

# **TIBCO Designer™ Add-in for TIBCO Business Studio™**

## **User's Guide**

*Software Release 1.5.0  
September 2013*

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# Contents

<b>Preface</b>	<b>v</b>
Changes from the Previous Release of this Guide	vi
Related Documentation	vii
TIBCO Designer Add-in for TIBCO Business Studio Documentation	vii
Other TIBCO Product Documentation	vii
Typographical Conventions	viii
Connecting with TIBCO Resources	x
How to Join TIBCOCommunity	x
How to Access TIBCO Documentation	x
How to Contact TIBCO Support	x
<b>Chapter 1 Overview</b>	<b>1</b>
Introduction	2
Starting TIBCO Designer Add-in for TIBCO Business Studio	3
TIBCO Designer Add-in for TIBCO Business Studio Interface	4
Working with TIBCO Designer Projects	8
<b>Chapter 2 Differences between TIBCO Designer and TIBCO Designer Add-in for TIBCO Business Studio</b>	<b>15</b>
Menu Bar	16
Differences in Version 1.2 and 1.3	26
Differences in Version 1.1 and 1.2	26
Toolbar	28
Static Toolbar	28
Dynamic Toolbar	28
TIBCO Designer Project Tree	29
Global Variables	32
Debugger	33
TIBCO Business Studio Features	34
Revision Control System	34
Debug Launch Configuration	34
Right-click Menu to Import File System Resources to the Project Tree	34

**Chapter 3 TIBCO BusinessWorks Example . . . . . 35**

Introduction . . . . . 36

    Overview of Example Process . . . . . 36

Prerequisites . . . . . 37

Starting the Design-time and Saving Your Project . . . . . 38

Creating the TestFileOperations Process . . . . . 39

Testing the TestFileOperations Process . . . . . 44

    Returning to Designer Perspective . . . . . 45

**Chapter 4 TIBCO Adapters Example . . . . . 47**

Overview . . . . . 48

    Sample Adapter Project . . . . . 48

Setup for Using the Adapter Tester . . . . . 52

**Chapter 5 Working with a Revision Control System . . . . . 53**

Using CVS . . . . . 54

**Index . . . . . 57**

# Preface

This preface gives some information on the TIBCO Designer Add-in for TIBCO Business Studio documentation set, related documentation, and on conventions used in TIBCO manuals.

## Topics

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- [Changes from the Previous Release of this Guide, page vi](#)
- [Related Documentation, page vii](#)
- [Typographical Conventions, page viii](#)
- [Connecting with TIBCO Resources, page x](#)

## Changes from the Previous Release of this Guide

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This section itemizes the major changes from the previous release of this guide.  
There are no changes in the guide for this release.

## Related Documentation

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This section lists documentation resources you may find useful.

### TIBCO Designer Add-in for TIBCO Business Studio Documentation

The following documents form the TIBCO Designer Add-in for TIBCO Business Studio documentation set:

- *TIBCO Designer Add-in for TIBCO Business Studio Installation* Read this manual for information on installing TIBCO Designer Add-in for TIBCO Business Studio on supported platforms.
- *TIBCO Designer Add-in for TIBCO Business Studio User's Guide* Read this manual for using the TIBCO Designer Add-in for TIBCO Business Studio interface.
- *TIBCO Designer Add-in for TIBCO Business Studio 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 Designer™
- TIBCO ActiveMatrix BusinessWorks™
- TIBCO ActiveMatrix BusinessWorks™ Service Engine

# Typographical Conventions




The following typographical conventions are used in this manual.

Table 1 General Typographical Conventions

Convention	Use
	<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"><li>• <b>Name</b> 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 &gt; All Programs menu.</li></ul>
<i>ENV_NAME</i>	
<i>TIBCO_HOME</i>	<ul style="list-style-type: none"><li>• <b>Path</b> The folder into which the product is installed. This folder 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.</li></ul>
<i>DABS_HOME</i>	<p>TIBCO Designer Add-in for TIBCO Business Studio installs into a directory within <i>TIBCO_HOME</i>. This directory is referenced in documentation as <i>DABS_HOME</i>. The value of <i>DABS_HOME</i> depends on the operating system. For example on Windows systems, the default value is C:\tibco\dabs\1.5.</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>
<b>bold code font</b>	<p>Bold code font is used in the following ways:</p> <ul style="list-style-type: none"><li>• In procedures, to indicate what a user types. For example: Type <b>admin</b>.</li><li>• In large code samples, to indicate the parts of the sample that are of particular interest.</li><li>• In command syntax, to indicate the default parameter for a command. For example, if no parameter is specified, MyCommand is enabled: MyCommand [<b>enable</b>   disable]</li></ul>



