TIBCO BusinessConnect™ EDI Protocol powered by Instream®

Gateway Configuration

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TIBC○®

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Preface

TIBCO BusinessConnect™ EDI Protocol powered by Instream® is the TIBCO business-to-business (B2B) solution for transferring EDI documents between trading partners. This manual describes how to use the Gateway protocol.

Topics

Related Documentation

This section lists documentation resources you may find useful.

TIBCO BusinessConnect EDI Protocol powered by Instream Documentation

The following documents form the TIBCO BusinessConnect EDI Protocol powered by Instream documentation set:

- *TIBCO BusinessConnect EDI Protocol powered by Instream Installation* Read this manual to learn about installing and deploying TIBCO BusinessConnect EDI Protocol powered by Instream.

- *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide* Read this manual for instructions on using the product to configure all the EDI protocols.

- *TIBCO BusinessConnect EDI Protocol powered by Instream EDIFACT Configuration* Read this manual for instructions on configuring the EDIFACT protocol.

- *TIBCO BusinessConnect EDI Protocol powered by Instream Gateway Configuration* Read this manual for instructions on configuring the Gateway protocol.

- *TIBCO BusinessConnect EDI Protocol powered by Instream Service Configuration* Read this manual for instructions on configuring the Service protocol.

- *TIBCO BusinessConnect EDI Protocol powered by Instream TEXT Configuration* Read this manual for instructions on configuring the TEXT protocol.

- *TIBCO BusinessConnect EDI Protocol powered by Instream TRADACOMS Configuration* Read this manual for instructions on configuring the TRADACOMS protocol.

- *TIBCO BusinessConnect EDI Protocol powered by Instream X12 Configuration* Read this manual for instructions on configuring the X12 protocol.

- *TIBCO BusinessConnect EDI Protocol powered by Instream Release Notes* Read the release notes for a list of new and changed features. This document also contains lists of known issues and closed issues for this release.

Other TIBCO Product Documentation

You may find it useful to read the documentation for the following TIBCO products:

- TIBCO ActiveMatrix BusinessWorks™

- TIBCO ActiveMatrix BusinessWorks™ Plug-in for BusinessConnect™

- TIBCO Administrator™
- TIBCO BusinessConnect™
- TIBCO BusinessConnect™ Palette
- TIBCO Business Studio™
- TIBCO Designer™

Typographical Conventions

The following typographical conventions are used in this manual.

Table 1   General Typographical Conventions

Convention	Use
ENV_HOME *TIBCO_HOME*	TIBCO products are installed into an installation environment. A product installed into an installation environment does not access components in other installation environments. Incompatible products and multiple instances of the same product must be installed into different installation environments. An installation environment consists of the following properties: • **Name** Identifies the installation environment. This name is referenced in documentation as *ENV_NAME*. On Microsoft Windows, the name is appended to the name of Windows services created by the installer and is a component of the path to the product shortcut in the Windows **Start > All Programs** menu. • **Path** The folder into which the product is installed. This folder is referenced in documentation as *TIBCO_HOME*.
TIBEDI_HOME	*TIBCO BusinessConnect EDI Protocol powered by Instream* installs into a directory within a *TIBCO_HOME*. This directory is referenced in documentation as *TIBEDI_HOME*. The default value of *TIBEDI_HOME* depends on the operating system. For example, on Windows systems, the default value is C:\tibco\bc*version*\protocols\tibedi.
code font	Code font identifies commands, code examples, filenames, pathnames, and output displayed in a command window. For example: Use MyCommand to start the foo process.
bold code font	Bold code font is used in the following ways: • In procedures, to indicate what a user types. For example: Type **admin**. • In large code samples, to indicate the parts of the sample that are of particular interest. • In command syntax, to indicate the default parameter for a command. For example, if no parameter is specified, MyCommand is enabled: MyCommand [**enable** | disable]

Table 1   General Typographical Conventions (Cont'd)

Convention	Use
italic font	Italic font is used in the following ways: • To indicate a document title. For example: See *TIBCO BusinessConnect EDI Protocol powered by Instream Installation*. • To introduce new terms. For example: A portal page may contain several portlets. *Portlets* are mini-applications that run in a portal. • To indicate a variable in a command or code syntax that you must replace. For example: MyCommand *PathName*.
Key combinations	Key names separated by a plus sign indicate keys pressed simultaneously. For example: Ctrl+C. Key names separated by a comma and space indicate keys pressed one after the other. For example: Esc, Ctrl+Q.
	The note icon indicates information that is of special interest or importance, for example, an additional action required only in certain circumstances.
	The tip icon indicates an idea that could be useful, for example, a way to apply the information provided in the current section to achieve a specific result.
	The warning icon indicates the potential for a damaging situation, for example, data loss or corruption if certain steps are taken or not taken.

TIBCO Product Documentation and Support Services

For information about this product, you can read the documentation, contact TIBCO Support, or join TIBCO Community.

How to Access TIBCO Documentation

Documentation for TIBCO products is available on the TIBCO Product Documentation website mainly in the HTML and PDF formats.

The TIBCO Product Documentation website is updated frequently and is more current than any other documentation included with the product. To access the latest documentation, visit https://docs.tibco.com.

Documentation for TIBCO BusinessConnect EDI Protocol powered by Instream is available on the https://docs.tibco.com/products/tibco-businessconnect-edi-protocol-powered-by-instream Product Documentation page.

How to Contact TIBCO Support

You can contact TIBCO Support in the following ways:

- For an overview of TIBCO Support, and information about getting started with TIBCO Support, visit http://www.tibco.com/services/support

- For accessing the Support Knowledge Base and getting personalized content about products you are interested in, visit the TIBCO Support portal at https://support.tibco.com.

- For creating a Support case, you must have a valid maintenance or support contract with TIBCO. You also need a user name and password to log in to https://support.tibco.com. If you do not have a user name, you can request one by clicking Register on the website.

How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employee subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature requests from within the TIBCO Ideas Portal. For a free registration, go to https://community.tibco.com.

Chapter 1 **Overview**

This chapter describes the Gateway protocol for TIBCO BusinessConnect EDI Protocol powered by Instream.

Topics

Product Overview

TIBCO BusinessConnect EDI Protocol powered by Instream is the TIBCO B2B solution for transferring EDI documents between trading partners.

The protocol can be used for all EDI integration scenarios, including connecting directly to trading partners using Internet or through value added networks (VANs), and provides common format standards support for various EDI document standards including the X12, TEXT, TRADACOMS, and EDIFACT standards. For more information on setting up TIBCO BusinessConnect EDI Protocol powered by Instream to exchange X12, TEXT, TRADACOMS, and EDIFACT documents with your trading partners, refer to the configuration guides for these protocols.

Unlike the X12, TEXT, TRADACOMS, and EDIFACT standards, Gateway does not represent a well-known common format standard in the EDI document exchange industry; instead, Gateway facilitates the transport of EDI documents to and from your trading partners either directly or through a VAN. Gateway also helps you orchestrate the processing of incoming EDI documents received by TIBCO BusinessConnect and is an important component of TIBCO BusinessConnect EDI Protocol powered by Instream.

Figure 1   Gateway Diagram
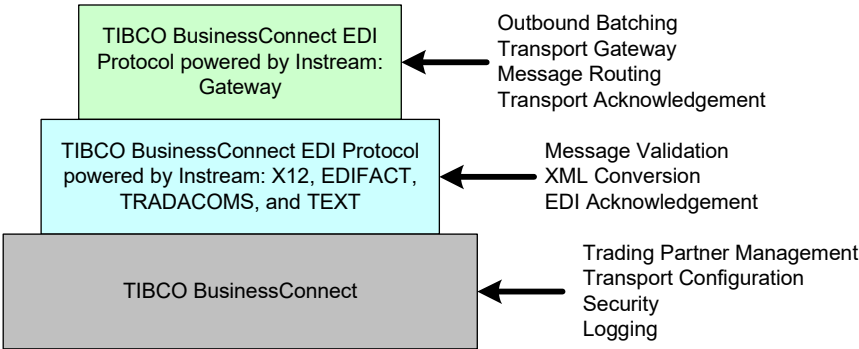
As shown in Figure 1, Gateway provides three major functionalities:

- **Outbound Batching** Monitors and manages activities for batching of outbound X12 and EDIFACT transactions. See Outbound Batching on page 3.

