



TIBCO BusinessConnect™ EDI Protocol powered by Instream®

X12 Configuration

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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 X12 protocol.

Topics

- [Related Documentation, page xii](#)
- [Typographical Conventions, page xiv](#)
- [TIBCO Product Documentation and Support Services, page xvi](#)

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
<i>ENV_HOME</i> <i>TIBCO_HOME</i>	<p>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.</p> <p>An installation environment consists of the following properties:</p> <ul style="list-style-type: none">• Name Identifies the installation environment. This name is referenced in documentation as <i>ENV_NAME</i>. 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 <i>TIBCO_HOME</i>.
<i>TIBEDI_HOME</i>	<p><i>TIBCO BusinessConnect EDI Protocol powered by Instream</i> installs into a directory within a <i>TIBCO_HOME</i>. This directory is referenced in documentation as <i>TIBEDI_HOME</i>. The default value of <i>TIBEDI_HOME</i> depends on the operating system. For example, on Windows systems, the default value is C:\tibco\bc\version\protocols\tibedi.</p>
code font	<p>Code font identifies commands, code examples, filenames, pathnames, and output displayed in a command window. For example:</p> <p>Use MyCommand to start the foo process.</p>
bold code font	<p>Bold code font is used in the following ways:</p> <ul style="list-style-type: none">• 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
<i>italic font</i>	<p>Italic font is used in the following ways:</p> <ul style="list-style-type: none"> To indicate a document title. For example: See <i>TIBCO BusinessConnect EDI Protocol powered by Instream Installation</i>. To introduce new terms. For example: A portal page may contain several portlets. <i>Portlets</i> are mini-applications that run in a portal. To indicate a variable in a command or code syntax that you must replace. For example: <code>MyCommand <i>PathName</i></code>.
Key combinations	<p>Key names separated by a plus sign indicate keys pressed simultaneously. For example: Ctrl+C.</p> <p>Key names separated by a comma and space indicate keys pressed one after the other. For example: Esc, Ctrl+Q.</p>
	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 **X12 Overview**

This chapter briefly describes the X12 standard and its use for Electronic Data Interchange (EDI). For a more complete description of the X12 standard, see the standard itself, which can be found at the Data Interchange Standards Association (DISA) website:

<http://www.disa.org>

Topics

- [Product Overview, page 2](#)
- [Document Structure, page 3](#)
- [Delimiters, page 6](#)
- [Acknowledgments, page 7](#)
- [Support for File Conversion, page 9](#)
- [HIPAA Acknowledgment Properties, page 10](#)

Product Overview

EDI is the exchange of information between trading partners, which the information is formatted in according to a set of common data format standards developed in the U.S. and Western Europe during the late 1970s. EDI standards define the vocabulary, syntax rules, and structure of electronic documents.

X12 is an EDI standard from the American National Standards Institute (ANSI). The Accredited Standards Committee (ASC) X12 develops and maintains the X12 standards. In the X12 standard, a transaction set contains the data for a well-defined business function, for example, a purchase order. Today, more than three hundred X12 transaction sets are used by more than thirty thousand organizations for nearly every facet of business-to-business (B2B) operations.

Document Structure

An X12 document is a file containing EDI data to be exchanged between trading partners.

An X12 document includes the following basic structures:

- [Interchange, page 3](#)
- [Functional Group, page 4](#)
- [Transaction Set, page 4](#)

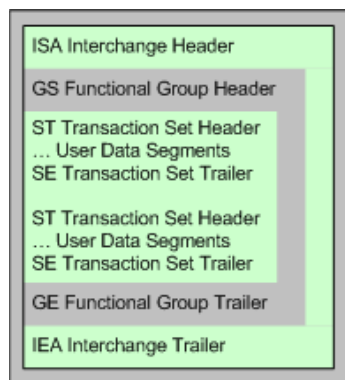
The following sections provide a basic description of each of these structures. For more detailed information on each of these structures, please see the X12 standard.

Interchange

The interchange is the basic unit of electronic data transfer. Several interchanges can be bundled into a single file for data transfer.

An interchange starts with an interchange header (ISA segment), and ends with an interchange trailer (IEA segment).

Figure 1 Structure of X12 Interchange



In X12, the interchange header (ISA) performs the following functions:

- Defines the delimiters used in the interchange.
- Identifies the sender and receiver.
- Provides control information for the interchange.
- Allows for authorization and security information.

The following example of an X12 interchange contains an 850 (purchase order) transaction set:

```

ISA~00~Authorizat~00~Security I~01~123456789   ~01~987654321
~040418~1338~U~00403~000000001~0~I~+^
GS~PO~Application Sen~Application Rec~20040418~1338~1~X~004030^
ST~850~0001^
BEG~00~CO~PO#39281~Release Number~20040418^
REF~.....
N1~.....
PO1~.....
PO1~.....
...
CTT~.....
SE~70~0001^
GE~1~1^
IEA~1~000000001^

```



Normally, all of the data in an X12 interchange is on one line. The example here has the data split across several lines in order to fit on the page. However, it is not unusual for X12 data to be split on segment boundaries or even blocked at a particular number of characters.

Functional Group

A functional group is a group of similar transaction sets, for example, three purchase orders.

It is a group of one or more related transaction sets sharing the same functional group ID. Functional groups start with the segment GS Functional Group Header, and end with the segment GE Functional Group Trailer.

The details in the Functional Group GS/GE envelope are often used to route the group transaction sets to the appropriate department or business application within a company.

Transaction Set

A transaction set contains the data for a well-defined business function. For example, X12 transaction sets can be used for purchase orders, invoices, and financial statements.

A business transaction is defined by a transaction set composed of a number of segments of variable lengths. Each segment is in turn composed of a number of data elements of variable lengths. A transaction set is analogous to a business document, such as a purchase order. A segment is analogous to a line of information in that purchase order. A data element is analogous to a unit of information in the item line. For example, in the purchase order for a book, the number of copies requested or the unit price is represented by data elements.

Transaction Set Header and Transaction Set Trailer

Each transaction set starts with a transaction set header (ST), followed by a beginning segment that uniquely identifies the type of transaction set. The transaction set header contains the transaction set identification and transaction set control number. The beginning segment is followed by other segments, which might also be found in other transaction sets, and is concluded by a transaction set trailer.

The transaction set trailer (SE) is the last element in the transaction set. It defines the end of the transaction set, and contains the number of segments included and the transaction set control number.

Delimiters

Delimiters separate various syntax structures of an X12 document.

Delimiters consist of three separators and a terminator. Each interchange in an X12 document specifies the set of delimiters to use for that interchange.

The delimiters to be used in the interchange are defined in the interchange header segment (ISA). The delimiters contain the following items:

- Data element separator
- Component element separator
- Replacement character
- Segment terminator

The delimiter characters defined in the ISA segment must not be used in a data element value elsewhere in the interchange. However, defined delimiter characters can appear within a binary data element.



Only one character per delimiter can be used for the X12 Protocol.

Acknowledgments

Acknowledgments for X12 documents fall into three categories.

- [Delivery Acknowledgments, page 7](#)
- [Syntactic Response Acknowledgments, page 7](#)
- [Business Application Acknowledgments, page 7](#)

You must have an agreement with your trading partner to use acknowledgments.

Delivery Acknowledgments

Two interchange delivery acknowledgments exist for X12 documents.

- Interchange acknowledgment segment (TA1)

An interchange acknowledge segment (TA1) reports the receipt of the contents of one interchange control header and trailer envelope, in which the envelope surrounds one or more functional groups. The TA1 reports the results of the syntactical analysis of the interchange control header and trailer. Each interchange exchanged between trading partners might contain interchange-level control segments (TA1s) related to prior interchanges.

- Interchange delivery notice segment (TA3)

An interchange delivery notice (TA3) reports the delivery status of a document, when an intermediary is used to transfer documents between an interchange sender and interchange receiver.

Syntactic Response Acknowledgments

Two syntactic response acknowledgments exist for X12 documents.

- Functional acknowledgment (997)

The functional acknowledgment (997) describes the syntax-level acknowledgment of the receipt of an X12 functional group.

- Implementation acknowledgment (999)

The implementation acknowledgment (999) is first available in the X12 004061 subrelease. It is used for reporting the status of implementation guide syntax edits.

Business Application Acknowledgments

Business application acknowledgments includes two different types.

- Application advice (824)

The application advice (824) reports the results of an application system's data content edits on a transaction set. The results of editing transaction sets can be reported at the functional group and transaction set level, in either coded or free-form format.

The 824 is designed to report the following information for a transaction set:

- Acceptance
- Rejection
- Acceptance with change

- Specific response transaction (Example: 271 response to a 270)

The status of a transaction set can also be reported by using a *specific response transaction* set as a response to the original transaction set.

The following information are examples of transaction set pairs where the status of the original transaction set is indicated in the response transaction set:

- 271 response to a 270
- 855 response to an 850
- 870 response to an 869

Support for File Conversion

The X12 protocol supports different types of file conversions.

- Validation of X12 documents and their conversion to TEXT files, either delimited or positional, based on the TEXT guidelines developed in TIBCO Foresight® EDISIM® and mapped by using the Translator tool.
- Conversion of the TEXT files to EDI for the Notify operation where TEXT files are converted to X12 protocol. To perform this conversion, the trading partner must enable both the TEXT and X12 protocol.



For more details about TEXT to EDI conversion, see *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide*, "TEXT to EDI Conversion."

- Conversion of TEXT data to X12 by using the synchronous request response transactions.

HIPAA Acknowledgment Properties

Business Application Acknowledgments

The following information is a list of the versions of business application acknowledgments that TIBCO BusinessConnect EDI Protocol powered by Instream supports:

- 00405/004050X166/824 - generated for 4010 HIPAA transactions
- 00501/005010X186A1/824 - generated for 5010 HIPAA transactions
- 00307/003070X070A1/277 - generated for 4010 HIPAA transactions
- 00404/004040X167/277 - generated for 4010 HIPAA transactions
- 00501/005010X214/277 - generated for 5010 HIPAA transactions

TIBCO BusinessConnect EDI Protocol powered by Instream can automatically generate the following business application acknowledgments:

- Application advice (824)
- Unsolicited Health Care Claim Status Notification (277U)
- Health Care Claim Acknowledgment (277CA)

The 824 application advice reports the results of an application system's data content edits on a transaction set. The results of editing transaction sets can be reported at the functional group and transaction set level, in either coded or free-form format.

The 824 is designed to report the following information for a transaction set:

- Acceptance
- Rejection
- Acceptance with change

The unsolicited health care claim status notification (277U) reports the results of an application system's data content edits on the claims in a transaction set.

The 277 Claim Acknowledgment (277CA) has replaced the usage of the 277U Unsolicited Health Care Claim Status Notification. The 277 Claim Acknowledgment reports the results of an application system data content edits on the claims in a HIPAA 837 transaction.

You can use the **HIPAA Acknowledgement** tab to specify settings to be used in composing these business application acknowledgments for documents sent by this trading partner. These settings only take effect if you have enabled transaction level acknowledgments in the **Acknowledgement** tab.

The 997 or 999 acknowledgment that is generated when 824 application advice acknowledgments are also generated, only contains the results of the X12 and HIPAA syntax validation edits for the transaction.

999 Acknowledgments

In accordance with the 5010 transaction TR3s, TIBCO BusinessConnect EDI Protocol HIPAA Edition powered by Instream can be configured to generate version 005010X231A1 999s for all HIPAA 5010 transactions.

You can use the **HIPAA Acknowledgement** tab to enable the option for generating version 005010X231A1 999s. This setting overrides any other 997 or 999 acknowledgment generation settings for 00501 interchanges, which contain HIPAA 5010 transactions.

See [Table 2](#) for details.

Table 2 HIPAA Acknowledgment Fields

Field	Description
824 Application Advice Creation	<p>Select one option to define when 824 acknowledgments are created for this partner by the host.</p> <p>The possible acknowledgment creation options are:</p> <ul style="list-style-type: none"> • None No acknowledgment is created. By default, None is selected. • Always The acknowledgment is created whether there are validation errors to be reported or not. The acknowledgment contains all validation edit information other than that which is related to syntax checking for X12 and HIPAA. • Only on Errors The acknowledgment is only created if errors that are not related to X12 syntax or HIPAA syntax occur in validation.
824 Application Advice Version	<p>Select the version of the 824 Application Advice that is generated:</p> <ul style="list-style-type: none"> • 004050X166 This version of 824 application advice is only generated for version 4010 HIPAA transactions. By default, 004050X166 is selected. • 005010X186 This version of 824 application advice is only generated for version 5010 HIPAA transactions. • 004050X166 & 005010X186 These versions of 824 application advice are generated for both version 4010 and 5010 HIPAA transactions.

Table 2 HIPAA Acknowledgment Fields (Cont'd)

Field	Description
277 Health Care Notification Creation	<p>Select one option to define when a 277U or 277CA acknowledgment is created for this partner by the host.</p> <p>277U or 277CA acknowledgments are only created for 837 transactions.</p> <p>The possible acknowledgment creation options are:</p> <ul style="list-style-type: none"> • None No acknowledgment is created (default). • Always The acknowledgment is created whether validation errors are reported or not. The acknowledgment contains all validation edit info including that which is related to syntax checking for X12 and HIPAA.
277 Health Care Notification Version	<p>Select the version of the 277U or 277CA that is generated:</p> <ul style="list-style-type: none"> • 003070X070A1 - Unsolicited Claim Status A 277U is only generated for version 4010 HIPAA transactions. (default) • 004040X167 - Claim Acknowledgement A 277CA is only generated for version 4010 HIPAA transactions. • 005010X214 - Claim Acknowledgement A 277CA is only generated for version 5010 HIPAA transactions. • 004040X167 & 005010X214 - Claim Acknowledgement A 277C is generated for both version 4010 and 5010 HIPAA transactions. • 003070X070A1 & 005010X214 - Claim Acknowledgement A 277U is generated for 4010 HIPAA transactions, and a 277CA is generated for 5010 HIPAA transactions.
005010X231A1 999 Ack Creation	<p>Select one option to enable generation of version 005010X231A1 999 acknowledgments for HIPAA 5010 transactions.</p> <ul style="list-style-type: none"> • Off 997 and 999 acknowledgment settings from the Acknowledgement tab apply to all transactions. • 5010 HIPAA Transactions Version 005010X231A1 999s are generated for 00501 interchanges, which contain HIPAA 5010 transactions. The Inbound Ack Creation Option setting from the Acknowledgement tab is still applied, for example, Interchange, Group, and Txn.

Chapter 2

Tutorials — Getting Started

This chapter describes how to use TIBCO ActiveMatrix BusinessWorks with TIBCO BusinessConnect EDI Protocol powered by Instream.

You have to configure trading partner information, configure a private process to communicate with TIBCO BusinessConnect EDI Protocol powered by Instream, and run the tutorials.

Topics

- [Prerequisites, page 14](#)
- [Using EDI Guidelines, page 15](#)
- [Configuring the Initiator, page 19](#)
- [Configuring Private Processes, page 25](#)
- [Send 850 Txn To BC, page 30](#)
- [Receive 850 TEXT Process, page 38](#)
- [CAQH Sample, page 42](#)

Prerequisites

Before starting the tutorial, you must complete the corresponding tasks.

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 unfamiliar with the X12 standard, read [Chapter 1, X12 Overview, on page 1](#).
3. For complete information on setting up and running TIBCO BusinessConnect, see *TIBCO BusinessConnect Interior Server Administration* and *TIBCO BusinessConnect Trading Partner Administration*.
4. Review "Setting Up Trading Partners" in *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide*.
5. Activate TIBCO BusinessConnect EDI Protocol powered by Instream.

Using EDI Guidelines

You can find the guidelines that are used for this tutorial in the `BC_HOME\protocols\tibedi\samples\sampleDocs\guidelines` directory.

The guideline file names are:

- X12_4030_850.std
- X12_5010_850.sef
- X12_5010_997.sef
- X12_5010_999.sef
- X12_TA1.sef

Viewing a Guideline

This procedure explains how to view the guideline used in the tutorial.

To import a guideline:

1. Start TIBCO Foresight EDISIM.

2. Click **Standards Editor**.

The **Empty Guideline - Edisim** dialog is displayed.

3. From the menu, click **File > Import > Import Single .SEF and Open**.

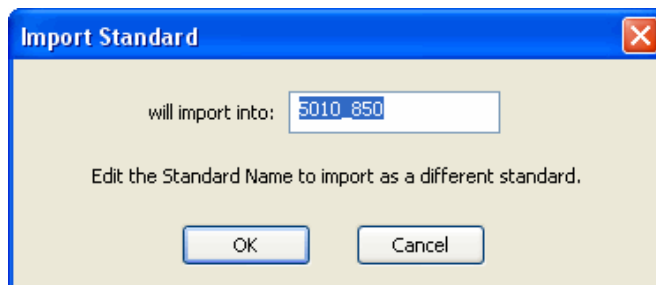
4. Navigate to the `BC_HOME\protocols\tibedi\samples\sampleDocs\guidelines` directory.

5. Select the `X12_5010_850.sef` file, and then click **Open**.

6. If the **SEF Import Correction** dialog is displayed, click **Skip Correction**.

7. In the **Import Standard** dialog, keep or change the standard name, which you want to import this guideline into, and click **OK**.

Figure 2 Import Standard

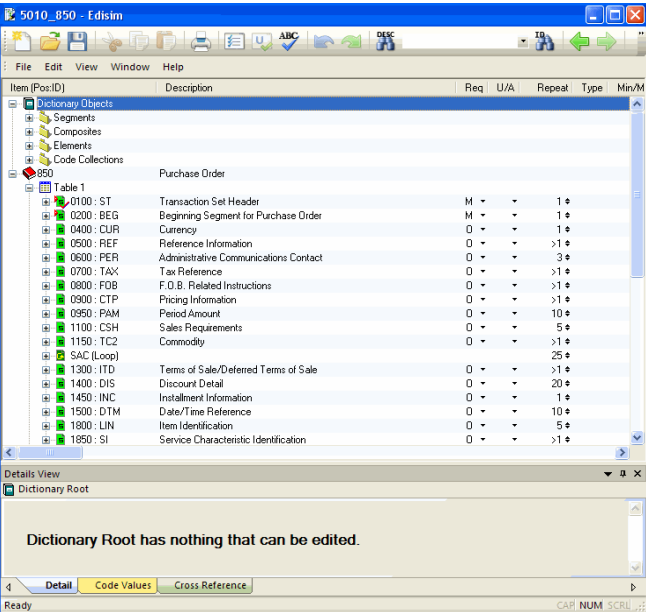


For this tutorial, keep the standard name as `5010_850` and click **OK**.

The imported standard 5010_850 is now displayed.

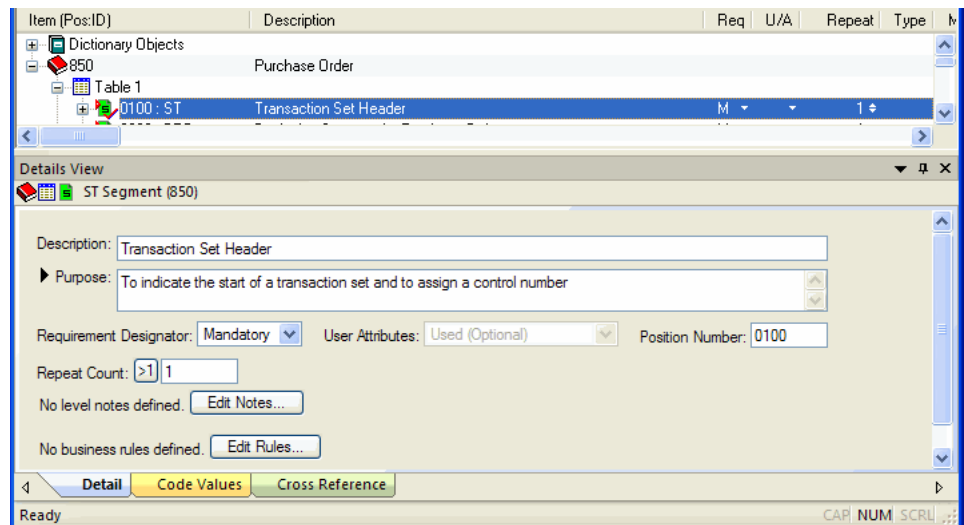
8. Click  on the left to display the purchase order guideline.

Figure 3 Elements of the Purchase Order



When you expand and highlight elements in the Guideline panel, the properties of each element are displayed in the Details View panel.

Figure 4 Details View Panel



Loading Guidelines to the X12 Protocol

This section describes how to load the guidelines and XSDs for the X12 messages. TIBCO BusinessConnect EDI Protocol powered by Instream contains a sample configuration file for this tutorial. You can load guidelines to the X12 protocol by importing the configuration file into the Operations Editor.

To import the configuration file into the Operations Editor:

1. Log on to TIBCO Administrator.
2. In the left panel, expand **BusinessConnect > Operations Editor**.
3. In the right panel, click **Import**.
4. In the Import Operations panel, click **change** next to the **Upload Configuration Data File** field.
5. In the Change File panel, click **Browse** next to the **Upload file** field to navigate to the configuration file directory.
6. Select the corresponding configuration file, and then click **Open**.
 - For the first tutorial: `BC_HOME\protocols\tibedi\samples\interfaces\X12-00403.csx`
 - For the second tutorial: `BC_HOME\protocols\tibedi\samples\interfaces\X12-850_PO_Positional.csx`
7. In the Change File panel, click **OK**.
8. In the Import Operations panel, set a password (optional) and click **Import**.

Reviewing the Guidelines

This procedure describes how to review the guideline loaded for the purchase order transaction.


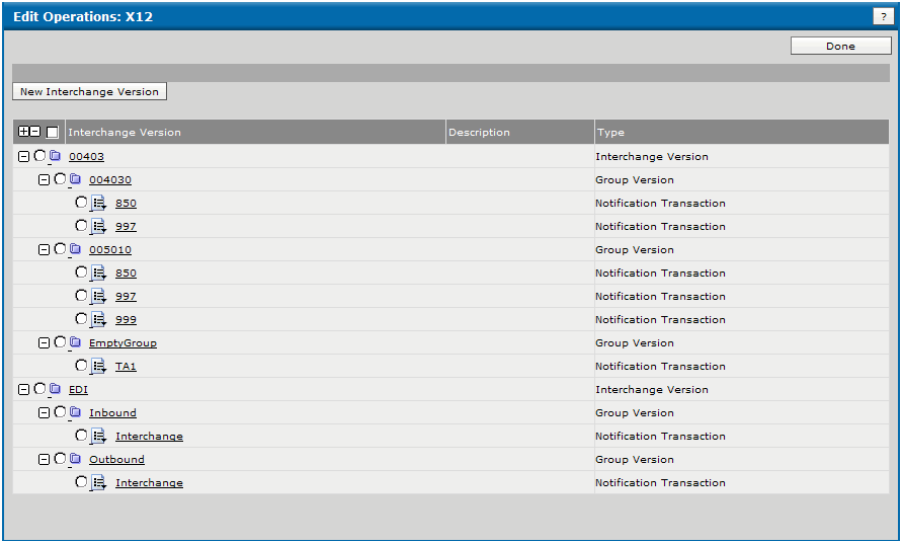
1. Click the X12 link.
2. In the **Edit Operations: X12** dialog, click the topmost **expand all**  to display all X12 operations.

Figure 5 X12 Operations



3. Click the **00403 > 005010 > 850** transaction link.
4. Click the **Guideline** tab.

Note that X12_5010_850.sef is displayed in the **Guideline File for validating X12 Partner data (.sef or .std)** field.

5. Click **Save** to save the configurations.
6. In the **Edit Operations: X12** dialog, click **Done**.

Configuring the Initiator

This section steps you through the activities you need to perform to configure a host and a trading partner on an Initiator machine that runs on the Windows platform.

As explained before, this tutorial is run on a single machine (Initiator) and when the 850 transaction is sent to the trading partner, the transport properties are defined to store the request in a directory on the local file system.

To proceed with the tutorial, perform the following tasks:

- Ensure that you have uploaded guidelines for this tutorial as described in [Loading Guidelines to the X12 Protocol, page 17](#)
- [Setting Up a Host, page 19](#)
- [Setting Up a Partner, page 21](#)
- [Configuring the Business Agreement, page 23](#)
- [Deploying the Initiator Server, page 23](#)

Setting Up a Host

To set up a trading host on the Initiator machine, you have to complete the following tasks:

1. [Creating a Host, page 19](#)
2. [Setting the Interchange Qualifier and ID for the Host, page 20](#)
3. [Activating the Host](#)

Creating a Host

To create and set up the default host:

1. Log on to TIBCO Administrator.
2. In the left panel, expand **BusinessConnect > Participants**.
3. In the right panel, click **New**.
4. In the **Name** field, type **Company1**.
5. From the **Type** list, select **Host**.
6. Click **OK** to create a host.
7. Click **Save** to save the configurations.

Enabling the X12 Protocol for the New Host

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

1. In the right panel, click the **Company1** link.
2. Click the **Protocols** tab.
3. In the **Protocols** tab, perform the following configurations:
 - a. Select the check boxes next to EDI protocols other than X12.
 - b. Click **Disable**.

If protocols have not been enabled:

- a. Click **Enable**.
- b. Select the check box next to X12, and then click **OK**.

Setting the Interchange Qualifier and ID for the Host

To set the Interchange Qualifier and ID for the host:

1. Click the **X12** link.
2. Click the **Add New** link next to the **Default Interchange Qualifier ID** field.
3. Click the **Add New** button.
4. From the **Interchange Qualifier** list, select a qualifier such as **01**.
In the **ID** field, type a name such as **987654321**.
5. Click **Save** and **OK**.
6. From the **Default Interchange Qualifier ID** list, select **01-987654321**.
7. Click **Save** twice.

Activating the Host

1. In the left panel, expand **BusinessConnect > Participants** again.
Verify that the host, Company 1, has the Domain Identity you have defined in [Setting the Interchange Qualifier and ID for the Host](#): (01)987654321.
2. Click the **Company1** link.
3. In the **General** tab of the **Edit Host Participant: Company1** dialog, select the **Active** check box.

4. Click **Save** to save the configurations.



Saving of the trading host succeeds only if the protocol is properly configured: the protocol is enabled and a qualifier/ID is provided.

5. In the left panel, expand **BusinessConnect > System Settings**.
6. In the right panel, click **General**, and verify that **Company1** is selected from the **Default Host** field as the default host.

Setting Up a Partner

The trading partner setup consists of these steps:

- [Creating a Partner, page 21](#)
- [Enabling the X12 Protocol for the Partner, page 21](#)
- [Setting the Interchange Qualifier and ID for the Partner, page 22](#)
- [Enabling Outbound EDI Validation, page 22](#)
- [Setting the Transport, page 22](#)

Creating a Partner

To set up a partner, you must first create one partner.

To create a trading partner:

1. In the left panel, expand **BusinessConnect > Participants**.
2. In the right panel, click **New** to create a participant.
3. In the **Name** field, type **Company2**.
4. From the **Type** list, select **Partner**.
5. Click **OK** to create a partner.
6. In the **General** tab, elect the **Active** check box.
7. Click **Save** to save the configurations.

The new partner Company2 is displayed in the Participants list, with no identity defined.

Enabling the X12 Protocol for the Partner

After creating a partner, you must enable the X12 protocol for the partner.

1. In the right panel, click the **Company2** link.

2. Click the **Protocols** tab.
3. In the **Protocols** tab, click **Enable**.
4. Select the **X12** check box.
5. Click **OK** to enable the X12 protocol.

Setting the Interchange Qualifier and ID for the Partner

This procedure describes how to set the interchange qualifier and ID for the partner.

1. Click the **X12** link.
2. Click the **Add New** link next to the **Default Interchange Qualifier ID** field.
3. Click the **Add New** button.
4. From the **Interchange Qualifier** list, select **01**.
5. In the **ID** field, type **123456789**.
6. Click **Save**.
7. Click **OK**.
8. From the **Default Interchange Qualifier ID** list, select **01-123456789**.
9. Click **Save** to save the configurations.

Enabling Outbound EDI Validation

This procedure describes how to enable outbound EDI validation.

1. Click the **X12** link.
2. In the **Outbound** area of the **General** tab, select the **Enable EDI Validation** check box.
3. Click **Save** to save the configurations.

Setting the Transport

This procedure describes how to set the transport.

1. Click the **X12** link.
2. Click the **Transports** tab.
3. Click **Add**.
4. In the **Name** field, type **FILE**.
5. From the **Type** list, select **FILE**.

6. Click **OK**.
7. 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.

8. Click **Save** three times to save the configurations.

Configuring the Business Agreement

After setting up a partner, you must configure the business agreement.

1. In the left panel, expand **BusinessConnect > Business Agreements**.
2. In the right panel, click **New**.
3. Click **Company1** in the **Host Party** area and **Company2** in the **Partner Party** area.
4. Click **OK**.
5. In the **Protocol Bindings** area, click **Add Protocol Binding**.
6. Select the **X12** check box.
7. Click **OK**.
8. In the **Protocol Bindings** area, click the **X12** link.
9. Click the **Transports** tab.
10. In the **Outbound Transports for Host 'Company1'** area, ensure that **FILE** is selected from the **Primary Transport** list.
11. Click **Save** twice to save the configurations.

The new agreement between Company1 and Company2 with the enabled X12 protocol is displayed.

Deploying the Initiator Server

You must set up and deploy the Initiator server to communicate with trading partners.

To deploy the Initiator server:

1. Create the deployment configuration.

See *TIBCO BusinessConnect Interior Server Administration* for information on deployment configurations.

2. Deploy TIBCO BusinessConnect, and then start the server.

Configuring Private Processes

TIBCO BusinessConnect EDI Protocol powered by Instream contains a sample TIBCO ActiveMatrix BusinessWorks project that sends an X12 850 transaction to TIBCO BusinessConnect.

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

- [Configuring Private Processes in TIBCO Designer, page 25](#)
- [Configuring Private Processes in TIBCO Business Studio, page 28](#)

Configuring Private Processes in TIBCO Designer

To configure private processes in TIBCO Designer, you have to open the sample project, and then configure connections to TIBCO BusinessConnect.

1. [Opening the TIBCO ActiveMatrix BusinessWorks Project, page 25](#)
2. [Configuring Connections to BusinessConnect, page 26](#)

Opening the TIBCO ActiveMatrix BusinessWorks Project

To configure private processes, you must open the sample TIBCO ActiveMatrix BusinessWorks project in TIBCO Designer.

