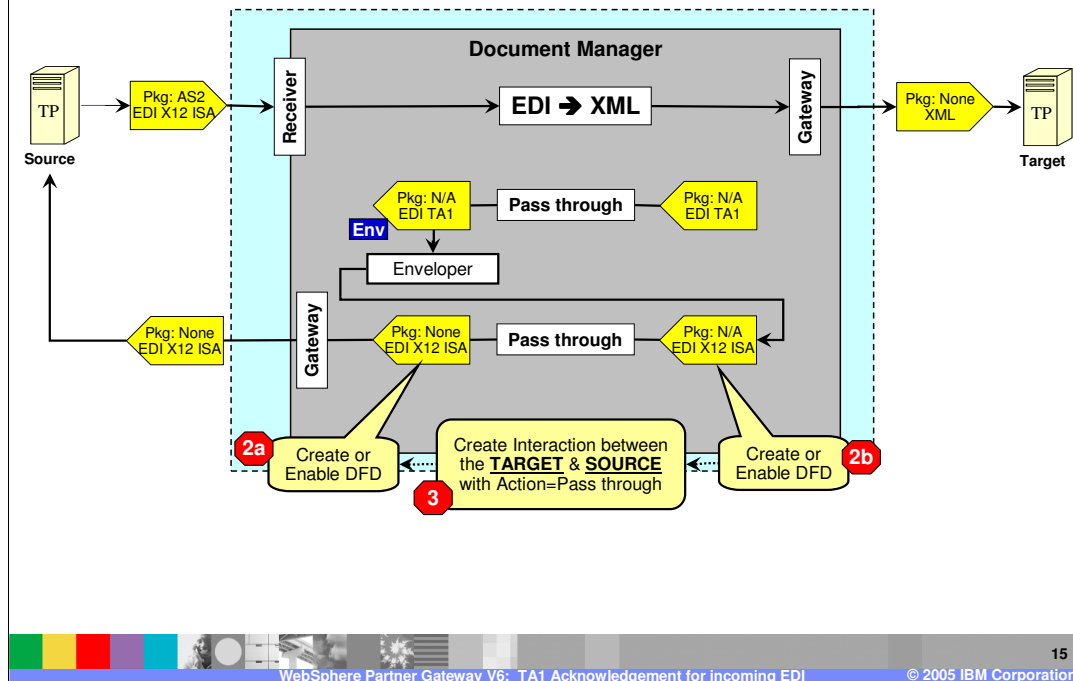


The first step is to assign an envelope profile on the generated FA transaction for the target connection. The target connection in this example is for the source trading partner that has send the incoming EDI. Prior to using an envelope profile, the administrator will need to create one.

The EDI TA1 transaction will be enveloped into an EDI ISA envelope, based on the scheduling of the enveloper.

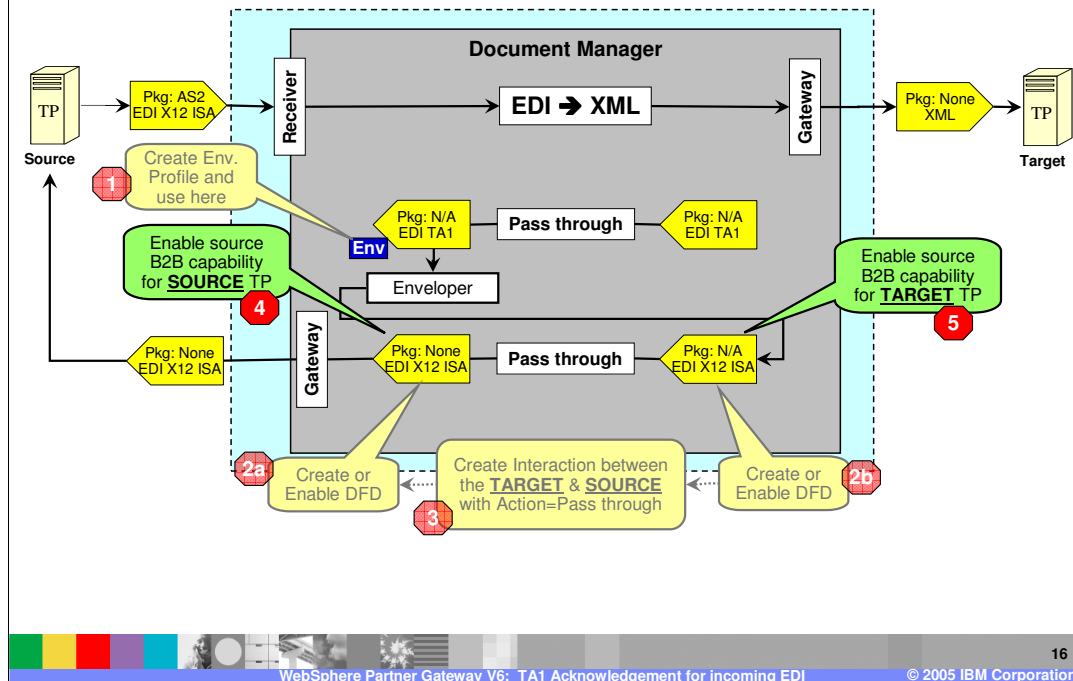
The enveloped EDI X12 ISA will then be rerouted through the document manager for any final packaging.