- **Transport Gateway** Serves as a common transport gateway for exchanging EDI documents with your trading partners that bypasses the EDI validation and XML conversion. See Transport Gateway on page 6.

- **Message Routing** Identifies and distributes inbound EDI documents for EDI message validation and XML conversion processing. See Message Routing on page 7.

Outbound Batching

With TIBCO BusinessConnect EDI Protocol powered by Instream X12 and EDIFACT protocols, outbound transactions can be sent individually with one outgoing EDI document containing only one transaction enclosed in a single interchange envelope. Outbound transactions can also be batched together into an EDI document that contains multiple interchange envelopes, and each envelope contains multiple transactions of the same type. However, the above batching functionality cannot batch transactions targeting different trading partners into a single EDI document. The outbound batching has this functionality in Gateway protocol. Transactions of different types and targeting different trading partners can be batched together into a single outgoing EDI document. Such EDI documents contain multiple interchange envelopes, and each envelope contains one type of transaction targeting one trading partner.

By providing this batching functionality, the Gateway protocol represents the commercial VANs where batches of transactions are distributed to the target trading partners.

Multiple trading partners can share the same Gateway for batching X12 and EDIFACT transactions by specifying the same Gateway name in their batching configuration. The batch EDI document contains multiple interchange envelopes, and each interchange envelope contains a batch of transactions for one trading partner.

Batching is not available for TEXT and TRADACOMS.

A diagram of outbound batching is shown in Figure 2.

Figure 2   Outbound Batching

EDI Multiple Interchange Envelope Messages with
Batches of Transactions
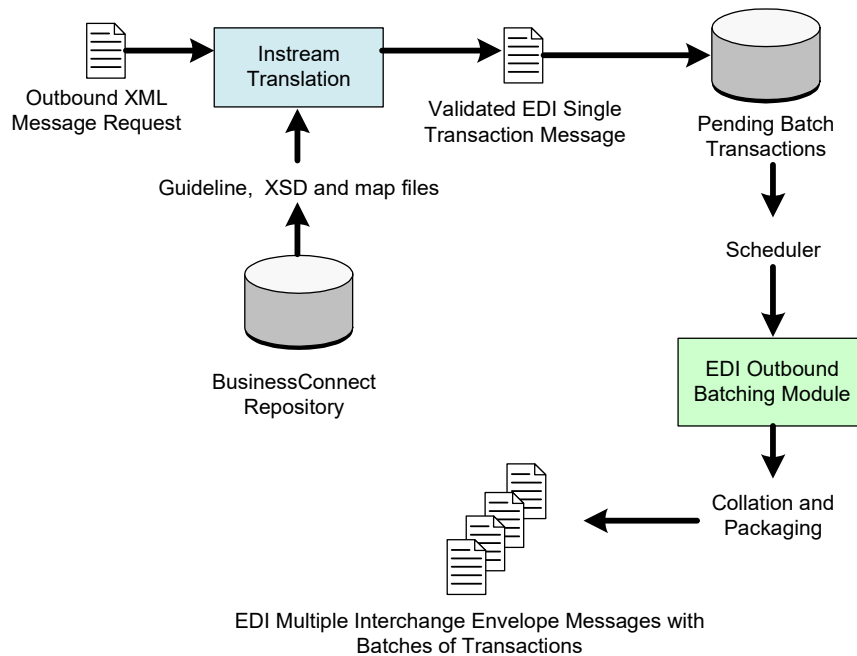
Each X12 or EDIFACT transaction goes through message validation and conversion from the XML request to the standard EDI format. The messages that are configured to be delivered in batch are persisted into the database after successful message validation and conversion.

You configure a maximum count of messages or a scheduled time interval. When a batch of persisted transactions reaches this count or interval, all the persisted transactions are retrieved back from the database and collated into a single interchange envelope. Each transaction in the resulting EDI document is assigned a unique control number within the interchange envelope before the batch is transmitted to your trading partner. The batch is transmitted using the transport that you have chosen as a default.

Outbound batching is enabled by the Batching and Scheduled Transmission options for an X12- or EDIFACT-enabled trading partner.

For more information on these options, refer to the chapters on setting up of the trading partners in *the configuration guides for* X12 or EDIFACT *protocols.*

The Gateway protocol provides two mechanisms of controlling the batching of X12 or EDIFACT transactions at the trading partner level:

- Maximum number of transactions in each batch. When the cumulated number of transactions reaches the maximum count, the batch is marked for transmission immediately. A new batch will be created for subsequent new outgoing transactions.

- Regular time interval between the start time and the end time of the scheduling window.

  Batching times are defined based on the start time in increments of the specified interval until the end time of the scheduling window, all outgoing transactions are cumulated before the next batching time.

  For example: if the start and end time is from 9:00 AM. to 6:00 PM. with a scheduled time interval of 30 minutes, the batches are scheduled at 9:00 AM., 9:30 AM., 10:00 AM., and so on.

There are also additional options that extend the batching behavior at the transaction level. These options are:

- **Always** If the batch scheduler is enabled in the trading partner **Scheduled Transmission** tab, all transactions of this transaction type for that trading partner will be placed into batches. The batches will be sent based upon the settings in the business agreement **Scheduled Transmission** tab. See Scheduled Transmission Tab on page 50.

- **Never** You can configure a transaction type to be excluded from the batching facility so the transaction will always be transmitted directly to your trading partner immediately. For example: All invoices for a particular trading partner are always sent directly as received from the back-end system.

- **Exclusively** TIBCO BusinessConnect can organize transactions so that each interchange envelope contains only one type of transaction. For example: All purchase orders for a particular trading partner are always packaged into a single interchange envelope. The exclusive batching feature includes two options in which TIBCO BusinessConnect can transmit:

  — Each interchange in its own document

  — Multiple interchanges in a single document

To learn more about these options, see *TIBCO BusinessConnect EDI Protocol Powered by Instream, X12 Configuration,* Outbound Action Tab.

Transport Gateway

The Gateway protocol provides a facility for sending well-formed EDI documents generated from the back-end systems directly to your trading partner without EDI message validation and XML or TEXT conversion. This function is particularly useful when your back-end system or legacy application is capable of generating well-formed EDI documents. In this scenario, Gateway serves as the transport gateway to provide transport connectivity, such as AS1 and AS2, with your trading partner.

No EDI guideline validation is done for documents that are picked up from the Gateway polling directory. The Gateway outbound EDI file request poller provides transport connectivity to your trading partners without EDI message validation and XML conversion. Therefore, it functions as a pass-through gateway for sending EDI documents.

EDI documents that are picked up under the polling directory for Gateway will not be examined for multiple interchanges to identify the trading partner. The Gateway protocol generates only one outbound request message to the corresponding Gateway trading partner. The trading partner must be specified in the name of the parent directory from which the document is being picked up.

If the Gateway polling directory is specified as

/tibco/bc/outbound/request/*.*

the outbound file poller recursively searches through all subdirectories of /tibco/bc/outbound/request/ for files that match the pattern *.*.

For example, to transmit the X12_5010_850.dat file to the trading partner VAN1, put it in the subdirectory /tibco/bc/outbound/request/VAN1. TIBCO BusinessConnect will pick up the file and generate a single outbound request to the Gateway trading partner VAN1.

Gateway does not perform any EDI guideline validation or EDI to XML (or EDI to TEXT) conversion of any outbound documents, whether they come from the outbound file poller directory or private process communication; it functions as a pass-through gateway for sending EDI documents.

Message Routing

When an EDI document is received from a trading partner by the Gateway protocol through the various supported inbound transports Gateway handles all the activities in acknowledging your trading partner at the transport level.

Transport level acknowledgment includes message decryption and authentication as well as composing the receipt synchronously or asynchronously. Gateway then inspects the message and identifies the document type in preparation for protocol standard-specific processing. Protocol standard-specific processing includes splitting the incoming EDI document into multiple interchange envelopes if necessary and redirecting each interchange envelope for EDI message validation and XML conversion.