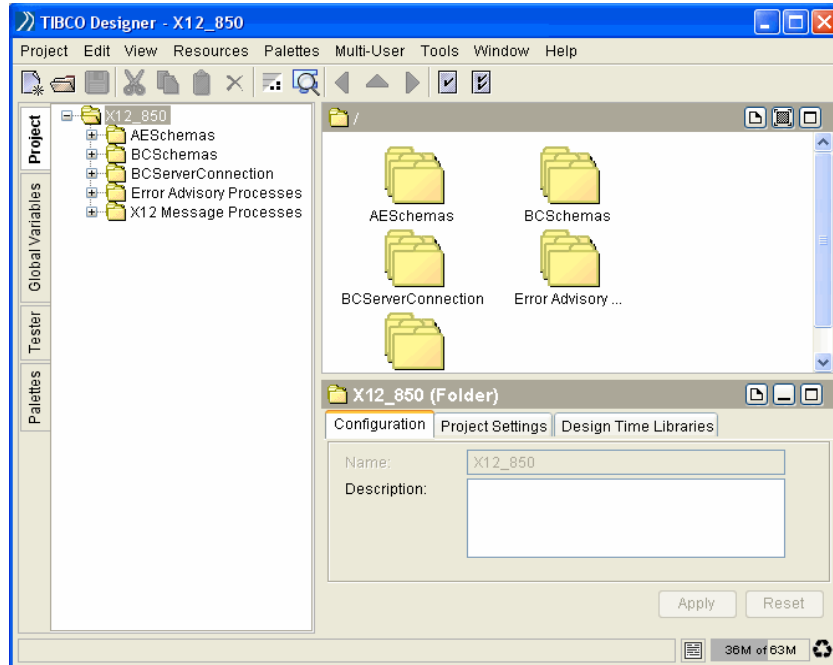
To open the sample project:

1. Start TIBCO Designer and click **New empty project**.
2. In the **Save Project** dialog, click **Cancel**.
3. From the menu, click **Project > Import Full Project**.
4. Click the **ZIP Archive** tab.
5. In the **ZIP Archive** tab, click  next to the **File** field to navigate to the *BC_HOME\protocols\tibedi\samples\bw\X12_850* directory.
6. Select the **X12_850.zip** file and click **Open**.
7. Click **OK**.
8. In the **Options** tab of the **Import - Options** dialog, click **Try rename in case of name conflict**, and then click **Apply**.
9. From the menu, click **Project > Save As**.
10. In the **Multi-File Project** tab of the **Save Project** dialog, click  next to the **Project Directory** field to navigate to the *BC_HOME\protocols\tibedi\samples\bw\X12_850* directory.

11. Click **OK**.
12. In the **Save Project** dialog, click **OK**.
13. When a dialog is displayed asking to use the directory as a project directory, click **Yes**.

The .zip archive file is deleted from the `BC_HOME\protocols\tibedi\samples\bw\X12_850` directory. The window shown in [Figure 6](#) is displayed.

Figure 6 TIBCO ActiveMatrix BusinessWorks Project



14. Click the **Global Variables** tab.
15. In the **Global Variables** dialog:
 - a. Set **BCHome** to your TIBCO BusinessConnect installation directory.
 - b. Ensure that the *TPName* variable is defined as `Company2`.
 - c. Click **OK** to save the global variable changes.
16. If you make any changes, save the project but do not exit TIBCO Designer.

Configuring Connections to BusinessConnect

After opening the sample project, you must configure connections to TIBCO BusinessConnect so that TIBCO ActiveMatrix BusinessWorks can communicate with TIBCO BusinessConnect.

To configure connections to TIBCO BusinessConnect:

1. Click the **Project** tab.
2. In the `BCServerConnection` folder, double-click **BCServerConfig**.
3. Click the **BusinessConnect Server Access** tab, and configure the following information in the tab:
 - a. From the **JDBC Driver Type** list, select the JDBC driver that you want to use to communicate with the BusinessConnect configuration store.
 - b. In the **JDBC URL** field, type the URL for the configuration store.
 - c. In the **DB User** field, type the user name of the configuration store.
 - d. In the **DB Password** field, type the password of the configuration store.
 - e. Click **Apply** to save the configurations.
4. Click the **Configuration** tab.
5. Click **Update from Configuration Store**.
 If you choose TIBCO Rendezvous as the transport for private communication, the software displays a TIBCO Rendezvous tab.
6. From the **Protocol Name** list, select **X12**.
7. Click **Import Selected Business Protocol**.

TIBCO ActiveMatrix BusinessWorks now retrieves schema information from the BusinessConnect configuration store, and saves it in the `BCSchemas` project folder.

Figure 7 BCServerConfig: Configuration

The screenshot shows the 'BCServerConfig (BusinessConnect Connection)' dialog box with the 'Configuration' tab active. The 'BusinessConnect Server Access' and 'Rendezvous' tabs are also visible. The 'Name' field is 'BCServerConfig'. The 'Description' field contains the text 'n be done at the Private Process configuration in the Deploym'. The 'Server' field is 'BC-DTz600'. The 'PP Transport' field is 'Tibrv'. The 'Update Transport Settings' checkbox is checked. The 'Protocol Name' dropdown is set to 'X12'. The 'Imported Operations' list contains '00403/EmptyGroup/TA1', 'EDI/Inbound/Interchange', and 'EDI/Outbound/Interchange'. At the bottom, there are four buttons: 'Update from Configuration Store', 'Import Selected Business Protocol', 'Apply', and 'Reset'.

8. Click **Apply** to save the configurations.
9. From the menu, click **Project > Save** to save the project.

Configuring Private Processes in TIBCO Business Studio

To configure a private process in TIBCO Business Studio, you have to open the sample project, and then configure connections to TIBCO BusinessConnect.

1. [Opening the TIBCO ActiveMatrix BusinessWorks Project, page 28](#)
2. [Configuring Connections to TIBCO BusinessConnect, page 28](#)

Opening the TIBCO ActiveMatrix BusinessWorks Project

To configure private processes, you must open the sample TIBCO ActiveMatrix BusinessWorks project in TIBCO Business Studio.

To open the sample project in TIBCO Business Studio:

1. Start TIBCO Business Studio.
2. From the menu, 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/X12_850* directory.
5. Select the *X12_850_for_bw6.zip* file, and then click **Open**.
6. Click **Finish** to import the sample project.

After importing the sample project, you have to perform the following steps:

1. In the Project Explorer view, expand **X12_850 > Module Descriptors**.
2. Double-click **Module Properties**.
3. Change the default values of the *BCHome* and *TPName* properties according to your environment.

Configuring Connections to TIBCO BusinessConnect

After opening the sample project, you must configure connections to TIBCO BusinessConnect so that TIBCO ActiveMatrix BusinessWorks can communicate with TIBCO BusinessConnect.

To configure connections to TIBCO BusinessConnect:

1. In the Project Explorer view, expand **Resources** and double-click **BCConnection.bcResource**.
2. Click the **Server Access** tab.
3. Enter information as explained in [step 3](#).

4. Click the **Configuration** tab, and click **Update from Configuration Store**.
5. Select **X12** 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 saves them in the project folder.

7. Click **Save**.

Send 850 Txn To BC

In this tutorial, you can use TIBCO ActiveMatrix BusinessWorks and TIBCO BusinessConnect EDI Protocol powered by Instream running on one machine to send an X12 850 purchase order transaction 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. When the 850 transaction is sent to the trading partner, the transport properties are defined to store the request in a directory on the local file system.

The transaction set identifier information is as follows:

- Transaction set - 850
- Group version - 005010
- Interchange version - 00403

When you run the tutorial, the following operations occur:

1. TIBCO Designer/TIBCO Business Studio reads an XML file, which contains the data for an 850 transaction.

TIBCO Designer/TIBCO Business Studio parses the XML data, and sends the XML data to TIBCO BusinessConnect EDI Protocol powered by Instream.

TIBCO BusinessConnect EDI Protocol powered by Instream converts the XML data to X12 data.

2. TIBCO BusinessConnect EDI Protocol powered by Instream validates the X12 data against an 850 guideline.
3. The validated X12 data is bundled into an interchange for sending to the trading partner.
4. FILE transport is used to simulate sending the interchange to the trading partner. By using FILE transport, the X12 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:

- EDI Guideline Authoring
- Trading Partner Setup
- TIBCO ActiveMatrix BusinessWorks Process Assembly

Processes Overview

Process names are slightly different in TIBCO Designer and TIBCO Business Studio. For example, the Send 850 Txn to BC process in TIBCO Designer equals the Send_850_Txn_to_BC process in TIBCO Business Studio. The following description takes processes in TIBCO Designer as an example.

The X12_850 project contains several processes in two folders: X12 Message Processes and Error Advisory Processes.

The X12 Message Processes folder contains the following processes:

- Send 850 Txn to BC

This process reads a file containing the XML equivalent of an 850 transaction, and sends the XML data to TIBCO BusinessConnect.

- Receive 997 Acknowledgement

If you are actually communicating with a trading partner in this tutorial, when the trading partner receives your interchange containing the 850 transaction, it returns a 997 acknowledgment.

- Receive TA1 Acknowledgment

If you are actually communicating with a trading partner in this tutorial, when the trading partner received your interchange containing the 850 transaction, it returns a TA1 to acknowledge receipt of the interchange.

- Receive Txn Ack Advisory

If you are actually communicating with a trading partner in this tutorial, when the Initiator receives the TA1 and 997 without any errors, it sends an acknowledgment to the private process to indicate the successful completion of the transaction.

The Error Advisory Processes folder contains processes, which are activated if TIBCO BusinessConnect is to send any advisory messages during the processing of the 850 transaction.

The Error Advisory Processes folder contains the following processes:

- Ack Timeout Error Advisory Received

This process is activated when TIBCO BusinessConnect sends a timeout advisory due to not receiving a 997 acknowledgment for the original 850 transaction within the default timeout period of 1440 minutes (24 hours).

- General Error Advisory Received

This process is activated when TIBCO BusinessConnect sends a general error advisory. Several conditions which cause this advisory to be sent. For example, it is sent when an invalid message is sent from TIBCO ActiveMatrix BusinessWorks to TIBCO BusinessConnect.

For more information on when TIBCO BusinessConnect sends a general error advisory, refer to the *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide*.

- Validation Error Advisory Received

This process is activated when TIBCO BusinessConnect sends an advisory indicating that a validation error occurred on the original 850 Transaction.

Running the Tutorial

To run the tutorial, you must send the 850 transaction from TIBCO Designer and check the sending results.

1. Send the 850 transaction from TIBCO Designer.

See [Sending the 850 Transaction on page 32](#).

2. Check the results of sending the message.

See [Expected Results on page 34](#) and [Viewing the Audit Log on page 35](#).



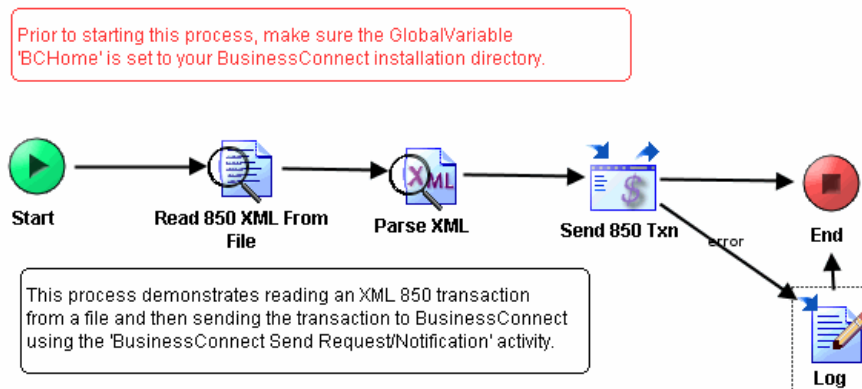
The steps of how to load and run private processes in TIBCO Business Studio are similar to TIBCO Designer. See TIBCO ActiveMatrix BusinessWorks Documentation for more details.

Sending the 850 Transaction

To see the 850 transaction, click **X12 Message Processes > Send 850 Txn To BC** in TIBCO Designer.

[Figure 8](#) shows the Send 850 Txn to BC process.

Figure 8 Send 850 Txn to BC



This process performs the following operations:

1. Reads a file containing XML data for a 850 transaction.
2. Parses the 850 XML data.
3. Constructs a message containing the 850 XML data, and sends it to TIBCO BusinessConnect EDI Protocol powered by Instream.

Running the Process

This procedure describes how to run the process.


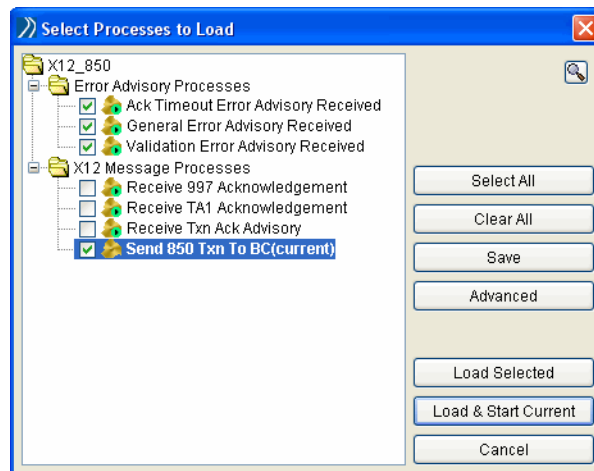
1. In TIBCO Designer, click the **Tester** tab.
2. In the **Tester** tab, click **Start testing viewed process** .

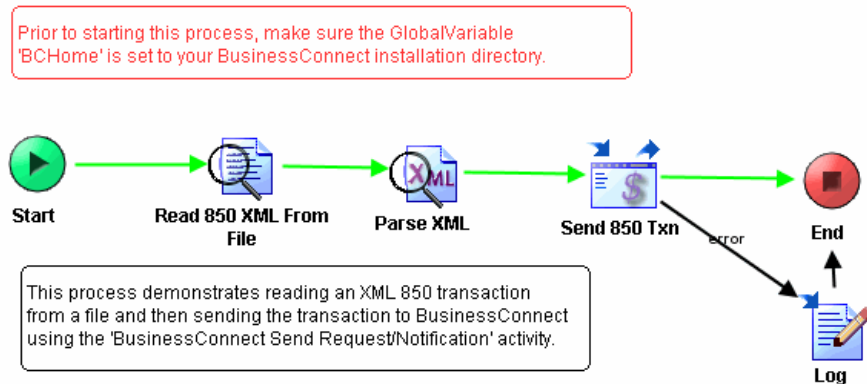
Figure 9 Select Process to Load



3. In the **Select Processes to Load** dialog:
 - a. Select the check box next to **Send 850 Txn To BC** in the X12 Message Processes folder.
 - b. Select the check boxes next to all three processes in the Error Advisory Processes folder.
4. Click **Load Selected** to run the process.

If everything is configured and runs properly, you can get the result shown in [Figure 10, XML 850 Transaction Read from a File](#).

Figure 10 XML 850 Transaction Read from a File



Expected Results

When the 850 transaction is received by TIBCO BusinessConnect EDI Protocol powered by Instream, several operations are performed.

1. TIBCO BusinessConnect EDI Protocol powered by Instream converts XML to X12 data.
2. TIBCO BusinessConnect EDI Protocol powered by Instream validates the X12 data against an 850 guideline.
3. The validated X12 data is bundled into an interchange for sending to the trading partner.
4. The X12 interchange is written to a file on the local file system when it simulates sending the interchange to the trading partner.

What you can observe:

- The Send 850 Txn activity of the Send 850 Txn To BC.process contains the output indicating that the 850 transaction is successfully sent to the trading partner.
- The c:\testED\out directory contains a file, which contains the X12 850 transaction that is sent to the trading partner by TIBCO BusinessConnect EDI Protocol powered by Instream.
- The audit log contains entries for each processing state that occurs in TIBCO BusinessConnect. For details, see [Viewing the Audit Log on page 35](#).
- After 24 hours, TIBCO BusinessConnect EDI Protocol powered by Instream sends an acknowledgment timeout error advisory to TIBCO ActiveMatrix BusinessWorks. For this tutorial, it is not necessary to wait for this advisory message to arrive.

Viewing the Audit Log

This procedure describes how to view the audit log on the Initiator machine.

1. Log on to TIBCO Administrator.
2. In the left panel, expand **BusinessConnect > Log Viewer**.
3. In the right panel, click the **X12** link.
4. Select items from the following lists: **Status**, **Connection**, and **Date Range**.
5. Click **Search** to search for the matching audit logs.

Figure 11 Send 850 Txn To BC Audit Log

Audit Logs : X12 > Connection : bc-db												
												?
Search Done												
Filters												
Status: ANY												
Connection: bc-db												
Date Range: One Day												
Start: September 24, 2014 10:16												
End: September 25, 2014 10:16												
Advanced												None Add
Summary Results												
Search in Results Show All												Group by: Date Group
Hide Header												
Date Group ↑	Time Stamp (COT)	Operation ID	Document ID	Trading Partner	Interchange QIR	Interchange ID	User Key	Int. Control Number	Group Control Number	Txn Control Number	Initiated by Host	
YESTERDAY												7 item(s)
Sep-24-2014 05:16:52 PM	00403/004030/997	966C8E74-33AE-40B3-9E7B-65E9F1F2CE48	Company2	01	123456789	000000004	3	0001	true			
Sep-24-2014 05:16:52 PM	EDI/Inbound	966C8E74-33AE-40B3-9E7B-65E9F1F2CE48	Company2	NA	NA	NA	NA	NA	false			
Sep-24-2014 05:16:52 PM	EDI/Inbound/Interchange	966C8E74-33AE-40B3-9E7B-65E9F1F2CE48	Company2	01	123456789	NA	NA	NA	false			
Sep-24-2014 05:16:51 PM	00403/004030/850	966C8E74-33AE-40B3-9E7B-65E9F1F2CE48	Company2	01	123456789	000000001	200	000000001	false			
Sep-24-2014 05:15:16 PM	00403/EmptyGroup/TA1	966C8E74-33AE-40B3-9E7B-65E9F1F2CE48	Company2	01	123456789	000000003	NA	NA	true			
Sep-24-2014 05:15:16 PM	00403/005010/850	7_22bc6avdV-ECs9DSKfwkCF-	Company2	01	123456789	000000002	2	0001	true			
Sep-24-2014 05:14:54 PM	00403/005010/850	8zpl_2Q9vdjC7YECs9CSKfwkCF-	Company2	NA	NA	000000001	1	0001	true			


6. Click **Details**  in the search results area for a specific operation to view details of the transaction.

Figure 12 Transaction Details for the Send 850 Txn To BC Audit Log

Transaction Details

Done

Filters > Status : ANY > Sep-24-2014 10:16 ~ Sep-25-2014 10:16

Summary : 6 of 7

Gateway Instance Information

Operation ID 00403/005010/850

Document ID 7_22bc6avdjDV-ECs9DSKfvzkCf-

Trading Partner Company2

Interchange Qlfr 01

Interchange ID 123456789

User Key

Int Control Number 000000002

Group Control Number 2

Txn Control Number 0001

Initiated by Host true

BackNext

States

change view

	Time Stamp	Status	State	Description	Transmission ID	Transmission Time
	Sep-24-2014 05:15:15 PM	PENDING	RECEIVED_FROM_PP	Received message from Private Process. This message can be resent.		
	Sep-24-2014 05:15:16 PM	PENDING	REQUEST_FROM_PP	Received request EDI message from private process.		
	Sep-24-2014 05:15:16 PM	ACK PENDING	TXN_VALIDATION_COMPLETE	Request converted successfully.		
	Sep-24-2014 05:15:16 PM	ACK PENDING	REQUEST_TO_TP	Document sent to Trading Partner via file://c:/testEDI/out/Company2-7_22bc6avdjDV-ECs9DSKfvzkCf-.request	7_22bc6avdjDV-ECs9DSKfvzkCf-	Wed Sep 24 17:17:54 CST 2014 (actual)
	Sep-24-2014 05:15:16 PM	ACK PENDING	RESPONSE_TO_PP	EDI Document has been sent to the Trading Partner successfully.		


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

Figure 13 RECEIVED_FROM_PP

Transaction Details

Done

Filters > Status : ANY > Sep-24-2014 10:16 ~ Sep-25-2014 10:16

Summary : 6 of 7

Gateway Instance Information

Operation ID 00403/005010/850

Document ID 7_22bc6avdjDV-ECs9DSKfvzkCf-

Trading Partner Company2

Interchange Qlfr 01

Interchange ID 123456789

User Key

Int Control Number 000000002

Group Control Number 2

Txn Control Number 0001

Initiated by Host true

BackNext

State : 1 of 5

change view

Time Stamp Sep-24-2014 05:15:15 PM

Status PENDING

State RECEIVED_FROM_PP

Description Received message from Private Process. This message can be resent.

ResendSave Message [188950 bytes]BackNext

The Detail View provides you with all message details. It also indicates whether a particular message can be resent or saved.

Retrieving the User Key for Outbound Documents

User key retrieval after the outbound documents are converted from XML to EDI is recorded in the row User Key: User Key: AB Purchase Order Number.

Receive 850 TEXT Process

In this tutorial, you work with the Receive 850 TEXT Process that is located in the X12 Message Processes folder.

This process receives a flat TEXT document for TIBCO BusinessConnect EDI Protocol powered by Instream based on the translation map that converts an X12 850 purchase order document into a TEXT document. You must ensure that the option "Parse XML output" is disabled during the EDI to TEXT conversion received by TIBCO ActiveMatrix BusinessWorks.

Prerequisites

Before running this tutorial, you must complete the tasks of [Enabling Inbound File Poller](#) and [Setting Up the Monitor Directory](#).

Enabling Inbound File Poller

For this tutorial the Inbound File Poller must be configured and enabled. For more details, see *TIBCO BusinessConnect Trading Partner Administration*, Chapter 14, "File Transport, Inbound File Poller."

To enable and configure an inbound File poller on the TIBCO BusinessConnect server:

1. Log on to TIBCO Administrator.
2. In the left panel, expand **BusinessConnect > System Settings > Inbound Public Transport Types**.
3. Select the check box next to the **File** transport.
4. Click **Enable**.

The enabled protocol is displayed with a red checkmark in the Enabled column.

Setting Up the Monitor Directory

To set up this directory, see *TIBCO BusinessConnect Gateway Server Administration*, Chapter 4, "Gateway Services, Poller Tab."

The directory to be monitored by the File Poller has to be set up. The directory must start with a forward slash (/), a back slash (\), two forward slashes (//), or [a-zA-Z]:, and must end with a forward slash (/) or a back slash (\).

Example: C:\tibco\bc\version\monitorFiles

Running the Tutorial

This section describes how to run the tutorial.

1. Receive a TEXT document based on the translation map for converting EDI to TEXT.
See [Receiving the TEXT Document](#).
2. Check the results of sending the message.
See [Expected Results on page 40](#) and [Viewing the Audit Log on page 40](#).



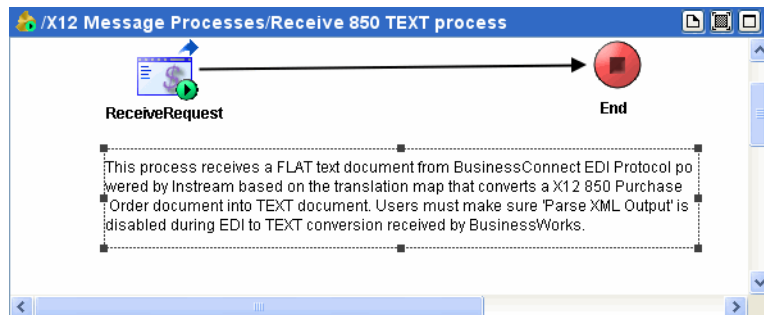
The steps of how to load and run private processes in TIBCO Business Studio are similar to TIBCO Designer. For more details, see TIBCO ActiveMatrix BusinessWorks Documentation.

Receiving the TEXT Document

To see the 850 transaction, select **X12 Message Processes > Receive 850 TEXT process**.

The process is shown in [Figure 14](#).

Figure 14 Receive 850 TEXT Process



Running the Process

This procedure describes how to run the process.


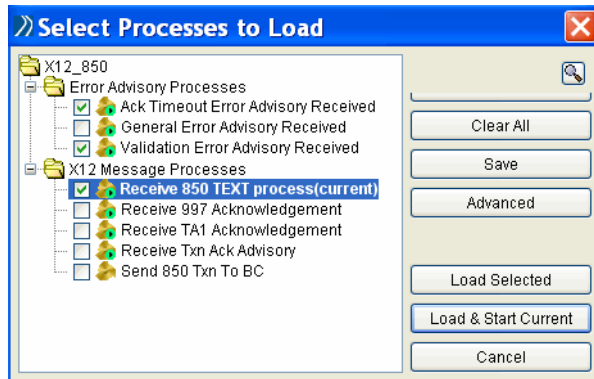
1. In TIBCO Designer, click the **Tester** tab.
2. In the **Tester** tab, click **Start testing viewed process** .

Figure 15 Select Process to Load



3. In the **Select Processes to Load** dialog:
 - a. Select the check box next to **Receive 850 TEXT Process** in the X12 Message Processes folder.
 - b. Select the check boxes next to all three processes in the Error Advisory Processes folder.
4. Start the BusinessConnect engine and Gateway Server engine.
5. Drop the X12_4030_850.dat file (from the *BC_HOME*\protocols\tibedi\samples\sampleDocs directory) in the Inbound File Poller directory:

C:\tibco\bc\version\monitorFiles

Expected Results

The Receive 850 TEXT process receives the converted FLAT file as a string data.

Viewing the Audit Log

This procedure describes how to view the audit log on the Initiator machine.

1. Log on to TIBCO Administrator.
2. In the left panel, expand **BusinessConnect > Log Viewer**.
3. In the right panel, click the **X12** link.
4. Select items from the following lists: **Status**, **Connection**, and **Date Range**.
5. Click **Search** to search for the matching audit logs.

Figure 16 Receive 850 TEXT Process Audit Log

Audit Logs : X12 > Connection : bc-db											
<div> <div>Search</div> <div>Done</div> </div>											
<div> <div>Filters</div> <div> <div>Status: ANY</div> <div>Connection: bc-db</div> <div>Date Range: --Custom--</div> <div>Start: September 24, 2014 17:15</div> <div>End: September 24, 2014 17:20</div> </div> </div>											
<div> <div>Advanced</div> <div>None</div> <div>Add</div> </div>											
<div> <div>Summary Results</div> <div>Search in Results</div> <div>Show All</div> <div>Group by: Date Group</div> </div>											
<div> <div>Hide Header</div> <div> <div>Date Group</div> <div>THIS HOUR</div> </div> </div>											
Time Stamp (CDT)	Operation ID	Document ID	Trading Partner	Interchange Qlfr	Interchange ID	User Key	Int Control Number	Group Control Number	Txn Control Number	Initiated by Host	
Sep-24-2014 05:16:52 PM	00403/004030/997	966C8E74-33AE-40B3-9E7B-65E9F1F2CE4B	Company2	01	123456789		000000004	3	0001	true	
Sep-24-2014 05:16:52 PM	EDI/Inbound	966C8E74-33AE-40B3-9E7B-65E9F1F2CE4B	Company2	NA	NA		NA	NA	NA	false	
Sep-24-2014 05:16:52 PM	EDI/Inbound/Interchange	966C8E74-33AE-40B3-9E7B-65E9F1F2CE4B	Company2	01	123456789		NA	NA	NA	false	
Sep-24-2014 05:16:51 PM	00403/004030/850	966C8E74-33AE-40B3-9E7B-65E9F1F2CE4B	Company2	01	123456789		000000001	200	000000001	false	
Sep-24-2014 05:16:51 PM	00403/EmptyGroup/TA1	966C8E74-33AE-40B3-9E7B-65E9F1F2CE4B	Company2	01	123456789		000000003	NA	NA	true	
Sep-24-2014 05:15:16 PM	00403/005010/850	7_23bc6avdJQV-EC-903Kv6kCZ-	Company2	01	123456789		000000002	2	0001	true	


6. Click **Details**  in the search results area for a specific operation to view the details of the transaction.

Figure 17 Receive 850 TEXT Audit Log: Transaction Details

Transaction Details						
<div>Done</div>						
<div> <div>Filters > Status : ANY > Sep-24-2014 17:15 ~ Sep-24-2014 17:20</div> <div>Summary : 4 of 6</div> <div> <div>Gateway Instance Information</div> <div>Operation ID 00403/004030/850</div> <div>Document ID 966C8E74-33AE-40B3-9E7B-65E9F1F2CE4B</div> <div>Trading Partner Company2</div> <div>Interchange Qlfr 01</div> <div>Interchange ID 123456789</div> <div>User Key</div> <div>Int Control Number 000000001</div> <div>Group Control Number 200</div> <div>Txn Control Number 000000001</div> <div>Initiated by Host false</div> </div> </div>						
<div> <div>Back</div> <div>Next</div> </div>						
<div> <div>States</div> <div>change view</div> </div>						
Time Stamp	Status	State	Description	Transmission ID	Transmission Time	
Sep-24-2014 05:16:51 PM	PENDING	TXN_VALIDATION_COMPLETE	Received an EDI transaction from trading partner and the transaction was validated and converted successfully			
Sep-24-2014 05:16:51 PM	COMPLETED	REQUEST_TO_PP	TEXT Transaction sent to Private Process			

CAQH Sample

TIBCO BusinessConnect EDI protocol powered by Instream supports CAQH connectivity rules, including Phase II (version 2.2.0) and Phase IV (version 4.0.0) of the CAQH connectivity rules.

There are 2 type of envelope specifications - HTTP MIME Multipart and SOAP + WSDL. Phase II (version 2.2.0) connectivity rules support both envelopes, but Phase IV (version 4.0.0) only support SOAP + WSDL envelope.

SOAP + WSDL Envelope



CAQH sample uses HIPAA operation and sample files and also uses SOAP protocol to package the CAQH message. You must install HIPAA and SOAP protocols before running the CAQH tutorial for sending and receiving CAQH message with SOAP + WSDL envelope.

In this tutorial, you can use TIBCO ActiveMatrix BusinessWorks and TIBCO BusinessConnect EDI Protocol powered by Instream running on one machine to send an X12 270 batch transaction to a trading partner.

The transaction set identifier information is as follows:

- Transaction set - 270
- Group version - 005010X279A1
- Interchange version - 00501

CAQH Batch Interaction

When you run the tutorial, the following operations occur at the Initiator end:

1. TIBCO Designer/TIBCO Business Studio reads an XML file, which contains the data for a 270 batch transaction.

TIBCO Designer/TIBCO Business Studio parses the XML data, and sends the XML data to TIBCO BusinessConnect EDI Protocol powered by Instream.

TIBCO BusinessConnect EDI Protocol powered by Instream converts the XML data to X12 data.

2. TIBCO BusinessConnect EDI Protocol powered by Instream validates the X12 data against a 270 guideline.
3. The validated X12 data is packaged with CAQH envelope and then bundled into a SOAP envelope for sending to the trading partner.

4. At the Responder end, the Response and Acknowledgments are generated and stored in the local file system and waiting for retrieval from the Initiator end.
5. The Initiator end, retrieves the response and acknowledgments.
6. The Initiator end generates Acknowledgment for the retrieved response and sends it back to the Responder end.

Processes Overview

Process names are slightly different in TIBCO Designer and TIBCO Business Studio. For example, the Send 270 Request to BC process in TIBCO Designer equals the Send_270_Request_to_BC process in TIBCO Business Studio. The following description takes processes in TIBCO Designer as an example.