Envelope TA1 – Steps 2, 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.

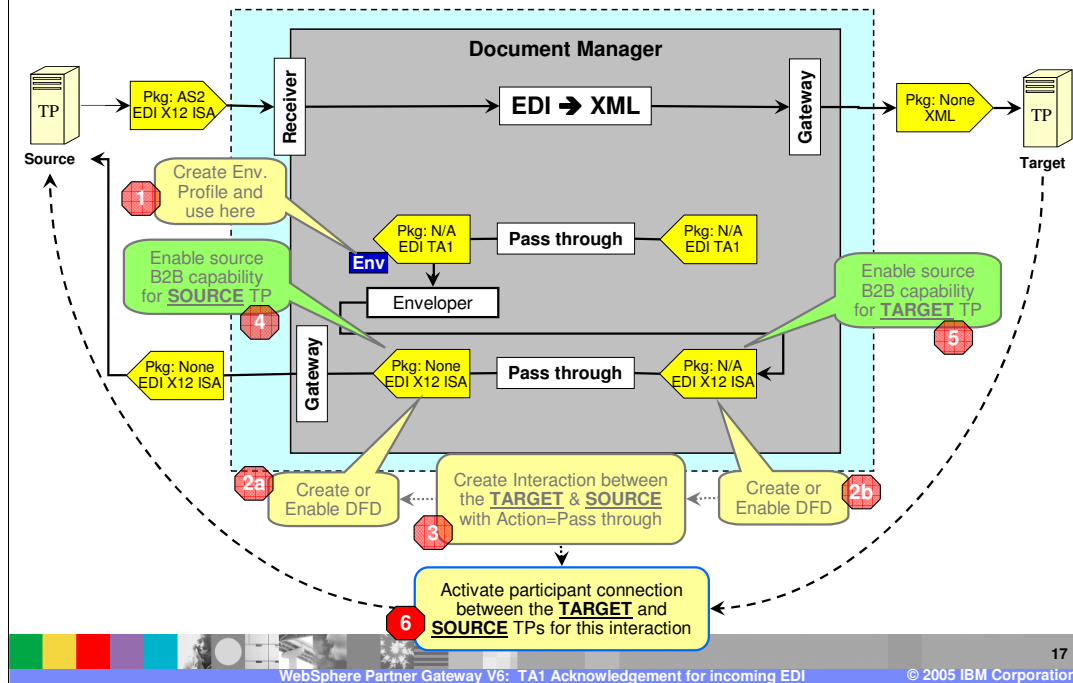
Envelope TA1 – Steps 4, 5



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.