After this splitting, the EDI message validation and XML conversion is handled by protocol standard-specific processing such as the X12, TEXT, TRADACOMS, or EDIFACT standards. Corresponding protocol standard level acknowledgments, such as X12 997 or EDIFACT CONTRL, are generated accordingly.

The Gateway protocol also provides an option for bypassing the protocol standard specific message validation and XML conversion based on the detected document type. This option is available through the Operations Editor for the corresponding document type. By disabling the protocol standards specific processing, Gateway can simply serves as the inbound transport gateway for receiving and routing inbound EDI documents to your back-end systems or legacy applications which are already capable of processing a well-formed EDI documents.

Chapter 2 # Tutorial — Getting Started

This chapter gives an overview of how to use TIBCO ActiveMatrix BusinessWorks with TIBCO BusinessConnect EDI Protocol powered by Instream.

In this tutorial you will configure trading partner information, configure a private process to communicate with TIBCO BusinessConnect EDI Protocol powered by Instream, and run the tutorial.

Topics

Overview

In this tutorial you use TIBCO ActiveMatrix BusinessWorks and TIBCO BusinessConnect EDI Protocol powered by Instream running on one machine to send a 850 transaction using the Gateway protocol to a trading partner.

Normally the trading partner is represented by another B2B engine running on another machine. However, this tutorial is run on a single machine and when the 850 is sent to the trading partner, the transport properties are defined to store the request in a directory on the local file system.

The identifier information is as follows:

When you run the tutorial, the following steps occur:

1. TIBCO Designer/TIBCO Business Studio reads a file which contains the data for 850.

2. TIBCO Designer/TIBCO Business Studio sends the EDI data to TIBCO BusinessConnect EDI Protocol powered by Instream.

3. TIBCO BusinessConnect EDI Protocol powered by Instream sends the interchange to the trading partner without validating it.

4. FILE transport is used to simulate sending an interchange to a trading partner. By using FILE transport, the interchange is written to a file on the local file system when it is sent to the trading partner.

The following sections describe how to set up and run the tutorial. The steps involved in setting up TIBCO BusinessConnect EDI Protocol powered by Instream to run the tutorial are the same steps that have been discussed in *TIBCO BusinessConnect EDI Protocol powered by Instream, User's Guide,* Chapter 3, "Exchanging Documents":

- Trading Partner Setup
- TIBCO ActiveMatrix BusinessWorks Process Assembly

Prerequisites

Before starting the tutorial, perform the following steps:

1. Install the following software packages:

    a. TIBCO BusinessConnect (Server)

    b. TIBCO BusinessConnect Palette or TIBCO ActiveMatrix BusinessWorks Plug-in for BusinessConnect

    c. TIBCO Foresight® Instream® Standard Edition

    d. TIBCO Foresight® Translator Standard Edition

    e. TIBCO BusinessConnect EDI Protocol powered by Instream

2. If you are not familiar with Gateway, read Chapter 1, Overview, on page 1.

3. Review *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide,* Chapter 3, "Exchanging Documents."

4. See *TIBCO BusinessConnect Interior Server Administration* and the *TIBCO BusinessConnect Trading Partner Administration* for complete information on setting up and running TIBCO BusinessConnect.

5. Review "Setting Up Trading Partners" in *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide*.

6. Activate TIBCO BusinessConnect EDI Protocol powered by Instream.

Configuring the Initiator

This section steps you through the activities you need to perform to configure the host and trading partner on the Initiator machine. As explained before, the trading partner is normally represented by another B2B engine running on another machine. However, this tutorial is run on a single (Initiator) machine.

To proceed with the tutorial, perform the following steps:

- Set Up a Host, page 12
- Set Up a Trading Partner, page 13
- Configure the Business Agreement, page 14
- Deploy the Initiator Server, page 15

Set Up a Host

On the Initiator machine, you will set up a trading host. If this is the first time you are configuring a host on this machine after installing EDI protocols, follow these steps:

1. Start Creating a New Trading Host, page 12
2. Activate the Trading Host, page 13

Start Creating a New Trading Host

To create your trading host and set it as the default host, perform the following steps:

1. Click the **BusinessConnect > Participants** link in the left panel.
2. Click the **New** button in the right panel.
3. Type Company1 in the **Name** field.
4. Select **Host** in the **Type** list.
5. Click **OK**.
6. Click **Apply.**

Enable the Gateway Protocol for the New Host

All EDI protocols are enabled by default after installation. In order to configure and activate any of the protocols, you must disable *all other unconfigured* protocols. Once the protocols are configured, they can be enabled or disabled at any time: this procedure is needed only when configuring protocols for the first time.

If no protocols have been enabled:

1. Click the **Protocols** tab.

2. Select the check boxes next to all other EDI protocols except for Gateway.

3. Click **Disable**.

If enabling an additional protocol:

1. Click **Enable**.

2. In the list of non-enabled protocols, select the check box next to **Gateway**.

3. Click **OK** and **Save**.

Activate the Trading Host

1. Click the **Company1** link.

2. Select the **Active** check box.

3. Click **Save**.

> Saving of the trading host will succeed only if the protocol is properly configured: protocol is binded and a qualifier and ID are provided.

4. Select **BusinessConnect > System Settings > General** and verify that Company1 is selected as the default host.

Set Up a Trading Partner

The trading partner setup consists of these steps:

- Create a Trading Partner, page 13
- Enable the Gateway Protocol, page 14
- Set the Transport, page 14

Create a Trading Partner

To set up the trading partner, perform the following steps:

1. Click the **BusinessConnect > Participants** link in the left panel.

2. Click the **New** button in the right panel.

3. Type Company2 in the **Name** field.

4. Select **Partner** in the **Type** list.

5. Click **OK**.

6. Select the **Active** check box.

7. Click **Save**.

Enable the Gateway Protocol

1. Select Conmpany2 link.

2. Click the **Protocols** tab.

3. Click the **Enable** button.

4. Select the **Gateway** check box.

5. Click **OK**.

Set the Transport

To set the transport:

1. Click the **Gateway** link.

2. Click the **Transports** tab.

3. Click **Add**.

4. Provide the transport name as FILE and select **FILE** from the **Type** list.

5. Click **OK**.

6. In the URL field, type **C:/testEDI/out**.

> Forward slashes are used in the path as opposed to the Windows backslash. This is because the fields of the TIBCO BusinessConnect console are HTML user interface text components. As with any HTML user interface text component, the backslash (\) is treated as an escape character.

7. Click **Save** three times.

Configure the Business Agreement

1. Click the **BusinessConnect > Business Agreements** link in the left panel.

2. Click the **New** button in the right panel.

3. Select the **Company1** radio button in the Host Party area and the **Company2** radio button in the Partner Party area.

4. Click **OK**.

5. Click the **Add Protocol Binding** button.

6. Select the **Gateway** check box.

7. Click **OK**.

8. Click the **Gateway** link.

9. Click the **Transports** tab.

10. Make sure that **FILE** is selected in the **Primary Transport** list in the Outbound Transports for Host 'Company1' area.

11. Click **Save** twice.

Deploy the Initiator Server

The Initiator server must be set up to communicate with its trading partners. To do so, follow these steps

• Create the deployment configuration. See *TIBCO BusinessConnect Interior Server Administration* for information on deployment configurations.

• Deploy BusinessConnect and start the server.

Configuring Private Processes

TIBCO BusinessConnect EDI Protocol powered by Instream contains an example TIBCO ActiveMatrix BusinessWorks project which sends a 850 to TIBCO BusinessConnect.

This section describes how to configure private processes in the following ways:

Configuring Private Processes in TIBCO Designer

To configure private processes in TIBCO Designer:

Opening the TIBCO ActiveMatrix BusinessWorks Project

To open the example TIBCO ActiveMatrix BusinessWorks project in TIBCO Designer, perform the following steps:

1. Start TIBCO Designer.

2. Click **New empty project**.

3. In the Save Project dialog, click **Cancel**.

4. Select **Project > Import Full Project**.

5. Click the **ZIP Archive** tab.

6. Navigate to *BC_HOME*\protocols\tibedi\samples\bw\Gateway_Text

7. Select **Gateway_Text.zip** and click **Open**.

8. Click **OK**.

   The Import - Options dialog is displayed.