The CAQH_SOAP_EDI project contains several processes in folders: Batch/Initiator/Explicit PayloadType Batch/CAQH_SOAP and Batch/Responder.

The Batch/Initiator/Explicit PayloadType Batch folder contains the following processes:

- **Send 270 Request**
This process reads a file containing the XML equivalent of a 270 transaction, and sends the XML data to TIBCO BusinessConnect as a CAQH batch submission request.
- **Send 271 Response Retrieve Request**
This process sends a CAQH batch response retrieval request to get the 271 response from the trading partner.
- **Send 824 ACK Retrieve Request**
This process sends a CAQH acknowledgment retrieval request to get the 824 acknowledgment from the trading partner.
- **Send 999 ACK Retrieve Request**
This process sends a CAQH acknowledgment retrieval request to get the 999 acknowledgment from the trading partner.
- **Send TA1 ACK Retrieve Request**
This process sends a CAQH acknowledgment retrieval request to get the TA1 acknowledgment from the trading partner.
- **Send 270 Request (Correlate PayloadID)**
This process simulate Initiator send all CAQH request with the same PayloadID and expect that batch response/acknowledgment retrieval request only get data which is corresponding to the original batch request.

The Batch/Responder folder contains the following processes:

- Receive 270 Request

This process receive batch submission 270 request and sends back 271 data as batch response.

Prerequisites

Before running this tutorial, you must complete the tasks of [Importing Operations](#) and [Configuring Trading Partner and Host](#).

Importing Operations

You must import the following operations:

- Import CAQH operation of SOAP protocol.
BC_HOME/protocols/soap/samples/caqh/caqh.csx
- Import 270 sync request response operation of HIPAA protocol.
BC_HOME/protocols/tibedi/samples/interfaces/HIPAA-RT-00501-270-271.csx

Change the transaction name to 270R before importing 270 notify operations

- Click the **X12** link.
 - In the **Edit Operations: X12** dialog, click the topmost **expand all** to display all operations.
 - Click **00501 > 005010X279A1 > 270** transaction link.
 - Click the **Notification Transaction** tab.
 - Click the **General** tab.
 - Change name property to **270R**.
 - Click **Save**.
 - Click **Done**.
- Import 270 notify operations of HIPAA protocol.
BC_HOME/protocols/tibedi/samples/interfaces/HIPAA-00501.csx

Configuring Trading Partner and Host

You must do the following to configure the Trading Partner and Host. The below configuration is applicable both for the Initiator and Responder.

- Click **Partner > Protocols > SOAP > General** tab.
- On the **General** tab, select the **Send CAQH Message To EDI Protocol** check box.
- Click **Host > Protocols > X12 > General** tab.

4. In the **CAQH UserName to authenticate at Partner** field, enter **Test**.
5. In the **CAQH Password to authenticate at Partner** field, enter **Test**.
6. Click **Host > Protocols > X12 > Advanced** tab.
7. Click **CAQH > Store location** and specify the file directory.
8. Click **System Settings > User Authentication Configuration**.
9. Click the **Add** button.
10. Select **BC Database**.
11. Click **OK** and then click **Done**.
12. Click **User Management > Users > External** tab.
13. Click the **Add** button.
14. In the **Email** field, enter **Test**.
15. From the **Belongs to Partner** list, select **Trading Partner**.
16. Set **Password** to **Test**.
17. Click **OK** and then click **Save**.

Running a Tutorial

To run the tutorial, you must run the following processes from TIBCO Designer and check the results.

- First, from the Responder side:
Start Receive 270 Request process.
- Then, from the Initiator side run the following processes in the sequence shown below:
 - Send 270 Request
 - Send TA1 ACK Retrieve Request
 - Send 999 ACK Retrieve Request
 - Send 824 ACK Retrieve Request
 - Send 271 Response Retrieve Request

Send a 270 Request transaction from TIBCO Designer.

See [Sending the 270 Request](#).
- Check the results of sending the message.
See [Expected Results](#) and [Viewing the Audit Log](#).

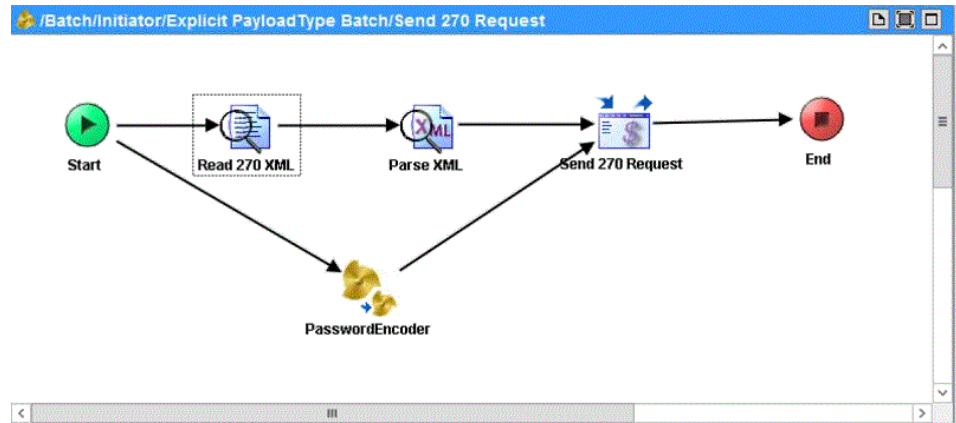
Sending the 270 Request

You must send a 270 Request from TIBCO Designer. This transaction is used for sending the CAQH batch submission request.

To see the Send 270 Request, click **Project > Batch > Initiator > Explicit PayloadType Batch > CAQH_SOAP > Send 270 Request**.

[Send 270 Request](#) shows the Send 270 Request to BC process.

Figure 18 Send 270 Request



This process performs the following operations:

1. Reads a file containing XML data for a 270 transaction.
2. Parses the 270 XML data.
3. Constructs a message containing the 270 XML data, and sends it to TIBCO BusinessConnect EDI Protocol powered by Instream.

Running the Process

This procedure describes how to run the process.


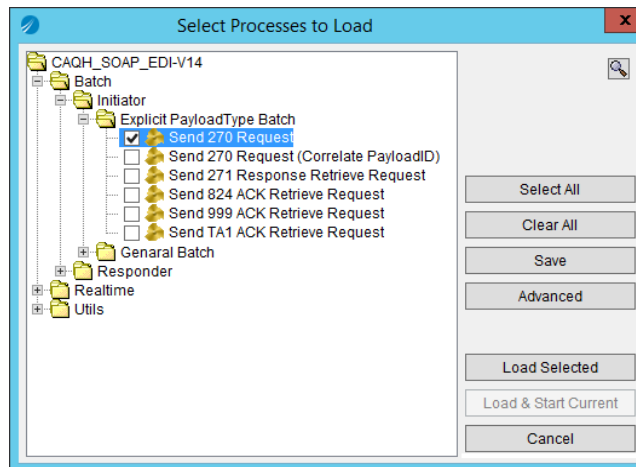
1. In TIBCO Designer, click the **Tester** tab.
2. In the **Tester** tab, click **Start testing viewed process** .

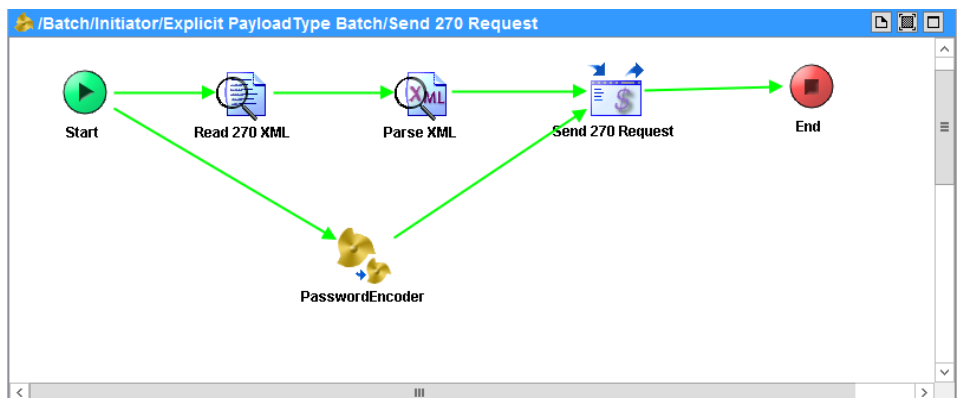
Figure 19 Select Process to Load



3. In the **Select Processes to Load** dialog, select the check box next to **Send 270 Request To BC** in the X12 Message Processes folder.
4. Click **Load Selected** to run the process.

If everything is configured and runs properly, you can get the result shown in [XML 270 Transaction Read from a File](#).

Figure 20 XML 270 Transaction Read from a File



Expected Results

When the 270 transaction is received by TIBCO BusinessConnect EDI Protocol powered by Instream, several operations are performed.

1. TIBCO BusinessConnect EDI Protocol powered by Instream converts XML to X12 data.

2. TIBCO BusinessConnect EDI Protocol powered by Instream validates the X12 data against an 270 guideline.
3. The validated X12 data is packaged with CAQH envelope and then bundled into a SOAP envelope for sending to the trading partner.
4. At the Responder end, the Response and Acknowledgments are generated and stored in the local file system and waiting for retrieval from the Initiator end.
5. The Initiator end, retrieves the response and acknowledgments.
6. The Initiator end generates Acknowledgment for the retrieved response and sends it back to the Responder end.

What you can observe:

- The audit log contains entries for each processing state that occurs in TIBCO BusinessConnect. For details, see [Viewing the Audit Log](#).

Viewing the Audit Log

This procedure describes how to view the audit log on the Initiator machine.

1. Log on to TIBCO Administrator.
2. In the left panel, expand **BusinessConnect > Log Viewer**.
3. Do one of the following:
 - In the right panel, click the **X12** link to view the X12 logs.
 - In the right panel, click the **SOAP** link to view the SOAP logs.
4. Select items from the following lists: **Status**, **Connection**, and **Date Range**.
5. Click **Search** to search for the matching audit logs.

Figure 21 Send 270 Request To BC X12 Audit Log at the Initiator end

Search in ResultsShow All

Hide Header

Date Group

+

Time Stamp (PDT)

Operation ID

Document ID

Trading Partner

Interchange Qlfr

Interchange ID

User Key

Int. Control Number

Group Control Number

THIS HOUR















	Sep-27-2017 10:34:15 PM	00501/EmptyGroup/TA1	wh82NB_2_2ljdjEkh7O_2ULP1kSpsCompany2	01	987654321		000000126	NA
	Sep-27-2017 10:34:15 PM	EDI/Inbound	wh82NB_2_2ljdjEkh7O_2ULP1kSpsCompany2	NA	NA		NA	NA
	Sep-27-2017 10:34:15 PM	EDI/Inbound/Interchange	wh82NB_2_2ljdjEkh7O_2ULP1kSpsCompany2	01	987654321		NA	NA
	Sep-27-2017 10:34:14 PM	EDI/Inbound	_27mZGwY1jdbiUkh7N_2ULP1kSpsCompany2	NA	NA		NA	NA
	Sep-27-2017 10:34:14 PM	EDI/Inbound/Interchange	_27mZGwY1jdbiUkh7N_2ULP1kSpsCompany2	01	987654321		NA	NA
	Sep-27-2017 10:34:13 PM	00501/005010X231A1/999_27mZGwY1jdbiUkh7N_2ULP1kSpsCompany2	01	987654321			000000127	97
	Sep-27-2017 10:34:13 PM	00501/005010X279A1/270aHob_2p-HljZlJkKh7K_2ULP1kSpsCompany2	01	987654321			000000190	136
	Sep-27-2017 10:34:11 PM	00501/005010X186A1/824WklcgWUcljdSw-kh7M_2ULP1kSpsCompany2	01	987654321			000000128	98
	Sep-27-2017 10:34:11 PM	EDI/Inbound	WklcgWUcljdSw-kh7M_2ULP1kSpsCompany2	NA	NA		NA	NA
	Sep-27-2017 10:34:11 PM	EDI/Inbound/Interchange	WklcgWUcljdSw-kh7M_2ULP1kSpsCompany2	01	987654321		NA	NA
	Sep-27-2017 10:34:10 PM	00501/005010X231A1/999taNxUa9ZljdJaEkh7L_2ULP1kSpsCompany2	01	987654321			000000192	137
	Sep-27-2017 10:34:10 PM	EDI/Inbound	taNxUa9ZljdJaEkh7L_2ULP1kSpsCompany2	NA	NA		NA	NA
	Sep-27-2017 10:34:10 PM	EDI/Inbound/Interchange	taNxUa9ZljdJaEkh7L_2ULP1kSpsCompany2	01	987654321		NA	NA
	Sep-27-2017 10:34:09 PM	00501/005010X279A1/271taNxUa9ZljdJaEkh7L_2ULP1kSpsCompany2	01	987654321			000000129	99

Figure 22 Send 270 Request To BC SOAP Audit Log at the Initiator end

Audit Logs : SOAP > Connection : bc-db

Search

Done

Filters

Status

ANY

Connection

bc-db

Date Range

One Day

Start

September 26, 2017 22:34

End

September 27, 2017 22:34

Advanced

None

Add

Summary Results

Search in Results

Show All

Group by

Date Group

Hide Header

<div><div></div><div>Date Group</div><div></div></div>	Time Stamp (PDT)	Trading Partner	Operation ID	Transaction ID
<div><div></div><div>THIS HOUR</div><div></div></div>				
<div><div></div></div>	<div><div></div>Sep-27-2017 10:34:15 PM</div>	Company2	CAQH/2.2.0/BatchSubmitAckRetrievalTransaction	wh82NB_2_2ljdjEkh7O_2ULP1kSps
<div><div></div></div>	<div><div></div>Sep-27-2017 10:34:13 PM</div>	Company2	CAQH/2.2.0/BatchSubmitAckRetrievalTransaction	_27mZGwY1jdbiUkh7N_2ULP1kSps
<div><div></div></div>	<div><div></div>Sep-27-2017 10:34:11 PM</div>	Company2	CAQH/2.2.0/BatchSubmitAckRetrievalTransaction	WklcgWUcljdSw-kh7M_2ULP1kSps
<div><div></div></div>	<div><div></div>Sep-27-2017 10:34:10 PM</div>	Company2	CAQH/2.2.0/BatchResultsAckSubmitTransaction	taNxUa9ZljdJaEkh7L_2ULP1kSps
<div><div></div></div>	<div><div></div>Sep-27-2017 10:34:09 PM</div>	Company2	CAQH/2.2.0/BatchResultsRetrievalTransaction	taNxUa9ZljdJaEkh7L_2ULP1kSps
<div><div></div></div>	<div><div></div>Sep-27-2017 10:33:03 PM</div>	Company2	CAQH/2.2.0/BatchSubmitTransaction	aHob_2p-HljZlJkKh7K_2ULP1kSps

6 item(s)

Figure 23 Send 270 Request To BC X12 Audit Log at the Responder end

Search in ResultsShow All

Group byDate Group

Hide Header

Date Group	Time Stamp (PDT)	Operation ID	Document ID	Trading Partner	Interchange Qtr	Interchange ID	User Key	Int_Control Number	Group_Control Number	Txn_Control Number	Tr
THIS HOUR											
Sep-27-2017 10:34:15 PM	00501/EmptyGroup/TA1	aHob_2p-HjZlIkKh7K_2ULP1kSps	Company1	01	123456789		000000126	NA	NA	NA	tr
Sep-27-2017 10:34:15 PM	EDI/Inbound	wh82NB_2_2ljdJEkh7O_2ULP1kSps	Company1	NA	NA		NA	NA	NA	NA	fa
Sep-27-2017 10:34:13 PM	00501/005010X231A1/999	aHob_2p-HjZlIkKh7K_2ULP1kSps	Company1	01	123456789		000000127	97		0001	tr
Sep-27-2017 10:34:13 PM	EDI/Inbound	_27mZGwY1ljdBIkh7N_2ULP1kSps	Company1	NA	NA		NA	NA	NA	NA	fa
Sep-27-2017 10:34:11 PM	00501/005010X186A1/824	aHob_2p-HjZlIkKh7K_2ULP1kSps	Company1	01	123456789		000000128	98		0001	tr
Sep-27-2017 10:34:11 PM	EDI/Inbound	WklcgWUcljdSw-kh7M_2ULP1kSps	Company1	NA	NA		NA	NA	NA	NA	fa
Sep-27-2017 10:34:10 PM	00501/005010X231A1/999	taNxUa9ZljdJaeKh7L_2ULP1kSps	Company1	01	123456789		000000192	137		0001	fa
Sep-27-2017 10:34:10 PM	00501/005010X279A1/271	2CmNP5ISlJZN6kE0p1_2ULQq-Sq6	Company1	01	123456789		000000129	99		0001	tr
Sep-27-2017 10:34:10 PM	EDI/Inbound	taNxUa9ZljdJaeKh7L_2ULP1kSps	Company1	NA	NA		NA	NA	NA	NA	fa
Sep-27-2017 10:34:10 PM	EDI/Inbound/Interchange	taNxUa9ZljdJaeKh7L_2ULP1kSps	Company1	01	123456789		NA	NA	NA	NA	fa
Sep-27-2017 10:34:08 PM	EDI/Inbound	taNxUa9ZljdJaeKh7L_2ULP1kSps	Company1	NA	NA		NA	NA	NA	NA	fa
Sep-27-2017 10:33:04 PM	EDI/Inbound	aHob_2p-HjZlIkKh7K_2ULP1kSps	Company1	NA	NA		NA	NA	NA	NA	fa
Sep-27-2017 10:33:04 PM	EDI/Inbound/Interchange	aHob_2p-HjZlIkKh7K_2ULP1kSps	Company1	01	123456789		NA	NA	NA	NA	fa
Sep-27-2017 10:33:03 PM	00501/005010X279A1/270	aHob_2p-HjZlIkKh7K_2ULP1kSps	Company1	01	123456789		000000190	136		0001	fa

Figure 24 Send 270 Request To BC SOAP Audit Log at the Responder end

Audit Logs : SOAP > Connection : bc-db

SearchDone

Filters

StatusANY

Connectionbc-db

Date RangeOne Day

StartSeptember 26, 2017 22:35

EndSeptember 27, 2017 22:35

AdvancedNoneAdd

Summary Results

Search in ResultsShow All

Group byDate Group

Hide Header

Date Group	Time Stamp (PDT)	Trading Partner	Operation ID	Transaction ID
THIS HOUR				
Sep-27-2017 10:34:15 PM	Company1	CAQH/2.2.0/BatchSubmitAckRetrievalTransaction	wh82NB_2_2ljdJEkh7O_2ULP1kSps	
Sep-27-2017 10:34:13 PM	Company1	CAQH/2.2.0/BatchSubmitAckRetrievalTransaction	_27mZGwY1ljdBIkh7N_2ULP1kSps	
Sep-27-2017 10:34:11 PM	Company1	CAQH/2.2.0/BatchSubmitAckRetrievalTransaction	WklcgWUcljdSw-kh7M_2ULP1kSps	
Sep-27-2017 10:34:10 PM	Company1	CAQH/2.2.0/BatchResultsAckSubmitTransaction	taNxUa9ZljdJaeKh7L_2ULP1kSps	
Sep-27-2017 10:34:08 PM	Company1	CAQH/2.2.0/BatchResultsRetrievalTransaction	taNxUa9ZljdJaeKh7L_2ULP1kSps	
Sep-27-2017 10:33:03 PM	Company1	CAQH/2.2.0/BatchSubmitTransaction	aHob_2p-HjZlIkKh7K_2ULP1kSps	

6. Click **Details** in the search results area for a specific operation to view details of the transaction.

Figure 25 Transaction Details for the Send 270 Request To BC X12 Audit Log

Transaction Details					
Filters > Status: ANY > Sep-26-2017 04:39 ~ Sep-27-2017 04:39					
Summary: 7 of 14					
<div>Outbound AS2 Message ID</div> <div>Inbound AS2 Message ID</div> <div>Gateway Instance Information</div> <div>Operation ID 00501005010X27941271</div> <div>Document ID vhl0M3Nm5yEE0zr_2ULQr-5q6</div> <div>Trading Partner Company1</div> <div>Interchange QH 01</div> <div>Interchange ID 123456789</div> <div>User Key</div> <div>Int Control Number 000000111</div> <div>Group Control Number 85</div> <div>Trn Control Number 0001</div> <div>Initiated by Host true</div>					
Back Next					
States change view					
Time Stamp	Status	State	Description	Transmission ID	Transmission Time
Sep-27-2017 04:38:52 AM	PENDING	RECEIVED_FROM_PP	Received message from Private Process. This message can be resent.		
Sep-27-2017 04:38:52 AM	PENDING	REQUEST_FROM_PP	Received request EDI message from private process.		
Sep-27-2017 04:38:53 AM	ACK PENDING	TIN_VALIDATION_COMPLETE	request converted successfully.		
Sep-27-2017 04:38:53 AM	ACK PENDING	CAQH_MSG_STORED	EDI Document has been saved to CAQH store location and is ready to be retrieved by Trading Partner. Raw EDI File is stored in location: c:\hslogging\Out\Company1\ReinFeb8-2-Interior-Serve-Company1-2017-09-27-04-h-38-m-53-p-133-ma.ad	vhl0M3Nm5yEE0zr_2ULQr-5q6	Wed Sep 27 04:38:53 PDT 2017
Sep-27-2017 04:38:53 AM	ACK PENDING	RESPONSE_TO_PP	EDI Document has been saved to CAQH store location and is ready to be retrieved by Trading Partner. Raw EDI File is stored in location: c:\hslogging\Out\Company1\ReinFeb8-2-Interior-Serve-Company1-2017-09-27-04-h-38-m-53-p-133-ma.ad		(actual)
Sep-27-2017 04:39:04 AM	COMPLETED	CAQH_MSG_RETRIEVED	CAQH message has been retrieved successfully.	k8RVC_2CIm6IQ-hk73_2ULP1s6pa	
Sep-27-2017 04:39:07 AM	ACK	ACK_FROM_TP	An acknowledgment has been received under Document ID: k8RVC_2CIm6IQ-hk73_2ULP1s6pa with the following ack Code & Code Name: Accepted/Please refer 999 guidelines for k8RVC_2CIm6IQ-hk73_2ULP1s6pa a complete description on this ACK		Wed Sep 27 04:39:07 PDT 2017


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

Figure 26 Detailed View of Transaction at RECEIVED_FROM_PP state

Transaction Details					
Filters > Status: ANY > Sep-26-2017 04:39 ~ Sep-27-2017 04:39					
Summary: 7 of 14					
<div>Outbound AS2 Message ID</div> <div>Inbound AS2 Message ID</div> <div>Gateway Instance Information</div> <div>Operation ID 00501005010X27941271</div> <div>Document ID vhl0M3Nm5yEE0zr_2ULQr-5q6</div> <div>Trading Partner Company1</div> <div>Interchange QH 01</div> <div>Interchange ID 123456789</div> <div>User Key</div> <div>Int Control Number 000000111</div> <div>Group Control Number 85</div> <div>Trn Control Number 0001</div> <div>Initiated by Host true</div>					
Back Next					
State: 1 of 7 change view					
<div>Time Stamp: Sep-27-2017 04:38:52 AM</div> <div>Status: PENDING</div> <div>State: RECEIVED_FROM_PP</div> <div>Description: Received message from Private Process. This message can be resent.</div>					
Resend Save Message (44323 bytes) Back Next					

The Detail View provides you with all message details. It also indicates whether a particular message can be resent or saved.

CAQH Real-time Interaction

When you run the tutorial, the following operations occur:

1. TIBCO Designer/TIBCO Business Studio reads an XML file, which contains the data for a 270 transaction.
TIBCO Designer/TIBCO Business Studio parses the XML data, and sends the XML data to TIBCO BusinessConnect EDI Protocol powered by Instream.
TIBCO BusinessConnect EDI Protocol powered by Instream converts the XML data to X12 data.
2. TIBCO BusinessConnect EDI Protocol powered by Instream validates the X12 data against a 270 guideline.
3. The validated X12 data is packaged with CAQH envelope and then bundled into a SOAP envelope for sending to the trading partner.
4. At the responder end, SOAP protocol unpacks the SOAP message, extracts the CAQH message, and then sends it to X12 protocol. X12 protocol validates the EDI data, converts it to an XML request, and then sends it to PP.
5. Responder PP sends back XML response, which contains the data for a 271 response, to Responder X12 protocol. X12 protocol converts the XML response to X12 data and validates it. After that, X12 data is packaged with CAQH envelope and forwarded to SOAP protocol for sending back to Initiator BC through the same HTTP communication channel.
6. Initiator SOAP protocol extracts the CAQH message and sends to X12 protocol. X12 protocol extracts the response data, validates and converts it to XML response, and then sends it back to Initiator PP.

Process Overview

Process names are slightly different in TIBCO Designer and TIBCO Business Studio. For example, the Send 270 Request to BC process in TIBCO Designer equals the Send_270_Request_to_BC process in TIBCO Business Studio. The following description takes processes in TIBCO Designer as an example.

The CAQH_SOAP_EDI project contains several processes in folders: Realtime/Initiator and Realtime/Responder.

The Realtime/Initiator/V220 folder contains the following processes:

- Send 270 Request

This process reads a file containing the XML equivalent of a 270 transaction, and sends the XML data to TIBCO BusinessConnect as a CAQH batch submission request of CAQH Phase II.

The Realtime/Initiator/V400 folder contains the following processes:

- Send 270 Request

This process reads a file containing the XML equivalent of a 270 transaction, and sends the XML data to TIBCO BusinessConnect as a CAQH batch submission request of CAQH Phase IV.

The Realtime/Initiator folder contains the following processes:

- Receive EDI Advisory Sync Request to SOAP

This process receives the CAQH Advisory messages that has been sent to SOAP.

- Receive SOAP Advisory Sync Request to EDI

This process receives the CAQH Advisory messages that has been sent to EDI.

The Realtime/Responder folder contains the following processes:

- Receive 270 Request and send 271 Response.

This process receives the 270 Synchronous Request and sends back 271 as a Synchronous Response to BC.

- Receive SOAP Advisory Sync Response to EDI

This process receives the CAQH Advisory messages that has been sent to EDI

- Receive EDI Advisory Sync Response to SOAP

This process receives the CAQH Advisory messages that has been sent to SOAP.

Prerequisites

Before running this tutorial, you must complete the tasks of [Importing Operations](#) and [Configuring Trading Partner and Host](#) that are specified in CAQH Batch Interactions.

Running the Tutorial

To run the tutorial, you must run the following processes from TIBCO Designer and check the results.

- First, from the Responder side:

Start "Receive 270 Request and Send 271 Response" process.

Then, from the Initiator side run the following processes as shown below:

Start "Send 270 Sync Request" available in Realtime/Initiator/V220.

Send a 270 Sync Request transaction from TIBCO Designer.

See [Send 270 Sync Request](#).

- Check the results of sending the message.

See [Expected Results](#) and [Viewing the Audit Log](#).

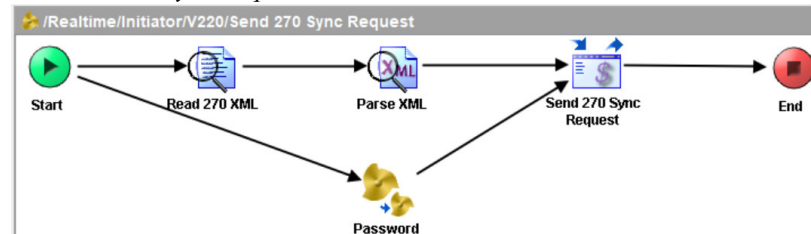
Send 270 Sync Request

You must send a 270 Request from TIBCO Designer. This transaction is used for sending the CAQH real-time request.

To see the Send 270 Sync Request, click Project > Realtime > Initiator > V220 > Send 270 Sync Request.

[Figure 27](#) shows the Send 270 Request to BC process.

Figure 27 Send 270 Sync Request



This process performs the following operations:

1. Reads a file containing XML data for a 270 transaction.
2. Parses the 270 XML data.
3. Constructs a message containing the 270 XML data, and sends it to TIBCO BusinessConnect EDI Protocol powered by Instream.

Running the Process

This procedure describes how to run the process.


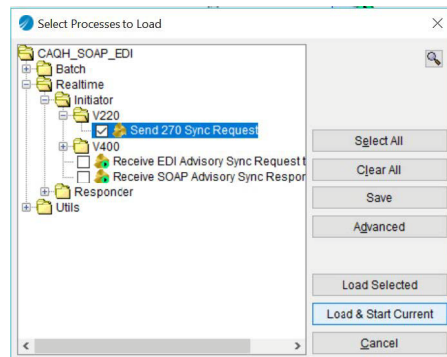
1. In TIBCO Designer, click the **Tester** tab.
2. In the **Tester** tab, click **Start testing viewed process** 

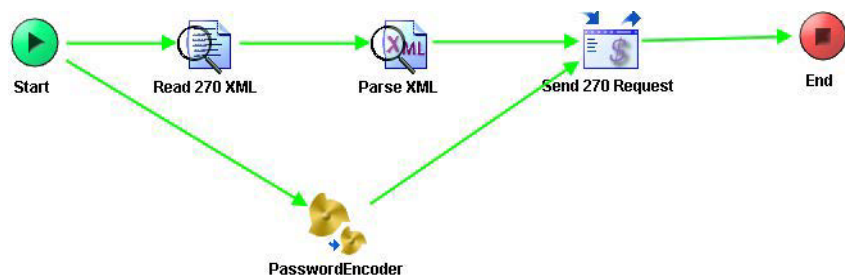
Figure 28 Select process to Load



3. In the **Select Processes to Load** dialog, select the check box next to **Send 270 Sync Request To BC** in the X12 Message Processes folder.
4. Click **Load Selected** to run the process.

If everything is configured and runs properly, you can get the result shown in [Send 270 Sync Transaction](#).

Figure 29 Send 270 Sync Transaction



Expected Results

When the 270 transaction is received by TIBCO BusinessConnect EDI Protocol powered by Instream, several operations are performed.

1. TIBCO BusinessConnect EDI Protocol powered by Instream converts XML to X12 data.
2. TIBCO BusinessConnect EDI Protocol powered by Instream validates the X12 data against an X12 guideline.
3. The validated X12 data is packaged with CAQH envelope and then bundled into a SOAP envelope for sending to the trading partner.

- 4. At the Responder end, response will be generated and is sent back to Initiator BC.
- 5. At the Initiator BC, SOAP protocol unpacks the SOAP message, extracts the CAQH message, and then sends it to X12 protocol. X12 protocol validates the EDI data, converts it to an XML response, and then sends it to PP.

Viewing the Audit Log

This procedure describes how to view the audit log on the Initiator machine.

