The goal of this presentation is to help you understand basic setup for WebSphere Partner Gateway V6.0, including concepts such as trading partners, receivers, and gateways required for all document flow.

Agenda

- Basic Configuration for all flows
- Profiles (Roles), Users and Trading Partners and Administration Roles
- Receivers (Targets) and Splitters
- Trading Partner's Gateways
- Summary

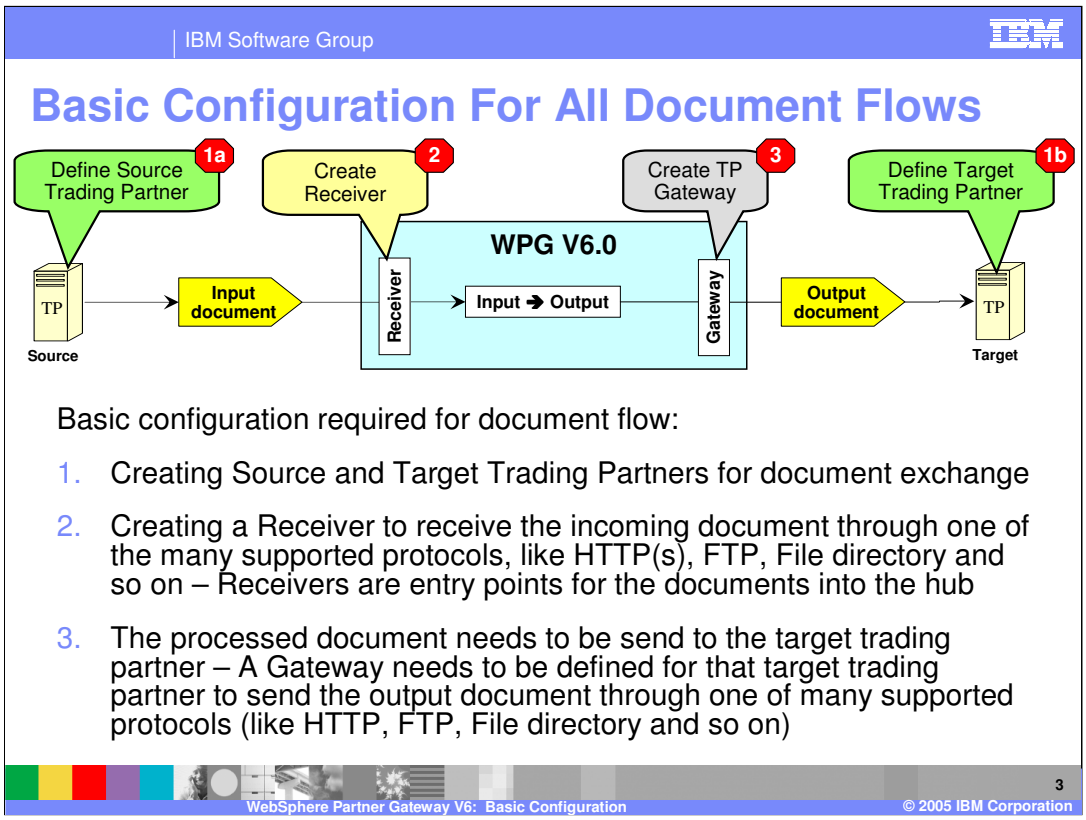
The following topics will be covered in this presentation:

•Basic Configuration

•Profiles and Roles

•Receivers

•Gateway



A minimum configuration must be performed to allow any document flow through the hub. The hub administrator defines the source and the target trading partners and their attributes, as shown in steps 1a and 1b.

For the incoming document, the administrator specifies the receiver or the target where the document is received from the source trading partner into the hub as shown in step 2.

Once the document is processed by the hub, based on the document processing configuration for that document between the source and the target trading partners, the processed output document is sent to the target trading partner. This is done by means of the target trading partner gateways defined by the administrator as shown in step 3.

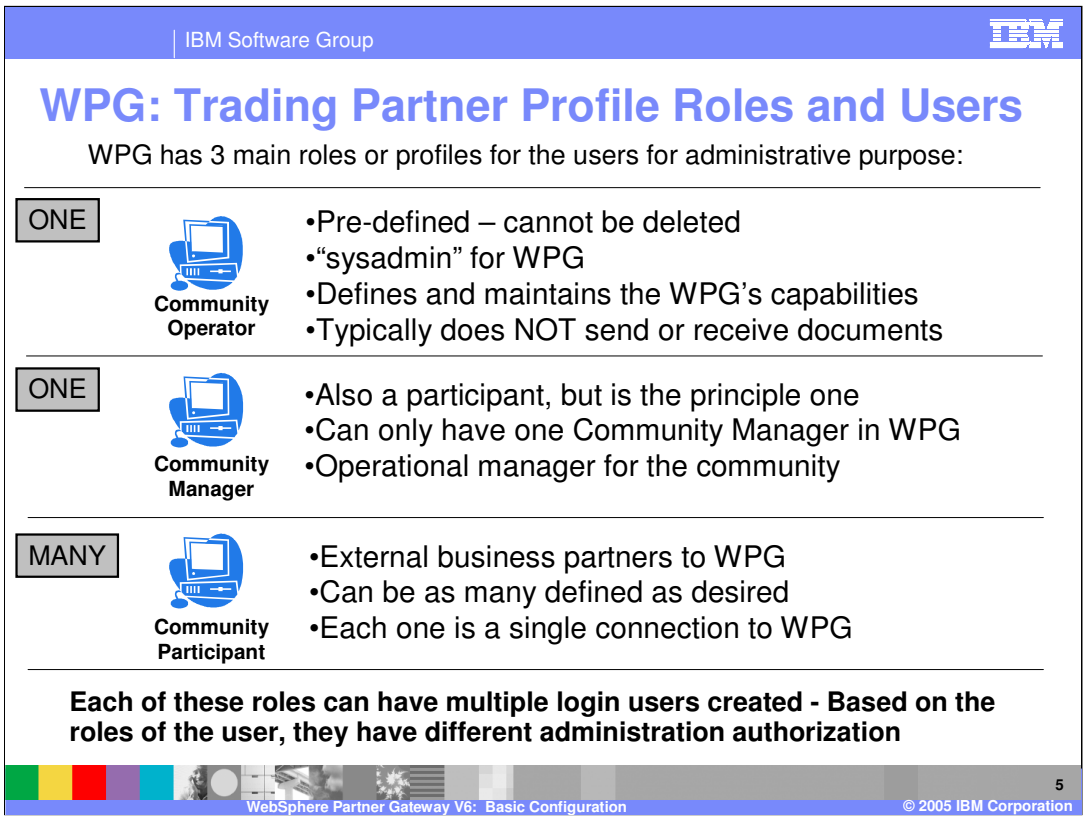
These configuration components will be discussed in detail later in the presentation.

Section

Profiles (Roles), Users and Trading Partners

Administration Roles

This section will provide more details on the trading partners, their users and administration roles.