9. In the **Options** tab, click **Try rename in case of name conflict**.

10. Click **Apply**.

11. Select **Project > Save As**.

12. In the Project Directory file chooser, navigate to
    BC_HOME\protocols\tibedi\samples\bw\Gateway_Text.

13. Click **OK** twice.

14. When a dialog is displayed asking to use the directory as a project directory, click **Yes**. The zip archive file is deleted.

    The window shown in Figure 3 is displayed.

Figure 3   TIBCO ActiveMatrix BusinessWorks Project
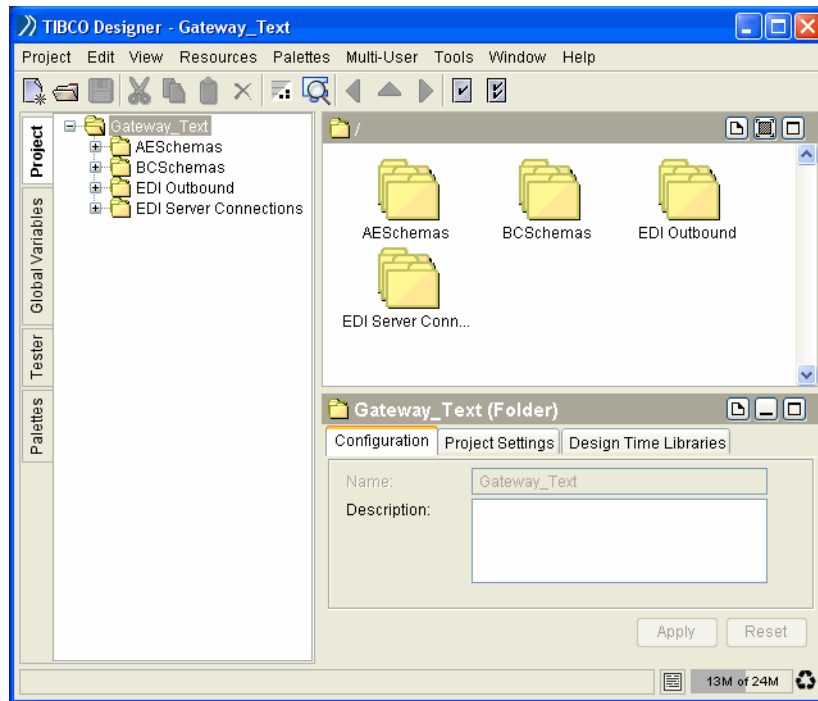
15. Click the **Global Variables** tab.

16. Verify that the global variable **BCHome** is set to your TIBCO BusinessConnect installation directory.

    If you made any changes, save the project but do not exit TIBCO Designer.

Configuring Connections to BusinessConnect

To configure connections to BusinessConnect, perform the following steps:

1. Click the **Project** tab.

2. In the EDI Server Connections folder, double-click **BCServerConfigGateway**.

3. Click the **BusinessConnect Server Access** tab.

   a. Select the JDBC driver you use to communicate with the BusinessConnect configuration store from the **JDBC Driver Type** list.

   b. Type the URL for the configuration store in the **JDBC URL** field.

   c. Type the configuration store user name and password in the **DB User** and **DB Password** fields.

   d. Click the **Apply** button.

4. Click the **Configuration** tab.

5. Click the **Update from Configuration Store** button.

6. Select **Gateway** from the **Protocol Name** list.

7. Click the **Import Selected Business Protocol** button. When you import the protocol, TIBCO ActiveMatrix BusinessWorks retrieves schema information from the TIBCO BusinessConnect configuration store and puts it in the BCSchemas project folder.

Figure 4   BusinessConnect Server Access
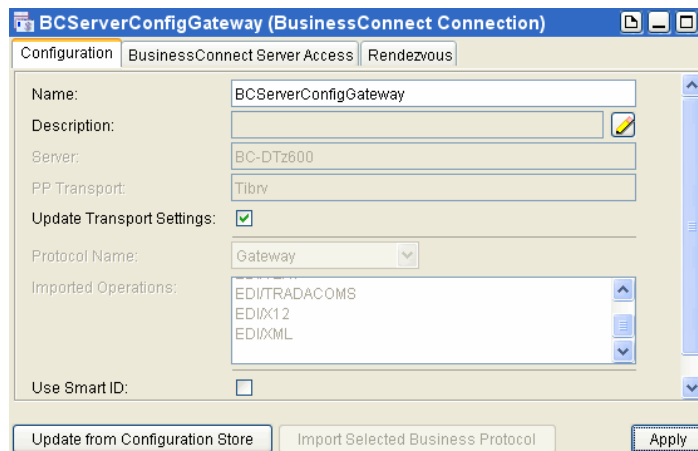
8. Click **Apply**.

9. Click the Save icon to save the project.

Configuring Private Processes in TIBCO Business Studio

To configure a private process in TIBCO Business Studio:

1. Opening the TIBCO ActiveMatrix BusinessWorks Project, page 19

2. Configuring Connections to TIBCO BusinessConnect, page 19

Opening the TIBCO ActiveMatrix BusinessWorks Project

To open the TIBCO ActiveMatrix BusinessWorks project in TIBCO Business Studio:

1. Start TIBCO Business Studio.

2. Click **File > Import**.

3. On the Import page, expand the **General** folder and select **Existing Studio Projects into Workspace**. Click **Next**.

4. Click **Browse** next to the **Select archive file** field to navigate to the *BC_HOME/*protocols/tibedi/samples/bw/Gateway_Text directory, and select the Gateway_Text_for_bw6.zip file. Click **Open**.

5. Click **Finish**.

After importing the sample, you also need to perform the following steps:

1. Expand **Gateway_Text > Module Descriptors** in the Project Explorer view.

2. Double-click **Module Properties**.

3. Change the default values of the BCHome, TPName, and DataFile properties according to your environment.

Configuring Connections to TIBCO BusinessConnect

To configure connections to TIBCO BusinessConnect:

1. In the Project Explorer view, expand **Resources** and double-click **BCServerConfigGateway.bcResource**.

2. Click the **Server Access** tab.

3. Enter information as explained in .

4. Click the **Configuration** tab, and click **Update from Configuration Store**.

5. Select **Gateway** from the **Protocol Name** list.

   If you select the **Select Operations** check box, you can select any of the configured/imported operations. For this tutorial, select all operations and click **OK**.

6. Click **Import Selected Business Protocol**.

   When you import the protocol, TIBCO ActiveMatrix BusinessWorks retrieves information from the TIBCO BusinessConnect configuration store and puts them in the project folder.

7. Click **Save**.

Running the Tutorial

To run the tutorial, follow these steps:

1. Set the Input Data, page 20

2. Send the 850 Transaction, page 21.

3. Check the results of sending the message.

   See Expected Results on page 22 and View the Audit Log on page 22.

> The steps of how to load and run private processes in TIBCO Business Studio are similar to TIBCO Designer. See TIBCO ActiveMatrix BusinessWorks Documentation for more details.

Set the Input Data

1. Expand the **Gateway_Text > EDI Outbound** folder.

2. Select the process inside the folder and press the F12 key.

Figure 5   Input Data for EDI Outbound/Send EDI as Text
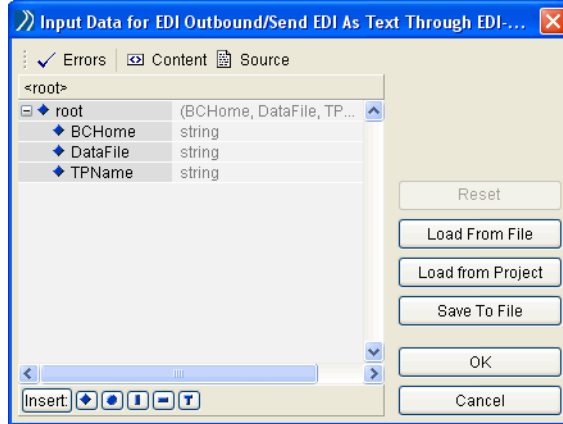
3. Type the following input data:

   — BCHOME: *BC_HOME ,* such as C:\tibco\bc*version*

   — DataFile: **X12_5010_850.dat**

   — TPName: **Company2**

4. Click **OK**.

Send the 850 Transaction

The Send EDI As Text Through Gateway process in presented in Figure 6.