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"> <li>To indicate a document title. For example: See <i>TIBCO ActiveMatrix BusinessWorks Concepts</i>.</li> <li>To introduce new terms For example: A portal page may contain several <i>portlets</i>. Portlets are mini-applications that run in a portal.</li> <li>To indicate a variable in a command or code syntax that you must replace. For example: <code>MyCommand <i>pathname</i></code></li> </ul>
Key combinations	<p>Key name 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.

## Connecting with TIBCO Resources

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### How to Join TIBCOCommunity

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

### How to Access TIBCO Documentation

You can access TIBCO documentation here:

<http://docs.tibco.com>

### How to Contact TIBCO Support

For comments or problems with this manual or the software it addresses, 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 user name and password. If you do not have a user name, you can request for one.

## Chapter 1 **Overview**

This chapter introduces TIBCO Designer Add-in for TIBCO Business Studio.

### Topics

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- [Introduction, page 2](#)
- [Starting TIBCO Designer Add-in for TIBCO Business Studio, page 3](#)
- [TIBCO Designer Add-in for TIBCO Business Studio Interface, page 4](#)
- [Working with TIBCO Designer Projects, page 8](#)

## Introduction

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TIBCO Designer Add-in for TIBCO Business Studio allows the user to work with the TIBCO Designer interface and edit TIBCO Designer projects in TIBCO Business Studio. The Designer functionality is presented in the following manner:

- The Designer view as panels are represented as *views* in TIBCO Business Studio.
- The Designer menu will be available in a separate menu within TIBCO Business Studio.
- The Designer toolbar is divided into a static toolbar and a dynamic toolbar. The static tool bar is integrated with the TIBCO Business Studio toolbar. The dynamic toolbar is available in the DABS Main View.
- A new Designer perspective is created in TIBCO Business Studio which contains the Designer components.
- You will be able to work with any projects created using TIBCO Designer. You can create Designer projects for Adapter and TIBCO ActiveMatrix BusinessWorks, or import existing projects into your workspace.
- DABS Synchronize button has been introduced. This button provides a shortcut to refresh the contents visible in 'DABS Main View' and synchronize them to the contents in the 'Project Tree'. You can use this button when you import files into the project using any of Eclipse import wizards. If you make changes to the project, save the project and do not refresh or synchronize.

This chapter describes the layout of the TIBCO Designer Add-in for TIBCO Business Studio interface and provides information on working with projects.

[Chapter 2](#) describes the differences in the TIBCO Designer and Designer Add-in for Business Studio graphical user interface. Though TIBCO Designer Add-in for TIBCO Business Studio provides the same functionality as TIBCO Designer, there are differences in the way in which features and components are available and used.

[Chapter 3](#) describes the process of designing and testing a simple TIBCO ActiveMatrix BusinessWorks project using TIBCO Designer Add-in for TIBCO Business Studio.

[Chapter 4](#) describes the process of designing and testing a simple adapter project using TIBCO Designer Add-in for TIBCO Business Studio.

[Chapter 5](#) provides instructions on working with a revision control system (RCS).

