# TIBCO ActiveMatrix BusinessWorks™ Plug-in for EDI

User's Guide

Software Release 1.0 July 2011



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### **Preface**

TIBCO ActiveMatrix BusinessWorks Plug-in for EDI is designed as a plug-in integrated with TIBCO BusinessWorks to address the needs of the TIBCO BusinessWorks customer who wants to make use of the functions provided by TIBCO Foresight Instream and TIBCO Foresight Instream Translator in a user-friendly way.

#### **Topics**

- Related Documentation, page x
- Typographical Conventions, page xi
- Connecting with TIBCO Resources, page xiii

#### **Related Documentation**

This section lists documentation resources you may find useful.

#### TIBCO ActiveMatrix BusinessWorks Plug-in for EDI Documentation

The following documents form the TIBCO ActiveMatrix BusinessWorks Plug-in for EDI documentation set:

- TIBCO ActiveMatrix BusinessWorks Plug-in for EDI Installation Read this manual for instructions on site preparation and installation.
- TIBCO ActiveMatrix BusinessWorks Plug-in for EDI User's Guide Read this manual for instructions on using the product.
- TIBCO ActiveMatrix BusinessWorks Plug-in for EDI 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:

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

- TIBCO Designer<sup>TM</sup>
- TIBCO Administrator<sup>TM</sup>
- TIBCO ActiveMatrix BusinessWorks<sup>TM</sup>
- TIBCO Rendezvous®
- TIBCO Enterprise Message Service<sup>TM</sup>
- TIBCO Hawk®
- TIBCO Runtime Agent<sup>TM</sup>

## **Typographical Conventions**

The following typographical conventions are used in this manual.

Table 1 General Typographical Conventions

Convention	Use
TIBCO_HOME ENV_NAME CONFIG_HOME	Many TIBCO products must be installed within the same home directory. This directory is referenced in documentation as <i>TIBCO_HOME</i> . The default value of <i>TIBCO_HOME</i> depends on the operating system. For example, on Windows systems, the default value is C:\tibco.
	Other TIBCO products are installed into an installation environment. Products installed into different installation environments do not share components. Incompatible products and multiple instances of the same product must be installed into different installation environments. An installation environment consists of the following properties:
	• <b>Name</b> Identifies the installation environment. The name is appended to the name of Windows services created by the installer and is a component of the path to the product in the Windows Start > All Programs menu. This directory is referenced in documentation as <i>ENV_NAME</i> .
	• <b>Description</b> Provides information about what the environment contains or is used for.
	• <b>Path</b> The directory into which the product is installed. This directory is referenced in documentation as <i>TIBCO_HOME</i> . The value of <i>TIBCO_HOME</i> depends on the operating system. For example, on Windows systems the default value is C:\tibco.
	A TIBCO configuration folder stores configuration data generated by TIBCO products. Configuration data can include sample scripts, session data, configured binaries, logs, and so on. This folder is referenced in documentation as <i>CONFIG_HOME</i> . The default location of the folder is USER_HOME/ENV_NAME/data. For example, on Windows, the default location is C:\Documents and Settings\UserName\Application Data\ENV_NAME\data
code font	Code font identifies commands, code examples, filenames, pathnames, and output displayed in a command window. For example:

Table 1 General Typographical Conventions (Cont'd)

Convention	Use				
bold code font	Bold code font is used in the following ways:				
	• In procedures, to indicate what a user types. For example: Type admin.				
	<ul> <li>In large code samples, to indicate the parts of the sample that are of particular interest.</li> </ul>				
	<ul> <li>In command syntax, to indicate the default parameter for a command. For example, if no parameter is specified, MyCommand is enabled:</li> <li>MyCommand [enable   disable]</li> </ul>				
italic font	Italic font is used in the following ways:				
	<ul> <li>To indicate a document title. For example: See TIBCO ActiveMatrix BusinessWorks Concepts.</li> </ul>				
	<ul> <li>To introduce new terms. For example: A portal page may contain several portlets. Portlets are mini-applications that run in a portal.</li> </ul>				
	<ul> <li>To indicate a variable in a command or code syntax that you must replace.</li> <li>For example: MyCommand PathName</li> </ul>				
Key combinations	Key names separated by a plus sign indicate keys pressed simultaneously. For example: Ctrl+C.				
	Key names separated by a comma and space indicate keys pressed one after the other. For example: Esc, Ctrl+Q.				
	The note icon indicates information that is of special interest or importance, for example, an additional action required only in certain circumstances.				
· ·	The tip icon indicates an idea that could be useful, for example, a way to apply the information provided in the current section to achieve a specific result.				
$\triangle$	The warning icon indicates the potential for a damaging situation, for example, data loss or corruption if certain steps are taken or not taken.				