Figure 6   Send EDI As Text Through Gateway
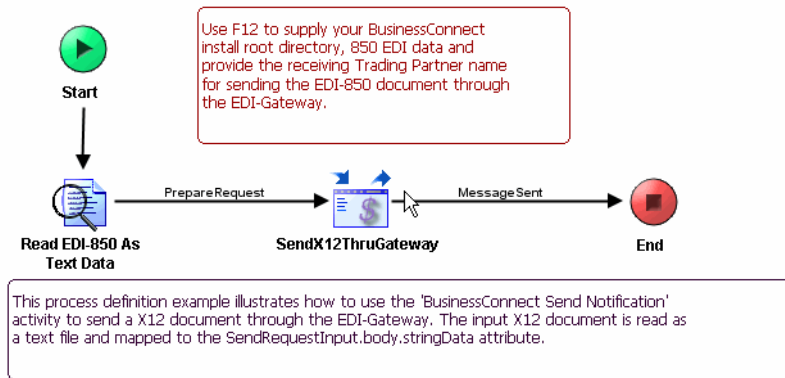
This process:

1. Reads a file containing EDI data for X12 850.

2. Constructs a message containing the EDI data and sends it to TIBCO BusinessConnect EDI Protocol powered by Instream.

To run the process:

1. Click the **Tester** tab.

2. Click **Start testing viewed process** ▶.

Figure 7   Select Process to Load
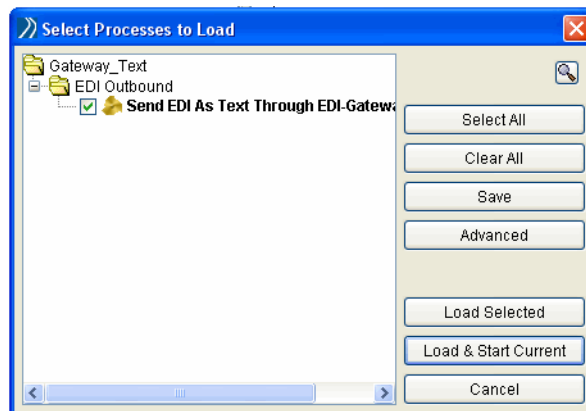
3. Select the check box next to Send EDI As Text Through Gateway.

4. Click **Load Selected**.

5. Select **Send EDI As Text Through Gateway.**

6. Click **Start Test** 🔺 .

Figure 8   Message Sent Thru Gateway
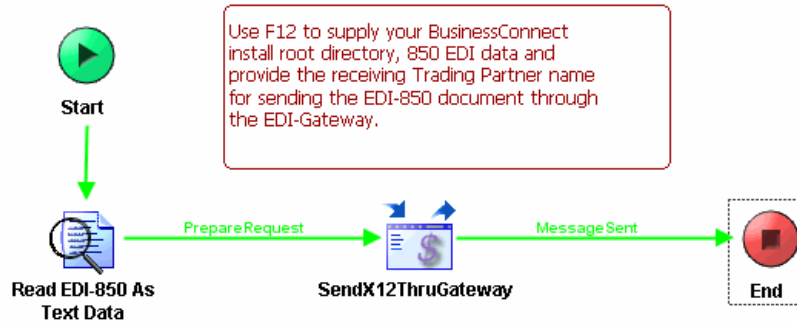
7. The designated file has been read and sent through the Gateway.

Expected Results

Once the X12_5010_850 message has been received by TIBCO BusinessConnect EDI Protocol powered by Instream, messages are written to a file on the local file system when it simulates sending the interchange to the trading partner. What you can observe:

- The SendX12ThruGateway activity of the Send EDI As Text Through Gateway process should contain output that indicates that the X12_5010_850 message was successfully sent to the trading partner.

- The directory c:\testEDI\out should contain a file which contains the 850 that was sent to the trading partner by TIBCO BusinessConnect EDI Protocol powered by Instream.

- The audit log should contain entries that for each processing state that occurred in TIBCO BusinessConnect. See View the Audit Log on page 22.

View the Audit Log

To view the audit log on the Initiator machine, perform the following steps:

1. Click the **BusinessConnect > Log Viewer** link in the left panel.

2. Click the **Gateway** link.

3. Select items from the following lists: **Status**, **Connection**, and **Date Range**.

4. Click **Search**.

Figure 9   Gateway Audit Log Search Results

5. Click the **Details** icon in the left-most column of the Search Results area to view details of the transaction.

6. Compare the audit log entries on your Initiator with Figure 10.

    The figure contains a detailed successful transaction.

Figure 10   Initiator Transaction Detail

7. Click the icon next to the specific transaction to see more details.

Figure 11   Transaction Details: State RESEND_RECEIVED_FROM_PP

Chapter 3 **Managing Validation and Conversion**

This chapter describes how to manage validation and conversion when using the Gateway protocol.

Topics

Overview

TIBCO BusinessConnect EDI Protocol powered by Instream uses predefined operations in Gateway to send and receive EDI documents for the Gateway-enabled trading partners.

The following operations are predefined upon installation of TIBCO BusinessConnect EDI Protocol powered by Instream:

- EDIFACT

- TEXT

- TRADACOMS

- X12

- XML

When a document is received through a Gateway trading partner, TIBCO BusinessConnect validates the content of the request and ensures that the document type conforms to one of the predefined protocols.

For incoming EDIFACT, TEXT, TRADACOMS, and X12 documents, TIBCO BusinessConnect determines if EDI validation and XML conversion are required. This determination is based on the option for validation and conversion in the **Inbound Action** tab in the screen **Edit <protocol> Document Transmission for Group EDI: <protocol>.**

Configuring Validation and Conversion

When a document is received through a Gateway trading partner, TIBCO BusinessConnect determines if EDI validation and XML or TEXT conversion are required. This determination is based on the setting of the check box Enable (xxx) Validation and Conversion. To configure the available validation and conversion type for a selected protocol, perform these steps:

1. Using TIBCO Administrator, select BusinessConnect> Operations Editor.

2. Click the **Gateway** link

   Click the topmost + (plus) sign to display the tree.

Figure 12   Edit Gateway Operations
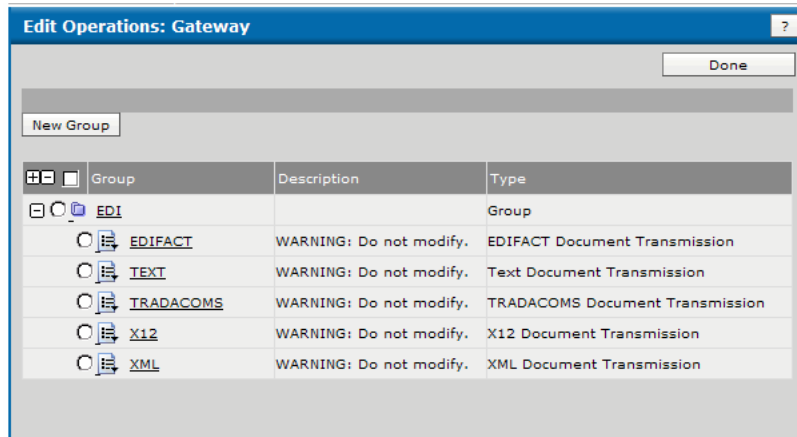
3. Click the protocol link, such as X12.

   The dialog New X12 Document Transmission is shown on .