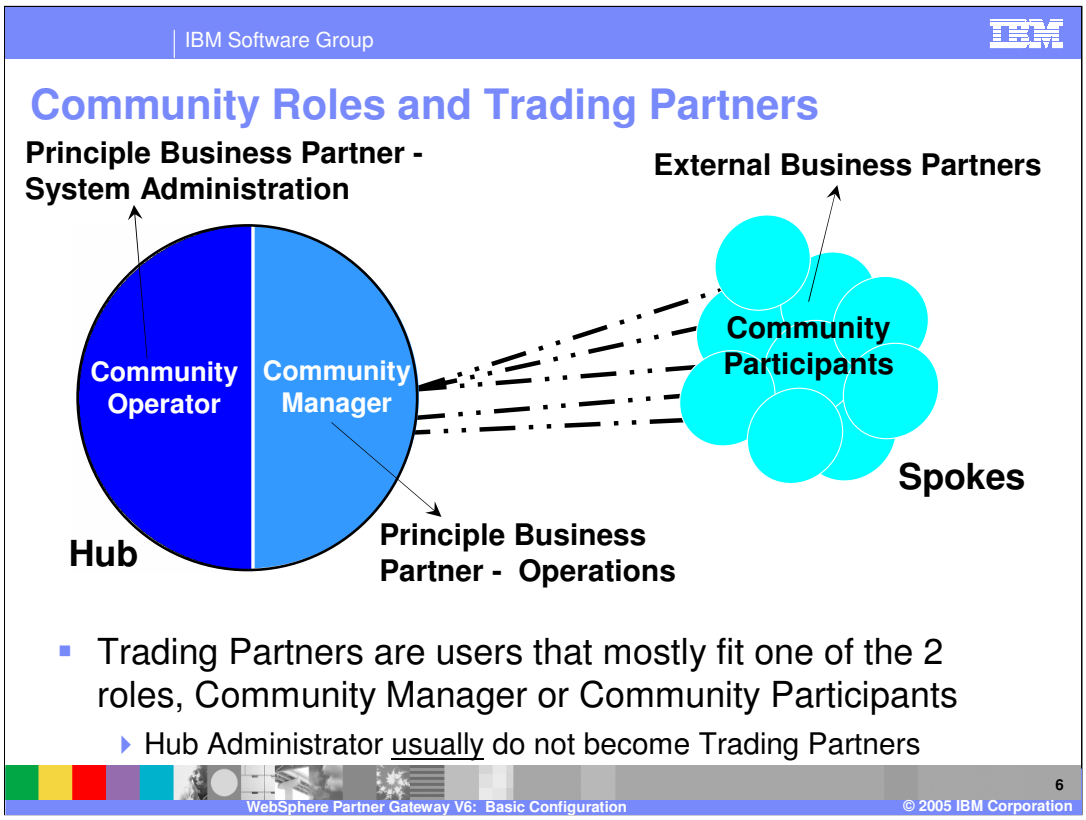
WebSphere Partner Gateway has 3 primary user roles or profiles used for administrative and document flow purposes:

1. **Community Operator** – also known as the hub administrator.
   - Responsible for managing the day-to-day operation of the hub community
   - Configuring the capabilities of the hub and new participants

2. **Community Manager**
   - Manages the hub from the trading partner capabilities – like a business owner of the system
   - Defines what interactions are allowed between trading partners.

3. **Community Participant**
   - Acts as a trading partner

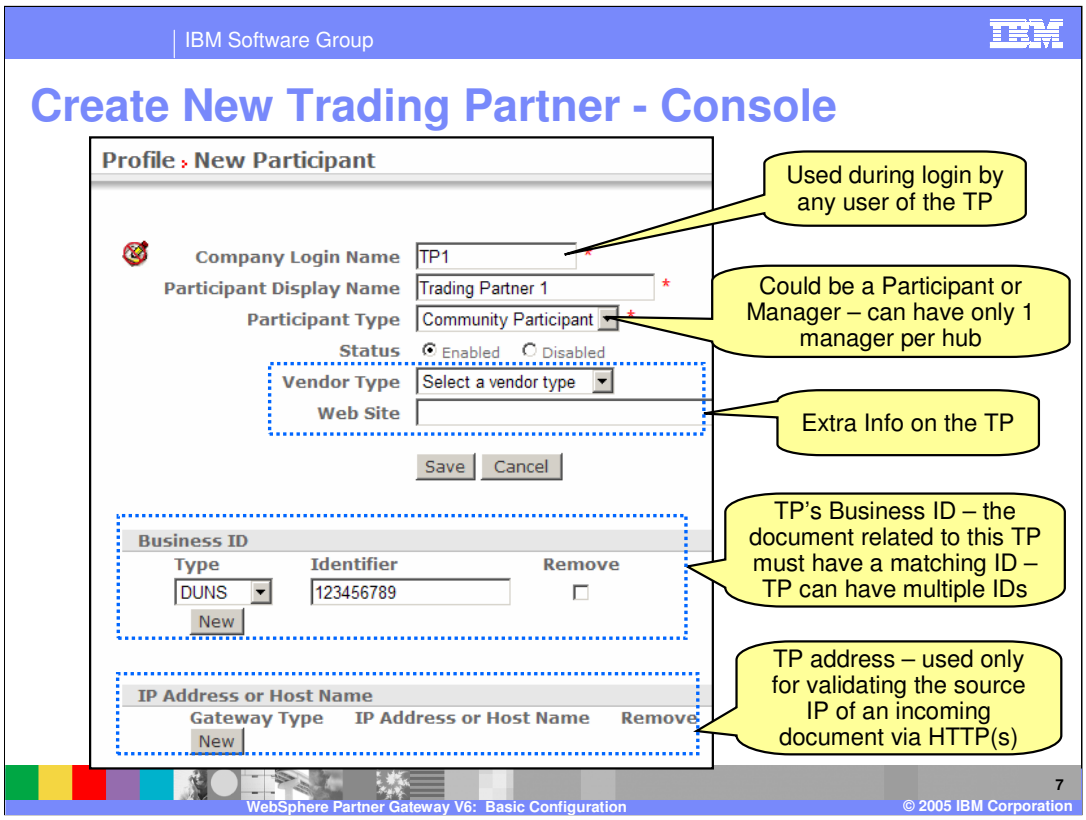
Each trading partner will have one or more users defined to log in to the hub as the trading partner. All users for a given trading partner have the same rights. However, users for each role will have different authorization capability, with the operator having all rights, and participant users having limited rights.



This graphic shows the 3 roles in a hub and community environment in more detail.

Community Participants are business partners with the owner of the hub. For licensing purposes, each Community Participant profile counts as one connection, regardless of how many Gateways and participant connections are defined.