- 1. Log on to TIBCO Administrator.
- 2. In the left panel, expand **BusinessConnect > Log Viewer**.
- 3. Do one of the following:
 - In the right panel, click the **X12** link to view the X12 logs.
 - In the right panel, click the **SOAP** link to view the SOAP logs.
- 4. Select items from the following lists: **Status**, **Connection**, and **Date Range**.
- 5. Click **Search** to search for the matching audit logs.

Figure 30 Send 270 Sync Request to BC X12 Audit Log at Initiator

Date Group	Time Stamp (DDT)	Operation ID	Document ID	Trading Partner	Interchange QID	Interchange ID	User Key	Int. Control Number	Group Control Number	Txn Control Number	Initiated By Host
THIS HOUR											2 item(s)
	Feb-14-2018 03:27:34 AM	00501/005010X279A1/270	pCOKnv8jZ_22-A-9sQe_2ULmQkSps	Company2	01	967634321	000000099	75	0001	false	
	Feb-14-2018 03:27:34 AM	00501/005010X279A1/270	pCOKnv8jZ_22-A-9sQe_2ULmQkSps	Company2	01	967634321	000000118	84	0001	true	

Figure 31 Send 270 Sync Request to BC SOAP Audit Log at Initiator

Date Group +	Time Stamp (DDT)	Trading Partner	Operation ID	Transaction ID
THIS HOUR	1 item(s)			
	Feb-14-2018 03:27:34 AM	Company2	CAQH/2.2.0/RealTimeTransaction	pCOKnv8jZ_22-A-9sQe_2ULmQkSps

Figure 32 Send 270 Sync Request to BC X12 Audit Log at Responder

Date Group	Time Stamp (EDT)	Operation ID	Document ID	Trading Partner	Interchange QID	Interchange ID	User Key	Int. Control Number	Group Control Number	Txn Control Number	Initiated
THIS HOUR											2
	Feb-14-2018 06:27:23 AM	00501/005010X279A1/271	pCOKnv8jZ_22-A-9sQe_2ULmQkSps	Company1	01	123456789	000000099	75	0001	true	
	Feb-14-2018 06:27:05 AM	00501/005010X279A1/270	pCOKnv8jZ_22-A-9sQe_2ULmQkSps	Company1	01	123456789	000000118	84	0001	false	

Figure 33 Send 270 Sync Request to BC SOAP Audit Log at Responder

Date Group +	Time Stamp (EDT)	Trading Partner	Operation ID	Transaction ID
THIS HOUR				1 item(s)
	 Feb-14-2018 06:27:26 AM	Company1	CAQH/2.2.0/RealTimeTransaction	pCOKnv8jZ_22-A-9sQe_2ULmQkSps


6. Click **Details**  in the search results area for a specific operation to view details of the transaction.

Figure 34 Transaction Details for Receive 270 Request at BC SOAP

Time Stamp +	Status	State	Description
Feb-14-2018 06:26:46 AM	PENDING	REQUEST_FROM_TP	Received Request from Trading Partner
Feb-14-2018 06:26:50 AM	PENDING	REQUEST_VERIFIED	UsernameToken request from Trading Partner verified successfully
Feb-14-2018 06:26:50 AM	PENDING	UNPACKAGE_MSG	HTTP Message from Company1 parsed to a SOAP message successfully.The Message was added with UsernameToken Field. SOAP version is SOAP 1.1 Protocol.
Feb-14-2018 06:26:50 AM	PENDING	VALIDATE_REQUEST	Incoming request (Body) validated successfully.
Feb-14-2018 06:27:21 AM	PENDING	REQUEST_TO_ED	CAQH request message sent to EDI protocol.
Feb-14-2018 06:27:24 AM	PENDING	RESPONSE_FROM_ED	Received CAQH response message from EDI protocol.
Feb-14-2018 06:27:25 AM	PENDING	VALIDATE_RESPONSE	Outgoing response (Body) validated successfully.
Feb-14-2018 06:27:26 AM	PENDING	PACKAGE_MSG	SOAP Message packaged successfully. SOAP version is SOAP 1.1 Protocol.
Feb-14-2018 06:27:26 AM	COMPLETED	RESPONSE_TO_TP	Send response to Trading Partner.

Figure 35 Transaction Details for Receive 270 Request at BC X12

States					change view	
Time Stamp +	Status	State	Description	Transmission ID	Transmission Time	
Feb-14-2018 06:27:04 AM	PENDING	SYNC_REQUEST_FROM_SOAP	Received a CAQH request message from SOAP protocol, SOAP operation ID is CAQH/2.2.0/RealTimeTransaction			
Feb-14-2018 06:27:04 AM	PENDING	UNPACKAGE_CAQH_MSG	CAQH SOAP Message parsed successfully. PayloadType = 'X12_270_Request_005010X279A1', PayloadID = 'D52825DA-BBCD-4E47-AF9B-05602000EDD7'.			
Feb-14-2018 06:27:05 AM	PENDING	TXN_VALIDATION_COMPLETE	Received an EDI transaction from trading partner and the transaction was validated and converted successfully			
Feb-14-2018 06:27:05 AM	COMPLETED	REQUEST_TO_PP	XML Transaction sent to Private Process			


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

Figure 36 SYNC_REQUEST_FROM_SOAP

State : 1 of 4

change view

Time Stamp	Feb-14-2018 06:27:04 AM
Status	PENDING
State	SYNC_REQUEST_FROM_SOAP
Description	Received a CAQH request message from SOAP protocol, SOAP operation ID is CAQH/2.2.0/RealTimeTransaction
	<div><div>Save Message [1114 bytes]</div><div>Back</div><div>Next</div></div>

HTTP MIME Multipart Envelope



CAQH sample uses HIPAA operation and sample files to package the CAQH message. You must install HIPAA before running the CAQH tutorial for sending and receiving CAQH message with HTTP MIME Multipart envelope.

In this tutorial, you can use TIBCO ActiveMatrix BusinessWorks and TIBCO BusinessConnect EDI Protocol powered by Instream running on one machine to send an X12 270 batch transaction to a trading partner.

The transaction set identifier information is as follows:

- Transaction set - 270
- Group version - 005010X279A1
- Interchange version - 00501

CAQH Batch Interaction

When you run the tutorial, the following operations occur at the Initiator end:

1. TIBCO Designer/TIBCO Business Studio reads an XML file, which contains the data for a 270 batch transaction.

TIBCO Designer/TIBCO Business Studio parses the XML data, and sends the XML data to TIBCO BusinessConnect EDI Protocol powered by Instream.

TIBCO BusinessConnect EDI Protocol powered by Instream converts the XML data to X12 data.
2. TIBCO BusinessConnect EDI Protocol powered by Instream validates the X12 data against a 270 guideline.
3. The validated X12 data is packaged with HTTP MIME Multipart Envelope and send to the trading partner.
4. When the request is received by the Responder, Batch receipt confirmation is sent to Initiator from Responder.
5. The Responder generates and stores the Response and Acknowledgments in the local file system and waits for the initiator to retrieve them.
6. The Initiator end retrieves the response and acknowledgments.
7. The Initiator end generates Acknowledgment for the retrieved response and sends it back to the Responder end.

Processes Overview

Process names are slightly different in TIBCO Designer and TIBCO Business Studio. For example, the Send 270 Request to BC process in TIBCO Designer equals the Send_270_Request_to_BC process in TIBCO Business Studio. The following description takes processes in TIBCO Designer as an example.

The CAQH_SOAP_EDl project contains several processes in folders: Batch/Initiator/Explicit PayloadType Batch/CAQH_MIME and Batch/Responder.

The Batch/Initiator/Explicit PayloadType Batch folder contains the following processes:

- Send 270 Request

This process reads a file containing the XML equivalent of a 270 transaction, and sends the XML data to TIBCO BusinessConnect as a CAQH batch submission request.
- Send 271 Response Retrieve Request to EDI

This process sends a CAQH batch response retrieval request to get the 271 response from the trading partner.

- Send 824 ACK Retrieve Request to EDI
This process sends a CAQH acknowledgment retrieval request to get the 824 acknowledgment from the trading partner.
- Send 999 ACK Retrieve Request to EDI
This process sends a CAQH acknowledgment retrieval request to get the 999 acknowledgment from the trading partner.
- Send TA1 ACK Retrieve Request to EDI
This process sends a CAQH acknowledgment retrieval request to get the TA1 acknowledgment from the trading partner.
- Send 270 Request (Correlate PayloadID)
This process simulates Initiator and sends all CAQH requests with the same PayloadID and expects that batch response/acknowledgment retrieval request only get the data which is corresponding to the original batch request. The Batch/Responder folder contains the following processes:
- Receive 270 Request
This process receives batch submission 270 request and sends back 271 data as batch response.

Prerequisites

Before running this tutorial, complete the tasks of [Importing Operations](#) and [Configuring Trading Partner and Host](#) that are specified in CAQH tutorial with SOAP+WSDL implementation.

- While performing tasks of [Importing Operations](#), it is not necessary to import CAQH operation of SOAP protocol.
- While performing the tasks of [Configuring Trading Partner and Host](#), it is not necessary to configure SOAP protocol settings for TP that are mentioned below.
 - Click **Partner > Protocols > SOAP > General** tab.
 - On the **General** tab, select the **Send CAQH Message To EDI Protocol** check box.
- To perform CAQH operations with HTTP MIME Multipart, it is required to configure Transport Settings for Trading Partner that are mentioned below.
 - Click **Partner > Protocols > X12 > Transports** tab.
 - Create HTTP/HTTPS outbound transport and provide the below query string in HTTP/HTTPS transport URL.
package = x12-caqh-mime

For example:

server1.company.example.com:6700/X12?package=x12-caqh-mime

- At Business Agreement level, select the primary outbound transport as HTTP/HTTPS in which the outbound transport URL contains the query string mentioned above. To do this, perform the steps mentioned below:

Click **Business Agreements>X12>Transports**.

Select HTTP/HTTPS as a **Primary Transport** in the **Outbound Transport for Host**.



If the mentioned query string is not provided in the outbound HTTP URL, TIBCO BusinessConnect EDI protocol powered by Instream will package outbound CAQH message with SOAP + WSDL envelope.

Running a Tutorial

To run the tutorial, you must run the following processes from TIBCO Designer and check the sending results.

- First, from the Responder side:
Start Receive 270 Request process.
- Then, from the Initiator side run the following processes in the sequence shown below:
 - Send 270 Request
 - Send TA1 ACK Retrieve Request to EDI
 - Send 999 ACK Retrieve Request to EDI
 - Send 824 ACK Retrieve Request to EDI
 - Send 271 Response Retrieve Request to EDI

Send a 270 Request transaction from TIBCO Designer.
- Check the results of sending the message.


Sending the 270 Request

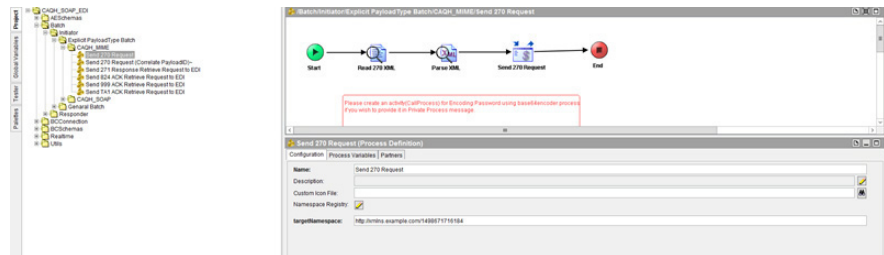
You must send a 270 Request from TIBCO Designer. This transaction is used for sending the CAQH batch submission request.

To see the Send 270 Request, click **Project > Batch > Initiator > Explicit PayloadType Batch > CAQH_MIME > Send 270 Request**.

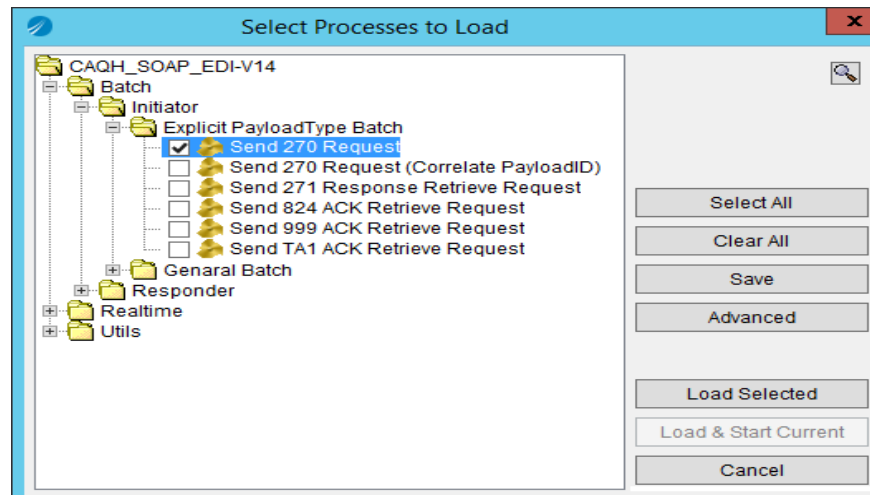
Running the Process

This procedure describes how to run the process.

1. In TIBCO Designer, click the **Tester** tab.
2. In the **Tester** tab, click **Start testing viewed process** .



3. In the **Select Processes to Load** dialog, select the check box next to **Send 270 Request To BC** in the X12 Message Processes folder.
4. Click **Load Selected** to run the process.



Expected Results

When the 270 transaction is received by TIBCO BusinessConnect EDI Protocol powered by Instream, several operations are performed.

1. TIBCO BusinessConnect EDI Protocol powered by Instream converts XML to X12 data.
2. TIBCO BusinessConnect EDI Protocol powered by Instream validates the X12 data against 270 guideline.

3. The validated X12 data is packaged with HTTP MIME Multipart envelope and sent to the trading partner.
4. When the request is received by the Responder, Batch receipt confirmation is sent to Initiator.
5. The Responder generates and stores the Response and Acknowledgments in the local file system and waits for the initiator to retrieve them.
6. The Initiator end retrieves the response and acknowledgments
7. The Initiator end generates Acknowledgment for the retrieved response and sends it back to the Responder end.

Viewing the Audit Log

This procedure describes how to view the audit log on the Initiator machine.

1. Log on to TIBCO Administrator.
2. In the left panel, expand **BusinessConnect > Log Viewer**.
3. In the right panel, click the **X12** link to view the X12 logs.
4. Select items from the following lists: **Status**, **Connection**, and **Date Range**.
5. Click **Search** to search for the matching audit logs.

Figure 37 Send 270 Request To BC X12 Audit Log at the Initiator end

Date Range (UTC)	Operation ID	Connection ID	Trading Partner	Interchange ID	Interchange ID	Doc Key	Doc Control Number	Group Control Number	Doc Control Number	Initiated By User
Feb-08-2018 11:08:42 PM	00501/EmptyInnuv/T1	9a3HFA8KXndq4Hr_2ul-y-Spa	Company2	01	987654321		000000044	NA	NA	false
Feb-08-2018 11:08:42 PM	EDI/Inbound	9a3HFA8KXndq4Hr_2ul-y-Spa	Company2	NA	NA	NA	NA	NA	NA	false
Feb-08-2018 11:08:42 PM	EDI/Inbound/Interchange	9a3HFA8KXndq4Hr_2ul-y-Spa	Company2	01	987654321	NA	NA	NA	NA	false
Feb-08-2018 11:08:42 PM	EDI/Outbound/Interchange	9a3HFA8KXndq4Hr_2ul-y-Spa	Company2	NA	NA	NA	NA	NA	NA	true
Feb-08-2018 11:08:26 PM	00501/005010K279A1/270	23aYrvSp8BAq4Hr_2ul-y-Spa	Company2	01	987654321		000000044	43	0001	true
Feb-08-2018 11:08:26 PM	EDI/Inbound	a70B6aANSKQu4Hr_2ul-y-Spa	Company2	NA	NA	NA	NA	NA	NA	false
Feb-08-2018 11:08:26 PM	EDI/Inbound/Interchange	a70B6aANSKQu4Hr_2ul-y-Spa	Company2	01	987654321	NA	NA	NA	NA	false
Feb-08-2018 11:08:25 PM	00501/005010K231A1/999	a70B6aANSKQu4Hr_2ul-y-Spa	Company2	01	987654321		000000065	48	0001	false
Feb-08-2018 11:08:25 PM	EDI/Outbound/Interchange	a70B6aANSKQu4Hr_2ul-y-Spa	Company2	NA	NA	NA	NA	NA	NA	true
Feb-08-2018 11:08:23 PM	00501/005010K186A1/824	Hlx2qnduKQYUq4Hr_2ul-y-Spa	Company2	01	987654321		000000046	49	0001	false
Feb-08-2018 11:08:23 PM	EDI/Inbound	Hlx2qnduKQYUq4Hr_2ul-y-Spa	Company2	NA	NA	NA	NA	NA	NA	false
Feb-08-2018 11:08:23 PM	EDI/Inbound/Interchange	Hlx2qnduKQYUq4Hr_2ul-y-Spa	Company2	01	987654321	NA	NA	NA	NA	false
Feb-08-2018 11:08:23 PM	EDI/Outbound/Interchange	Hlx2qnduKQYUq4Hr_2ul-y-Spa	Company2	NA	NA	NA	NA	NA	NA	true
Feb-08-2018 11:08:08 PM	00501/005010K231A1/999	cwy8D6sdKFTxq4Hr_2ul-y-Spa	Company2	01	987654321		000000066	44	0001	true
Feb-08-2018 11:08:08 PM	EDI/Inbound	cwy8D6sdKFTxq4Hr_2ul-y-Spa	Company2	NA	NA	NA	NA	NA	NA	false
Feb-08-2018 11:08:08 PM	EDI/Inbound/Interchange	cwy8D6sdKFTxq4Hr_2ul-y-Spa	Company2	01	987654321	NA	NA	NA	NA	false
Feb-08-2018 11:08:02 PM	00501/005010K279A1/271	cwy8D6sdKFTxq4Hr_2ul-y-Spa	Company2	01	987654321		000000067	50	0001	false
Feb-08-2018 11:08:02 PM	EDI/Outbound/Interchange	cwy8D6sdKFTxq4Hr_2ul-y-Spa	Company2	NA	NA	NA	NA	NA	NA	true

Figure 38 Send 270 Request To BC X12 Audit Log at the Responder end

Feb-09-2018 02:08:31 AM	EDI/Inbound	43930FF5-E1E3-472D-B2FE-E2AC5FAFF2B	Company1	NA	NA	NA	NA	NA	NA
Feb-09-2018 02:08:15 AM	00501/005010K231A1/999BEADEF5F-1E24-49F5-ADEE-368C2AB56A78	Company1	01	123456789	000000065	48	0001		
Feb-09-2018 02:08:15 AM	EDI/Inbound	570D5D11-5349-4EF6-9147-9EBA12BED23A	Company1	NA	NA	NA	NA	NA	NA
Feb-09-2018 02:08:13 AM	EDI/Inbound	772D45CB-877C-4E03-92BD-D64F09CB0E7	Company1	NA	NA	NA	NA	NA	NA
Feb-09-2018 02:08:12 AM	00501/005010K186A1/824BEADEF5F-1E24-49F5-ADEE-368C2AB56A78	Company1	01	123456789	000000066	49	0001		
Feb-09-2018 02:07:59 AM	00501/005010K231A1/9991564ACB-E3D4-478B-99CD-171FD931A39	Company1	01	123456789	000000066	44	0001		
Feb-09-2018 02:07:59 AM	EDI/Inbound	1564ACB-E3D4-478B-99CD-171FD931A39	Company1	NA	NA	NA	NA	NA	NA
Feb-09-2018 02:07:59 AM	EDI/Inbound/Interchange	1564ACB-E3D4-478B-99CD-171FD931A39	Company1	01	123456789	NA	NA	NA	NA
Feb-09-2018 02:07:52 AM	00501/005010K279A1/2712aYgK1QSKEx_2aPc3d010-6Eg-k	Company1	01	123456789	000000067	50	0001		
Feb-09-2018 02:07:52 AM	EDI/Inbound	500679B2-9828-4100-AF74-AC4FD8DE95FF	Company1	NA	NA	NA	NA	NA	NA
Feb-09-2018 02:07:41 AM	EDI/Inbound	BEADEF5F-1E24-49F5-ADEE-368C2AB56A78	Company1	NA	NA	NA	NA	NA	NA
Feb-09-2018 02:07:41 AM	EDI/Inbound/Interchange	BEADEF5F-1E24-49F5-ADEE-368C2AB56A78	Company1	01	123456789	NA	NA	NA	NA
Feb-09-2018 02:07:39 AM	00501/005010K279A1/270BEADEF5F-1E24-49F5-ADEE-368C2AB56A78	Company1	01	123456789	000000064	43	0001		



- Click **Details**  in the search results area for a specific operation to view details of the transaction

Figure 39 Transaction Details for the Send 270 Request To BC X12 Audit Log

#	Status	State	Description	Document ID	Transaction Time
3	PENDING	RECEIVED_FROM_PP	Received message from Private Process. This message can be resent.		
4	PENDING	REQUEST_FROM_PP	Received request EDI message from private process.		
5	ACK				
6	PENDING	X12_TO_HTTP_MIME_CONVERT	Request converted successfully.		
7	PENDING	PACKAGE_CAQH_MSG	CAQH MIME request message packaged successfully. Message was added with UserIdentifier field. PayloadType = 702_270_Request.00510027941. PayloadID = 10267235-2514-4750-5350-7E5D3D001009.		
8	ACK				
9	PENDING	REQUEST_SEND_TO_TP	Sending CAQH MIME Request to Trading Partner.		
10	ACK				
11	PENDING	REQUEST_SEND_TO_TP	CAQH request message has been successfully sent to Trading partner. Raw EDI File is stored in location: c:\outbound\ogging\Out\Company\2018-02-08 (John V P2-Initiator-Server-Company\2018-02-08-11-07-11-07-42-835-mo-ed)	23c7ndp3K8fJ4P4_2LL- p-5ps	Thu, Feb 08 23:07 (actual)
12	ACK	RESPONSE_FROM_TP	Received CAQH response from Trading Partner.		
13	ACK				
14	PENDING	UNPACK_CAQH_MSG	CAQH MIME response parsed successfully. PayloadType = X12_BatchAckConfirmation. PayloadID = 10267235-2514-4750-5350-7E5D3D001009. ErrorCode = Success.		
15	ACK				
16	PENDING	RESPONSE_TO_PP	EDI Document has been sent to the Trading Partner successfully. Raw EDI File is stored in location: c:\outbound\ogging\Out\Company\2018-02-08 (John V P2-Initiator-Server-Company\2018-02-08-11-07-11-07-42-835-mo-ed)		
17	ACK		An acknowledgement has been received under Document ID: e708b6A8KGuUj4P4_2LL-p-5ps with the following Ack Code: A and Code Name: Accepted (Please refer 959 guidelines for a complete description on this ACK)	e708b6A8KGuUj4P4_2LL- p-5ps	Thu, Feb 08 23:08
18	ACCEPTED				

- Click  next to the specific transaction to see more details.

CAQH Real-time Interaction

When you run the tutorial, the following operations occur:

- TIBCO Designer/TIBCO Business Studio reads an XML file, which contains the data for a 270 transaction.

TIBCO Designer/TIBCO Business Studio parses the XML data, and sends the XML data to TIBCO BusinessConnect EDI Protocol powered by Instream.

TIBCO BusinessConnect EDI Protocol powered by Instream converts the XML data to X12 data.
- TIBCO BusinessConnect EDI Protocol powered by Instream validates the X12 data against a 270 guideline.
- The validated X12 data is packaged with HTTP MIME Multipart Envelope and send to the trading partner.
- The responder PP will send 271 XML response back to responder X12 protocol, X12 protocol will convert it to EDI data and packages with HTTP MIME Multipart envelope and sends back to Initiator BC.
- The Initiator X12 protocol extracts the EDI response data from HTTP MIME Multipart message, validates and converts it to XML response, and then sends it back to Initiator PP.

Process Overview

The process information is similar to [Process Overview](#) pertaining to Real-time Interaction with SOAP+WSDL tutorial.

Prerequisites

To run this tutorial, [Prerequisites](#) tasks are similar to Prerequisites section available in Batch Interaction with HTTP MIME Multipart.

Running a Tutorial

This tutorial is similar to [Running the Tutorial](#) section provided in the Real-time Interaction of CAQH with SOAP+WSDL.

Expected Results

When the 270 transaction is received by TIBCO BusinessConnect EDI Protocol powered by Instream, several operations are performed.

1. TIBCO BusinessConnect EDI Protocol powered by Instream converts XML to X12 data.
2. TIBCO BusinessConnect EDI Protocol powered by Instream validates the X12 data against 270 guideline.
3. The validated X12 data is packaged with HTTP MIME Multipart envelope and sent to the trading partner.
4. The Responder PP generates 271 Response, packages with HTTP MIME Multipart envelope and sends back to Initiator.
5. Initiator BC X12 unpacks the HTTP MIME Multipart envelope message, extracts the EDI data, validates it, and converts EDI to XML, and sends XML to PP, or directly sends EDI to PP.

Viewing the Audit Logs

This procedure describes how to view the audit log on the Initiator machine.

1. Log on to TIBCO Administrator.
2. In the left panel, expand **BusinessConnect > Log Viewer**.
3. In the right panel, click the **X12** link to view the X12 logs.
4. Select items from the following lists: **Status**, **Connection**, and **Date Range**.
5. Click **Search** to search for the matching audit logs

Figure 40 Send 270 as Sync Request to BC Audit Log at the Initiator

Summary Results										
Search in Results [Blank]										
Only Header	Time Stamp (UTC)	Operation ID	Document ID	Trading Partner	Interchange ID	Interchange ID	User Key	Int. Control Number	Group Control Number	Txn Control Number
THIS HOUR	Feb-14-2018 03:36:39 AM	00501/005010X279A1/271	64070C95-4788-4CF6-B237-3F6787F55406	Company2	01	967684321	000000100	76	0001	False
	Feb-14-2018 03:36:38 AM	00501/005010X279A1/270	64070C95-4788-4CF6-B237-3F6787F55406	Company2	01	967684321	000000119	85	0001	True

Figure 41 Receive 270 Sync Request and send 271 Response Audit Log at Responder

Date Group	Time Stamp (UTC)	Operation ID	Document ID	Trading Partner	Interchange ID	Interchange ID	User Key	Int. Control Number	Group Control Number	Txn Control Number	Initial
THIS HOUR	Feb-14-2018 06:36:32 AM	00501/005010X279A1/271	64070C95-4788-4CF6-B237-3F6787F55406	Company1	01	123456789	000000100	76	0001	True	
	Feb-14-2018 06:36:28 AM	00501/005010X279A1/270	64070C95-4788-4CF6-B237-3F6787F55406	Company1	01	123456789	000000119	85	0001	False	



6. Click **Details**  in the search results area for a specific operation to view details of the transaction

Figure 42 Transaction Details for Send 271 as a Synchronous Response at Responder

States						change view
Time Stamp	Status	State	Description	Transmission ID	Transmission Time	
Feb-14-2018 06:36:30 AM	PENDING	RESPONSE_FROM_PP	Received response EDI message from private process.			
Feb-14-2018 06:36:30 AM	PENDING	TXN_VALIDATION_COMPLETE	Synchronous response converted successfully			
Feb-14-2018 06:36:32 AM	PENDING	PACKAGE_CAQH_MSG	CAQH MIME Message packaged successfully. PayloadType = 'X12_271_Response_005010X279A1', PayloadID = '4B1BF83F-2931-451D-A1F2-52ACD5FEA0AB'.			
Feb-14-2018 06:36:32 AM	PENDING	RESPONSE_SEND_TO_TP	Sending CAQH MIME Response to Trading Partner.			
Feb-14-2018 06:36:32 AM	COMPLETED	SYNC_RESPONSE_TO_TP	Synchronous response 00501/005010X279A1/271 has been sent to Trading Partner.			

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

State : 1 of 5				change view	
Time Stamp	Feb-14-2018 06:36:30 AM				
Status	PENDING				
State	RESPONSE_FROM_PP				
Description	Received response EDI message from private process.				
				Back	Next

Chapter 3 **Managing X12 Interchanges, Functional Groups, and Transactions**

This chapter describes how to manage X12 interchanges, functional groups, and transactions.

Topics

- [Overview, page 68](#)
- [Adding an Interchange Version, page 69](#)
- [Adding a Group Version to an Interchange Version, page 70](#)
- [Adding a Transaction to a Group Version, page 71](#)
- [Notification Transaction, page 72](#)
- [Synchronous Request Response Transaction, page 78](#)
- [Configuring Acknowledgments, page 90](#)
- [Configuring Validation Profile \(.apf\) Files, page 94](#)
- [Exporting Interchanges, Groups, and Transactions, page 100](#)
- [Importing an Interchange Version, page 101](#)

Overview

An X12 document includes three basic structures.

- Interchange
- Functional group
- Transaction

For details about these structures, see [Chapter 1, X12 Overview, page 1](#).

You can use the TIBCO BusinessConnect console to configure the guidelines. Once you have configured transactions in the Operations Editor, the transactions can be seen during the configuration of your trading partners. The transactions can be allowed or disallowed, or the guideline itself can be overridden for a particular trading partner, if necessary.

For more information, see [Operation Bindings Tab on page 149](#).



To properly mark the ISA, GS, and ST segments with a DSR mark, as required for proper acknowledgments generation, see the documentation provided with the EDISIM Standards Editor.

Adding an Interchange Version

The first step in configuring an X12 transaction in the TIBCO BusinessConnect console is to add the interchange version.

1. Log on to TIBCO Administrator.
2. In the left panel, expand **BusinessConnect > Operations Editor**.
3. In the right panel, click the **X12** link.
4. Click **New Interchange Version**.
5. In the **Name** field, type a name that corresponds to the X12 interchange version number.
6. (Optional) Provide a description for the new interchange.
7. Specify the **Error Limit** setting to control the number of errors reported or audited at transaction, group or interchange level to avoid system overload.

The default Interchange Setting is set to 1000. Only up to 1000 errors are reported to the private process and audited. Any errors over that limit are not reported, but the acknowledgment 997 or 999 reports everything.

Error Limit 0 means that no error limit is set.

8. Click **Save** to save the configurations.

Adding a Group Version to an Interchange Version

After adding an interchange version, you have to add a group version to it.

To add a group version to an interchange version:

1. Click an interchange version radio button.
2. Click **New Group Version**.
3. Configure the options listed in [Table 3](#).
4. Click **Save** to save the configurations.