Figure 13   Edit X12 Document Transmission
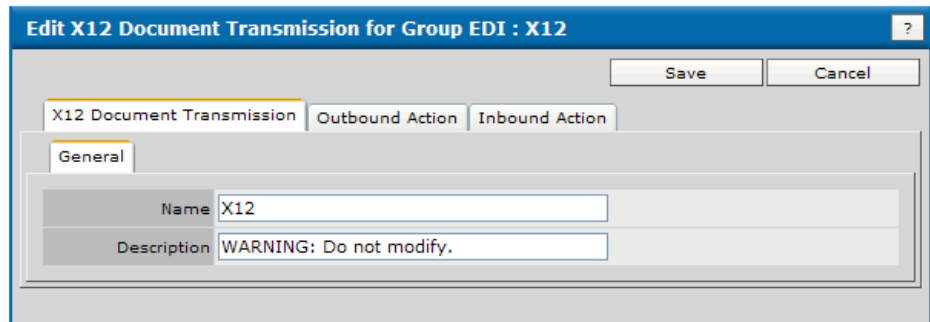
Document Transmission Tab

This tab contains data that cannot be modified:

- Name: Selected document transmission type (EDIFACT, TEXT, TRADACOMS, X12, or XML)

- Description: Pre filled as "WARNING: Do not Modify"

TIBCO BusinessConnect EDI Protocol powered by Instream utilizes predefined operations in Gateway to send and receive EDI documents for Gateway enabled trading partners.

Outbound Action Tab

The **Outbound Action** tab contains the following fields:

Table 2   Outbound Action for Document Transmission

Field	Description
Name	Enter the name for this transmission.
Description	Enter the description for this transmission
Direction	Initiator to Responder (pre-filled)

Inbound Action Tab

This allows you to configure the following data:

Table 3   Inbound Action Tab

Field	Description
Name	Enter the name for this transmission.
Description	Enter the description for this transmission
Direction	Responder to Initiator (pre-filled)

Table 3   Inbound Action Tab (Cont'd)

Field	Description
Enable (XXX) Validation and Conversion	This check box allows for different validation and conversion choices, depending on the document transmission type: • **EDIFACT, X12** Enable EDI to XML (or EDI to TEXT) Validation and Conversion For more information about this option, see *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide*, "Validation and XML Conversion" and "TEXT to EDI Conversion." • **TEXT** Enable TEXT to XML Validation and Conversion For more information about this option, see *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide*, "TEXT to EDI Conversion." • **TRADACOMS** Enable EDI to XML Validation and Conversion For more information about this option, see *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide*, "Validation and XML Conversion". • **XML** No validation and conversion options are available if you are using the XML document transmission type. If the check box is not selected, the EDI document is not parsed and no EDI validation and XML or TEXT conversion is performed. In this case: • The entire EDI document is published to the private process under the subject AX.BC.*installation_name*.Gateway.RESPONDER.REQUEST • The payload is populated under the rawRequest field of binary type. • If the Log Raw Request to File setting (see Logging Tab on page 34) is enabled, the incoming or outgoing EDI document is written to file accordingly and the requestFile field is populated with the corresponding file reference.

Chapter 4 **Setting Up Trading Hosts**

This chapter describes setting up the trading host in TIBCO BusinessConnect EDI Protocol powered by Instream when using Gateway.

Topics

Configuring the Gateway Protocol for Hosts

To enable the Gateway protocol:

1. Click the **BusinessConnect > Participants** link in the left panel.

2. Click a host participant link in the right panel.

3. Click the **Protocols** tab.

4. If Gateway is not displayed in the list of protocols:

    a. Click **Enable**.

    b. Select the **Gateway** check box.

    c. Click **OK**.

5. Click the **Gateway** link. The following configuration options are available:

    — General Tab, page 33.

    — Logging Tab, page 34.

6. Click **Save**.

General Tab

To set host's general properties, use the data from Table 4.

Table 4   General Fields

Field	Description
AS2 Identifier	An identifier to use in the AS2-From header field of the HTTP message. This identifier should be mutually agreed upon between trading partners. This identifier can be an interchange ID. This only applies when using AS2 transport.
Valid Email Address List	The identifier to use in the From header field of the SMTP MIME message. This email address list can be a list of email addresses. For an outbound document sent to the trading partner through SMTP transport, the first email address is used in the From header. For incoming email from the mail server, the To email address from the email is matched to one of the email addresses in this list. This only applies when using AS1 or AS2 transport.

Logging Tab

Use the **Logging** tab to configure EDI-specific logging options available with TIBCO BusinessConnect EDI Protocol powered by Instream.

For further information, see *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide*, "Document Archiving."

Table 5   Logging Fields

Field	Description
Inbound	
Log Raw Request to File	Log the inbound or outbound EDI documents that are transmitted through the Gateway.
Threshold (bytes)	The payload size above which the payload is streamed to a file and a file reference is passed in the message instead of the payload itself. This affects messages flowing between the BusinessConnect engine and the Interior Server and for messages between the Interior Server to the private process.
Store Location	Enter a valid file system location. The original inbound EDI documents are stored in a directory whose name is derived from the specified location.
Include Date Folder	Creates a file reference in a folder created based on the current date.
Outbound	
Log Raw EDI Request to File	Log the original, intact and unconverted EDI documents. This option is also used for Insight reporting.
	Outbound Insight reporting at Gateway level is supported for batching cases. To enable this, check the options:
	• Gateway TP > Gateway protocol > Batch Tab > Outbound > Publish Information to Insight Reporting for Batch, and
	• Host > Gateway protocol > Logging Tab > Outbound Log Raw EDI Request to File.
Store Location	The original inbound EDI documents are stored in a directory whose name is derived from the specified location.
Include Date Folder	If checked, the date folder is added to the document path.
	If unchecked, the date folder is omitted and the document is stored under the *tpName* directory.

Chapter 5 **Setting Up Trading Partners**

This chapter describes how to set up a transporting Gateway for trading partners.

Topics

Configuring the Gateway Protocol for Partners

To configure the Gateway protocol for trading partners, perform the following steps:

1. Click the **BusinessConnect > Participants** link in the left panel.

2. Click a partner participant link in the right panel.

3. Click the **Protocols** tab.

4. If Gateway is not displayed in the list of protocols

   a. Click **Enable**.

   b. Select the **Gateway** check box.

   c. Click **OK**.

Trading partner's Gateway cannot be enabled with any other EDI protocol standards.

5. Click the **Gateway** link. The following configuration options are available:

   — General Tab, page 37.

   — Batching Tab, page 38.

   — Transports Tab, page 40.

General Tab

To configure the **General** tab and set the properties for the transporting Gateway use .

Table 6   General Fields

Field	Description
AS2 Identifier	An identifier to use in the AS2-To header field of the HTTP message. This identifier should be mutually agreed upon between trading partners. This identifier can be an interchange ID. This only applies when using AS2 transport.
Valid Email Address List	The email address that is used to match against the incoming email from the mail server. If the incoming email From address matches to any email address in this list, then this trading partner is picked as the receiving party. This only applies when using AS1 or AS2 transport.
Inbound	
Partner Level Security Option (MIME Encode Messages Only)	Select what kind of messages you expect from this partner for this particular transaction set from among the following options: • None • Plain Text Only • Signed Only • Encrypted Only • Signed And Encrypted For example, if you expect only signed messages for this particular transaction set from a partner, but the partner, or someone posing as the partner, sends this particular transaction set in a plain text message, TIBCO BusinessConnect rejects the message. If a message is rejected, it is logged as an ERROR transaction and an error advisory is published. The rejected message is not published to the Responder private process. If an incoming message is sent as plain text and contains an interchange with multiple transaction sets, only the transaction sets that have the security option specified as Plain Text Only for the trading partner are accepted.

Batching Tab

Use the **Batching** tab to manage outbound batching for your EDIFACT or X12 partners that are using this transporting Gateway. These settings are used if this Gateway trading partner name is entered in the Gateway (override scheduler and transport settings) field in a trading partner's EDIFACT or X12 **Batching** tab. See Product Overview on page 2 for more information.