#### **Connecting with TIBCO Resources**

#### **How to Join TIBCOmmunity**

TIBCOmmunity is an online destination for TIBCO customers, partners, and resident experts; a place to share and access the collective experience of the TIBCO community. TIBCOmmunity offers forums, blogs, and access to a variety of resources. To register, go to http://www.tibcommunity.com.

#### How to Access All TIBCO Documentation

After you join TIBCOmmunity, you can access the documentation for all supported product versions here:

http://docs.tibco.com/TibcoDoc

#### How to Contact TIBCO Support

For comments or problems with this manual or the software it addresses, please contact TIBCO Support as follows:

For an overview of TIBCO Support, and information about getting started with TIBCO Support, visit this site:

http://www.tibco.com/services/support

If you already have a valid maintenance or support contract, visit this site:

https://support.tibco.com

Entry to this site requires a username and password. If you do not have a username, you can request one.

This chapter gives an overview of TIBCO Foresight and TIBCO ActiveMatrix BusinessWorks Plug-in for EDI.

#### **Topics**

- TIBCO Foresight Overview, page 2
- TIBCO BusinessWorks Foresight Plug-in Overview, page 4

#### TIBCO Foresight Overview

Before using this document, familize yourself with Electronic Data Interchange (EDI), see Appendix A, Electronic Data Interchange for details.

The TIBCO Foresight products benefit customers by connecting partners and validating transactions, reducing administrative inefficiencies and addressing mandates such as HIPAA 5010. Also, the Foresight family of EDI management solutions allows organizations to trade electronic transactions with commonly-used formats (EDI, XML and proprietary Flat Files) and standards (HIPAA, X12, EDIFACT, TRADACOMS, VICS, etc.).

This document focus on transaction validation and translation functions provided by Foresight product, which are TIBCO Foresignt Instream and TIBCO Foresight Instream Translator respectively.

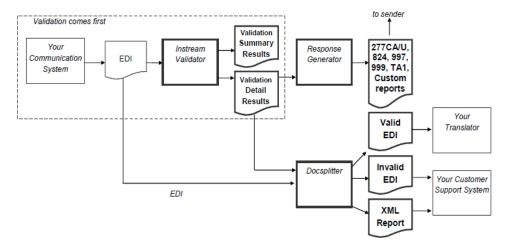
#### **Transaction Validation**

TIBCO Foresight Instream ensures the compliance of inbound and outbound data with the fastest and most thorough transaction validation engine.

You can use TIBCO Foresight Instream to automate transaction flow throughout your organization and validate transactions according to industry standards, organizational guidelines, and specific business rules.

Instream is designed to be highly configurable, with several components that work together. Figure 1 is an example screen that shows Instream Validator, Response Generator, and Docsplitter working together to process inbound EDI.

Figure 1 EDI Processing Workflow



Refer to InStream Validation Technical Manual.pdf for more information about the Instream validation function, which you can find in the Instream's Doc directory.



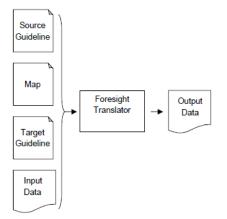
Instream validation can be run as a command line, usually from within a batch file or script. Or you can integrate Insream validation into another of your applications either statically (C/C++) or dynamically (C/C++, C#, and Java).

#### Translation

TIBCO Foresight Instream Translator is a specialized, high-speed transformation engine that enables the mass conversion of transaction files based on pre-built or custom maps, providing direct translation to and from EDI, XML and Flat File formats with no interim staging required.

You can use TIBCO Foresight Instream Translator to translate the input data in one format to a new file in another format. Figure 2 is an example screen that shows the translation workflow.

Figure 2 Translation Workflow



Refer to Translator.pdf about the translation function, which you can find in the Translator's Doc directory.



#### TIBCO BusinessWorks Foresight Plug-in Overview

TIBCO BusinessWorks is an easy-to-use integration software that provides world-class integration technology in a rapid deployable solution that manages the entire lifecycle of integration projects.

Since the validation module of TIBCO Foresight Instream is a command line validator, and the Translator.exe is a command line executable that performs the translation, therefore, TIBCO ActiveMatrix BusinessWorks Plug-in for EDI is designed as a plug-in integrated with TIBCO BusinessWorks to address the needs of the TIBCO BusinessWorks customer who wants to make use of the functions provided by TIBCO Foresight Instream and TIBCO Foresight Instream Translator in a user-friendly way.