Table 3 Group Version Fields

Field	Descriptions
Name	<p>Specify a name that corresponds to the X12 standard version, release and subrelease, which are designated in the functional group header (GS) segment. For example, 004010 or 004030.</p> <p>If you are configuring an interchange acknowledgment segment (TA1), type EmptyGroup, and then proceed to the steps in Adding a Transaction to a Group Version on page 71. See the sample interchange <i>BC_HOME\protocols\tibedi\samples\interfaces\X12-00403.csx</i>.</p>
Description	(Optional) Provide a description for this group version.
Error Limit	<p>Specify a threshold to control the number of errors reported or audited at transaction, group or interchange level to avoid system overload. If you set Error Limit to 0, it means that no limit is imposed at this level.</p> <p>Group Setting 997 and 999 reports all the errors though the default value is 100. Only up to 100 errors are reported to the private process and audit logged.</p>
Application Code	
GS02 Sender	The application sender code in the GS segment of an X12 document. This code identifies the party sending the X12 group. Codes are agreed upon between trading partners.
GS03 Receiver	The application receiver code in the GS segment of an X12 document. This code identifies the party sending the X12 group. Codes are agreed upon between trading partners.
GS07 Responsible Agency Code	Accept or change the GS07 Responsible Agency Code.

Adding a Transaction to a Group Version

After configuring your interchange and group versions, you can add your X12 transaction.

To add a transaction:

1. Click a group version radio button.
2. Click **New Transaction**.
3. Select one of the following items from the **Transaction Type** list:
 - **Notification**
Continue with [Notification Transaction on page 72](#).
 - **Sync RequestResponse**
Continue with [Synchronous Request Response Transaction on page 78](#).
4. Click **OK**.

Notification Transaction

Notification transactions are asynchronous in nature: a transaction is sent to the trading partner, and the response from the trading partner is expected at some later time.

Only Notify transactions are currently supported for NAESB; Synchronous Request Response transactions are not supported. See also [NAESB, page 142](#).

- [Notification Transaction Tab, page 72](#)
- [Outbound Action Tab, page 75](#)

Notification Transaction Tab

This tab contains three subtabs.

- [General Tab, page 72](#)
- [Guideline Tab, page 73](#)
- [Schema Tab, page 74](#)

General Tab

In the **General** tab, you can configure general information for notification transactions.

The following table lists the fields in the **General** tab of the **Notification Transaction** tab:

Table 4 Notification Transaction: General Tab

Field	Description
Name	Specify a name for the transaction.
Description	Provide a description for the transaction (optional)
Inbound Raw EDI Segments	
Include in Private Process Request	Select this check box to include raw EDI message in the private process (RESPONDER.REQUEST) for this operation. This check box is unselected by default.
Include in Validation Error Advisory	Select this check box to include raw EDI messages in the Validation Error advisory. This check box is selected by default.

Table 4 Notification Transaction: General Tab (Cont'd)

Field	Description
Extra Transaction Info	<p>This text field is used to send any information to the private process at transaction level of RESPONDER.REQUEST message.</p> <p>It can also be included in RESPONDER.INTERCHANGE and ValidationAlert advisory.</p>

Guideline Tab

In the **Guideline** tab, you can configure guideline information for notification transactions.

The following table lists the fields in the **Guideline** tab of the **Notification Transaction** tab:

Table 5 Notification Transaction: Guideline Tab

Field	Description
GS01 Functional Identifier Code	<p>The mandatory code of the message. Example: PO.</p> <p>Entering the GS01 functional identifier that is normally indicated in the Functional Group Header is needed by the EDI conversion engine.</p>
Validation Guideline	
Guideline File for validating X12 Partner data (.sef or .std)	<p>The guideline file associated with this message type. It is used to validate the EDI document that is received from a trading partner, or that is sent to the trading partner.</p> <p>Click change to select the guideline file associated with this message type. Then, follow the procedure described in the section File Specification Dialog in <i>TIBCO BusinessConnect Trading Partner Administration Guide</i>.</p>
Validator Profile File (.apf)	<p>Click change to select and load the Validator profile file.</p> <p>Validator profile files are used to check on errors and categorize them to different levels of severity. For details, see Configuring Validation Profile (.apf) Files.</p>
Error Limit	<p>Specify a threshold to control the number of errors reported or audited at transaction, group or interchange level to avoid system overload. If you set Error Limit to 0, it means that no limit is imposed at this level.</p> <p>The default transaction setting is 10. Only up to 10 errors are reported per transaction, both in the audit and ERROR.VALIDATION. However, acknowledgments have all the errors that are being reported.</p>

Table 5 Notification Transaction: Guideline Tab (Cont'd)

Field	Description
Inbound Type of Translation	
Inbound X12 Translation Type (e.g. EDI to XML or EDI to TEXT)	<div>Select one item from the list to specify the inbound X12 translation type.</div> <ul style="list-style-type: none">EDI to XML This is the default value. When you select EDI to XML from the list, the inbound X12 document is translated to XML. It can be overridden at the business agreement level to do EDI to TEXT translation. For more details, see Table 33, Override Settings for Notify: Guideline.EDI to TEXT When you select EDI to TEXT from the list, the Inbound X12 document is translated into a TEXT document, depending on the structure of the guideline that is designed. When a proper TEXT guideline is uploaded and an appropriate translation map for mapping EDI to TEXT is created, the output is a TEXT file.
TEXT Translation Guideline	
Guideline File used for translating X12 to TEXT (.sef or .std)	<div>Click change to select a guideline file for translating X12 to TEXT.</div> <div>This TEXT guideline is used for translating an X12 EDI document into a TEXT document.</div>

Schema Tab

In the **Schema** tab, you can configure schema information for notification transactions.

The following table lists the fields in the **Schema** tab of the **Notification Transaction** tab:

Table 6 Notification Transaction: Schema Tab

Field	Description
Transaction Schema (.xsd)	<div>Click change to select the schema file associated with this message type.</div> <div>The message schema is required for the EDI conversion engine. When a connection to TIBCO BusinessConnect is created in TIBCO Designer or TIBCO Business Studio, loading the message schema into the TIBCO BusinessConnect configuration store allows it to be retrieved automatically by TIBCO Designer or TIBCO Business Studio.</div>
Request Root Element Name	<div>Specify the name of the Transaction Schema root element from the preceding field.</div>

Table 6 Notification Transaction: Schema Tab

Field	Description
EDI to XML (or EDI to TEXT) Translation Map file (.map)	<p>Click change to select the EDI to XML or EDI to TEXT translation map file associated with this message type.</p> <ul style="list-style-type: none"> If you select EDI to TEXT as the type of translation, the appropriate X12 to TEXT translation map must be uploaded for the translation to occur. If you select EDI to XML as the inbound type of translation, the appropriate X12 to XML translation map must be uploaded for the translation to occur. <p>Note that EDI to XML translation map files generally have the extension <code>_EX.map</code>.</p>
XML to EDI Translation Map file (.map)	<p>Click change to select the XML to EDI translation map file associated with this message type. Note that XML to EDI translation map files have the extension <code>_XE.map</code>.</p>

Outbound Action Tab

To configure the outbound action for the Notification transaction, you must configure information in the subtabs of the **Outbound Action** tab.

- [General Tab, page 75](#)
- [Batching Tab, page 75](#)
- [Acknowledgement Tab, page 76](#)

General Tab

In the **General** tab, you can configure general information for outbound actions.

The following table lists the fields in the **General** tab of the **Outbound Action** tab:

Table 7 Outbound Action: General Tab

Field	Description
Name	Specify a name for the outbound action.
Description	Provide a description for the outbound action.
Direction	Specify the Initiator to Responder (pre-filled).

Batching Tab

In the **Batching** tab, you can configure batching information for outbound actions.

The following table lists the fields in the **Batching** tab of the **Outbound Action** tab:

Table 8 Outbound Action: Batching Tab

Field	Description
Batch Option	<p>Select one item from the Batch Option list:</p> <ul style="list-style-type: none">Always This is the default option. <p>If Scheduled Transmission is enabled in the Scheduled Transmission tab of a trading partner's business agreement with the host, all messages of this transaction type for that trading partner are placed into batches. The batches are sent based upon the settings in the Scheduled Transmission tab of the business agreement. See Scheduled Transmission Tab on page 170.</p> <ul style="list-style-type: none">Never Messages of this transaction type are not to be included in any batches regardless of whether the scheduled transmission has been enabled for a trading partner. All messages of this type are sent immediately to your trading partners, and bypass the schedule time/batch settings for your trading partners.Exclusively When messages of this transaction type are included in a scheduled batch, they are separated into interchanges containing only messages of this type. With this choice, you can batch transactions based upon transaction type. <p>For example, you can batch all 850 transactions and all 860 transactions so that your trading partners receive 850 transactions in one interchange and 860 transactions in another interchange. The exclusive batching feature includes two options where TIBCO BusinessConnect can transmit:</p> <ul style="list-style-type: none">— Each interchange in its own document.— Multiple interchanges in a single document.

Acknowledgement Tab

In the **Acknowledgement** tab, you can configure acknowledgment information for outbound actions.

The following table lists the fields in the **Acknowledgement** tab of the **Outbound Action** tab:

Table 9 Outbound Action: Acknowledgement Tab

Field	Description
Maximum Wait (minutes)	<p>The default waiting time is 1440 minutes.</p> <p>This is the maximum amount of time that TIBCO BusinessConnect waits for an acknowledgment (997 functional acknowledgment transaction) from your trading partner when a message of this type is sent to your trading partner.</p> <p>If an acknowledgment is not received within the time limit specified, TIBCO BusinessConnect logs an ACK_RESPONSE_TIMEOUT state for the original message, and sends an alert message on the subject <i>prefix.installation.X12.ERROR.TIMEOUT.ACK</i> to the private process.</p>
Reconcile After Timeout	<p>Acknowledgments that are received after the timeout period are reconciled and processing of the original message continues.</p> <p>Normally when an acknowledgment times out, the final status of the original message is set to ACK TIMEOUT ERROR. If the acknowledgment is received after the timeout period, it is ignored.</p>
Mark as Completed After Timeout	<p>Final status of Completed with a state of ACK_RESPONSE_TIMEOUT is logged for the original message in the case when the acknowledgment for the message is not received before the specified timeout. If you select this check box and the acknowledgment is received after the timeout, it is ignored.</p> <p>This feature is useful when your trading partner is sending an acknowledgment only when validation errors occur for the original message. After the acknowledgment timeout period expires, the original message is assumed to be accepted by your trading partner.</p>

For information on configuring acknowledgments, see *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide*, Chapter 5, "Acknowledgments and Reconciliation."

Synchronous Request Response Transaction

Synchronous request-response transactions are transactions where a response transaction is expected to be returned quickly and using the same transport connection as the request transaction. In case of validation errors, the normal response cannot be returned but another transaction, for example, 997 or TA, is returned indicating that validation errors occur.

For example, you can agree with your trading partner that each 850 purchase order transaction you send must have an 855 purchase order acknowledgment transaction returned as a response on the same transport connection. If a validation error occurs in the 850 purchase order transaction, an 855 response cannot be returned. Instead, a 997 response is returned, indicating that the 850 is rejected. You do not usually choose to keep a transport connection open for more than a minute or two. Therefore, the time frame, which the response is expected within, must be fairly short. Synchronous request-response transactions are only supported on those transports for which a response transaction can be returned on the same connection used for sending the request transaction.



Synchronous Request-Response transactions are applicable only to the HTTP transport.

Synchronous Request and Notify Operations

Users receiving a synchronous request from their trading partner can also receive a notify operation of the same transaction type under the same group and interchange.

This result can be achieved by having a mandatory business agreement with the trading partner and configuring the following information:

- Naming the synchronous request operation of the transaction 101, so that it ends with R, for example, 101R.
- Configuring the trading partner to send the GS02 Sender Application ending with R. Then, the receiving BusinessConnect can detect the operation as a synchronous transaction and to trade synchronously with their partner. If either one of the preceding two configurations is missing and two different operation types are configured, namely synchronous (101R) and notify operations (101) for the same transaction type, the receiver always receives the transaction as a notify transaction even though the initiator might have sent it in synchronous mode.

Default Response for a Synchronous Request

You can send a default response for a synchronous request in case the response from the private process on the responder side fails due to validation errors.

To configure the default response, upload this response file to the following location:

BusinessAgreement>X12>Partner can initiate>operation>Action Settings> Default response

The **Default Response** field is available only in the **Partner can initiate** field of the operation binding. It is configurable to send a templated response to the trading partner if the synchronous response sent from the private process contains any validation errors or errors in the response XML. In such case, this templated response is sent back to the trading partner with no validation or syntax check. Users have to ensure that the Default Response is a valid response.

For more information on synchronous request-response transactions, see *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide*, Chapter 8, "Private Messages."

Configuring the Synchronous Request Response Transaction

To configure the synchronous request response transaction, configure corresponding information in the following tabs, and then click **Save** to save the configurations.

- [General Tab, page 79](#)
- [Request Action Tab, page 85](#)
- [Response Action Tab, page 87](#)

General Tab

In the **General** tab, you can configure general information for synchronous request response transactions.

The following table lists the fields in the **General** tab:

Table 10 Synchronous Request Response Transaction: General tab

Field	Description
Name	Specify a name for the transaction. Example: 850.
Description	(Optional) Provide a description for the transaction.
Transaction Type	
Acceptance Response	Specify an acceptance response transaction type. This is the type of transaction expected as a response from your trading partner. For example, if 850 is the request transaction, the acceptance response transaction type is 855.

Table 10 Synchronous Request Response Transaction: General tab (Cont'd)

Field	Description
Rejection Ack	<p>Specify a rejection acknowledgment transaction type.</p> <p>This field indicates the type of transaction that is expected to be returned as a response if the original request transaction has validation errors.</p> <p>The default type is 997.</p>
Inbound Raw EDI Segments	
Include in Private Process Request	<p>Select this check box to include raw EDI message in the private process (RESPONDER.REQUEST) for this operation.</p> <p>This check box is cleared by default.</p>
Include in Validation Error Advisory	<p>Select this check box to include raw EDI messages in the Validation Error advisory.</p> <p>This check box is selected by default.</p>

Guideline Tab

In the **Guideline** tab, you can configure guideline information for synchronous request response transactions.

The following table lists the fields in the **Guideline** tab

Table 11 Synchronous Request Response Transaction: Guideline Tab (Sheet 1 of 5)

Field	Description
Request	
GS01 Functional Identifier Code (for Request)	<p>Specify the mandatory functional identifier code of the transaction. Entering the GS01 functional identifier, which is normally indicated in the Functional Group Header, is required by the EDI conversion engine.</p> <p>Examples:</p> <ul style="list-style-type: none">Request PO for an 850 purchase order transaction.Acceptance Response PR for an 855 purchase order acknowledgment transaction.Rejection Acknowledgment FA for a 997 functional acknowledgment transaction.

Table 11 Synchronous Request Response Transaction: Guideline Tab (Sheet 2 of 5)

Field	Description
Type of Translation	
Inbound Translation Type (e.g. EDI to XML or EDI to TEXT)	<p>Select one item from the list to specify the inbound translation type.</p> <ul style="list-style-type: none"> • EDI to XML This is the default value. When you select EDI to XML from the list, the inbound Synchronous X12 document is translated to XML. It can be overridden at the business agreement level to do EDI to TEXT translation. For details, see Table 33, Override Settings for Notify: Guideline. • EDI to TEXT When you select EDI to TEXT from the list, the appropriate synchronous X12 document is translated to TEXT. When a proper TEXT guideline is uploaded and an appropriate translation map for mapping EDI to TEXT is created, the output is a TEXT file.
X12 Validation Guideline for Request	
Request Guidelines File (.sef or .std)	<p>Provide the path to the inbound synchronous request guidelines file. You can override this field at the business agreement level. You can use this guideline file to validate the EDI document that is received from a trading partner or sent to a trading partner.</p> <p>Click change to select a .sef or .std guideline file.</p>
Request Validator Profile File (.apf)	<p>Provide the path to the inbound synchronous request Validator Profile file that you want to suppress errors into warning or information. You can override this field at the business agreement level.</p> <p>Click change to select and load the Validator Profile file (.apf).</p>
TEXT Translation Guideline	
Guideline File used to translate X12 to TEXT (.sef or .std)	<p>Click change to select a guideline file to translate X12 to TEXT.</p> <p>This TEXT guideline is used for translating an X12 EDI document into a TEXT document.</p>

Table 11 Synchronous Request Response Transaction: Guideline Tab (Sheet 3 of 5)

Field	Description
Request Error Limit	<p>Specify a threshold to control the number of errors reported or audited at transaction, group or interchange level to avoid system overload. If you set Request Error Limit to 0, it means that no limit is imposed at this level.</p> <p>The default value is 10. Only up to 10 errors are reported per transaction, both in the audit and ERROR.VALIDATION. However, acknowledgments have all the errors that are being reported.</p>
Acceptance Response	
GS01 Functional Identifier Code (for Response)	<p>Specify the mandatory functional identifier code of the transaction. Entering the GS01 functional identifier, which is normally indicated in the Functional Group Header, is required by the EDI conversion engine.</p> <p>Examples:</p> <ul style="list-style-type: none"> Request PO for an 850 purchase order transaction. Acceptance Response PR for an 855 purchase order acknowledgment transaction. Rejection Acknowledgment FA for a 997 functional acknowledgment transaction.
X12 Validation Guideline for Response	
Response Guidelines File (.sef or .std)	<p>Provide the path to the outbound synchronous response Guidelines file. You can override this field at the business agreement level.</p> <p>This guideline file is used to validate the synchronous response EDI document that is received from a trading partner, or that is sent to a trading partner.</p> <p>Click change to select and load the .sef or .std Guidelines File.</p>
Response Validator Profile File (.apf)	<p>Provide the path to the outbound synchronous response Validator Profile file that you want to suppress errors into warning or informational if the responses have errors. You can override this field at the business agreement level.</p> <p>Click change to select and load the Validator Profile File (.apf).</p>
TEXT Translation Guideline	

Table 11 Synchronous Request Response Transaction: Guideline Tab (Sheet 4 of 5)

Field	Description
Guideline File used to translate EDI response to TEXT (.sef or .std)	<p>Click change to select a guideline file for translating EDI to TEXT.</p> <p>This TEXT guideline is used to translate a synchronous X12 response EDI document into a TEXT document.</p>
Type of Translation	
Backend to Partner Translation type for Response (e.g. XML to EDI or TEXT to EDI)	<ul style="list-style-type: none"> • XML to EDI • TEXT to EDI TEXT data can be sent from the private process, converted to the EDI data, and sent back to the Initiator. <p>For more details, see <i>TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide</i>, "TEXT to EDI Conversion."</p>
TEXT Translation Guideline	
Guideline File used to translate TEXT to EDI response (.sef or .std)	<p>Click change to select and load a guideline file for translating TEXT to EDI.</p> <p>This TEXT guideline is used for translating a TEXT document into synchronous X12 response EDI document.</p>
Response Error Limit	<p>Specify a threshold to control the number of errors reported or audited at transaction, group or interchange level to avoid system overload. If you set Request Error Limit to 0, it means that no limit is imposed at this level.</p> <p>The default value is 10. Only up to 10 errors are reported per transaction, both in the audit and ERROR.VALIDATION. However, acknowledgments have all the errors that are being reported.</p>
Rejection Ack	
GS01 Functional Identifier Code (for Acknowledgement)	<p>Specify the mandatory code of the acknowledgment. Example: FA.</p> <p>Entering the GS01 functional identifier, which is normally indicated in the Functional Group Header, is required by the EDI conversion engine.</p>
Rejection Ack Guidelines File (.sef or .std)	<p>Provide the path to the Rejection Ack Guidelines file. You can override this field at the business agreement level.</p> <p>Click change to select and load the Rejection Ack Guidelines File (.sef or .std).</p> <p>This guideline file is used to validate the synchronous EDI rejection acknowledgment document that is received from a trading partner, or that is sent to a trading partner.</p>

Table 11 Synchronous Request Response Transaction: Guideline Tab (Sheet 5 of 5)

Field	Description
Inbound Translation Guideline for Rejection Ack	
Guideline File used to translate EDI rejection Ack to TEXT (.sef or .std)	<p>Click change to select and load a guideline file for translating EDI rejection Ack to TEXT.</p> <p>This TEXT guideline is used for translating a synchronous X12 rejection acknowledgment EDI document into a TEXT document.</p>

Schema Tab

In the **Schema** tab, you can configure schema information for synchronous request response transactions.

Loading the transaction schemas into the TIBCO BusinessConnect configuration store allows it to be retrieved automatically by TIBCO Designer or TIBCO Business Studio when a connection to TIBCO BusinessConnect is created in TIBCO Designer or TIBCO Business Studio. For further information, see *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide*, "Creating Private Processes."

The following table lists the fields in the **Schema** tab:

Table 12 Synchronous Request Response Transaction: Schema Tab

Field	Description
Request	
Request Transaction Schema (.xsd)	<p>To load the synchronous Request Transaction schema, click change to select the schema file for the synchronous request transaction.</p> <p>Example: X12_5010_850.xsd.</p>
Request Root Element Name	<p>Specify the name of the root element of the synchronous request Transaction Schema from the above field.</p>
Acceptance Response	
Response Transaction Schema (.xsd)	<p>To load the synchronous Response Transaction schema, click change to select the schema file for the synchronous response transaction.</p> <p>Example: X12_5010_850.xsd.</p>
Response Root Element Name	<p>Specify the name of the root element of the synchronous response Transaction Schema from the preceding field.</p>

Table 12 Synchronous Request Response Transaction: Schema Tab

Field	Description
Rejection Ack	
Rejection Ack Transaction Schema (.xsd)	To load the Rejection Ack Transaction schema, and click change to select the schema file for the rejection acknowledgment transaction. Example: X12_5010_997.xsd.
Rejection Root Element Name	Specify the name of the root element of the Transaction Schema from the preceding field.

Request Action Tab

To configure request actions for synchronous request response transactions, you have to configure information in the subtabs of the **Request Action** tab.

General Tab

In the **General** tab, you can configure general information for request actions.

The following table lists the fields in the **General** tab of the **Request Action** tab:

Table 13 Request Action: General Tab

Field	Description
Name	Specify the name of a request action.
Description	Provide a description for this action.
Direction	Specify the Initiator to Responder (pre-filled).
Time to Wait for Sync Response (seconds)	Specify the time for TIBCO BusinessConnect to wait for a synchronous response from a trading partner before it closes the connection of the HTTP socket. The default value is 60.

Translation Map Tab

In the **Translation Map** tab, you can configure translation map information for request actions.

The following table lists the fields in the **Translation Map** tab of the **Request Action** tab:

Table 14 Request Action: Translation Map Tab

Field	Description
Request	
Request XML to EDI Translation Map File (.map)	<p>Click change to select the XML to EDI translation map file. This file is associated with this message type for sending XML from the private process to TIBCO BusinessConnect and is sent to the Trading Partner as a synchronous request.</p> <p>Note that XML to EDI translation map files have the extension <code>_XE</code>.</p>
Acceptance Response	
Response EDI to XML (or EDI to TEXT) Translation Map File (.map)	<p>Click change to select the EDI to XML or EDI to TEXT translation map file.</p> <ul style="list-style-type: none"> If you select EDI to TEXT as the inbound type of translation, the appropriate X12 to TEXT translation map must be uploaded for the translation to occur. If you select EDI to XML as the inbound type of translation, the appropriate X12 to XML translation map must be uploaded for the translation to occur. <p>Note that EDI to XML translation map files have the extension <code>_EX.map</code>.</p>
Rejection Ack	
Rejection Ack EDI to XML (or EDI to TEXT) Translation Map File (.map)	<p>Click change to select the EDI to XML or EDI to TEXT translation map file.</p> <ul style="list-style-type: none"> If you select EDI to TEXT as the inbound Type of Translation, then the appropriate X12 to TEXT translation map must be uploaded for the translation to occur. If you select EDI to XML as the inbound Type of Translation, then the appropriate X12 to XML translation map must be uploaded for the translation to occur. <p>Note that EDI to XML translation map files have the extension <code>_EX.map</code>.</p>

Response Action Tab

To configure request actions for synchronous request response transactions, you have to configure information in the subtabs of the **Response Action** tab.

General Tab

In the **General** tab, you can configure translation map information for response actions.

The following table lists the fields in the **General** tab of the **Response Action** tab:

Table 15 Response Action: General Tab

Field	Description
Name	Specify the name of a response action.
Description	Provide a description for this action.
Direction	Specify the Responder to Initiator (pre-filled).
Time to Wait for PP Response (seconds)	Specify the amount of time for the Responder BusinessConnect to wait after the synchronous request is sent to the private process. If the response is not received, a timeout occurs, an error is logged, and the error response is sent to the trading partner. If the response is received within the defined amount of time, the response is sent back to the partner. The default value is 60.

Translation Map Tab

In the **Translation Map** tab, you can configure translation map information for request actions.

The following table lists the fields in the **Translation Map** tab of the **Response Action** tab:

Table 16 Response Action: Translation Map Tab

Field	Description
Request	

Table 16 Response Action: Translation Map Tab (Cont'd)

Field	Description
Request EDI to XML (or EDI to TEXT) Translation Map File (.map)	<div>Click change to select and load the EDI to XML (or EDI to TEXT) translation map file.</div> <div><ul style="list-style-type: none">• If you select EDI to TEXT as the inbound type of translation, the appropriate X12 to TEXT translation map must be uploaded for the translation to occur.• If you select EDI to XML as the inbound type of translation, the appropriate X12 to XML translation map must be uploaded for the translation to occur.</div> <div>Note that EDI to XML translation map files have the extension _EX.map.</div>

Table 16 Response Action: Translation Map Tab (Cont'd)

Field	Description
Acceptance Response	
Response XML to EDI (or TEXT to EDI) translation Map File (.map)	<p>Click change to select the XML to EDI (TEXT to EDI) translation map file. This file is associated with this message type for sending the synchronous response to a trading partner that is received from the private process.</p> <p>Note that XML to EDI translation map files have the extension <code>_XE.map</code>.</p> <p>For TEXT to EDI translations, see <i>TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide</i>, "TEXT to EDI Conversion."</p>

Configuring Acknowledgments

This section describes how to configure acknowledgments.



To properly mark the ISA, GS, and ST segments with a DSR mark, as required for proper acknowledgments generation, see the documentation provided with the EDISIM Standards Editor.

Configuring 997 Functional Acknowledgments

The 997 transaction set is also called a functional acknowledgment.

It is used to indicate the results of the syntactical analysis of a same type transaction group, such as all 850 transactions contained in the same functional group inside an interchange. If functional acknowledgments (997s) are to be sent or received for X12 transaction sets, you must configure a 997 transaction for each functional group containing the transaction sets.



The 997 transactions are not sent as acknowledgments for other 997 transactions.

For example, the sample interchange X12-00403.csx contains the following information:

```
00403 interchange version
005010 group version
850 transaction set
997 transaction set
```

You can configure the 997 transaction set in the Operations Editor just as you configure any other X12 transaction set. However, for the 997 transaction set it is not necessary to upload the guideline to use for validation.

TIBCO BusinessConnect EDI Protocol powered by Instream contains a generic 997 guideline, which is used by default. The generic 997 guideline X12_5010_997.sef can be found in the directory: *BC_HOME*\protocols\tibedi\samples\sampleDocs\guidelines.

Configuring the 999 Implementation Acknowledgments

The 999 implementation acknowledgments are used to report the status of implementation guide syntax edits. Automatic generation of the 999 acknowledgment is available for transactions in group 004061 and higher.

Configuration of the 999 implementation acknowledgment is similar to configuring a 997 acknowledgment: you can configure the 999 as a transaction set in the operations editor just as you configure a 997.

For example, to use a 999 acknowledgment instead of a 997 acknowledgment in the X12-00403.csx example interface, you can replace the configuration of the 997 acknowledgment with a configuration for the 999 acknowledgment as follows:

```
00403 interchange version
  005010 group version
    850 transaction set
    999 transaction set
```

When configuring the 999 transaction set in the Operations Editor, it is not necessary to upload the guideline for 999. TIBCO BusinessConnect EDI Protocol powered by Instream contains a generic 999 guideline, which is used whenever the configuration of a 999 transaction set does not have a guideline uploaded. The generic 999 guideline for the preceding example is X12_5010_999.sef, and can be found in the directory:

BC_HOME/protocols/tibedi/samples/sampleDocs/guidelines.

Configuring TA1 Interchange Acknowledgment Segments

The interchange acknowledgment segment (TA1) is used to indicate the receipt of the contents of one interchange control header and trailer envelope, in which the envelope surrounds one or more functional groups. If the interchange contains only TA1 segments, a TA1 is not returned for the interchange.

If interchange acknowledgment segments are sent or received for interchanges containing X12 transaction sets, you must configure a TA1 interchange segment for each interchange. You can configure the TA1 interchange segment with a guideline just as you configure any other X12 transaction set. However, since the TA1 is not really a transaction set and is never contained inside of a functional group, the TA1 interchange segment is configured inside of a group version named *EmptyGroup*.

For example, the sample interchange X12-00403.csx contains the following information:

```
00403 interchange version
  005010 group version
    850 transaction set
    997 transaction set
  EmptyGroup group version
    TA1 interchange segment
```

The *EmptyGroup* group version is not configured with a guideline.

Similar to the 997, TIBCO BusinessConnect EDI Protocol powered by Instream contains a generic TA1 guideline, which it uses by default. Therefore, it is not necessary to upload a guideline for the TA1. The generic TA1 guideline X12_TA1.sef can be found in the directory: *BC_HOME*/protocols/tibedi/samples/sampleDocs/guidelines.

Multiple Configurations for the Same Transaction Type

TIBCO BusinessConnect EDI Protocol powered by Instream provides a name modifiers feature that you might need to use to provide multiple configurations for your message. This feature is called Transaction Name Modifiers.

Transaction Name Modifiers

The Transaction Name Modifiers are used to configure multiple guidelines for the same transaction type in cases when only certain trading partners are supported to use the alternate message configurations.

With them, you can create multiple operation bindings for a single operation set, which then allows them to target otherwise identical transactions, such as a purchase order, to a specific departments belonging to a trading partner. The trading partner departments are allowed to do the same when sending transactions to your departments.

You might need different guidelines for the same transaction type to satisfy the transaction exchange requirements for all of your trading partners. For example, the 850 guideline used for the trading partner A may include additional data elements which may not be suitable for other trading partners. These additional data elements may also generate an XSD for the guideline that is different from the XSD generated for the 850 guidelines that are used otherwise. To handle this situation, you can configure multiple versions of the same transaction type by using message name modifiers when configuring the transaction.



One business agreement can have only one Transaction Name Modifier of the same transaction or message type.

To use a Transaction Name Modifier:

1. Click **Notification Transaction > General** tab.
2. In the **Name** field, type the name of the transaction type.
3. Append a colon (:) to the name.
4. Provide a short description after the colon to differentiate the transaction type configurations.

For example, you can configure two versions of a 00403 850 transaction as:

00403/005010/850

00403/005010/850:TPA

You must configure the generic 00403/005010/850 version to exchange any 850 purchase order transactions with your trading partners, including transaction for the trading partner for which you are using the modified version. In the preceding example, this is Trading Partner A, using the version 00403/005010/850:TPA.

For the name modified version 00403/005010/850:TPA to be used for trading partner A, you must bind the name modified version 00403/005010/850:TPA to trading partner A.