Table 7   Batching Fields

Field	Description
Outbound	
Allow Single Transmission for Multiple Exclusively-batched Interchanges	If the **Batch Option** list for a transaction action is set to Exclusively, then the interchange containing this transaction can only contain this type of transaction. But you can still put multiple interchanges, each containing different types of transactions, into a single batch and send it to the trading partner.
	This option and the option "Increment Interchange Control Number by Operation ID for Exclusive Batch" are mutually exclusive.
Increment Interchange Control Number by Operation ID for Exclusive Batch	Select the check box to increment control numbers based on transaction types in addition to partner ID qualifiers. Used only for exclusive batching.
	If the option "Always Create Batch per Trading Partner" is disabled and the document is routed from different trading partners, then the outbound document would contain 'n' number of outbound interchanges, each interchange represented for each trading partner per transaction type, since the documents are exclusively batched.
	This option and the option "Allow Single Transmission for Multiple Exclusively-batched Interchanges" are mutually exclusive.
Regenerate Control Number For Batch Resend	You can override generation of a control number for batch resend for a trading partner using X12 or EDIFACT protocol by selecting/unselecting this check box.
	To select control number regeneration for these protocols, see *TIBCO BusinessConnect EDI Protocol powered by Instream, X12 Configuration*, Regenerate Control Number For Batch Resend.
Publish Information to Insight Reporting for Batch	If enabled, this option will publish a report based on the Instream results file along with EDI data file and other information required by the Insight Reporting.
	The report will contain messages received from the trading partner, both synchronous and asynchronous.

Table 7   Batching Fields (Cont'd)

Field	Description
Always Create Batch per Trading Partner	Normally, when partners share a gateway or VAN, a single batch may contain mixed document types such as 850 and 101 that are intended for different partners. Example: One batch of 850s and 101s for distribution at the VAN to different trading partners.
	If you check this field, separate batches are created for each partner, but each batch can now contain a mixture of different document types such as 850 and 101.
Outbound XML to EDI Data Encoding for Batch*	Specify the type of encoding for outbound XML to EDI data.
	This field is required.
	The default value is US-ASCII.

Transports Tab

Use the **Transports** tab to configure transport settings for this trading partner. To add an outbound transport, click **Add** in the **Transports** tab.

The following transports are available for use with this protocol:

- HTTP
- FTP/S
- FILE
- AS2_HTTP/S
- AS1_EMAIL
- EMAIL
- SSHFTP
- Inbox

  Inbox option is available in order to allow for document exchange between partners running TIBCO BusinessConnect EDI Protocol powered by Instream and one of these products:

  — TIBCO BusinessConnect Plug-in for SSH Server

  — TIBCO BusinessConnect Plug-in for FTP Server

  — TIBCO PartnerExpress

  For more information, see *TIBCO BusinessConnect EDI Protocol powered by Instream, User's Guide*, "Set Up Trading Partner Transport via Inbox."

The steps required for configuring transports are the same for all protocols. Refer to the Transports chapters in *TIBCO BusinessConnect Trading Partner Administration Guide*.

The transports you configure serve as the default transports for all business agreements associated with this partner.

Chapter 6   **Configuring Agreement Protocol Bindings**

This chapter explains how to configure operation bindings for business agreements.

Topics

Overview

An agreement protocol binding is contained within a business agreement. For information on business agreements, see *TIBCO BusinessConnect Trading Partner Administration Guide*.

Add Protocol Binding

To configure an agreement protocol binding:

1. Click the **BusinessConnect > Business Agreements** link in the left panel.

2. Click a business agreement link.

3. Click the **Add Protocol Bindings** button.

4. Check **Gateway**.

5. Click OK.

6. Click the **Gateway** agreement protocol binding link. The following configuration options are available:

   — Operation Bindings Tab, page 43.

   — Document Security Tab, page 45.

   — Transports Tab, page 47.

   — Scheduled Transmission Tab, page 50.

   — Show Advanced, page 52

Operation Bindings Tab

Use the **Operation Bindings** tab to configure the Gateway activities that each participant in a business agreement can initiate and respond to. The following properties apply to all the activities that you import in the Operations Editor:

- **Allow All Operations** Enables participants to initiate all operations configured in TIBCO BusinessConnect. You can modify the behavior of one or more operations by binding the operations in the Host '*X*' Can Initiate and Partner '*Y*' Can Initiate areas. If unchecked, operations must be explicitly bound in the Host '*X*' Can Initiate and Partner '*Y*' Can Initiate areas.

- **Non Repudiation Logging** Enables logging of all operations in the non-repudiation log.

Binding a Message

The Host '*X*' Can Initiate area (where *X* is the host participant in the business agreement) lists the activities that the host can initiate and the partner can respond to.

The Partner '*Y*' Can Initiate area (where *Y* is the partner participant in the business agreement) lists the activities that the partner can initiate and the host can respond to.

To bind an activity in either area, perform the following steps:

1. Click **Add Operation Bindings**.

2. Click the topmost + to expand the activity tree. It lists the available protocols (EDIFACT, TEXT, TRADACOMS, and X12) plus the XML document

3. Select the check box next to a transmission.

4. Click **OK**.

Edit Operation Binding for the Host

Transports Tab

To edit an operation binding for the host, click an operation binding link.

The **Transports** tab provides the following options:

- **Override Transports** If selected, this option overrides the transports selected using **BusinessConnect > Participants > Partner > Protocols > Gateway> Transports** tab.

- Override Outbound Transports

You can override these transports by selecting which one is the Primary and which one is the Backup transport, or by selecting None (no changes).

— **Primary Transport**   Select one of the existing configured transports, or None.

— **Backup Transport**   Select one of the existing configured transports, or None.

Edit Operation Binding for the Partner

To edit an operation binding for the partner, click an operation binding link. The following options are available:

Override Action Settings

If selected, this option overrides the settings configured using

General Settings

Depending on the protocol selected, the following options will be available:

•   **EDIFACT, X12**   Enable EDI to XML (or EDI to TEXT) Validation and Conversion

•   **TEXT**   Enable TEXT to XML Validation and Conversion

•   **TRADACOMS**   Enable EDI to XML Validation and Conversion

•   **XML**   No validation and conversion options are available if you are using the XML document transmission type.

For more information, see Enable (XXX) Validation and Conversion, page 29.

Document Security Tab

Use the **Document Security** tab to specify security information for a transporting Gateway that can be shared by multiple EDIFACT or X12 trading partners. The keys and certificates selected in the tab are set in a host and the Gateway participant's Credentials tab. See *TIBCO BusinessConnect Trading Partner Administration* for information on how to set credentials. The properties listed in Table 8 can be set for inbound and outbound document exchange.

> The document security settings in the transporting Gateway are used instead of the document security settings for the EDIFACT or X12 trading partners.

Table 8   Document Security Fields

Field	Description
Outbound Doc Exchange Signing Info Settings	
Signing Key	The key the host uses to sign a message in order to identify itself to a partner. The partner uses the host's certificates file to authenticate the host by verifying the digital signature of the host.
Digest Algorithm	The algorithm used to create the digest: SHA1, SHA256, SHA384, or SHA512
PGP Signing Private Key	The PGP key the host uses to sign a message in order to identify itself to a partner.
PGP Hash Algorithm	The PGP algorithm used to create the digest to be used for digital signatures: SHA1 and RIPEMD160
Encryption Info Settings	
Encryption Certificate	The certificates file the host uses to encrypt a document before sending it to the partner. The partner uses its own host key identity file to decrypt the document.
Encryption Algorithm	The algorithm used to encrypt documents: DES3, AES-128, AES-192, AES-256
PGP Encryption Public Key	The PGP public key the host uses to encrypt a document before sending it to the partner.

Table 8   Document Security Fields (Cont'd)

Field	Description
PGP Encryption Algorithm	The PGP algorithm used to encrypt documents: DES3, BLOWFISH, CAST5, AES-128, AES-192, AES-256.
Inbound Doc Exchange Signing Info Settings	
Verification Certificate	The partner identifies itself by signing a document with its own host identity-key file. The host uses this certificate to authenticate a partner by verifying the digital signature of the partner.
PGP Signing Verification Public Key	The host uses this PGP public key to authenticate a partner by verifying the digital signature of the partner.
Encryption Info Settings	
Decryption Key	The host uses part of the host key identity file to decrypt a document that the partner encrypted using the host's certificates file.
PGP Decryption Private Key	The host uses this PGP private key to decrypt the document.