The Community Manager is similar to the Community Participant except that the view includes all document flows for all participants. In addition, the Community Manager can activate and modify the specific allowable document flows called “Participant Connections”

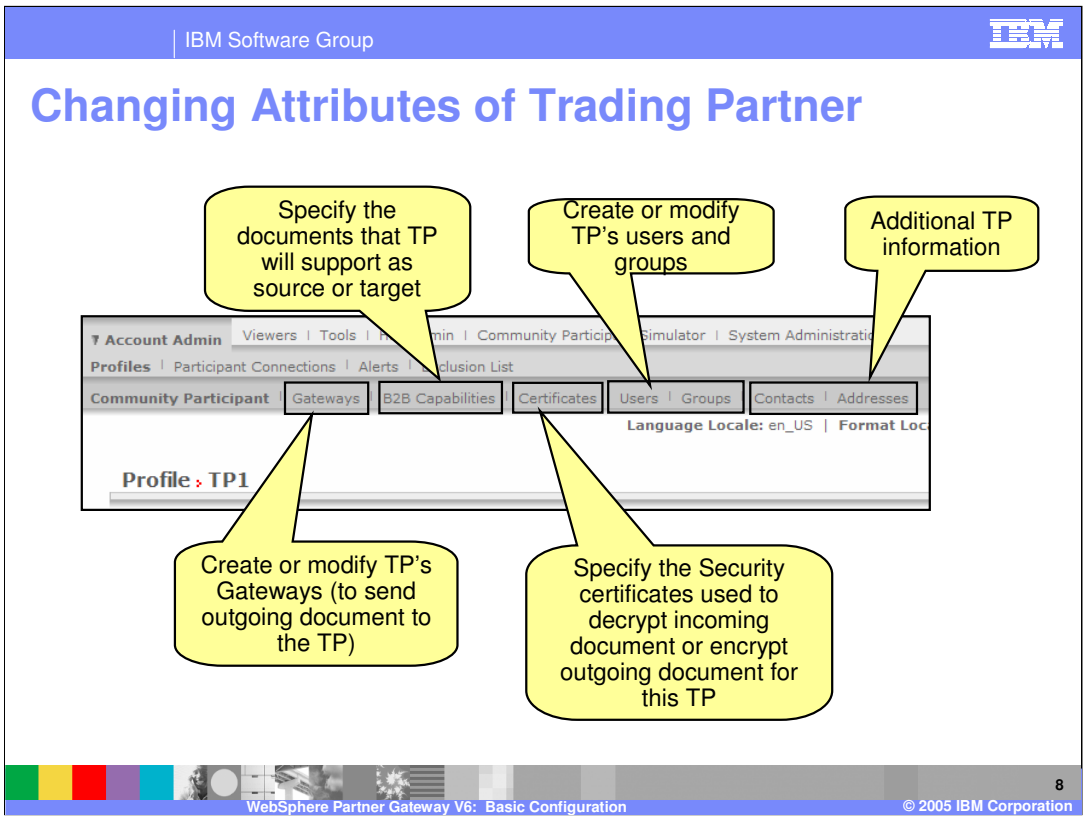


The console panel to create a new participant is shown here. The new participant can be a community manager or a participant. There can only be one manager for the hub. The community operator is created when WebSphere Partner Gateway is installed, so there is no option to create an operator.

When a new manager or participant is created, a default user called "admin" is created by the hub. Additional users can be created for the manager or the participant.

Business IDs for the trading partners must be specified. Several different types of IDs are supported, including DUNS, DUNS + 4, and Freeform. The hub determines the source and target IDs from the incoming document. Those IDs are then matched with the business IDs for the defined trading partners to find the source and target trading partner.

The administrator can also specify the IP address or the host name. This is used to validate that the incoming document was sent from the expected partner. This validation applies only for documents received using HTTP transport protocol.



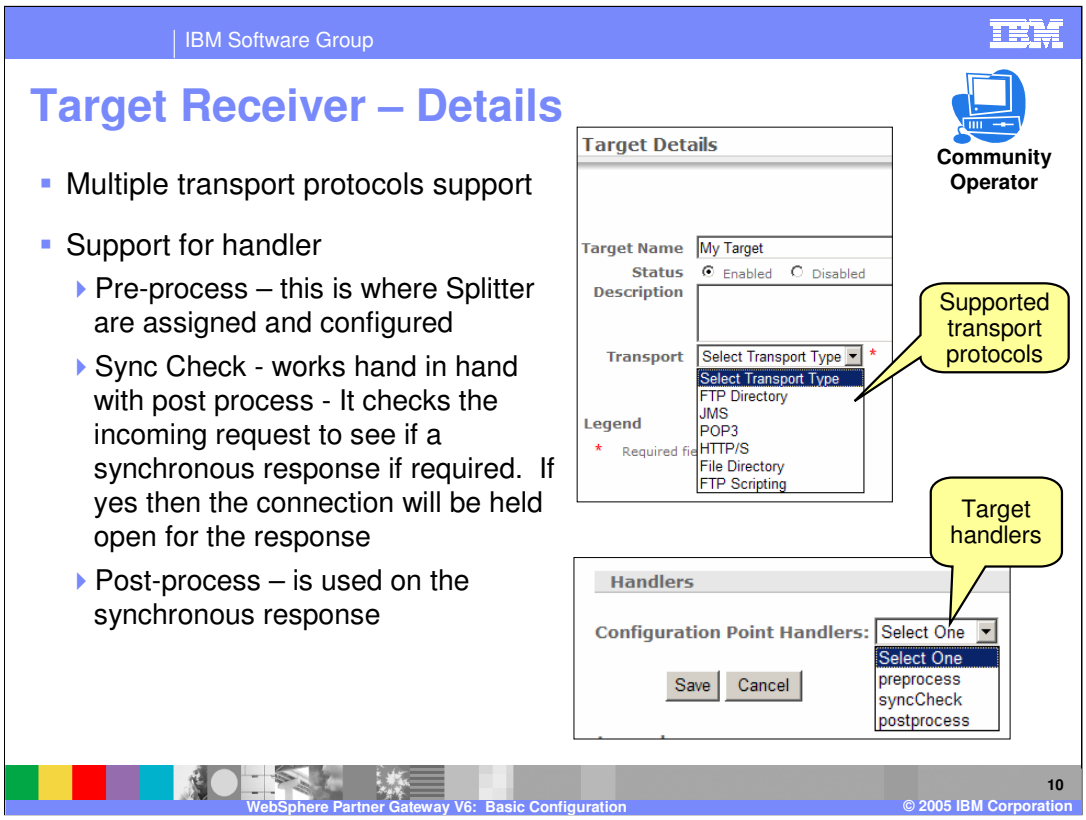
The console used to modify the trading partner attributes is shown here. The gateway and the B2B capabilities are defined as part of the trading partner profile. The Certificate button is used to specify the digital signature certificates used to decrypt signed incoming documents or encrypt outgoing documents.

The users and groups button is used to create new users and groups or modify existing ones.

Section

Receivers (Targets)

This section will provide details on Receivers or Targets.



Following are some attributes of Target Receivers:

•Targets are document entry points into WebSphere Partner Gateway used for receiving files from a trading partner or a back end system.

•Targets must be created for sending documents to partners and are the location where internal back end applications will drop documents to be sent to partners.

•Targets must be created for receiving documents from trading partners.

•Trading partners need the target information to send documents.

•Targets support multiple protocols.

•Targets can be a file directory, a JMS queue, an HTTP URI, POP3 for e-mails, or FTP scripting.

•Targets can have handlers at various levels of processing.