TIBCO ActiveMatrix BusinessWorks Plug-in for EDI exposes the functions provided by TIBCO Foresight Instream and TIBCO Foresight Instream Translator by following three activities:

- Instream, page 7
- Translator, page 14
- CallBack, page 18

## Chapter 2 Foresight Plug-in Palette

This chapter describes the Foresight Plug-in Palette, which contains three activities for the TIBCO ActiveMatrix BusinessWorks Plug-in for EDI.

#### **Topics**

- Overview, page 6
- Instream, page 7
- Translator, page 14
- CallBack, page 18

#### **Overview**

Foresight Plug-in palette includes the following activites: Insteam, Translator, and CallBack, see Figure 3.

Figure 3 Foresight Plug-in Pallete

#### Instream

Instream Activity

Instream activity allows the plug-in to validate the input EDI data, split validation results into valid and invalid data, and use validation detail results to creat responses. It also supports substituting values in EDI data.

The following list shows functions provided by TIBCO Foresight Instream that Instream activity will provide:

- Validation
  - creates two files or output stream: detail results and summary results.
  - supports callback.
- Document Splitter
  - runs after the validation.
  - uses validation results to seperate the valid EDI from the invalid.
  - generates a file containing valid data, a file containing invalid data, and Docsplitter reports.
- Response Generation
  - runs after the validation.
  - uses validation results to create response.
- Data Swapper
  - replaces the value in a specified data element with another value in the EDI.
  - inserts a new segment into the EDI.
  - deletes a segment from the EDI.
  - creates a report of the data that was changed.

Each of functions mentioned above has a corresponding PDF file in the Instream's Doc directory, refer to the PDF file for more information for each of the function.

#### Configuration

Figure 4 shows a sample screen of the Instream activity's Configuration panel.

Figure 4 Figure

The configuration tab has the following fields.

Table 2 Foresight Instream Configuration Fields

Field	Global Var?	Description
Name	No	The name for the activity in the process definition.
Description	No	Short description of the activity.
Protocol		Specifies what EDI standards are supported.
		EDI standard available options are as follows:
		X12, EDIFACT, EDIFICE, FLATFILE, NCPDP, NSF, UB92, EANCOM.
HIPPA		This field is available only when the X12 protocol is selected in the Protocol drop-down list.
Input Mode		Specifies where the input data is stored. There are two options: File, Memory. Memory is normally the most efficient way of connecting, but large documents should be stored as files.
Output Mode		Specifies where the output data is stored. There are two options: File, Memory. Memory is normally the most efficient way of connecting, but large documents should be stored as files.
Document Level Validation		
Data Swapper		Check the Data Swapper checkbox to enable the Data Swapper fuction. This field is available only when the HIPPA checkbox is checked.  !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
Callback		, 11

Table 2 Foresight Instream Configuration Fields (Cont'd)

Field	Global Var?	Description
CallBack ShareResource		
Base Output File Name		

#### **DocumentSplitter**

Figure 5 shows a sample screen of the Instream activity's DocumentSplitter panel.

Figure 5 Figure

The DocumentSplitter tab has the following fields.

Table 3 Foresight Instream DocumentSplitter Fields

Field	Global Var?	Description
Document Splitter		
DS Report Type		This field is available only when the XX checkbox is selected and the XX is set to XXX.
Report Format		This field is available only when the XX checkbox is selected and the XX is set to XXX.
TPA		

#### GenerateResponse

Figure 5 shows a sample screen of the Instream activity's GenerateResponse panel.

Figure 6 Figure

The GenerateResponse tab has the following fields.

Table 4 Foresight Instream GenerateResponse Fields

Field	Global Var?	Description
Generate Response		
Generate277		
Generate824		
Generate997		
Generate999		
GenerateTA1		
GenerateCustomReport		
TPA		
Parameters		

#### Input

Figure 5 shows a sample screen of the Instream activity's Input panel.

Figure 7 Figure

The input for the activity is as follows.