For more information, see [Operation Bindings Tab on page 149](#).

When an inbound 850 transaction is received for trading partner A, the guideline associated with the named modified version 00403/005010/850:TPA is used for validation of the message.

The operationID field of the ResponderRequest message to the private process contains the modified message name 00403/005010/850:TPA. With this transaction name, the private process can filter and handle this non-generic 850 message from trading partner A.



If the Transaction Name Modifier operation is not bound, the default operation without the modifier is picked by TIBCO BusinessConnect to validate transactions.

Configuring Validation Profile (.apf) Files

By default, any validation error that occurs causes a transaction to be rejected. When a transaction is rejected, the 997 generated contains an AK5 segment with a Transaction Set Acknowledgment Code of 'R' for the transaction. When validating EDI transactions, it is desirable to be able to control whether a validation error causes the rejection of the entire transaction or not.

Sometimes you might want the error reported and the transaction rejected. At other times, you might want to report the error in the 997 but to accept the transaction anyway. For example, the generated 997 has a Transaction Set Acknowledgment Code of 'E' for accepted with errors. You might want validation errors ignored altogether, or you might want only some validation errors ignored.

In conjunction with EDISIM Validator, TIBCO BusinessConnect EDI Protocol powered by Instream now provides the ability to configure the severity errors, which occur in EDI transactions.

Severity Level

When a transaction is rejected, the segments in the generated 997 acknowledgment looks something like the following information:

```
ST~997~0001'
AK1~HC~000000001'
AK2~837~000000001'
AK3~CLM~36~2300~8'
AK4~11+3~1362~1~AP'
AK5~R'
AK9~R~1~1~0'
SE~9~0001'
```

The AK2 segment identifies the transaction that is rejected. The AK3 and AK4 segments give information about where errors occur in the transaction. The AK5 segment indicates that the transaction rejected, and contains a transaction status code of 'R'.

The AK9 segment indicates that the group is rejected, 'R', since only one transaction exists in the group and that transaction is rejected. If some of the transactions in the group are accepted while others are rejected, the status of the group in the AK9 segment is 'P', which indicates that at least one transaction in the group is rejected.

When a transaction type is rejected, error information is also sent to the private process on the subject *AX.BC.BC instance name.X12.ERROR.VALIDATION*. This error information contains the transaction ID of the transaction, which has validation errors and descriptive information about the validation errors.

Setting different severity levels to validation errors affect the information about the validation errors that is contained in 997 acknowledgments and the error information reported to the private process. It also affects whether the given transaction is converted from EDI to XML or from XML to EDI. When a transaction is rejected, no conversion takes place.

The following table describes the four levels of severity, which can be configured for validation errors and their effect on how error information is reported:

Severity Level	997 Acknowledgment	Error Information to Private Process	Data Conversion Occurs?
Ignore	AK5 segment reports transaction status of 'A' for accepted. AK3 and AK4 segments are not present.	No error report is generated to the private process.	Yes
Informational	AK5 segment reports transaction status of 'A' for accepted. AK3 and AK4 segments are not present.	The cause of the error is reported in the message to the private process with the error code and a description of the error. The error description begins with <i>Information</i> .	Yes
Warning	AK5 segment reports transaction status of 'E' for accepted with errors. AK3 and AK4 segments contain information about the location of the error in the transaction as appropriate.	The cause of the error is reported in the message to the private process with the error code and a description of the error. The error description begins with <i>Warning</i> .	Yes
Error	AK5 segment reports transaction status of 'R' for rejected. AK3 and AK4 segments contain information about the location of the error in the transaction as appropriate.	The cause of the errors is reported in the message to the private process with the error code and a description of the error.	No
Fatal		Similar in behavior to the 'Error' type but is used for system errors.	No



User Type 1 and User Type 2 severity types are not currently supported.



Changing the normal error severity of type **1**, EDI syntax integrity, validation errors must be approached with caution as it can lead to invalid EDI or XML data. The converted EDI data can have errors that your trading partner might not accept. The converted XML data might not match the XSD used by the private process. Data elements can be shifted resulting in invalid data that might not be detected during validation.

Severity Scope

The scope of error severity setting is a transaction level. Normally an error severity setting applies to all validation errors of the specified type within the entire transaction.

Validating Severity Levels

The procedure for validating the error severity settings for a transaction is similar to that for configuring the guideline for the transaction. You have to first create a Validator Profile file for a transaction using EDISIM Validator, and then upload this file in the Protocol Editor of the TIBCO BusinessConnect configuration GUI.

Task A Creating a Validator Profile (.apf) File

You can create a Validator Profile file by using the EDISIM Validator.

1. Start **EDISIM > Validator**.
2. Click **Options > Validator Profile**.
3. In the **Message** tab, select a message. Select one of the severity types and save it:
 - Ignore
 - Informational
 - Warning
 - Error
 - Fatal
4. In the **Save Profile As** dialog, save the changed profile to a new profile of the type Validator Profile (*.apf).
5. Click **File > Open**.

An EDI data file is opened, such as sample data X12_5010_850.dat.
6. Click **Open**.

An EDI compliance check is automatically performed.

7. Select the guideline to validate the data file: 5010_850 that is imported from X12_5010_850.sef (Figure 43).

Figure 44 shows the validation result.

Figure 43 Select Standard Dialog

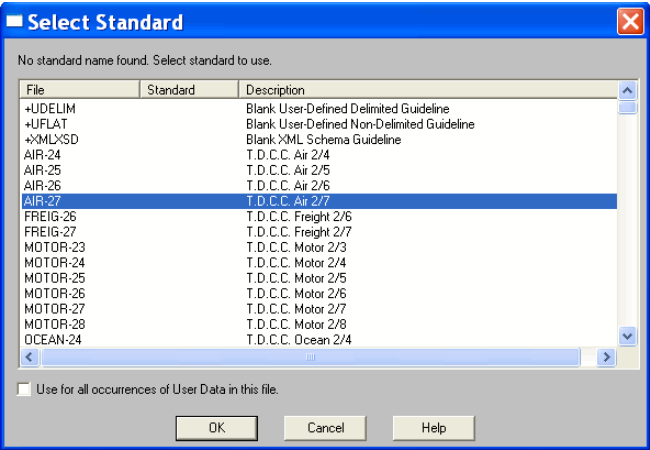
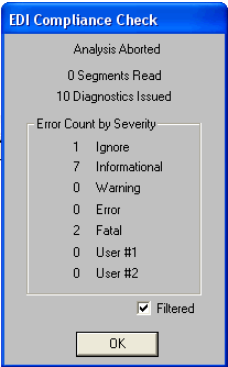


Figure 44 EDI Compliance Check



8. Select the standard to use for this guideline, such as X12-4030 (Standards Approved for Publication ASC X12 Procedures Review Board through October 1999).
9. Click OK.

The **Diagnostics** window provides the Validator analysis of the selected guideline.

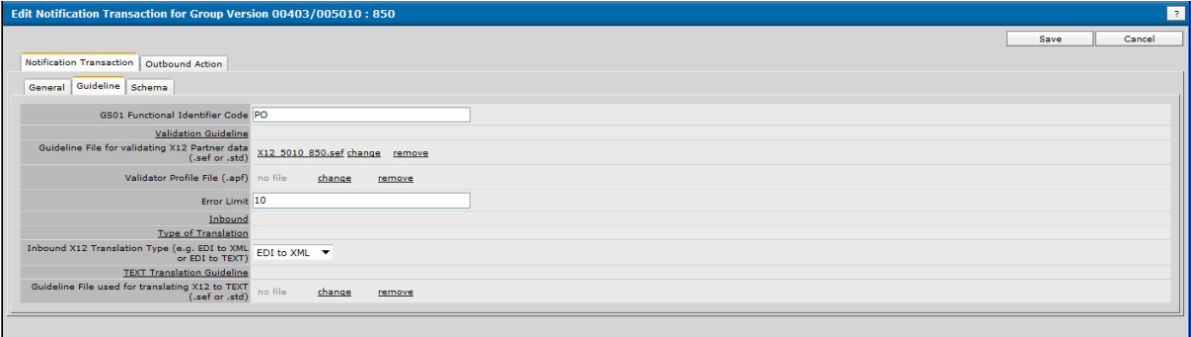
Task B Applying the Validator Profile File (.apf) to a Transaction

After creating a Validator Profile file, associate a transaction with the Validator Profile in X12 to apply the file to the transaction.

To apply a Validator Profile file to a transaction:

1. Log on to TIBCO Administrator.
2. In the left panel, expand **BusinessConnect > Operations Editor**.
3. In the right panel, click the **X12** link.
4. Expand the operations tree and select the transaction, which you want to configure the .apf file for.
5. Click the **Guideline** tab.

Figure 45 Edit Notification



6. Next to the **Validator Profile File (.apf)** field, click **change** to upload the validator profile file.



To apply a Validator Profile file to a transaction for a particular operation in a business agreement, bind the transaction, and then override the transaction settings. For details, see [Operation Bindings Tab on page 149](#).

7. Select the file type:
 - **File Reference** When you select this option, enter the path to the file reference you want to use.
 - **Uploaded File** When you select this option, navigate to the location of the file you want to upload. In this case, search for the file that you save in Task A.
8. Click **OK**.

Figure 46 Validator Profile File Downloaded

Edit Notification Transaction for Group Version 00403/005010 : 850

Save

Cancel

Notification Transaction

Outbound Action

General

Guideline

Schema

GS01 Functional Identifier Code

PO

Validation Guideline

Guideline File for validating X12 Partner data (.sef or .std)

X12_5010_850.sef

change

remove

Validator Profile File (.apf)

X12_850_validator_profile.apf

change

remove

Error Limit

10

Inbound

Type of Translation

Inbound X12 Translation Type (e.g. EDI to XML or EDI to TEXT)

EDI to XML

TEXT Translation Guideline

Guideline File used for translating X12 to TEXT (.sef or .std)

no file


change

remove

9. Click **Save** to save the configurations.

Exporting Interchanges, Groups, and Transactions

This procedure describes how to export interchanges, groups, and transactions.

1. In the left panel, expand **BusinessConnect > Operations Editor**.
2. In the right panel, click the **X12** link.
3. In the **Edit Operations: X12** dialog, click the topmost **expand all**  to show all existing transactions associated with the X12 protocol.
4. Click the radio button next to the interchange, group, or transaction that you want to export.
5. Click **Export XXX** where **XXX** is **Interchange**, **Group**, or **Transaction**, depending on what you select in [step 4](#).
6. Set a password (optional) and click **Export Data**.

The **Save As** dialog is displayed with `operations.csx` as the suggested file name.

7. Click **Save** to export interchanges, groups, and transactions to the file.

Importing an Interchange Version

This procedure describes how to import a previously exported interchange version into the Operations Editor.

1. In the left panel, expand **BusinessConnect > Operations Editor**.
2. In the right corner, select **None** from the **Group by** list.
3. Click **Import**.
4. Next to the **Upload Configuration Data File** field, click **change**.
5. Click **Browse** next to the Upload file field to navigate to a directory containing an interchange.
6. Select the .csx file, and then click **Open**.
7. Click **OK**.
8. Set a password in needed.
9. Click **Import**.

Sample Interchange Versions

TIBCO BusinessConnect EDI Protocol powered by Instream provides a sample X12 interchange version 00403 that can be imported into the TIBCO BusinessConnect configuration store.

The sample interchange version X12-00403.csx is located in the *BC_HOME*\protocols\tibedi\samples\interfaces directory.

Chapter 4 **Setting Up Trading Hosts**

This chapter describes how to set up trading hosts in TIBCO BusinessConnect EDI Protocol powered by Instream when using X12.

Topics

- [Configuring the X12 Protocol, page 104](#)
- [General Tab, page 105](#)
- [Preprocessing Tab, page 108](#)
- [Logging Tab, page 109](#)
- [Advanced Tab, page 110](#)

Configuring the X12 Protocol

Before you can configure the X12 protocol, the trading host has to be configured. To do that, see [Setting Up a Host, page 19](#).

To configure the X12 protocol:

1. Log on to TIBCO Administrator.
2. In the left panel, expand **BusinessConnect > Participants**.
3. In the right panel, click a host participant link.
4. Click the **Protocols** tab.
5. If X12 is not displayed in the list of protocols:
 - a. Click **Enable Protocol**.
 - b. Select the **X12** check box.
 - c. Click **OK**.
6. Click the **X12** link.
7. Configure corresponding information in the following tabs:
 - **General Tab** Set host general properties for X12.
See [General Tab, page 105](#).
 - **Preprocessing Tab** Configure how to preprocess inbound and outbound X12 documents. Preprocessing is necessary if the X12 documents you exchange with your trading partner are formatted in any way. For example, preprocessing is necessary if the X12 document is blocked at 80 characters per line.
See [Preprocessing Tab, page 108](#).
 - **Logging Tab** Set up logging properties for inbound and outbound documents. These logging properties only apply to X12 documents being exchanged with your trading partner.
See [Logging Tab, page 109](#).
 - **Advanced Tab** Specify that inbound X12 messages, which are converted to XML, must be published as a file reference when communicating with private processes. You can also use this panel to specify that the converted XML message must be in UTF-8 encoding.
See [Advanced Tab, page 110](#).
8. After you complete the configurations, click **Save** to save the configurations.

General Tab

In the **General** tab, you can set host general properties for X12.

The following table lists the fields in the **General** tab:

Table 17 General Fields (Sheet 1 of 3)

Field	Description
Default Interchange Qualifier ID	<p>The interchange qualifier and ID to use for this trading host.</p> <ul style="list-style-type: none">For outbound documents, the qualifier and ID are specified as the interchange sender qualifier and ID in the interchange header.For inbound documents, the interchange recipient qualifier and ID are matched against the values of this field to ensure that the inbound document is intended for this host.

Adding a Default Interchange Qualifier and ID

To add a default interchange qualifier ID:

- Click the **Add New** link.
- Click the **Add New** button.
- Select a qualifier from the **Interchange Qualifier** list.

This is mapped to the Interchange Qualifier used by the host. For outbound documents, the interchange qualifier is not validated for the sender of a document.
- Enter the mandatory identity for the local host in the ID field.

This is mapped to the host’s Interchange ID. For example, 987654321 is the fictitious DUNS number used in the tutorial. For outbound documents, the interchange ID is not validated for the sender of a document.
- Click **Save** and then **OK**.

Table 17 General Fields (Sheet 2 of 3)

Field	Description
AS2 Identifier	<p>An identifier to use in the AS2-From header field of the HTTP message. This identifier must be mutually agreed upon between trading partners.</p> <p>This identifier can be an interchange ID. This only applies when using AS2 Transport.</p> <p>Add New To use a new AS2 identifier:</p> <ol style="list-style-type: none">Click the Add New link.Click the Add New button.Enter a name of the AS2 identity.Select the new AS2 identifier from the list.
Common Code Identifier (used only for HTTP/S transport when NAESB/GISB packaging is selected)	<p>The Common Code Identifier to use in the "from" data element of the outbound NAESB packaged HTTP message. It must also be identical to the "to" data element of the inbound NAESB packaged HTTP message. This identifier must be mutually agreed upon between trading partners who use NAESB packaging.</p> <p>DUNS numbers are used for Common Code Identifiers.</p> <p>Adding a Common Code Identifier</p> <p>To add a Common Code identifier:</p> <ol style="list-style-type: none">Click the Add New link.Click the Add New button.Enter a DUNS number of the DUNS identity, for example, 987654321.Click Save and then OK.
Valid Email Address List	<p>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.</p> <ul style="list-style-type: none">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.
Outbound CAQH CORE2 Username/Password Configurations	

Table 17 General Fields (Sheet 3 of 3)

Field	Description
CAQH UserName to authenticate at Partner	<p>The user name that a CORE-certified host uses to authenticate against a partner's external authentication. For example, the user name might be the email address that a partner registers with the host's authentication system. The values for the username and password fields populate the appropriate envelope element of the SOAP message sent to a partner.</p> <p>This authentication mechanism is used for transactions involving messages that are packaged according to the CAQH CORE Phase II Connectivity Rule.</p>
CAQH Password to authenticate at Partner	<p>The password that a CORE-certified host uses to authenticate against a partner's external authentication. The values for the username and password fields populate the appropriate envelope element of the SOAP message sent to a partner.</p> <p>This authentication mechanism is used for transactions involving messages that are packaged according to the CAQH CORE Phase II Connectivity Rule.</p>

Preprocessing Tab

In the **Preprocessing** tab, you can configure preprocessing for inbound and outbound X12 documents.

Preprocessing is necessary if the X12 documents that you exchange with your trading partner are formatted in any abnormal way. For example, you have to preprocess if the X12 document is blocked at 80 characters per line.

The following table lists the fields in the **Preprocessing** tab:

Table 18 Preprocessing Fields

Field	Description
Inbound and Outbound	
Characters To Strip (e.g. /r/n; /t; 0D)	<p>The EDI Conversion Engine of TIBCO BusinessConnect EDI Protocol powered by Instream requires EDI data that is on a single line. The exception to this requirement is when the carriage return is specified as the segment delimiter.</p> <p>Specifies any extra formatting characters that might be contained in the EDI messages you exchange with your trading partners. These formatting characters are not considered part of the EDI data itself. These formatting characters are typically used to make the EDI data more readable or to block the EDI data into lines of equal length. This can include any carriage return at the end of the data.</p> <p>For information on the characteristics of EDI data, see <i>TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide</i>.</p>
Strip Chars Between Segments Boundaries	<p>This check box is selected by default. It provides an easy way to remove formatting characters.</p> <ul style="list-style-type: none">• If you select this check box, it causes any extraneous characters between segments to be removed from the EDI file regardless of what is specified in the Characters To Strip field.• If you clear this check box and no characters are specified in the Characters to Strip field, you can get an error in case unwanted characters or any unrecognized characters other than the delimiters are found in the document. <p>Characters To Strip must also be used if the EDI document is blocked into lines of equal length because blocked documents contain carriage returns inside of segments. Strip Chars Between Segments Boundaries only works between segments.</p>

Logging Tab

In the **Logging** tab, you can 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."

The following table lists the fields in the **Logging** tab:

Table 19 Logging Fields

Field	Description
Inbound	
Log Raw EDI Request to File	For inbound, log the original, intact, and unconverted inbound EDI document.
Store Location	<p>The original inbound EDI documents are stored in a directory whose name is derived from the specified location.</p> <p>For information on how the files are named, see <i>TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide</i>, "Document Archiving."</p>
Include Date Folder	Select this check box to create a file reference in a created folder based on the current date.
Outbound	
Log Raw EDI Request to File	<p>For outbound, log the raw EDI document sent to the trading partner.</p> <p>If the option "Publish Information to Insight Reporting" is checked for Outbound, this option is used to publish the ediDataFile element.</p>
Log Error Data in Separate Directory	<p>Select this check box to log error data in a separate folder.</p> <p>By default, this check box is cleared.</p>
Store Location	<p>The original outbound EDI documents are archived in a directory whose name is derived from the specified location. For information on how the files are named, see <i>TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide</i>, "Document Archiving."</p>
Include Date Folder	Select this check box to create a file reference in a created folder based on the current date.

Advanced Tab

In the **Advanced** tab, you can specify advanced settings for the handling of inbound and outbound XML documents.

The following table lists the fields in the **Advanced** tab:

Table 20 Host Record Advanced Fields (Sheet 1 of 5)

Field	Description
Inbound	
Publish XML (or TEXT) Request as File Reference	<p>Write the converted XML or TEXT to a file for each inbound transaction and publish the file reference in the requestFile attribute of the ResponderRequest message to the private process.</p> <p>Use of this option can decrease memory usage, improving performance. The Threshold property determines how large the XML or TEXT must be before BusinessConnect writes the request to a file; other status values from the user are considered a failure.</p>
Threshold (bytes)	<p>Specify a file size in bytes. The default value is 0.</p> <p>TIBCO BusinessConnect writes XML or TEXT requests that are this size and larger to a file and sends a reference to that file instead of the request itself. A value of 1000 is often appropriate. This can decrease memory usage within the EDI processing component, improving performance.</p>
Include Date Folder	<p>Select this check box to create a file reference in a created folder based on the current date.</p> <p>This check box is selected by default.</p>
Store Location	<p>Identify the directory in which TIBCO BusinessConnect must store the files. If this field is empty or the directory specified is not valid, TIBCO BusinessConnect behaves as if Publish XML Request as File Reference is not checked; it does not store a file; it sends the XML request.</p>

Table 20 Host Record Advanced Fields (Sheet 2 of 5)

Field	Description
Output XML Request in UTF-8 and Remove Empty Elements	<p>Select this check box to instruct TIBCO BusinessConnect to perform the following tasks:</p> <ul style="list-style-type: none"> • Convert the XML that is in UTF-16 format to UTF-8; • Delete XML elements in the request that contain no values. This reduces the file size. Reducing the request size is especially important when you are using the XML for back-end processing. <p>Note: Converting the XML from UTF-16 to UTF-8 in this way increases memory usage. Consider converting the XML to UTF-8 in a separate JVM process instead of using this option.</p>
Use In-memory Compression During EDI to XML (or EDI to TEXT) Conversion	<p>Select this check box to instruct TIBCO BusinessConnect to compress information stored in memory during the EDI to XML or TEXT conversion process.</p> <p>Although compressing and uncompressing data increases the processing time of the conversion process, it can greatly reduce memory usage. This option is useful when processing interchanges that contain a large number of messages.</p> <p>By default, this check box is unselected.</p>
Threshold to Use File-based Storage During EDI to XML (or EDI to TEXT) Conversion (bytes)	<p>Specify the threshold to use file-based storage during EDI to XML or EDI to TEXT conversion.</p> <p>This threshold has a default value of 20,000,000 bytes (20 MB).</p> <p>This threshold is triggered only when an inbound message comes in from a trading partner and the threshold is applied on Interchange basis: if the size of the interchange is greater than the threshold, the BusinessConnect EDI engine makes the conversion engine in-built validate and process all the transactions in that interchange, including errors on the disk. Only one currently processed transaction is loaded into memory and discarded after processing in chunks, saving memory and keeping it low. This also supports the interchange to process a lots of errors without loading them into memory.</p> <p>Frequent use of this threshold feature for very small sized files slows the performance depending on the network and I/O performance. It must be used only for fairly large interchanges, or for interchanges with lots of errors.</p>

Table 20 Host Record Advanced Fields (Sheet 3 of 5)

Field	Description
Inbound and Outbound	
Threshold to Use File-based Storage Prior to EDI Processing (bytes)	<p>Specify the threshold to use file-based storage prior to EDI processing.</p> <p>This threshold has a default value of 1,000,000 bytes (1MB).</p> <p>This threshold is triggered for both outbound and inbound messages and applies on an interchange basis. If the interchange or XML (in case of outbound) is greater than the threshold, it makes sure to be written to a temporary local file and given to the conversion engine instead of passing it as a blob to the engine. This reduces the memory consumption prior to EDI processing.</p> <p>This threshold does not resolve large number of smaller transaction details that are in memory, or the number of errors that can still accumulate during processing by the conversion engine.</p>

Table 20 Host Record Advanced Fields (Sheet 4 of 5)

Field	Description
AuditReportLogging	
Audit Report Location	<p>Specify the location used for audit reporting in EDI to XML processing when TIBCO BusinessConnect EDI Protocol powered by Instream validates and converts. The Audit Report files are generated by the Instream validation engine in XML form.</p> <p>The Audit Report location is also needed to be populated with an appropriate value when Insight Reporting Information is published to the private process</p> <p>The XML files have additional information pointing to the internal details of the validated transactions.</p> <p>Example: C:\temp\DocSplitReport</p>
Include Date Folder	<p>Select this check box to create a file reference in a created folder based on the current date.</p> <p>By default, this check box is selected.</p> <ul style="list-style-type: none"> • If you select this check box, the <code>date</code> folder is added to the document path. • If you clear this check box, the <code>date</code> folder is omitted, and the document is stored under the <code>tpName</code> directory.
DocumentSplit	
Store Location	<p>Specify the directory for storing the document splitting result.</p> <p>The document splitting results includes the document splitting report, valid transaction splitting result, and invalid transaction splitting result.</p> <p>TIBCO BusinessConnect EDI Protocol powered by Instream generates the following folders in the specified directory:</p> <ul style="list-style-type: none"> • Invalid: This folder stores the invalid splitting result. • Valid: This folder stores the valid splitting result. • Report: This folder stores the splitting report. <p>Note: If you want to use the document splitting feature, you must specify a value in this field.</p>

Table 20 Host Record Advanced Fields (Sheet 5 of 5)

Field	Description
Include Date Folder	<p>Select this check box to create a file reference in a created folder based on the current date.</p> <p>By default, this check box is selected.</p> <ul style="list-style-type: none">If you select this check box, the <code>date</code> folder is added to the document path.If you clear this check box, the <code>date</code> folder is omitted, and the document is stored under the <code>tpName</code> directory.
CAQH	
Store Location	<p>Specify the directory for storing the responses or acknowledgement data that is waiting to be retrieved from the host.</p>
Include Date Folder	<p>Select this check box to create a date sub folder in the CAQH store location based on the current date.</p> <p>By default, this check box is selected.</p> <ul style="list-style-type: none">If you select this check box, the <code>date</code> folder is added to the CAQH store location.If you clear this check box, the <code>date</code> folder is omitted.

Chapter 5

Setting Up Trading Partners

This chapter describes setting up your trading partners in TIBCO BusinessConnect EDI Protocol powered by Instream when using X12.

Topics

- [Configuring the X12 Protocol, page 116](#)
- [General Tab, page 117](#)
- [Logging Tab, page 123](#)
- [Batching Tab, page 124](#)
- [Interchange Header Tab, page 126](#)
- [Group Header Tab, page 128](#)
- [Acknowledgement Tab, page 130](#)
- [CAQH Tab, page 133](#)
- [Document Split Tab, page 135](#)
- [Control Numbers Tab, page 137](#)
- [Delimiters Tab, page 140](#)
- [Transports Tab, page 141](#)

Configuring the X12 Protocol

Before you can configure the X12 protocol, the trading partner has to be configured. To do that, see [Setting Up a Partner, page 21](#).



To properly mark the ISA, GS, and ST segments with a DSR mark, as required for proper acknowledgments generation, see the documentation provided with the EDISIM Standards Editor.

To configure the X12 protocol:

1. Log on to TIBCO Administrator.
2. In the left panel, expand **BusinessConnect > Participants**.
3. In the right panel, click a partner participant link.
4. Click the **Protocols** tab.
5. If X12 is not displayed in the list of protocols:
 - a. Click **Enable Protocol**.
 - b. Select the **X12** check box.
 - c. Click **OK**.
6. Click the **X12** link.
7. Configure corresponding information in the following tabs:
 - [General Tab, page 117](#)
 - [Logging Tab, page 123](#)
 - [Batching Tab, page 124](#)
 - [Interchange Header Tab, page 126](#)
 - [Group Header Tab, page 128](#)
 - [Acknowledgement Tab, page 130](#)
 - [CAQH Tab, page 133](#)
 - [Document Split Tab, page 135](#)
 - [Control Numbers Tab, page 137](#)
 - [Delimiters Tab, page 140](#)
 - [Transports Tab, page 141](#)
8. After you complete the configurations, click **Save** to save the configurations.

General Tab

In the **General** tab, you can set general trading partner properties for X12.

The main general trading partner properties for X12 include:

- Interchange qualifier and ID
- Enable EDI validation for inbound or outbound transactions
- Enable duplicate detection
- Disable EDI to XML (or EDI to TEXT) conversion of inbound transactions

The following table lists the fields in the **General** tab:

Table 21 General Fields (Sheet 1 of 6)

Field	Description
Default Interchange Qualifier ID	<p>Specify the interchange qualifier and ID to use for this trading partner.</p> <ul style="list-style-type: none">• For outbound documents, the qualifier and ID are specified as the interchange receiver qualifier and ID in the interchange header.• For inbound documents, the interchange sender qualifier and ID are used to identify the sender. <p>To add a default interchange qualifier ID:</p> <ol style="list-style-type: none">1. Click the Add New link.2. Click the Add New button.3. Select a qualifier from the Interchange Qualifier list.4. Enter the mandatory domain name. This is mapped to the Interchange Qualifier used by the trading partner.5. Enter the mandatory identity for the partner in the ID field. This is mapped to the partner’s Interchange ID. For example, 987654321 is the fictitious D-U-N-S number used in the tutorial.6. Click Save and OK.7. Select the new Interchange Qualifier ID from the list.

Table 21 General Fields (Sheet 2 of 6)

Field	Description
AS2 Identifier	<p>Specify an identifier to use in the AS2-To header field of the HTTP message. This identifier must be mutually agreed upon between trading partners.</p> <p>This identifier can be an interchange ID. This only applies when using AS2 Transport.</p> <p>Add New To use a new AS2 identifier:</p> <ol style="list-style-type: none">1. Click the Add New link.2. Click the Add New button.3. Enter a name of the AS2 identity.4. Select the new AS2 identifier from the list.
Common Code Identifier (used only for HTTP/S transport when NAESB/GISB packaging is selected)	<p>Specify the common code identifier to use in the "to" data element of the outbound NAESB packaged HTTP message.</p> <p>It must also be identical to the "from" data element of the inbound NAESB packaged HTTP message from this partner. This identifier must be mutually agreed upon between trading partners who use NAESB packaging. DUNS numbers are used for common code identifiers.</p> <p>To add a common code identifier:</p> <ol style="list-style-type: none">1. Click the Add New link.2. Click the Add New button.3. Enter a DUNS number of the DUNS identity.4. Click Save and then OK.
Valid Email Address List	<p>Specify the email address to match against incoming email from the mail server. If the incoming email From address matches to any email address in this list, this trading partner is recognized as the sender.</p> <p>This only applies when using AS1 or AS2 transport.</p>
Inbound	
Enable EDI Validation	<p>Select this check box to validate inbound EDI documents before TIBCO BusinessConnect converts and forwards them to the private process. This involves using the guidelines configured in the configuration store to validate inbound EDI data. For Publish Information to Insight Reporting to take effect, you must select the Enable EDI Validation check box.</p> <p>By default, this check box is selected.</p>

Table 21 General Fields (Sheet 3 of 6)

Field	Description
Disable EDI to XML (or EDI to TEXT) Conversion	<p>Select this check box to disable EDI to XML or EDI to TEXT conversion of inbound documents.</p> <p>The validation of inbound X12 documents occur using the guidelines configured in the configuration store. However, the XML or TEXT file corresponding to the inbound X12 data is not generated. The <code>ResponderRequest</code> message is still sent to the private process. However, the <code>request</code> attribute of the <code>ResponderRequest</code> message is not populated.</p> <p>This option must be used when XML or TEXT conversion of the EDI data is not required. Using this option reduces memory utilization and improves performance.</p> <p>By default, this check box is cleared.</p>
Enable Transaction Duplicate Detection	<p>Select this check box to enable detection for duplicate inbound transactions.</p> <p>By default, this check box is cleared.</p> <p>When you select this check box, all inbound transactions that are received from the trading partner are checked to see whether a duplicate is received and appropriately marked in the <code>RESPONDER.REQUEST PP</code> message. The <code>duplicate</code> attribute in <code>ResponderRequest</code> is marked as <code>true</code> if the same message is received from the trading partner.</p> <p>X12 has the following attributes: Trading Partner Name, <code>operationID</code>, <code>transactionName</code>, whole transaction (only the ST to SE segments for X12), host initiates flag, interchange control number, group control number, and transaction control number.</p>
Extra Info in Private Process Request	<p>Specify the data included in the message to the private process for each message received from this trading partner. For example, you can use this field to pass routing information based upon the trading partner.</p>
Allowable Receiver Identifier List (e.g. ZZ:50291; ZZ:50292)	<p>Specify a list of interchange qualifiers and identifiers supported for this trading partner.</p> <p>Normally, only interchanges with the qualifier and identifier specified in the Default Interchange Qualifier - ID field are supported for a trading partner. When a trading partner uses multiple interchange qualifiers and IDs, the additional qualifiers and IDs to be supported can be specified in this field.</p> <p>To specify the allowable list of identities, follow the following syntax:</p> <p><i>Qualifier:ID[:Qualifier:ID]</i></p>

Table 21 General Fields (Sheet 4 of 6)

Field	Description
Partner Level Security Option (MIME Encode Messages Only)	<p>Select one item from the list to specify what kind of messages that you expect from this partner for this particular transaction set.</p> <p>In the list, the following options are available:</p> <ul style="list-style-type: none">• None• Plain Text Only• Signed Only• Encrypted Only• Signed And Encrypted <p>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.</p> <p>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.</p>
Enable Interchange Complete Message	Select this check box to enable sending a private process message on RVCN subject or queue <code>AX.BC.installation.X12.RESPONDER.INTERCHANGE.COMPLETE</code> .
Enable Audit Report Logging	<p>Select this check box to enable audit report logging for the complete inbound interchanges.</p> <p>This audit report file reference is sent to the private process with the Enable Interchange Complete Message field.</p>
Publish Information to Insight Reporting	If enabled, this option publishes a report on the "Messages received from the trading partner" both synchronous and asynchronous.