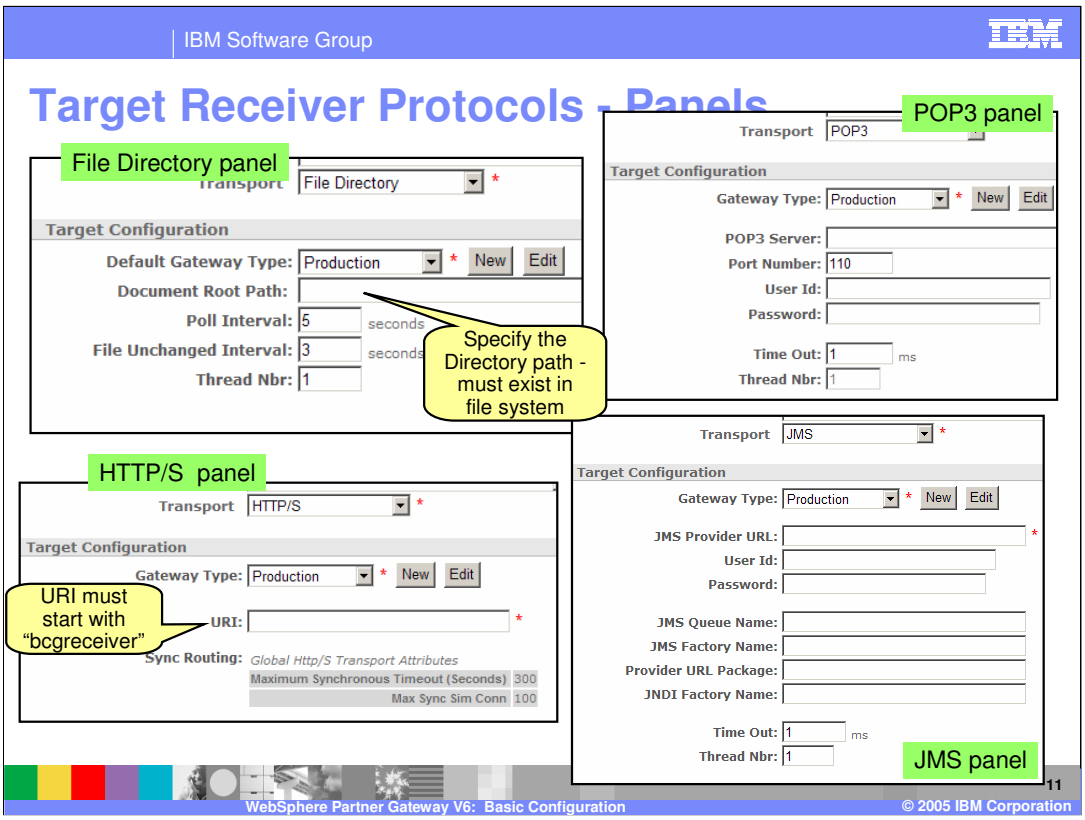
•Targets can only be configured by the Community Operator.

•Handlers can be at pre-process level, before the target processes the document.

•Handlers can be defined at a synchronization level to determine if a synchronous response is required for an incoming request, in conjunction with the post process handler.

•You can add your own handlers for each of the levels.

Pre-process handlers are where splitters are assigned. Splitters process incoming documents, splitting them or extracting information needed for downstream processing. WebSphere Partner Gateway comes with built-in splitters for various document formats, including EDI, XML, and ROD.



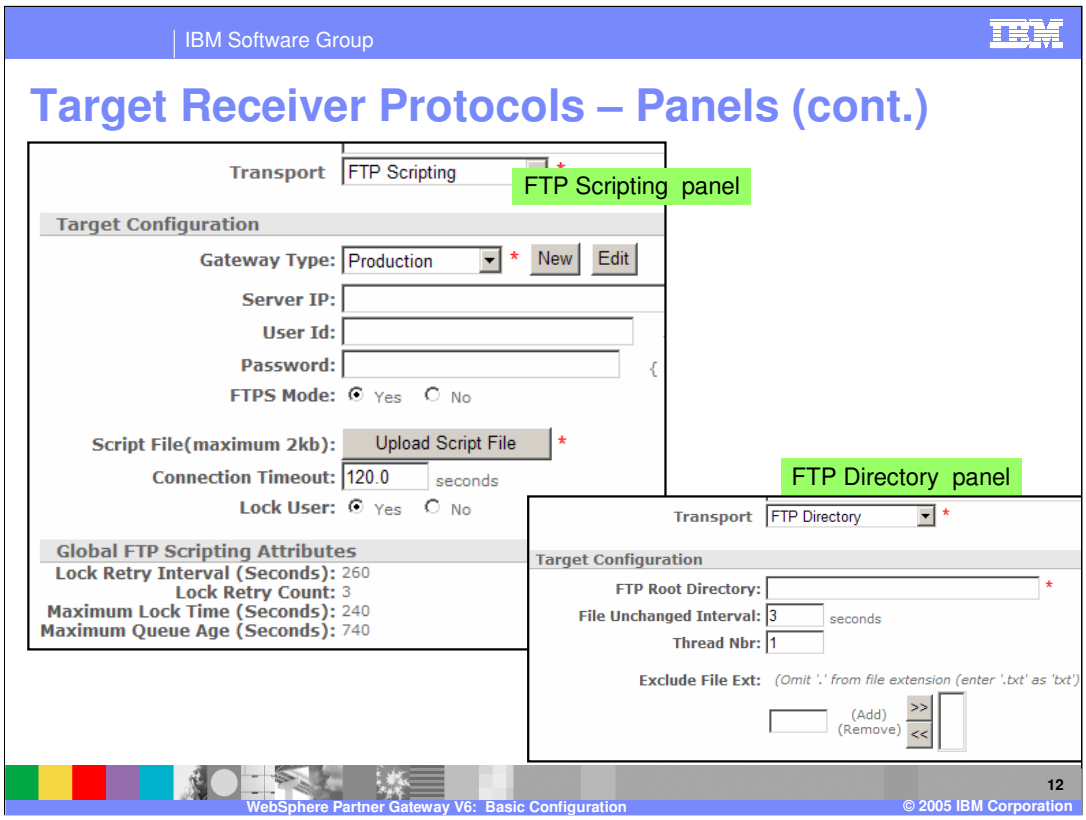
The target receiver supports many different transport protocols, including the File directory, HTTP, HTTPS, POP3 and JMS protocols shown on this page.

The file directory panel requires the full path of the directory on the file system and the directory must be created before the target will work. The hub will create additional directories based on the gateway type (such as production or test).