Table 5 Foresight Instream Input Fields

Input Item	Data Type	Description
guideline_name	string	The name of the guideline that used for the validation.
ds_profile	string	(Optional)
DS_TPA_filename	string	(Optional)
RG_Template_Filename	string	
Instream_partnerautom ation_filename	string	(Optional)
RG_TPA_filename	string	(Optional)
input_file	string	This field appears only when the File mode is selected as the input mode in the Configuration panel. You need to provide the full path and name of the file in this field.
msg_content	string	This field appears only when the Memory mode is selected as the input mode in the Configuration panel. You need to provide the name or title for the input data.
output_directory	string	Path to the directory for which you wish to store the files.  !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

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Table 5 Foresight Instream Input Fields

Input Item	Data Type	Description
encoding	string	(Optional) The character encoding for text files. This element is only available when the Read as field on the Configuration tab is set to text. Encoding names supported by Java can be specified in this element. If this element is not specified, the default encoding of the Java Virtual Machine used by the process engine is used.

#### Output

Figure 5 shows a sample screen of the Instream activity's Output panel.

Figure 8 Figure

The output for the activity is as follows.

Table 6 Foresight Instream Output Fields

Output Item	Data Type	Description
loginResponse		
result		

Table 6 Foresight Instream Output Fields

Output Item	Data Type Description	
		_
Error Output		-
Lifoi Gatpat	Figure 5 shows a sample XXXX screen.	
	Figure 9 Figure	
		i
		į
		1
	The Error Output tab lists the exceptions that can be thrown by this activity.	
	Instream Exceptions	
Exception	Thrown when	
		—

#### **Translator**

Translator Activity

Translator activity xxxx

Xxxxxx

XXXXXX

Χ

XXXXX

#### Configuration

Figure 4 shows a sample XXX screen.

Figure 10 Figure

The configuration tab has the following fields.

Table 8 Foresight Translator Configuration Fields

Field	Global Var?	Description
Name	No	The name for the activity in the process definition.
Description	No	Short description of the activity.
Input Mode		
Output Mode		

Table 8 Foresight Translator Configuration Fields (Cont'd)

Field	Global Var?	Description
Operation Type		
Call Back Buffer		
Separator Group		

#### Input

Figure 5 shows a sample XXXX screen.

Figure 11 Figure

The input for the activity is as follows.

Table 9 Foresight Translator Input Fields

Input Item	Data Type	Description	

#### **Output**

Figure 5 shows a sample XXXX screen.

Figure 12 Figure

The output for the activity is as follows.

Table 10 Foresight Translator Output Fields

Output Item	Data Type	Description

#### **Error Output**

Figure 5 shows a sample XXXX screen.

Figure 13 Figure

The Error Output tab lists the exceptions that can be thrown by this activity.

Table 11 Foresight Translator Exceptions

Exception	Thrown when	
LoginException		
xxxxxxx NotFoundException		

#### **CallBack**

CallBack activity xxxx

Xxxxxx

XXXXXXX

XXXXX

#### Configuration

Figure 4 shows a sample XXX screen.

Figure 14 Figure

The configuration tab has the following fields.

Table 12 Foresight CallBack Configuration Fields

Field	Global Var?	Description
Name	No	The name for the activity in the process definition.
Description	No	Short description of the activity.
Input Mode		
Output Mode		
Operation Type		
Call Back Buffer		
Separator Group		

#### Code

Figure 5 shows a sample XXXX screen.

Figure 15 Figure

The input for the activity is as follows.

Table 13 Foresight CallBack Code Tab

Input Item	Data Type	Description

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## Chapter 3 Getting Started

This chapter describes the basic steps that are required to configure and run the TIBCO ActiveMatrix BusinessWorks Plug-in for EDI in TIBCO Designer.

#### **Topics**

- Overview, page 6
- Creating a Project, page 23
- Creating a Process, page 24
- Adding Activities to a Process, page 25
- Testing a Process, page 26
- Deploying a Process, page 27

## Overview

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## **Creating a Project**

## **Creating a Process**

## **Adding Activities to a Process**

## **Testing a Process**

## **Deploying a Process**

## Chapter 4 Using the Sample Project

This chapter describes XX sample projects packaged with TIBCO ActiveMatrix BusinessWorks Plug-in for EDI. Working through the sample projects will help you understand how TIBCO ActiveMatrix BusinessWorks Plug-in for EDI operates.

#### **Topics**

• Sample 1, page 30

## Sample 1

## Appendix A Electronic Data Interchange

This appendix provides a basic introduction of Electronic Data Interchange (EDI).

#### **Topics**

• Overview, page 32

#### **Overview**

what is EDI

Some standard and what they stand fo

#### **HIPPA**

#### **EDIFACT**

Electronic Data Interchange for Administration, Commerce, and Transport is a standard way textually describe information for communication between seperate computer systems.

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