Table 21 General Fields (Sheet 5 of 6)

Field	Description
Inbound EDI Data Encoding	<p>Specify the type of encoding for inbound EDI data.</p> <ul style="list-style-type: none"> • If inbound EDI data contains the BOM header, such as UTF-8 and UTF-16 encoding, TIBCO BusinessConnect EDI Protocol powered by Instream gets the encoding from the BOM header regardless of what value you set in this field. • If inbound EDI data does not contain the BOM header, such as ISO-8859-1 and US-ASCII encoding, TIBCO BusinessConnect EDI Protocol powered by Instream checks whether the value in this field is set. <ul style="list-style-type: none"> — If you set a value in this field, TIBCO BusinessConnect EDI Protocol powered by Instream uses the specified encoding type to process inbound EDI data. — If no value is set in this field, TIBCO BusinessConnect EDI Protocol powered by Instream uses the system encoding of the TIBCO BusinessConnect Interior Server engine to process inbound EDI data.
Outbound	
Enable EDI Validation	<p>Select this check box to validate outbound EDI documents before TIBCO BusinessConnect converts and forwards them to the trading partner. This involves using the guidelines configured in the configuration store to validate outbound EDI data.</p> <p>By default, this check box is cleared.</p> <p>When you select this check box:</p> <ul style="list-style-type: none"> • For the XML payload sent from private processes, both transaction values are validated as well as the envelope information. • For EDI payload sent from private processes, the whole EDI document with envelope is validated. • For Publish Information to Insight Reporting to take effect, you must select this check box.

Table 21 General Fields (Sheet 6 of 6)

Field	Description
Transaction Level Duplicate Detection	<p>Select one item from the list to specify how duplicate documents from private processes are handled. All attributes contribute to detect whether a message is as duplicate or not.</p> <ul style="list-style-type: none">• None No outbound duplicate detection is performed.• Allow to TP If a duplicate document is sent, the message is marked as duplicate and returned to the private process through an attribute in the InitiatorResponse message. The message is sent to the trading partner.• Deny to TP If a duplicate document is sent, the message is marked as duplicate and returned to the private process through an attribute in the InitiatorResponse message. The message is not sent to the trading partner.
Publish Information to Insight Reporting	<p>Select this check box to publish a report on the "Messages sent to the trading partner" synchronous response and regular non-batch messages.</p>
Outbound XML to EDI Data Encoding *	<p>Specify the type of encoding for outbound XML to EDI data.</p> <p>This field is required.</p> <p>The default value is US-ASCII.</p>
Add BOM for UTF Encoding *	<p>Select this check box to add the BOM for UTF encoding.</p> <p>By default, this check box is selected.</p>
Replace Element Value (e.g. E-7088=.,: E-6032=.:,)	<p>Specify a list of translation specifications.</p> <p>Each specification causes the translation of an XML element value from one value to another. This replacement is done before the XML is converted to EDI.</p> <p>The replacement syntax is <i>from_value:to_value</i>.</p> <p>For example, if the XML has an element named E-100_3_02, which is of type numeric, and you want to convert the decimal point from a period (.) to a comma (,), enter the value: E-100_3_02=.,.</p> <p>Add Click Add to add a translation specification to the list.</p> <p>After adding translation specifications to this list, you can also remove the unwanted ones by selecting them and clicking Remove.</p>

Logging Tab

In the **Logging** tab, you can 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."

The following table lists the fields in the **Logging** tab:

Table 22 Logging Fields

Field	Description
Inbound Interchange Level	
Log Raw EDI Segments to File	Store each individual interchange in an inbound X12 document into a separate file. For Publish Information to Insight Reporting to take effect, you must enable this option.
Store Location	The original inbound EDI documents are stored in a directory whose name is derived from the specified location. For information on how the files are named, see <i>TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide</i> , "Document Archiving."
Transaction Level	
Log Raw EDI Segments to File	Store each individual transaction in an inbound X12 document into a separate file. A transaction consists of all segments between the ST and SE segments, inclusive. You can check this option at the transaction level. Note: By specifying this setting, together with the value in the Store Location field and Include Envelope Segments , you can enable the EDI_TXN_FROM_TP Resend option in the Log Viewer.
Include Envelope Segments	For transaction-level logging, include the interchange and functional group header and trailer segments along with the X12 transaction.
Store Location	The original inbound EDI documents are stored in a directory whose name is derived from the specified location. For information on how the files are named, see <i>TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide</i> , "Document Archiving."

Batching Tab

In the **Batching** tab, you can set the transporting gateway.



Trading partner and Gateway level batching is not supported for NAESB.

The following table lists the fields in the **Batching** tab:

Table 23 Batching Fields

Field	Description
Outbound	
Allow Single Transmission for Multiple Exclusively-batched Interchanges	<p>Select this check box to support single transmission for multiple exclusively-batched interchanges.</p> <p>By default, this check box is cleared.</p> <p>In the Operations Editor, if you select Exclusively from the Batch Option list for a transaction action, the interchange containing this transaction can only contain this type of transaction. However, you can still put multiple interchanges, each containing a different type of transaction, into a single batch and send it to the trading partner.</p> <p>This feature and Increment Interchange Control Number by Operation ID for Exclusive Batch are mutually exclusive.</p>
Increment Interchange Control Number by Operation ID for Exclusive Batch	<p>Select the check box to increment interchange control numbers based on transaction types in addition to partner ID qualifiers.</p> <p>By default, this check box is cleared.</p> <p>With this feature, you can configure how to increment interchange control numbers based on a particular trading partner, and on the transaction type, such as 850 for a particular interchange or group version. It only applies to the case of the Exclusive batch where an interchange can only contain one type of transaction, and also where multiple interchanges in a single transaction are not supported.</p> <p>This feature and Allow Single Transmission for Multiple Exclusively-batched Interchanges are mutually exclusive.</p>

Table 23 Batching Fields (Cont'd)

Field	Description
Regenerate Control Number For Batch Resend	<p>Select this check box to regenerate control number for batch resend.</p> <ul style="list-style-type: none"> If you select this check box, a control number is regenerated for all transactions in this batch when resent. If you clear this check box, the already created control number is used for all transactions in this batch when resent. <p>By default, this check box is selected.</p> <p>For information about how to override this setting, see <i>TIBCO BusinessConnect EDI Protocol powered by Instream, Gateway Configuration</i>, "Regenerate Control Number For Batch Resend."</p>
Publish Information to Insight Reporting for Batch	<p>Select this check box to publish a report on the Messages that are batched and sent to the trading partner.</p> <p>By default, this check box is cleared.</p>
Destination File Mask for Batch	<p>Specify the file mask which is used to generate the file name for batch transactions.</p>
Use Transporting Gateway	
Gateway (override scheduler and transport settings)	<p>Specify a Gateway partner name to specify the Gateway transport for this trading partner.</p> <p>By using the same Gateway transport for multiple X12 trading partners, you can send outbound X12 documents to just one URL and to set scheduling for multiple X12 trading partners in one place. With the batching functionality of the Gateway transport, transactions of multiple trading partners can be batched in a single document and send to the Gateway. In either scenario, the Gateway represents the commercial VANs where transactions are distributed to the target trading partners.</p> <p>Note: If the Gateway override feature is used, NAESB is not supported and only X12 protocol can be used.</p> <p>For more information about using Gateway, see <i>TIBCO BusinessConnect EDI Protocol powered by Instream, Gateway Configuration</i>.</p>

Interchange Header Tab

In the **Interchange Header** tab, you can specify the settings to use in composing the interchange header (ISA segment) for documents sent to this trading partner.

The following table lists the fields in the **Interchange Header** tab:

Table 24 Interchange Header Fields

Field	Description
Outbound Authorization Information	
ISA01 Qualifier*	Required. Code identifying the type of information specified in the ISA02 Information field. The default value is 00, indicating that no authorization information is present.
ISA02 Information	Information used for additional identification or authorization of the interchange sender or the data in the interchange.
Security Information	
ISA03 Qualifier*	Required. Code identifying the type of information specified in the ISA04 Information field. The default value is 00, indicating that no security information is present.
ISA04 Information	Security information about the interchange sender or the data in the interchange.
Date and Time Formats	
ISA09 Date Format*	Required. The date when any outbound interchanges are prepared. The macro YYMMDD can be specified to have the current system date inserted in the designated format into this field when an interchange is being prepared.
ISA10 Time Format*	Required. The time when any outbound interchanges are processed. The macro HHMM can be specified to have the current system time inserted in the designated format into this field when an interchange is being prepared.
Others	
ISA11 Control Standard (4012 And Lower)	The agency responsible for the interchange control standard used by the transaction that is enclosed by the interchange header and trailer. The default value is U.

Table 24 Interchange Header Fields (Cont'd)

Field	Description
ISA11 Repeating Separator (4020 and Higher)	<p>Character used to separate repeated occurrences of a simple data element or a composite data structure. This character must differ from the data element separator, component element separator, and the segment terminator.</p> <p>The default value is *.</p> <p>Earlier versions of X12 do not specify a repeating separator. In these earlier versions, an interchange control standard identifier is specified in the interchange segment instead.</p>
ISA14 Ack Requested*	<p>Required. Code sent by the sender to request an interchange acknowledgment.</p> <p>The default value is 0, indicating that no interchange acknowledgment is requested.</p>
ISA15 Usage Indicator*	<p>Required. Code indicating whether data enclosed by this interchange envelope is test, production or information.</p> <p>The default value is P, indicating Production.</p>
ISA16 Component Element Separator*	<p>Character used to separate component data elements within a composite data structure. This character must differ from the data element separator, segment terminator, and repeating separator.</p> <p>The default value is +.</p>

Group Header Tab

In the **Group Header** tab, you can specify the settings to use in composing the functional group header (GS segment) for transactions sent to this partner.

The following table lists the fields in the **Group Header** tab:

Table 25 Group Header Fields

Field	Description
Outbound Application Code	
GS02 Sender	The application sender's code in the GS segment of an X12 document that identifies the party sending the X12 group. Codes are agreed upon between trading partners.
GS03 Receiver	The application receiver's code in the GS segment of an X12 document. This code identifies the party sending the X12 group. Codes are agreed upon between trading partners.
Date and Time Formats	
GS04 Date Format*	<div>Required. The date when any outbound groups are prepared.<ul style="list-style-type: none">The macro CCYYMMDD can be specified to have the current system date inserted in the designated format into the GS04 field when a group is being prepared.The macro YYMMDD is used for earlier X12 versions where the GS04 field is designated as a 6-character field.</div>
GS05 Time Format*	<div>Required. This is the time when any outbound groups are prepared and must be specified in 24-hour clock format.<ul style="list-style-type: none">The macro HHMM can be specified to have the current system time inserted in the designated format into the GS05 field when a group is being prepared.The macro HHMMSSD can also be specified to have the current system time inserted in the designated format into the GS05 field. ss indicates the current seconds, and must be a value between 00 and 59. D indicates one tenth of a second, and must be a value between 0 and 9. For example, if the current time is 16:50:23.618 and the HHMMSSD format is set in GS05, the value in the converted X12 data is 1650236.</div>



When an XML document is sent over the X12 protocol from the private process, if the values GS02/GS03 are not overridden by the private process InitiatorRequest message, these values from the GS02/GS03 fields under **Trading Partner > X12 Protocol > Group Header** are used during the XML-to-EDI conversion. If no values are specified in these GS02/GS03 fields, the values GS02/GS03 (Application Code Sender/Receiver) from **Operations Editor > X12 > Group Version** are used instead in the final EDI output.

Acknowledgement Tab

In the **Acknowledgement** tab, you can specify the settings to use in composing the acknowledgments for documents sent by this trading partner.

For more information on acknowledgments, see [Acknowledgments on page 7](#), and *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide*, Chapter 5, "Acknowledgments and Reconciliation."

If you want to generate acknowledgments for inbound X12 transactions, the guideline of inbound transactions must contain the DSR mark for ISA, GS, and ST segments.

- The DSR mark for ISA segments must be ISA1.
- The DSR mark for GS segments must be GSSG.
- The DSR mark for ST segments must be STST.

The following table lists the fields in the **Acknowledgement** tab:

Table 26 Acknowledgement Fields (Sheet 1 of 3)

Field	Description
Inbound	
Ack Creation Option	<p>Select one item to define what acknowledgments are created for this partner by the host. The possible acknowledgment creation options by TIBCO BusinessConnect EDI Protocol powered by Instream are:</p> <ul style="list-style-type: none">• None No acknowledgment is created.• Interchange, Group and Txn Creates a TA1 and a 997 or 999 acknowledgment.• Interchange and Group Creates a TA1 and a 997 or 999 acknowledgment. The 997 acknowledgment is verified only for the group response. For this setting, HIPAA Acknowledgments must not be generated.• Interchange Only Creates a TA1 acknowledgment. For this setting, HIPAA Acknowledgments must not be generated.• Group and Txn Creates a 997 or 999 acknowledgment.• Group Only Creates a 997 or 999 acknowledgment with group response. For this setting, HIPAA Acknowledgments must not be generated.

Table 26 Acknowledgement Fields (Sheet 2 of 3)

Field	Description
999 Ack Creation Option *	<p>Specify the 999 Ack Creation option.</p> <p>By default, this check box is cleared.</p> <p>If you select this check box, the 999 Ack Creation option is based on the options described in the Ack Creation Option list.</p>
Ack Creation Based on ISA14 Ack Requested	<p>Select this check box to control whether the acknowledgment creation is determined based on the value of field ISA14 in the interchange envelope segment of the incoming document.</p> <ul style="list-style-type: none"> When you select this check box and set field ISA14 to 1, acknowledgment generation is based on Ack Creation Option. When you select this check box and set field ISA14 to 0, acknowledgments are generated regardless of Ack Creation Option. <p>By default, this check box is cleared.</p>
Ack Version Option	<p>Select one item from the list to specify the acknowledgment version option.</p> <ul style="list-style-type: none"> Transaction group version in GS08 (default) This option carries the original inbound EDI document group version of the transaction that is acknowledged. For example, if the group version is 004030, the GS08 of the 997 is also 004030. Transaction group version in AK103 If the transaction being acknowledged has the group version of 4061 and higher for 999s, or group version 4041 and higher for 997s, the appropriate acknowledgment carries the inbound EDI transaction groups version in the AK103 element. This AK103 value is used to reconcile the original transaction for the group version of the transaction. Always generate same ack version HIPAA, X12N and VICS group versions are not allowed for this usage. With this option, the original base part of the groups is generated, and its value must be specified in the Ack Version field.
Ack Version	<p>Specify the acknowledgment version.</p> <p>The value entered is not used for HIPAA, X12N and VICS transactions. To be created, the value has to be 4041 or higher for 997, and 4061 or higher for 999s; for example, a value of 005010 can be specified.</p>
Ack File Mask	<p>Specify the file name by using file masks for generated acknowledgment data.</p> <p>The default value is #(TpName)-#(DocID)-#(YYYYMMDDHHMISSNNN).ack.response.</p> <p>Do not use special characters in the file name.</p>

Table 26 Acknowledgement Fields (Sheet 3 of 3)

Field	Description
Outbound	
Ack Expected Option	<p>Select one item from the list to define which acknowledgments that a host expects from this trading partner.</p> <p>The possible acknowledgment acceptance options are:</p> <ul style="list-style-type: none">• None No acknowledgment is expected and the transaction is completed after sent to the participant.• Interchange, Group and Txn The host expects a TA1/997 or 999 acknowledgment from this partner to have this outbound transaction reconciled and accepted.• Interchange and Group The host expects a TA1/997 or 999 acknowledgment from this partner to have this outbound transaction reconciled and accepted. The 997 or 999 acknowledgment is verified only for the group response.• Interchange Only The host expects a TA1 acknowledgment to have this transaction reconciled and accepted. The TA1 acknowledgment is verified only for the interchange response.• Group and Txn The host expects a 997 or 999 acknowledgment from the partner.• Group only The host expects a 997 or 999 acknowledgment from its partner with a Functional Group response to have this outbound transaction reconciled and accepted.
999 Ack Expected Option*	<p>Specify the expected 999 acknowledgment option.</p> <p>By default, this check box is cleared.</p> <p>If you select this check box, the 999 Ack is expected for outbound transactions with group versions 004061 and higher, based on the options described in the Ack Expected Option list.</p>
999 Ack Only	<p>* is for Group Version 004061 and higher</p>

CAQH Tab

In the **CAQH** tab, you can specify settings for the CAQH function.

The following table lists the fields in the **CAQH** tab:

Table 27 CAQH Fields (Sheet 1 of 2)

Field	Description
Inbound	
CAQH SenderID / ReceiverID Checking	<p>Select an item from the list to specify if the EDI protocol should check for Sender and Receiver ID values in the Interchange ID list when the Responder receives a CAQH message.</p> <ul style="list-style-type: none"> • ISA06/ISA08 Specifies that the EDI protocol should verify Sender and Receiver ID values in the Interchange ID list. • Off Specifies that the EDI protocol need not verify the SenderID and Receiver ID values in the Interchange ID list. <p>The default value is ISA06/ISA08.</p>
Ack Creation for CAQH Batch Submission Message	<p>Select this check box for the EDI protocol to create acknowledgments for inbound batch submission message based on the configuration in the Acknowledgement and HIPAA Acknowledgement tabs.</p> <p>By default, this check box is selected.</p>
Ack Creation for CAQH Batch Results Retrieval Message	<p>Select this check box for the EDI protocol to create an acknowledgment for the retrieved batch response message based on the configuration in the Acknowledgement and HIPAA Acknowledgement tabs.</p> <p>By default, this check box is selected.</p>
Correlating Batch Transactions Base on CAQH PayloadID	<p>Select this check box to specify if the EDI protocol should only retrieve Response/Acknowledgment prepared for the original inbound batch submission request which contain the same PayloadID as the retrieval request.</p> <p>By default, this check box is selected.</p>
Outbound	

Table 27 CAQH Fields (Sheet 2 of 2)

Field	Description
CAQH SenderID / ReceiverID Setting	<p>Select an item from the list to specify how the EDI protocol should generate the Sender and Receiver IDs for a CAQH message when the Private Processor does not specify the Sender and Receiver IDs.</p> <ul style="list-style-type: none">• ISA06/ISA08 X12 protocol uses ISA06/ISA08 values of EDI data as SenderID/ReceiverID of the CAQH message.• GS02/GS03 X12 protocol uses GS02/GS03 values of EDI data as SenderID/ReceiverID of the CAQH message. <p>The default value is ISA06/ISA08.</p>
Batch Response/Acknowledgement Maximum Wait (minutes)	<p>Specify how long the Responder will keep the acknowledgment / response data.</p> <p>The default value is 1440 minutes or 1 day.</p> <p>This value cannot be less than 1 or a decimal.</p>
Delete Batch Response/Acknowledgement Data After Timeout	<p>Select this check box to delete response / acknowledgment saved in the CAQH store location after the timeout.</p> <p>If you clear this check box, EDI protocol will not delete the expired response/acknowledgment from CAQH store location, but add the suffix .expire for the expired EDI files.</p> <p>By default, this check box is selected.</p>

Document Split Tab

In the **Document Split** tab, you can specify settings for the document splitting function.

If you want to save the document splitting results, you must specify the location for storing the results in the [Advanced Tab](#) configured for the trading host.

With the document splitting feature, TIBCO BusinessConnect EDI Protocol powered by Instream can split an invalid transaction into a valid part and an invalid part, and then convert valid part data to XML data.



If you want to use the document splitting feature, note the following items:

- You must install TIBCO Foresight Instream® Standard Edition 8.5.0 or later.
- TIBCO BusinessConnect EDI Protocol powered by Instream only splits invalid transactions.

TIBCO BusinessConnect EDI Protocol powered by Instream performs the document splitting of X12 files based on the settings in the `TIBEDI_HOME/config/X12_DocSplitter.ini` file. For details on how to set splitting points, see the TIBCO Foresight Instream Document Splitter documentation.

The following table lists the fields in the **Document Split** tab:

Table 28 Document Split

Field	Description
Inbound	
Enable Document Split	<p>Select this check box to enable the document splitting feature for X12 transactions with validation errors.</p> <p>By default, this check box is cleared.</p>

Table 28 Document Split (Cont'd)

Field	Description
Split Report Contents	<p>Specify whether to generate document splitting reports and what kinds of document splitting reports to be generated.</p> <ul style="list-style-type: none">• If you select Disable from this list, TIBCO BusinessConnect EDI Protocol powered by Instream does not generate document splitting reports.• If you select Valid from this list, TIBCO BusinessConnect EDI Protocol powered by Instream generates document splitting reports, and the splitting reports only include the contents of the valid part.• If you select Invalid from this list, TIBCO BusinessConnect EDI Protocol powered by Instream generates document splitting reports, and the splitting reports only include the contents of the invalid part.• If you select Both from this list, TIBCO BusinessConnect EDI Protocol powered by Instream generates document splitting reports, and the splitting reports only include the contents of both the valid and invalid parts.
Convert Valid Data to XML (Only for Single Valid Data)	<p>Select this check box to enable the product to convert the valid part of the splitting result to XML data after the document splitting process.</p> <p>By default, this check box is cleared.</p>

Control Numbers Tab

In the **Control Numbers** tab, you can specify settings, which affect the validation or generation of control numbers for this trading partner.

The inbound settings affect the validation of control numbers in documents received from this trading partner. The outbound settings affect the generation of control numbers to be included in documents sent to this trading partner.

For more information on control numbers, see *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide*, "Control Number Management."

The following table lists the fields in the **Control Numbers** tab:

Table 29 Control Numbers Fields (Sheet 1 of 3)

Field	Description
Inbound	
Group Control Number Increment Across Interchanges	Select True or False to specify whether to validate that group control numbers increment across interchanges.
Interchange Control Number Sequence Check	Specify how interchange control numbers are validated across a sequence of transactions. <ul style="list-style-type: none"> None No validation is performed. Incremental Successive interchange control numbers must increase by 1. Chronological Successive interchange control numbers must increase by ≥ 1.
Group Control Number Sequence Check	Specify how group control numbers are validated across a sequence of interchanges or transmissions. <ul style="list-style-type: none"> None No validation is performed. Incremental Successive group control numbers must increase by 1. Chronological Successive group control numbers must increase by ≥ 1. <p>If you select Incremental, you must avoid some possible problems. For more information, see <i>TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide</i>, "Senders and Receivers Falling out of Sync with Incremental Control Numbers."</p>

Table 29 Control Numbers Fields (Sheet 2 of 3)

Field	Description
Transaction Control Number Sequence Check	<p>Specify how transaction control numbers are validated within a group or an interchange.</p> <ul style="list-style-type: none">• None No validation is performed.• Incremental Successive transaction control numbers must increase by 1.• Chronological Successive transaction control numbers must increase by ≥ 1.
Reset on Save	<p>Select this check box to force the recycling of control numbers on demand. This applies to control numbers for inbound. On inbound documents, the resetting of the control numbers can reset the inbound trading partner control numbers, which are used in control number validation. As a result, the validation starts again based on the next incoming document from the trading partner.</p> <p>By default, this check box is cleared.</p>
Reset Across ALL domains.	<p>Select this check box to reset the control numbers across all domains.</p> <p>By default, the check box is cleared.</p>
Outbound	
Increment Group Control Number across Interchanges	<p>Select True or False to specify whether to increment group control numbers across interchanges.</p> <p>The default value is True.</p>
Increment Transaction Control Number Sequentially across Interchanges	<p>Select True or False to specify whether to increment transaction control numbers sequentially.</p> <p>The default value is False.</p>
Interchange Control Number Seed	<p>Specify the interchange control number starting point.</p> <p>The default value is 0.</p>
Interchange Control Number End	<p>Specify the interchange control number ending point. The next interchange after the ending point is numbered with the seed.</p> <p>The default value is 999999999.</p>
Group Control Number Seed	<p>Specify the group control number starting point.</p> <p>The default value is 0.</p>

Table 29 Control Numbers Fields (Sheet 3 of 3)

Field	Description
Transaction Control Number Seed	Specify the transaction control number starting point. The default is 0.
Reset on Save	Select this check box to force the recycling of control numbers on demand. This applies to control numbers for inbound. By default, this check box is cleared. If you select this check box, on outbound documents, the resetting of the control numbers force the outbound control numbers for a trading partner to start from the seeding value again before reaching the ending value. As a result, the control number of the next outbound document is generated based on the seeding value.
Reset Across ALL domains.	Select this check box to reset the control numbers across all domains. By default, the check box is cleared.

Delimiters Tab

In the **Delimiters** tab, you can specify the delimiters to be used when composing X12 documents to be sent to this trading partner.

Only one character per delimiter can be used for the X12 Protocol.



Each delimiter value must be unique. For example, the Segment Delimiter value cannot be set for the Element Separator, or for other delimiters.

For information on X12 delimiters, see [Delimiters, page 6](#).

The following table lists the fields in the **Delimiters** tab:

Table 30 Delimiters Fields

Field	Character	Description
Outbound		
Segment Terminator *	' (apostrophe)	The character indicating the end of a segment. A segment terminator must be a single character.
Data Element Separator *	~ (tilde)	The character used to separate data elements in a segment. A data element separator must be a single character.
Replacement Char *	 (vertical bar)	The character used to replace values in XML data that are the same as delimiters defined in configuration. A replacement character cannot be identical to any other delimiters. The required value format is a single character or a hexadecimal number.
Extra Segment Terminators (e.g. 0x0d,0x0a)		The additional characters of the segment terminator when the segment terminator consists of more than one character. The first character of the segment terminator is always specified in the Segment Terminator field. The additional segment terminator characters are specified in this field. Extra Segment Terminators cannot have the same values as the ones used for Data Element Separator or Segment Terminator .

Transports Tab

In the **Transports** tab, you can configure outbound 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/S



To send or receive CAQH messages with HTTP MIME Multipart envelope, add the below query string in the outbound transport URL:

The query string takes the form:

package = x12-caqh-mime

For example:

server1.company.example.com:6700/X12?package=x12-caqh-mime

If you select the **GISB/NAESB Package** check box, the outbound message is packaged in the NAESB Internet ET format. For more details about the NAESB Internet ET package standard, see [NAESB, page 142](#) and [Configuring HTTP/S for NAESB Internet ET, page 142](#).



NAESB packaging is supported only for the HTTP and HTTPS transports. It is currently not supported for the HTTPSCA transport.

- FTP/S
- FILE
- AS2-HTTP/S
- AS1-EMAIL
- EMAIL
- SSHFTP
- Inbox

This option is available to support document exchange between partners running TIBCO BusinessConnect EDI Protocol powered by Instream and one of the following 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 essentially the same for all protocols. For details, see the transports chapters in *TIBCO BusinessConnect Trading Partner Administration Guide*. For EDI-specific transport configuration, see *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide*, Chapter 6, File Masks.

The transports you configure serve as the default transports for all business agreements associated with this partner. You can override the default transport settings as part of the business agreement.

NAESB

NAESB Internet ET stands for North American Energy Standards Board Internet Electronic Transport. Its earlier version, GISB EDM - GISB (Gas Industry Standards Board) electronic Delivery Mechanism standard was an EDI transport mechanism to support reliable and secure transactions over the Internet.

NAESB Internet ET is designed to transfer all data types: text, EDI, or XML; it is used by the energy industry to transmit X12 EDI messages. It has the following characteristics:

- It can use a regular internet transport such as HTTP/S or even a Web browser on the client side.
- It supports any payload, such as EDI, flat files, or XML.
- It standardizes only how packages are exchanged, regardless of the business process.
- For security, it supports HTTP/S, HTTP Basic Authentication, PGP encryption, and signature to payloads.
- It standardizes error codes and how errors are returned back to the sender: synchronously or asynchronously.

Configuring HTTP/S for NAESB Internet ET

To configure the HTTP and HTTPS transports for NAESB Internet ET protocol, use the descriptions provided in [Table 31](#).

Table 31 Configuring NAESB Internet ET (Sheet 1 of 4)

Field	Description
Transport Name	Specify an identifier for these transport settings.