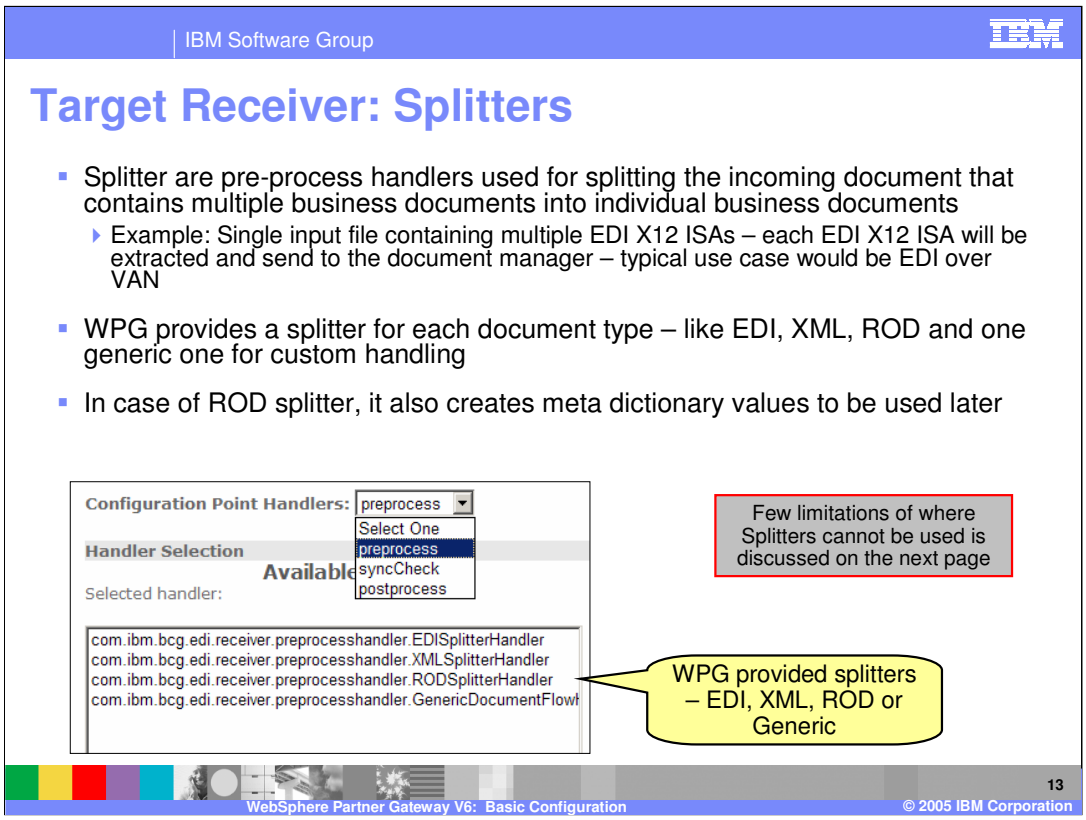
For the HTTP protocol, the HTTP target URL must start with the string “bcgreceiver” after the machine and port values. For example, the URL could be **http://<hostname>:57080/bcgreceiver/submit**

JMS protocol requires the JMS queue and connection factory name, the JNDO name for the connection factory and the JMS provider URL. This is standard information required to access a JMS queue.

POP3 requires the IP address or host name and port of the POP3 server along with the user id and password.



The panels for FTP directory and FTP scripting are shown here.

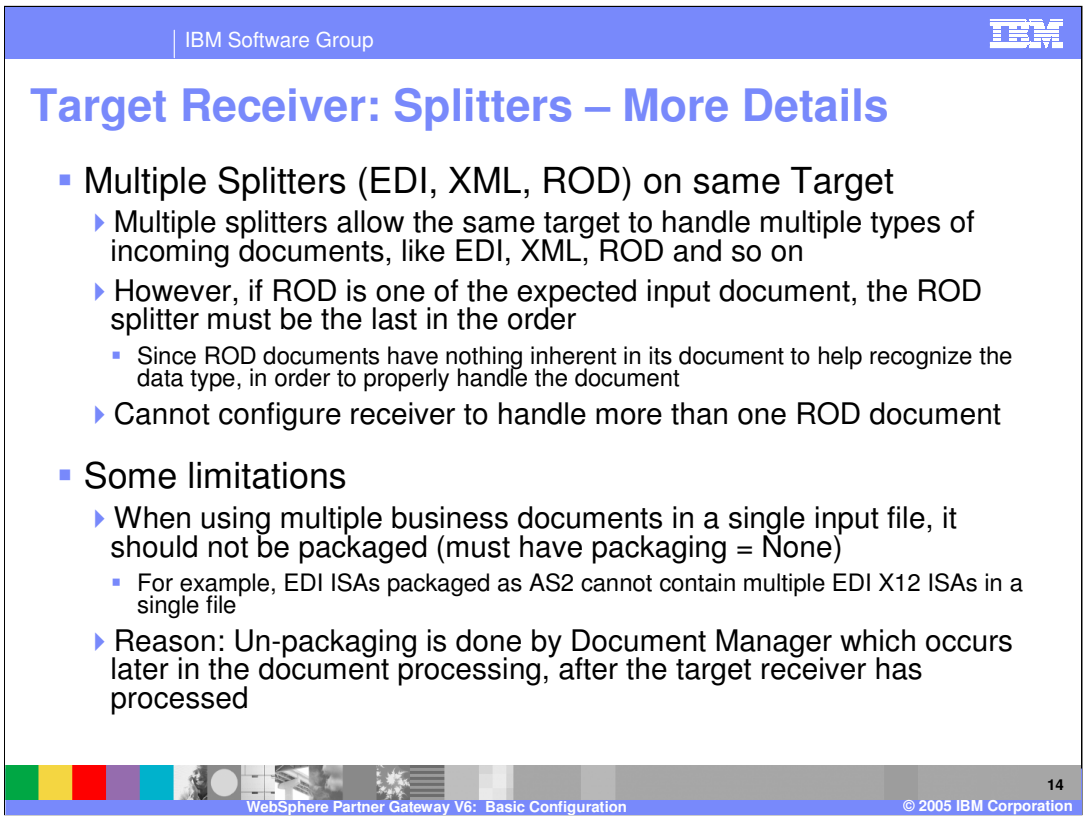


Splitter handlers are available as a pre-process handler for all of the supported transports used by the Targets.

Splitters perform the basic function of splitting incoming multiple business documents into individual business documents before sending them to the document manager. For example, an incoming EDI document could contain multiple ISAs (envelopes). The EDI Splitter splits the incoming document into separate EDI envelopes for downstream processing by the document manager. Another example would be an incoming XML file with multiple XML documents.

The splitter also extracts the information for cases like ROD and create meta data that is used by subsequent processes to extract information such as source and business target IDs

from the document.



Multiple splitters can be assigned to a single target, allowing the target to handle multiple types of input documents, such as EDI, XML, and ROD. When defining multiple splitters, the ROD splitter must be the last in the order. An EDI splitter can determine if the incoming document is an EDI document based on the EDI format. If it is not an EDI document, it will not process the document, but pass it on to next splitter in the order. This is true for XML splitters as well. However, ROD splitters are configured to parse the input ROD document of a specific format. If the ROD splitter receives an EDI, XML, or ROD of different format, it will send an error so the ROD splitter must be the last in the order.