Transports Tab

Use the **Transports** tab to set transport information for a transporting Gateway. A transporting Gateway can be shared by multiple EDIFACT and X12 trading partners, while it is not supported for partners using the TEXT or TRADACOMS protocol.

The top section of the tab is used for selecting transports for the outbound, or host to trading partner, direction. The bottom section of the tab is used for selecting and configuring transports for the inbound, or trading partner to host, direction.

Setting the Outbound Transport for the Host

Select an outbound primary and backup transport. The transports are configured in a trading partner's **Protocols > Transports** tab.

See .

Table 9 Outbound Transport for the Host

Field	Description
Primary Transport	See the Transports chapters in the *TIBCO BusinessConnect Trading Partner Administration*.
Backup Transport	TIBCO BusinessConnect EDI Protocol powered by Instream supports a backup outbound transport for sending EDI documents to the trading partner. This backup transport is used if the document could not be sent via the primary transport configured in the business agreement. Such situation may happen if the trading partner's server is not available or has a wrong URL during the time the document is being sent: the document still needs to reach the server via some other means even after the primary transport retry was exhausted.
	Backup transports are configured at the business agreement level and can be one of the supported BusinessConnect transports. The same rules apply for choosing a backup transport as for a primary transport.

Table 9   Outbound Transport for the Host (Cont'd)

Field	Description
AS2 Async MDN Reply Transport	Same as for TIBCO BusinessConnect. Select any of the configured transports. The settings from the specified AS2 MDN Async Reply Transport field are used for sending async MDN responses back to your trading partner. Configuring the AS2 MDN Async Reply Transport is not necessary unless you would like to specify different values for the following HTTP transmission related settings: • Retry Count – default is 3 • Retry Interval – default is 60 seconds • Socket Timeout – default is 300 seconds (5 minutes) Any other settings specified in the AS2 MDN Async Reply Transport are ignored. The most common case for which you would specify this transport is when your trading partner is not acknowledging the receipt of your async MDNs within the default socket timeout period.
AS2 Async MDN Remote Server Certificate	The Remote Server Certificate for the AS2 HTTPS transport is a SSL certificate that should be used for encrypting the data sent using HTTPS. This dropdown list contains all of the certificates that have been configured for the Trading Partner. You can select the one that was configured to be used for SSL encryption. **Note** The server certificate configuration is only required for Async MDNs via AS2 HTTPS transport.
Client Authentication Identity for HTTPS, FTPS, HTTPSCA	Choose between the transport that was set up as Client Authentication Identity for HTTPS, FTPS, HTTPSCA, or None.
Client Authentication Identity for SSHFTP	Choose between the transport that was set up as Client Authentication Identity for SSHFTP, or None.

Setting the Inbound Transport

What displays in this area depends on the transports that are selected in the **Transport Type** area of the **Public Process Configuration** tab. For further information, see the section on Deployment Configuration in the *TIBCO BusinessConnect Trading Partner Administration*.

For inbound processing, FILE and HTTP transports do not provide trading-partner information. Therefore, Gateway does not use FILE or HTTP transports for inbound processing. If FILE or HTTP is configured as the transport, Gateway uses the associated business protocol instead. For example, if the message type is X12, Gateway uses the X12 protocol for transport. This does not apply to AS1, AS2, EMAIL, or FTP transports because these transports provide trading-partner information in headers or URLs.

Table 10   Inbound Transport Fields

Field	Description
HTTP/S	Allow HTTP/S connections from this partner directly or from a VAN. This also applies when the inbound connection is using the AS2 transport.
HTTPSCA/AS2	See *TIBCO BusinessConnect Trading Partner Administration*, Chapter 11, HTTP, HTTPS, and HTTPSCA Transports.
FTP/S	Allow the host to perform FTP/S connections with this partner. The host is the Initiator of the FTP process. Click Edit Settings to configure FTP/S. See *TIBCO BusinessConnect Trading Partner Administration Guide* for more information on how a host uses FTP.
EMAIL	Allow email from this partner or from a VAN. This also applies when the inbound connection is using the AS1 transport. If your partner uses EMAIL and a transporting Gateway to send EDI documents back to you through a VAN, you need to configure the FTP transport. You must use FTP to get your partner's documents from the VAN site. This is because a VAN receives documents for multiple trading partners, but does not forward those documents to the recipients.
FILE	Allow FILE connections from this partner. FILE is normally used for file exchange within an enterprise. If your partner uses FILE and a transporting Gateway to send EDI documents back to you through a VAN, you need to configure FTP transport. You must use FTP to get your partner's documents from the VAN Gateway site. This is because a VAN receives documents for multiple trading partners, but does not forward those documents to the recipients.
SSHFTP	See *TIBCO BusinessConnect Trading Partner Administration*, Chapter 15, SSHFTP Transport.

Scheduled Transmission Tab

Use the **Scheduled Transmission** tab to schedule the transmission of outbound batches for this Gateway transporting partner. One EDIFACT or X12 trading partner can use a Gateway transporting partner or multiple partners can share a Gateway transporting partner to send transmissions to a VAN.

Gateway-partner settings always override the trading-partner settings. If multiple trading partners use one Gateway partner for transmissions, check for any conflicts between the Gateway-partner settings and the individual trading-partner settings and determine how best to proceed.

By default, transactions are transmitted to your trading partners immediately after they are processed by TIBCO BusinessConnect EDI Protocol powered by Instream. Using the options in the **Scheduled Transmission** tab, transactions can be scheduled to be sent:

- Only during a specified time period

- Only on certain days of the week

- Only on certain dates

If you use this tab to control when messages are transmitted, you can use the Log Viewer to view, submit manually, and delete queued messages.

Table 11   Scheduled Transmission Fields

Field	Description
Enable	Enable this configuration.
	The transaction will not route through the Gateway if this check box is not enabled.
Transmission Mode	The type of the transmission schedule: Everyday, Day of the Week, Specific Dates. The selection determines which of the other fields on the tab are used.
Start Time	Defines the start of the transmission window.
End Time	Defines the end of the transmission window.
Days of the Week	The days of the week that messages will be transmitted. Used when the mode is Day of the Week.

Table 11   Scheduled Transmission Fields (Cont'd)

Field	Description
Frequency	How often to group transactions into a single interchange and send them to trading partner.
	The transmission window specified for scheduled transmissions still applies when you select a frequency. When the transmission window opens, pending transactions for this trading partner are grouped together and sent at the frequency selected.
	The frequency you specify is applied to the scheduled transmission start time. The first transmission will be at the scheduled transmission start time. Each subsequent transmission will be at the start time plus the frequency interval specified.
	For example, if the start time is 9 AM. and the frequency is Every 30 mins, then the first transmission will occur at 9:00 AM., the next transmission will occur at 9:30 AM., and so forth.
Transaction Count Threshold	Limit the number of transactions in an interchange.
	If scheduled transmissions are enabled, entering a number will cause the following to occur when the transmission window is open:
	• If the number of transactions to be sent to this trading partner reaches the number specified in this field before the next transmission time is reached, all transactions up to the number specified will be grouped together into a single interchange and sent to the trading partner.
	• If the next transmission time is reached before the specified number of transactions are ready to be transmitted, the transactions that are ready will be grouped together into a single interchange and sent to the trading partner.
	When scheduled transmissions are enabled, the transmission time is always based upon the starting time.
Scheduled Dates	The list of dates when transmission will occur. Used when the mode is Specific Dates.

Show Advanced

Use the participant configuration tabs to override the general settings for a participant per agreement protocol binding. To view the participant configuration tabs, click the **Show Advanced** button.

TIBCO BusinessConnect console displays two tabs labeled *ParticipantA*'s Configuration and *ParticipantB* Configuration, where *ParticipantA* and *ParticipantB* are the participants in the business agreement.

To hide the participant configuration tabs, click the **Hide Advanced** button.

Override Settings

To override a general setting, perform the following steps:

1. Click a participant configuration tab.

2. Select the **Override Settings** check box.

   The available settings are the same as those specified for the host in or the trading partner in .

3. Modify the desired settings.

4. Click **Save** twice.

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