Table 31 Configuring NAESB Internet ET (Sheet 2 of 4)

Field	Description
URL	<p>Specify the URL for the trading partner.</p> <p>For NAESB, this primary URL is also used to send an Error Notification. The URL for NAESB must contain the query string <code>package=naesb</code>. For example: <code>server1.company.example.com:6900/X12?package=naesb</code></p>
Server Certificate (HTTPS only)	<p>Specify the participant's certificate used to encrypt communication.</p> <p>Note: You must configure the credentials in advance, before creating this transport. For more details about server certificates, see <i>TIBCO BusinessConnect Trading Partner Administration</i>, "New Certificate."</p>
Use HTTP Basic Authentication	<p>Select this check box to enable basic authentication at the trading partner.</p> <p>The user name and password set in those fields are provided when accessing the trading partner. The trading partner serves requests only if it can validate the supplied user name and password. Note that the password is passed in plain text across the network.</p>
Username	Specify a user name for the trading partner that you receive from the trading partner.
Password	Specify a password for the trading partner that you receive from the trading partner.
Retry Count	<p>Specify the maximum number of times TIBCO BusinessConnect tries to reconnect to the remote HTTP server, in case of failures.</p> <p>The default value is 3.</p>
Retry Interval	<p>Specify the interval between which TIBCO BusinessConnect waits before another reconnection is attempted, in seconds.</p> <p>The default value is 60.</p>
Socket Timeout	<p>Specify the amount of time a socket blocks on a read operation, in seconds.</p> <p>The default value is 300.</p>

Table 31 Configuring NAESB Internet ET (Sheet 3 of 4)

Field	Description
Cipher Suite Grade (HTTPS only)	<p>Select the cipher grade (strength) from the list.</p> <ul style="list-style-type: none">• All• Only Stronger Than Export• Only 128-Bit and Stronger• Only Stronger Than 128-Bit• Only 256-Bit and Stronger <p>All ciphers are listed in <i>TIBCO BusinessConnect Concepts</i>, "Cipher Suites."</p>
Can use TLS (HTTPS only)	Select this check box to use the Transport Layer Security (TLS) cryptographic protocol.
TLS Version (HTTPS only)	<p>Select the version of TLS protocol.</p> <p>TLS protocol versions 1.0, 1.1, and 1.2 are supported.</p> <p>Note: If you select TLS version 1.1 or 1.2, you have to select Sun as the security vendor for inbound and outbound socket operations.</p>
Can use SSLv3 (HTTPS only)	Select this check box to use the Secure Socket Layer version 3 (SSLv3) cryptographic protocol.
GISB/NAESB	
GISB/NAESB Package	<p>Select this check box to package outbound messages in the NAESB Internet ET format.</p> <p>By default, this check box is cleared.</p>
GISB/NAESB Version	<p>Specify the GISB/NAESB version.</p> <p>The default value is 2.0.</p>
Receipt Signature Required	<p>Select this check box to support the receipt signature.</p> <p>When you select this check box, the outbound NAESB message contains a "receipt-security-selection" data element that instructs the responder to sign the receipt (including the synchronous receipt and asynchronous error notification) that is sent back.</p> <p>By default, this check box is cleared.</p>
PGP Processing	

Table 31 Configuring NAESB Internet ET (Sheet 4 of 4)

Field	Description
PGP Encrypt	<p>Select this check box to enable PGP encryption.</p> <p>By default, this check box is selected.</p> <p>PGP encryption in ASCII Armor format is mandatory for requests.</p> <p>This setting takes effect only for a regular outbound request and not for an outbound Error Notification, which is never encrypted according to the NAESB standard.</p>
PGP Sign	<p>Select this check box to support PGP signature.</p> <p>This is optional. By default, this check box is cleared.</p> <p>This setting takes effect only for a regular outbound request and not for an outbound Error Notification.</p> <p>The "receipt-security-selection" data element in the original inbound NAESB message defines whether an error notification is signed.</p> <p>Note that other PGP features, such as Compression and Compression Algorithm, are not configured since NAESB messages are not compressed.</p>

Chapter 6

Configuring Agreement Protocol Bindings

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

Topics

- [Overview, page 148](#)
- [Operation Bindings Tab, page 149](#)
- [Overriding Outbound Settings for Notify, page 150](#)
- [Overriding Outbound Settings for Synchronous Response Request, page 156](#)
- [Document Security Tab, page 165](#)
- [Transports Tab, page 167](#)
- [Scheduled Transmission Tab, page 170](#)
- [Overriding Participant Settings, page 172](#)

Overview

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

Adding Protocol Binding

To configure an agreement protocol binding:

1. Log on to TIBCO Administrator.
2. In the left panel, expand **BusinessConnect > Business Agreements**.
3. In the right panel, click a business agreement link.
4. Click **Add Protocol Binding**.
5. Select the **X12** check box.
6. Click **OK**.
7. Click the **X12** agreement protocol binding link. The following configuration options are available:
 - [Operation Bindings Tab, page 149](#)
 - [Document Security Tab, page 165](#)
 - [Transports Tab, page 167](#)
 - [Scheduled Transmission Tab, page 170](#)
 - [Overriding Participant Settings, page 172](#)

Operation Bindings Tab

In the **Operation Bindings** tab, you can configure the X12 transactions that each participant in a business agreement can initiate and respond to.

The following properties apply to all the transactions that you import in the Operations Editor:

- **Allow All Operations** Enables participants to initiate all operations configured in BusinessConnect. You can modify the behavior of one or more operations by binding the operations in the Hosts' Can Initiate and Partners' Can Initiate areas.




For synchronous request response transactions: when you clear this check box, the following situations happen

- Both the acknowledgment creation at the Responder side and the synchronous response received at the Initiator side are supported, regardless of whether a binding is available.
- Initiator's synchronous requests are checked for binding availability.
- **Non Repudiation Logging** Enables logging of all operations in the non-repudiation log.

Adding Operation Binding

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

To bind a transaction in either area:

1. Click **Add Operation Bindings**.
2. Click the topmost **expand all**  to expand the transaction tree.
Check the transaction.
3. Click **OK**.

The selected message is added to the **Operation Name** list.

You can continue by editing this operation binding.

Overriding Outbound Settings for Notify

To override the outbound settings for a Notify operation binding, select it first.

- **Operation Settings** Override the default settings for this operation.

See [Operation Settings Tab, page 150](#).

- **Action Settings** To override the action settings for a transaction, select the **Override Action Settings** check box.

Options in this tab override configuration set in the [Action Settings Tab, page 154](#).

- **Transports** To override the transports for a transaction, select the **Override Transports** check box.

Options in this tab override configurations set in the [Transports Tab, page 167](#).

- **Document Security** To override the document security for a transaction, select the **Override Document Security** check box.

Options in this tab override configurations set in the [Document Security Tab, page 165](#).

Operation Settings Tab



When no guidelines are given for the operation binding with the **Override Operation Settings** check box selected and with the **Allow all Operation** check box selected, the guideline in the operations editor takes effect.



If transactions of same operation type are batched, the override settings for the particular operation binding take effect only when these transactions are transmitted for the interchanges with multiple groups of the same transaction type. In addition, these overrides cannot take effect when batch transmission is performed through a gateway.

To override outbound settings for a Notify operation, select the **Override Operation Settings** check box. If you select to override operation settings, continue by selecting one of the following items from the list:

- [General Option, page 151](#)
- [Guideline Option, page 152](#)
- [Schema Option, page 154](#)

General Option

The following options are available when overriding the settings:

Table 32 *Override Settings for Notify: General*

Field	Description
GS02 Sender/GS03 Receiver (for example, Application Sen: Application Rec)	<p>Specify the GS02/GS03 values for outbound and inbound messages to restrict or support transactions.</p> <p>When GS02/GS03 values are given under operation binding with the Allow All Operations check box unselected, only transactions containing the GS02/GS03 pair given under the operation binding are supported to be sent or received. If this condition is not met, transactions are restricted and they are neither sent nor received.</p>
Inbound Raw EDI Segments	
Include in Private Process Request	<p>Select this check box to include raw EDI message in the private process (RESPONDER.REQUEST) for this operation.</p> <p>By default, this check box is cleared.</p>
Include in Validation Error Advisory	<p>Select this check box to include raw EDI messages in the Validation Error advisory.</p> <p>By default, this check box is selected.</p>
Extra Transaction Info	<p>Specify a value used to send any information to the private process at transaction level of RESPONDER.REQUEST message.</p> <p>It can also be included in RESPONDER.INTERCHANGE and ValidationAlert advisory.</p>
Security Option (MIME Encode Message Only)	<p>Select one item from the list to support or deny only this transaction. The Security Option is at the transaction level. If the incoming document contains multiple transaction sets, the transaction that does not match the security option is not sent to the private process. This does not affect acknowledgment creation for the incoming X12 document.</p> <p>The options are:</p> <ul style="list-style-type: none"> • None • Plain Text Only • Signed Only • Encrypted Only • Signed and Encrypted

Guideline Option

If Guideline is selected, you can change or remove Validation Guidelines and TEXT Translation Guidelines as explained in [Table 33](#).

Table 33 Override Settings for Notify: Guideline (Sheet 1 of 3)

Field	Description
Validation Guideline	
Guideline File for validating X12 Partner data (.sef or .std)	<p>Click change to select and load the guideline file associated with this message type. Then, follow the procedure described in <i>TIBCO BusinessConnect Trading Partner Administration</i>, "File Specification Dialog."</p> <p>The guideline file associated with this message type.</p>
Validator Profile File (.apf)	<p>Click change to select and load the Validator profile file.</p> <p>Validator profile files are used to check errors and categorize them to different levels of severity. For details, see Configuring Validation Profile (.apf) Files.</p>

Table 33 Override Settings for Notify: Guideline (Sheet 2 of 3)

Field	Description
Allow Dynamic Guideline Loading based on GS02 Sender/GS03 Receiver	<p>If you select this check box, the guideline associated with this message type is determined by the GS02 and GS03 value in the message, and loaded from file system, rather than using the default guidelines specified in Guideline File for validating X12 Partner data.</p> <p>You can use the GS0203_guidelines.map file in the <i>TIBCO_HOME/bc/version_number/protocols/tibedi/config</i> directory to predefine the guideline file name for each GS02/GS03 pair. The format of each line of the file is: <i>Key = full path of guideline file</i>. See this file for more details.</p> <p>The original guideline file name defined in Guideline File for validating X12 Partner data and GS02 Sender/GS03 Receiver Group Headers in the message are used to form the Key to search in this file.</p> <p>Search is conducted in the following order:</p> <ol style="list-style-type: none"> <i>Original file name_GS02 Sender_GS03 Receiver</i> If a key that matches the original guideline name and both the GS02 and GS03 values, the file path in this line is used for loading the specific guideline file. <i>Original file name_GS02 Sender</i> If the key in step 1 is not found, the key that matches the original name and the GS02 value is picked up, and the file path in this line is used. <i>Original file name_GS03 Receiver</i> If the key in step 2 is not found, the key with the original name and the GS03 value is picked up, and the file path in this line is used. <p>Note:</p> <ul style="list-style-type: none"> Duplicate Keys are not supported in the map file. If no key matches, the default guidelines specified in Guideline File for validating X12 Partner data are used. If any character exists in GS02 and GS03 that is not permitted for file path, such as / \ : ? * \ < > , and spaces, these characters are all replaced by underscores (_) to form the search key.
Inbound Type of Translation	

Table 33 Override Settings for Notify: Guideline (Sheet 3 of 3)

Field	Description
Inbound X12 Translation Type (e.g. EDI to XML or EDI to TEXT)	<p>Select one item from the list to specify the inbound X12 transaction type.</p> <ul style="list-style-type: none">• EDI to XML When you select EDI to XML, it supports EDI to XML translation; an appropriate translation map has to be uploaded so that the output is XML.• EDI to TEXT When you select EDI to TEXT, with proper TEXT guideline and appropriate translation map for mapping EDI to TEXT, the output is translated to TEXT.

TEXT Translation Guideline

Guideline File used for translating X12 to TEXT (.sef or .std)	Click change to select and load a guideline file for X12 to TEXT translation.
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Schema Option

If Schema is selected, you can change or remove the Map file as explained in [Table 34](#).

Table 34 Override Settings for Notify: Schema

Field	Description
EDI to XML (or EDI to TEXT) Translation Map file (.map)	<p>Click change to select and load the EDI to XML or EDI to TEXT translation map file associated with this message type.</p> <p>Note that EDI to XML translation map files have the extension <code>_EX.map</code>.</p>
XML to EDI translation Map file (.map)	<p>Click change to select and load the XML to EDI translation map file associated with this message type.</p> <p>Note that XML to EDI translation map files have the extension <code>_XE.map</code>.</p>

Action Settings Tab

The **Action Settings** tab is available only for the Host.

It provides the following options:

- **Override Action Settings** If selected, this option overrides the action settings selected by using **BusinessConnect > Participants > Partner > Protocols > X12 > Batching** tab and **BusinessConnect > Participants > Partner > Protocols > X12 > Acknowledgement** tab.

- **Batching Option** To override outbound action settings for batching, see [Table 8, Outbound Action: Batching Tab, page 76](#).
- **Acknowledgement Option** To override outbound action settings for acknowledgments, see [Table 9, Outbound Action: Acknowledgement Tab, page 77](#).

Transports Tab

The **Transports** tab is available only for the Host.

It provides the following options:

- **Override Transports** If selected, this option overrides the transports as explained in [Transports Tab, page 167](#).
- **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.

Document Security Tab

The **Document Security** tab is available both for the Host and for the Partner.

It provides the following options:

- **Override Document Security** If selected, this option overrides the transports.
- **Outbound Doc Exchange** See [Document Security Tab, page 165](#).

Overriding Outbound Settings for Synchronous Response Request

To override the outbound settings for a Synchronous Response Request operation binding, select it first.

- **Operation Settings** Override the default settings for this operation.

See [Operation Settings Tab, page 156](#).

- **Action Settings** To override the action settings for a transaction, check the **Override Action Settings** check box.

Options in this tab override configuration set in the [Action Settings Tab, page 162](#).

- **Transports** To override the transports for a transaction, select the **Override Transports** check box.

Options in this tab override configurations set in the [Transports Tab, page 167](#).

- **Document Security** To override the document security for a transaction, select the **Override Document Security** check box.

Options in this tab override configurations set in the [Document Security Tab, page 165](#).

Operation Settings Tab



When no guidelines are given for the operation binding with the Override Operation Settings enabled and with **Allow all Operation** check box selected, the guideline in the operations editor takes effect.



If transactions of this operation are batched, the override settings in this operation binding take effect only when these transactions are not transmitted in the same outbound transmission with other operation transactions. In addition, these overridings cannot take effect when the batch transmission is performed through a gateway.

To override outbound settings for a Synchronous Response Request, select the **Override Operation Settings** check box. If you select to override operation settings, continue by selecting one of the following from the list:

- [General Option, page 157](#)
- [Guideline Option, page 158](#)

General Option

The following options are available when overriding the settings:

Table 35 Override Settings for Synchronous Request Response: General

Field	Description
GS02 Sender/GS03 Receiver (for example, Application Sen: Application Rec)	Specify the GS02/GS03 values for outbound and inbound messages to restrict or support transactions. When GS02/GS03 values are given under operation binding with the Allow All Operations check box unselected, only transactions containing the GS02/GS03 pair given under the operation binding are supported to be sent or received. If this condition is not met, transactions are restricted and they are neither sent nor received.
Inbound	
Include in Private Process Request	Select this check to include raw EDI message in the private process (RESPONDER.REQUEST) for this operation. By default, this check box is cleared.
Include in Validation Error Advisory	Select this check box to include raw EDI messages in the Validation Error advisory. By default, this check box is selected.

Guideline Option

If Guideline is selected, you can change or remove Validation Guidelines and TEXT Translation Guidelines as explained in [Table 33](#).

Table 36 Override Settings for Synchronous Request Response: Guideline (Sheet 1 of 4)

Field	Description
Allow Dynamic Guideline Loading based on GS02 Sender/GS03 Receiver	<p>If selected, the guideline associated with this message type is determined by the GS02 and GS03 value in the message, and loaded from file system, rather than using the default guidelines specified in Request Guideline File and Response Guideline File.</p> <p>You can use the GS0203_guidelines.map file in the <i>TIBCO_HOME/bc/version_number/protocols/tibedi/config</i> directory to predefine the guideline file name for each GS02/GS03 pair. The format of each line of the file is: <i>Key = full path of guideline file</i>. See this file for more details.</p> <p>The original guideline file name defined in Request Guideline File and Response Guideline File, and GS02 Sender/GS03 Receiver Group Headers in the message are used to form the Key to search in this file.</p> <p>Search is conducted in the following order:</p> <ol style="list-style-type: none"><i>Original file name_GS02 Sender_GS03 Receiver</i> If a key that matches the original guideline name and both the GS02 and GS03 values, the file path in this line is used for loading the specific guideline file.<i>Original file name_GS02 Sender</i> If the key in step 1 is not found, the key that matches the original name and the GS02 value is picked up, and the file path in this line is used.<i>Original file name_GS03 Receiver</i> If the key in step 2 is not found, the key with the original name and the GS03 value is picked up, and the file path in this line is used. <p>Note:</p> <ul style="list-style-type: none">Duplicate Keys are not supported in the map file.If no key matches, the default guidelines specified in Request Guideline File and Response Guideline File are used.If there is any character in GS02 and GS03 that is not permitted for file path, such as / \ : ? * \ < > , and spaces, these characters are all replaced by underscores (_) to form the search key.

Table 36 *Override Settings for Synchronous Request Response: Guideline (Sheet 2 of 4)*

Field	Description
Request Type of Translation	
Inbound Translation Type (e.g. EDI to XML or EDI to TEXT)	<p>From the drop-down menu, select one of these two choices:</p> <ul style="list-style-type: none">EDI to XML This is the default value. When you select EDI to XML, the inbound Synchronous X12 document is translated to XML. It can be overridden at the business agreement level to do EDI to TEXT translation. For details, see Table 33, Override Settings for Notify: Guideline.EDI to TEXT When you select EDI to TEXT, the appropriate synchronous X12 document is translated to TEXT. When a proper TEXT guideline is uploaded and an appropriate translation map for mapping EDI to TEXT is created, the output is a TEXT file.

Table 36 *Override Settings for Synchronous Request Response: Guideline (Sheet 3 of 4)*

Field	Description
X12 Validation Guideline for Request	
Request Guidelines File (.sef or .std)	<p>Specify the path to the inbound synchronous request guidelines file. You can override this field at the business agreement level. This guideline file is used to validate the EDI document that is received from a trading partner, or that is sent to a trading partner.</p> <p>Click change to select and load the Guidelines File (.sef or .std).</p>
Request Validator Profile File (.apf)	<p>Specify the path to the inbound synchronous request Validator Profile file that you want to suppress errors into warning or information. You can override this field at the business agreement level.</p> <p>Click change to select and load the Validator Profile file (.apf).</p>
TEXT Translation Guideline	
Guideline File used for translating X12 to TEXT (.sef or .std)	<p>Click change to select and load a guideline file for translating X12 to TEXT.</p> <p>This TEXT guideline is used for translating a X12 EDI document into a TEXT document.</p>
Acceptance Response X12 Validation Guideline for Response	
Response Guidelines File (.sef or .std)	<p>Specify the path to the outbound synchronous response Guidelines file. You can override this field at the business agreement level.</p> <p>This guideline file is used to validate the synchronous response EDI document that is received from a trading partner, or that is sent to a trading partner.</p> <p>Click change to select and load the Guidelines File (.sef or .std).</p>
Response Validator Profile File (.apf)	<p>Specify the path to the outbound synchronous response Validator Profile file that you want to suppress errors into warning or informational if the responses have errors. You can override this field at the business agreement level.</p> <p>Click change to select and load the Validator Profile File (.apf).</p>

Table 36 Override Settings for Synchronous Request Response: Guideline (Sheet 4 of 4)

Field	Description
TEXT Translation Guideline	
Guideline File used for translating EDI response to TEXT (.sef or .std)	<p>Click change to select and load a guideline file for translating EDI to TEXT.</p> <p>This TEXT guideline is used for translating a synchronous X12 response EDI document into a TEXT document.</p>
Type of Translation	
Backend to Partner Translation type for Response (e.g. XML to EDI or TEXT to EDI)	<ul style="list-style-type: none"> • XML to EDI • TEXT to EDI TEXT data can be sent from the private process, converted to the EDI data and sent back to the Initiator. <p>For more information, see <i>TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide</i>, "TEXT to EDI Conversion."</p>
TEXT Translation Guideline	
Guideline File used to translate TEXT to EDI response (.sef or .std)	<p>Click change to select and load a guideline file for translating TEXT to EDI.</p> <p>This TEXT guideline is used for translating a TEXT document into synchronous X12 response EDI document.</p>
Rejection Ack	
Rejection Ack Guidelines File (.sef or .std)	<p>Specify the path to the Rejection Ack Guidelines file. You can override this field at the business agreement level.</p> <p>Click change to select and load the Rejection Ack Guidelines File (.sef or .std).</p> <p>You can use this guideline file to validate the synchronous EDI rejection acknowledgment document that is received from a trading partner, or sent to a trading partner.</p>
Inbound Translation Guideline for Rejection Ack	
Guideline File used to translate EDI rejection Ack to TEXT (.sef or .std)	<p>Click change to select and load a guideline file for translating EDI rejection Ack to TEXT.</p> <p>This TEXT guideline is used for translating a synchronous X12 rejection acknowledgment EDI document into a TEXT document.</p>

Action Settings Tab

The **Action Settings** tab is available only for the Host.

It provides the following options:

- **Override Action Settings** If selected, this option overrides the action settings selected by using the **BusinessConnect > Participants > Partner > Protocols > X12 > Batching** tab and **BusinessConnect > Participants > Partner > Protocols > X12 > Acknowledgement** tab.

General Option

With this option, you can change the value for Time to Wait for Sync Response (seconds).

Translation Map Option

Table 37 *Override Settings for Synchronous Request Response: Translation Map Option*

Field	Description
Acceptance Response	
Response EDI to XML (or EDI to TEXT) Translation Map File (.map)	<p>Select the EDI to XML or EDI to TEXT translation map file.</p> <ul style="list-style-type: none"> If you select EDI to TEXT as the inbound type of translation, the appropriate X12 to TEXT translation map must be uploaded for the translation to occur. If you select EDI to XML as the inbound type of translation, the appropriate X12 to XML translation map must be uploaded for the translation to occur. Note that EDI to XML translation map files have the extension <code>_EX.map</code>.
Response XML to EDI (or TEXT to EDI) translation Map File (.map)	<p>Select the XML to EDI or TEXT to EDI translation map file.</p> <p>This file is associated with this message type for sending the synchronous response to a trading partner that is received from the private process.</p> <p>Note: XML to EDI translation map files have the extension <code>_XE.map</code>.</p> <p>For TEXT to EDI translations, see <i>TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide</i>, "TEXT to EDI Conversion."</p>
Rejection Ack	
Rejection Ack EDI to XML (or EDI to TEXT) Translation Map File (.map)	<p>Select the EDI to XML or EDI to TEXT translation map file.</p> <ul style="list-style-type: none"> If you select EDI to TEXT as the inbound Type of Translation, the appropriate X12 to TEXT translation map must be uploaded for the translation to occur. If you select EDI to XML as the inbound Type of Translation, the appropriate X12 to XML translation map must be uploaded for the translation to occur. Note that EDI to XML translation map files have the extension <code>_EX.map</code>.

Transports Tab

The **Transports** tab is available only for the Host.

It provides the following options:

- **Override Transports** If selected, this option overrides the transports as explained in [Transports Tab, page 167](#).

- **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.

Document Security Tab

The **Document Security** tab is available both for the Host and for the Partner. It provides the following options:

- **Override Document Security** If selected, this option overrides the transports as explained in [Table 38, Document Security Fields](#).

Document Security Tab

In the **Document Security** tab, you can specify security information for trading partners.

The keys and certificates selected in the tab are set in the host and partner participant's Credentials tabs. For information on how to set credentials, see *TIBCO BusinessConnect Trading Partner Administration*. The properties listed in [Table 38](#) can be set for inbound and outbound document exchange.

Overriding Document Security

When you select this check box, the configured document security settings are overridden.



If you are using a transporting Gateway with one or more X12 trading partners, the document security settings in the transporting Gateway are used instead of the document security settings for any of those X12 trading partners.

For more information about configuring the Gateway, refer to the *TIBCO BusinessConnect EDI Protocol powered by Instream, Gateway Configuration*.

The document security settings you configure in the business agreement are the default values. You can override these values only for outbound documents.

Table 38 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 to be used for digital signatures: SHA1, SHA256, SHA384, 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	

Table 38 Document Security Fields (Cont'd)

Field	Description
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. You must obtain this certificate from the host in advance.
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.
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 file. The host uses this certificate to authenticate a partner by verifying the digital signature of the partner. You must obtain this certificate from the host in advance.
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

In the **Transports** tab, you can configure the supported outbound and inbound transport for the host and the partner participant in the business agreement.

The top section of this 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 [Transports Tab, page 141](#).

Table 39 Outbound Transport for the Host

Field	Description
Primary Transport	See the Transports chapters in the <i>TIBCO BusinessConnect Trading Partner Administration</i> .
Backup Transport	<p>TIBCO BusinessConnect EDI Protocol powered by Instream supports a backup outbound transport for sending XML files to the trading partner. This backup transport is used if the file cannot be sent over the primary transport configured in the business agreement. Such situation might happen if the trading partner's server is not available or has a wrong URL during the time when the file is being sent: the file still needs to reach the server through some other means even after the primary transport retry is exhausted.</p> <p>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.</p> <p>Note Backup transport currently does not support NAESB packaging.</p>

Table 39 Outbound Transport for the Host (Cont'd)

Field	Description
AS2 Async MDN Reply Transport	<p>Same as for TIBCO BusinessConnect.</p> <p>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 field is not necessary unless you want to specify different values for the following HTTP transmission related settings:</p> <ul style="list-style-type: none">• Retry Count – default is 3• Retry Interval – default is 60 seconds• Socket Timeout – default is 300 seconds (5 minutes) <p>Any other settings specified in the AS2 MDN Async Reply Transport field are ignored. The most common case, which you specify this transport for, is when your trading partner is not acknowledging the receipt of your async MDNs within the default socket timeout period.</p>
AS2 Async MDN Remote Server Certificate	<p>Same as for TIBCO BusinessConnect.</p> <p>The Remote Server Certificate for the AS2 HTTPS transport is a SSL certificate that must be used for encrypting the data sent using HTTPS. This list contains all of the certificates that are configured for the trading partner. You can select the one that is configured to be used for SSL encryption.</p> <p>Note The server certificate configuration is only required for Async MDNs over the AS2 HTTPS transport.</p>
Client Authentication Identity for HTTPS, FTPS, HTTPSCA	<p>Choose between the transport that is set up as Client Authentication Identity for HTTPS, FTPS, HTTPSCA, or None.</p>
Client Authentication Identity for SSHFTP	<p>Choose between the transport that is set up as Client Authentication Identity for SSHFTP, or None.</p>

Setting the Inbound Transport for the Host

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

Table 40 Inbound Transport Fields

Field	Description
HTTP/S	Support 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 <i>TIBCO BusinessConnect Trading Partner Administration</i> , Chapter 11, "HTTP, HTTPS, and HTTPSCA Transports."
FTP/S	Support 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. For more information on how a host uses FTP, see <i>TIBCO BusinessConnect Trading Partner Administration Guide</i> .
EMAIL	Support 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 have to configure the FTP transport. You must use FTP to get your partner 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	Support 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 have to configure FTP transport. You must use FTP to get your partner 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 <i>TIBCO BusinessConnect Trading Partner Administration</i> , Chapter 15, "SSHFTP Transport."

Scheduled Transmission Tab

In the **Scheduled Transmission** tab, you can specify when transactions are transmitted to this trading partner. The settings in this tab interact with the settings in the **Batching** tab in the Operations Editor.

See [Outbound Action: Batching Tab on page 76](#).

By default, transactions are transmitted to your trading partners immediately after TIBCO BusinessConnect EDI Protocol powered by Instream processes them. 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.

See *TIBCO BusinessConnect EDI Protocol powered by Instream User's Guide*, Chapter 7, "Viewing Logs."

Table 41 Scheduled Transmission Fields

Field	Description
Enable	Enable this configuration.
Transmission Mode	Specify the type of the transmission schedule: Everyday , Day of the Week , or Specific Dates . The selection determines which of the other fields on the tab are used.
Start Time	Define the start of the transmission window.
End Time	Define the end of the transmission window.
Days of the Week	Specify the days of the week that messages are transmitted. Used when the mode is Day of the Week .

Table 41 Scheduled Transmission Fields (Cont'd)

Field	Description
Frequency	<p>Specify how often to group transactions into a single interchange and send them to trading partner. The frequency you specify applies to the scheduled transmission start time. The first set of transmissions are at the scheduled transmission start time. Each subsequent set of transmissions are at the start time plus the frequency interval specified. TIBCO BusinessConnect continues sending transmissions at regular intervals based on the value in the Frequency field until the transmission window closes.</p> <p>For example, if the start time is 9:00 AM and the frequency is Every 30 mins, the first set of transmissions occur at 9:00 AM, the next set of transmissions occur at 9:30 AM, and so on.</p> <p>If you use a Gateway (override scheduler and transport settings) field (see Batching Tab on page 124), the frequency setting in the Gateway General tab overrides any value in this field.</p>
Transaction Count Threshold	<p>Limit the number of transactions in an interchange. The minimum value is 1.</p> <p>If scheduled transmissions are enabled, entering a number causes the following situations to occur when the transmission window opens:</p> <ul style="list-style-type: none"> • 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 are 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 are be grouped together into a single interchange and sent to the trading partner. <p>If you use a Gateway in the (override scheduler and transport settings) field (see Batching Tab on page 124), the Number of Transactions Reached setting in the Gateway General tab overrides any value in this field.</p>
Scheduled Dates	<p>Specify the list of dates when transmissions occur. Used when the mode is Specific Dates.</p> <p>Click Add to add a specific date.</p>

Overriding Participant Settings

Use the participant configuration tabs to override the general settings for a participant per agreement protocol binding.

Hide Advanced

To hide the participant configuration tabs and skip overriding the participant settings, click **Hide Advanced**.

Show Advanced

To use the participant configuration tabs, click **Show Advanced**.

The configuration GUI displays two tabs labeled *ParticipantA's* Configuration and *ParticipantB's* Configuration, where *ParticipantA* and *ParticipantB* are the participants in the business agreement, which you are overriding the settings for.

Overriding General Settings

This procedure describes how to override a general setting.

1. Click the participant configuration tab.
2. Select the **Override Settings** check box.
3. **Default Interchange Qualifier ID** Select an interchange qualifier ID from the list.



When the default interchange qualifier is changed, no CSUPDATE advisory is published.

Choices for the Host are fully explained in the [General Tab, page 105](#).

Choices for the Trading Partner are fully explained in [General Tab, page 117](#).

4. **AS2 Identifier** Select an AS2 identifier from the list.

Choices for the Host are fully explained in the [General Tab, page 105](#).

Choices for the Trading Partner are fully explained in [General Tab, page 117](#)

5. **Common Code Identifier** Select the common code identity from the list.

Choices for the Host are fully explained in the [General Tab, page 105](#).

Choices for the Trading Partner are fully explained in [General Tab, page 117](#)

6. **Valid Email Address List** Enter the valid email address or addresses.

7. **CAQH UserName to authenticate at Partner** Enter the user name.
Choices for the Host are fully explained in the [General Tab, page 105](#).
8. **CAQH Password to authenticate at Partner** Enter the password.
Choices for the Host are fully explained in the [General Tab, page 105](#).
9. Click **Save** to save the configurations.

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