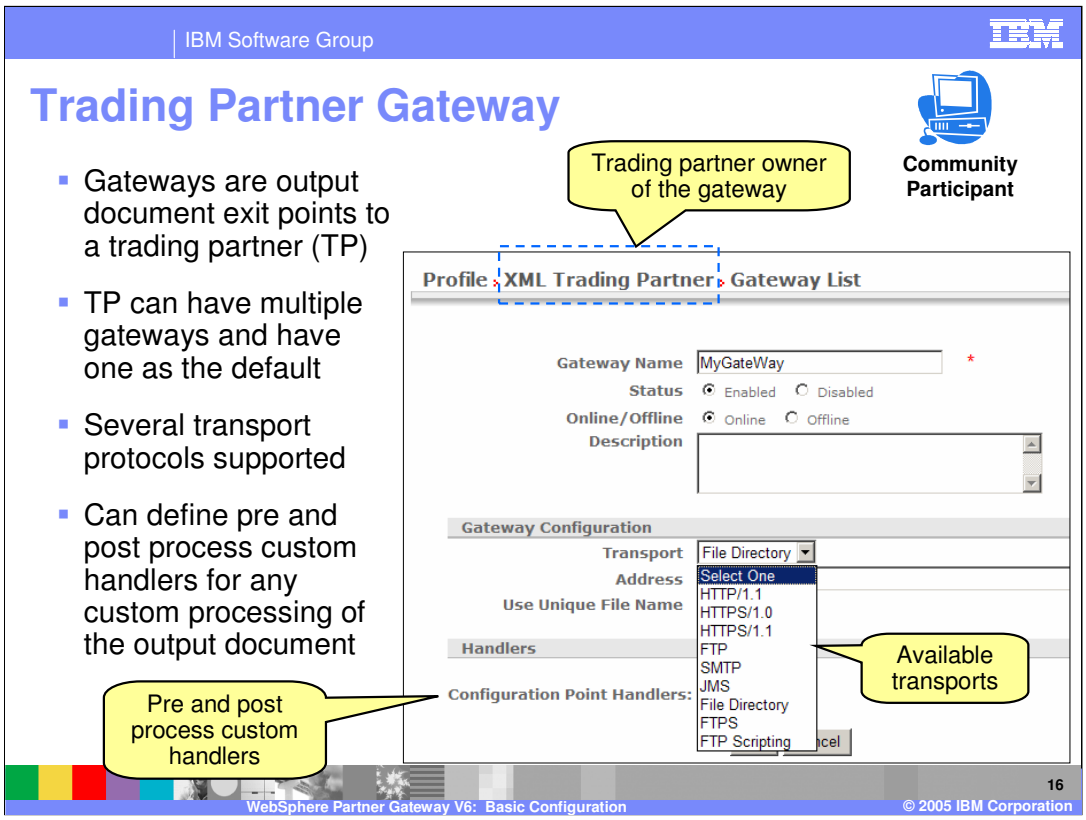
There are some limitations using an EDI splitter to split an incoming document with multiple ISAs.

For example, with some packaging, such as AS2, single files containing multiple EDI documents is not supported. When documents are encrypted, the decryption is performed by the document manager. However, the splitting that must take place after decryption occurs in the receiver target. As a result, encrypted multiple documents are not supported by the hub.

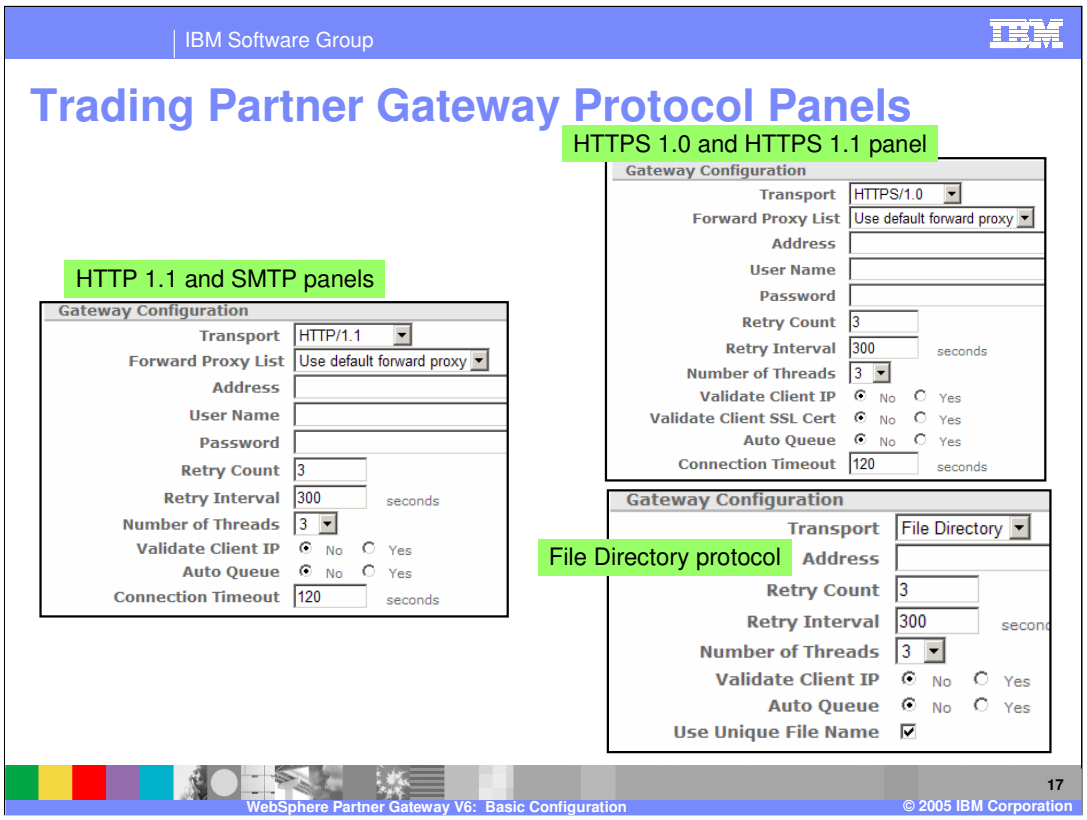
Section

Trading Partner Gateways

This section will cover the Trading Partner Gateway, which is part of the trading partner profile.



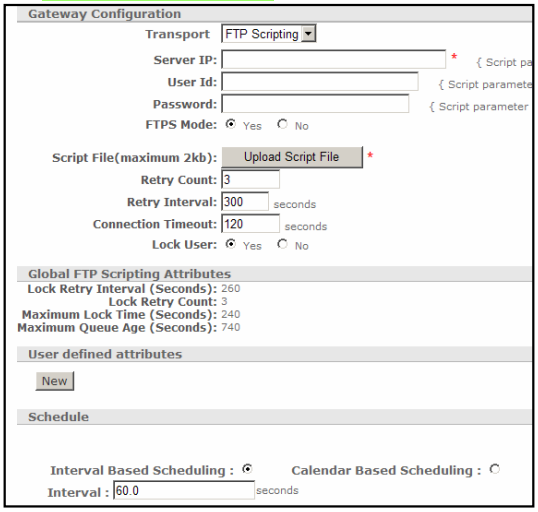
A Trading Partner Gateway is an exit point for the outgoing documents to the target trading partner. Multiple gateways can be defined for a trading partner. However, for a given document to the target trading partner, a specific gateway must be specified. If a gateway is not specified, the default gateway is used. Like receivers, gateways support multiple transport protocols and pre and post process handlers can be specified on the gateway for custom processing.



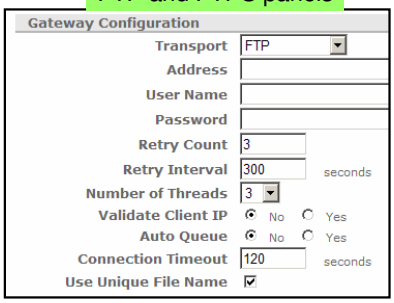
Shown here are the console gateway panels for the HTTP, HTTPS, SMTP, and File directory transport protocols.

Trading Partner Gateway Protocol Panels (cont.)