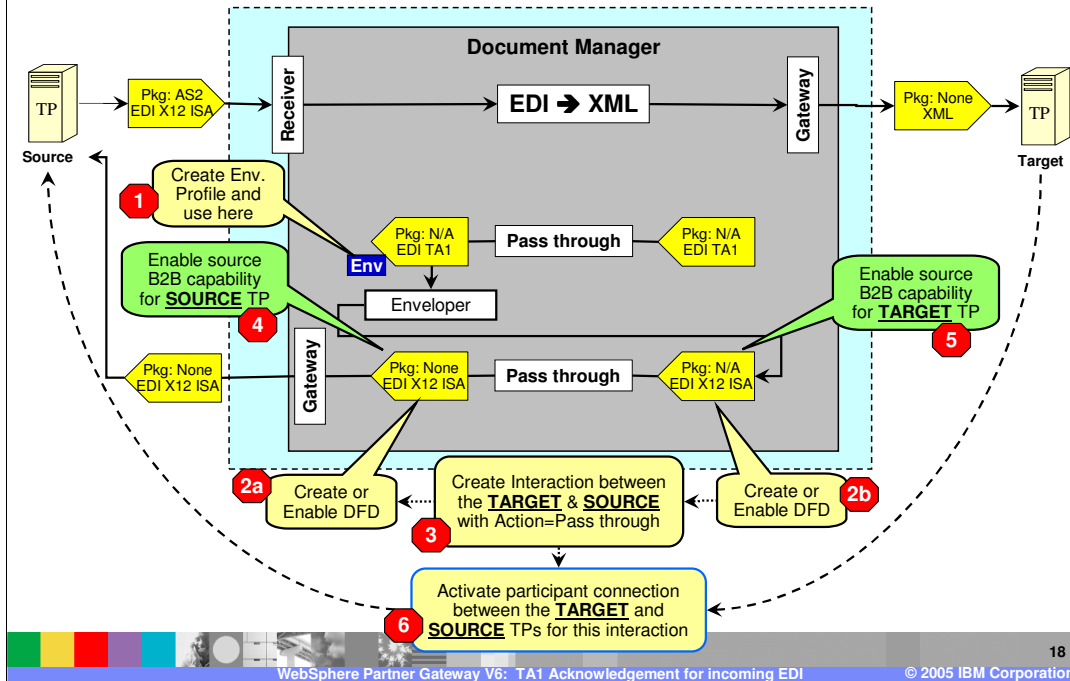
Envelope TA1 – Step 6



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 TA1 – All Steps At a Glance



This page summarizes all the configuration steps, from 1 to 6, needed for enveloping the TA1 transaction and passing the generated EDI X12 ISA envelope in its final packaging to the source trading partner.

Section

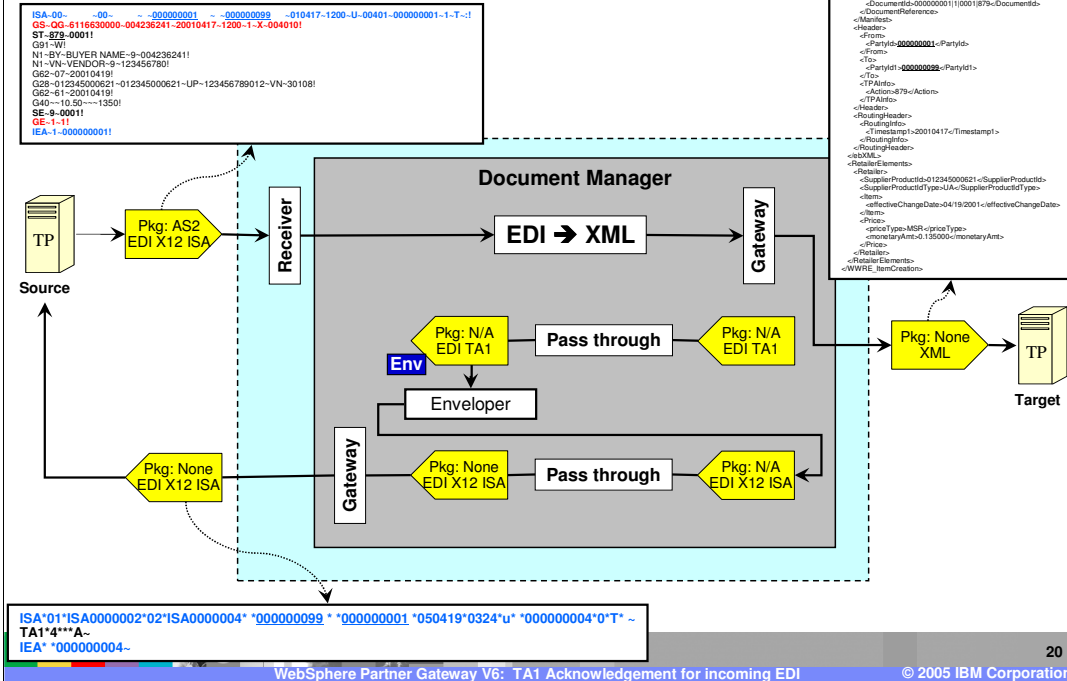
Generate TA1 acknowledgment for Incoming EDI X12 ISA

At a Glance



The next section will summarize the connections needed to create an EDI TA1 acknowledgement with the examples.

Generating EDI TA1 – 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 TA1 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 TA1 acknowledgement for the incoming EDI X12 ISA
- 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 TA1 acknowledgement related to an incoming EDI X12 ISA were shown in this presentation. These steps are needed only once for all EDI X12 ISAs being processed between 2 trading partners.

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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