FTP Scripting panel



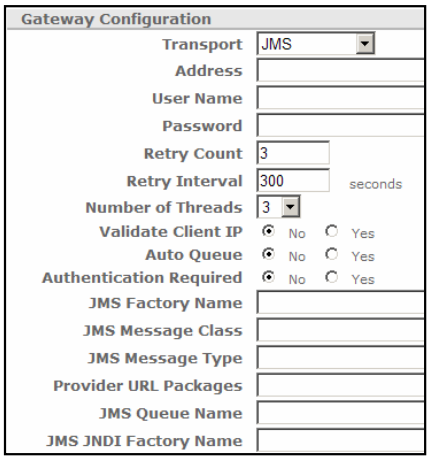
FTP and FTPS panels



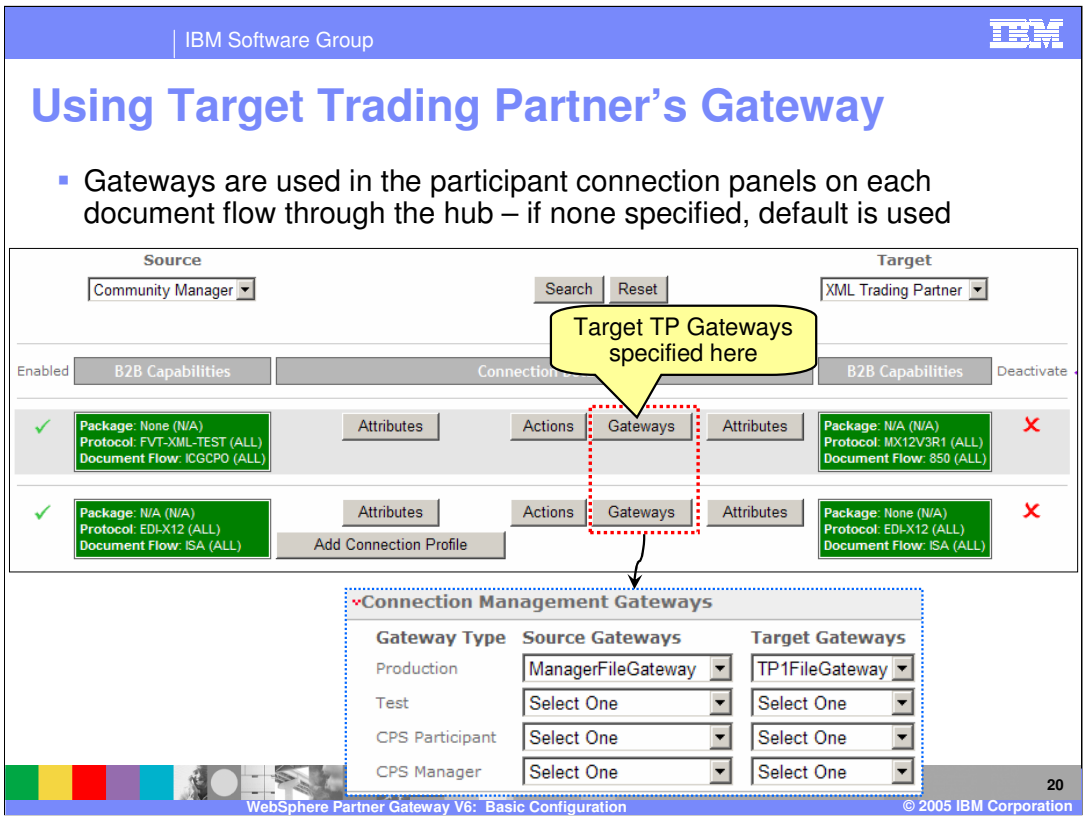
Shown here are the console gateway panels for the FTP, FTPS, and FTP scripting transport protocols.

Trading Partner Gateway Protocol Panels (cont.)

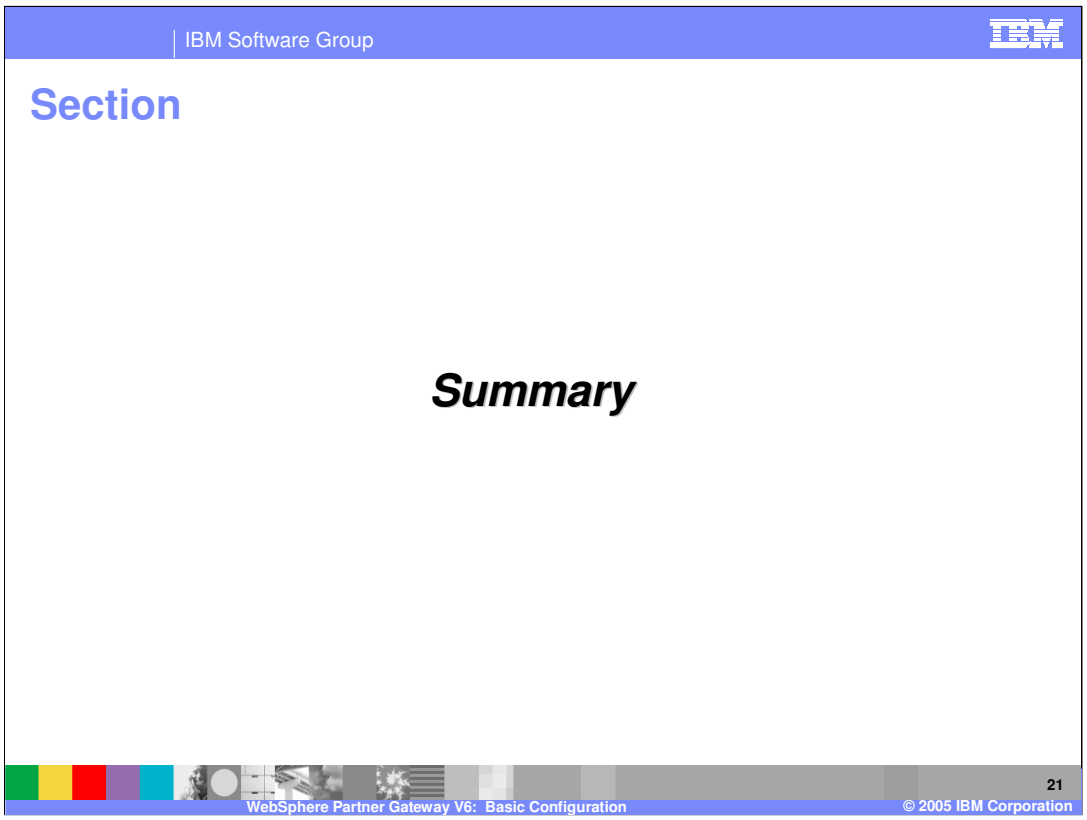
JMS panel



Shown here is the console gateway panels for the JMS transport protocol.



The participant connection panel shows the "Gateways" button where the target partner gateways are assigned to the specific connection for a document flow. If no gateway is assigned, the default gateway is used. The connection must have at least one gateway assigned for the document to flow through the hub.



This section will provide a summary of the topics covered in this presentation.

Summary

- This presentation covered basic configuration of Trading Partners, receivers (targets) and its splitters, and Trading partner's Gateways
- All document flows require this minimum configuration, besides the configuration needed specific for that document flow
  - The document flow configuration steps are described in other presentations

This presentation covered the basics of trading partners, receivers and gateways. These are minimum configuration components needed for all documents flowing through the hub.

Other presentations cover more detailed document flows of various types with examples.

Appendix

Extra Material

This section provides some additional material concerning splitters and handlers.

Target - EDI Splitter

- EDI splitter is needed for target where incoming EDI document may contain multiple Interchange (ISA)
- EDI has a known structure, so the EDI splitter can derive the information it needs from the EDI data itself
- Attributes that can be set on handler instance
  - Character encoding
    - Default is the local file encoding for the system the product

If the receiver target expects to receive EDI documents containing multiple ISA (envelopes), an EDI splitter should be configured for the target.

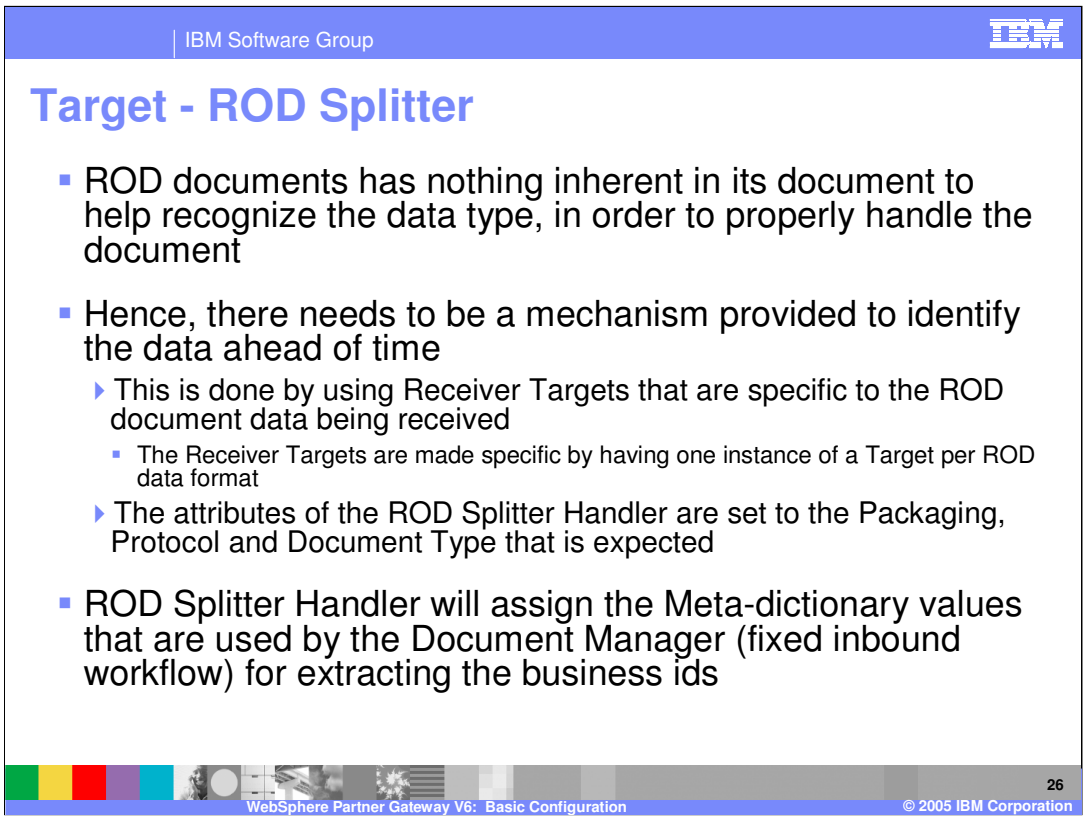
The EDI splitter can recognize the EDI document, since EDI format has a known structure.

Attributes such as character encoding can be specified for the EDI splitter on the target.

Target - XML Splitter

- XML has a known structure, the XML splitter can derive the information it needs from the XML data itself
- Applies to all transport type
- Needs capability to detect if the received document contains multiple XML documents – done by:
  - By checking for XML Prologue tags
  - If no XML prologue then by checking for basic XML syntax

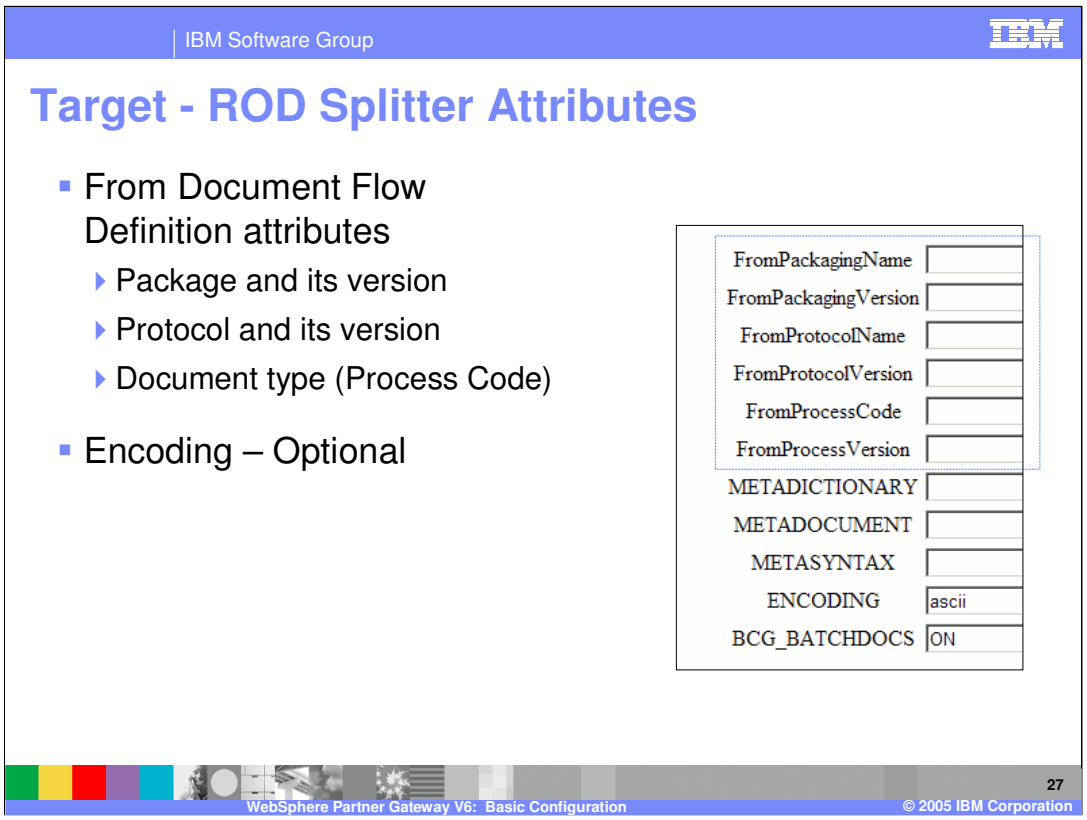
The XML splitter can derive the information needed from the XML data. Documents containing multiple XML documents can be detected by checking for XML prologue tags, or if no prologue tag exists, by checking for basic XML syntax.



For efficiency, the ROD Splitter Handler will always return true to the isApplies() method.

To parse the data to determine if the ROD Splitter Handler applies is not very practical for the following reasons:

1. The entire data may need to be processed before a determination can be made.
2. Often there is not one thing that identifies to the handler if it applies. Instead, the splitter is just informed about certain fields, record lengths, and other items to split the data on.



For the Documents Flow Definition attributes, there is no way to enable the Administrator to view the available document flow definitions when setting this attribute from within the attribute view itself (for example, there is no drop down list), but the values can be determined from the Document flow definitions

Target - Generic Data Handler

- Generic Data Handler is used to allow users to add support for their own packages and protocols with their own user exits

The Generic Data Handler allows you to add support for your own packages and protocols.

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