## Starting TIBCO Designer Add-in for TIBCO Business Studio

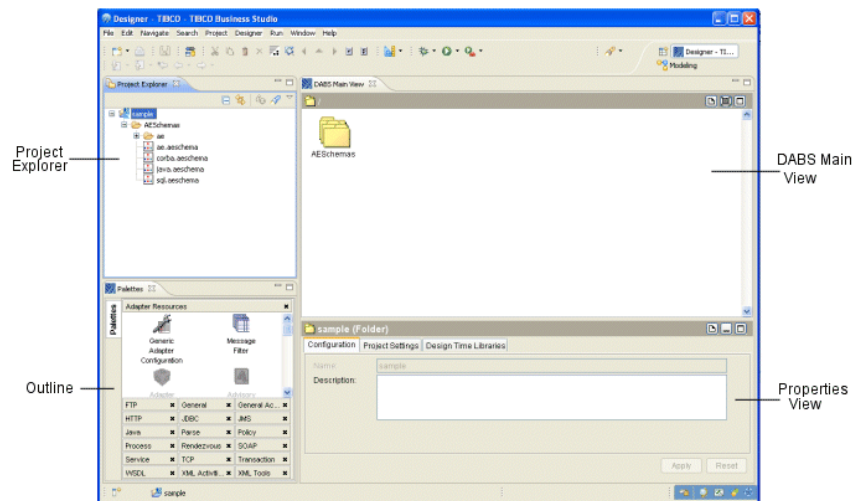
TIBCO Designer Add-in for TIBCO Business Studio provides a TIBCO Designer perspective within TIBCO Business Studio. You can create Designer projects for Adapter and TIBCO ActiveMatrix BusinessWorks, or import existing projects into your workspace.

To start TIBCO Designer Add-in for TIBCO Business Studio:

1. Launch TIBCO Business Studio or Eclipse on which TIBCO Designer Add-in for TIBCO Business Studio is installed.
2. Select a workspace in the Workspace Launcher dialog box. You can create a new workspace, accept the default or browse to choose an existing workspace.
3. Click **OK**.
4. If creating a new workspace, a Welcome screen is displayed.
5. Close the **Welcome** screen by clicking the 'X' located next to Welcome.

The following figure shows the default screen which opens in the Modeling perspective.

Figure 1 TIBCO Designer Add-in for TIBCO Business Studio: Default Perspective

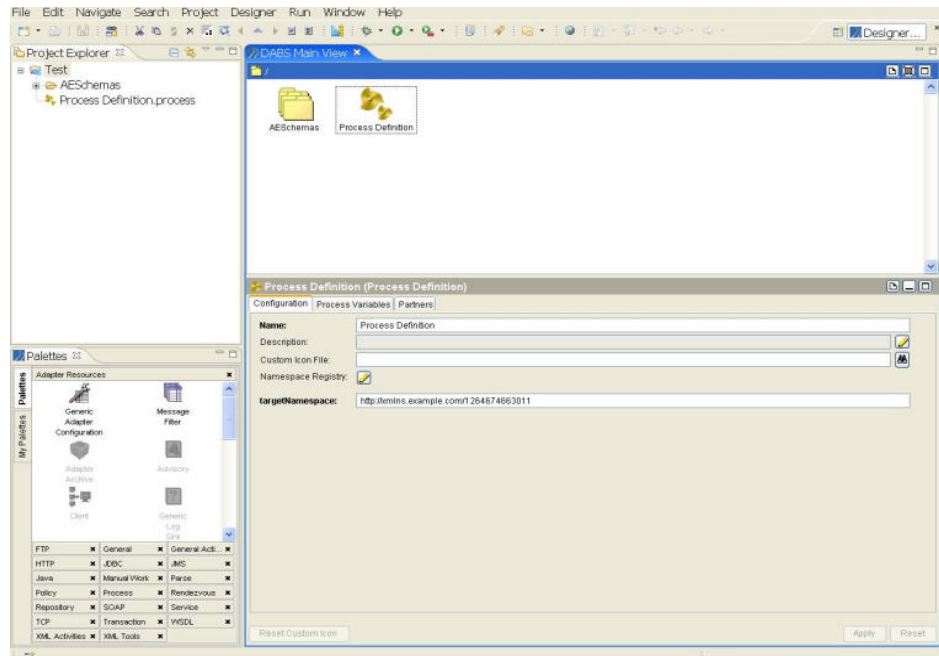


## TIBCO Designer Add-in for TIBCO Business Studio Interface

This section describes the layout and the locations of various components belonging to TIBCO Designer Add-in for TIBCO Business Studio.

The following figure shows the layout after you have created and opened a Designer project. The Designer menu bar is now visible and the perspective used is Designer-TIBCO.

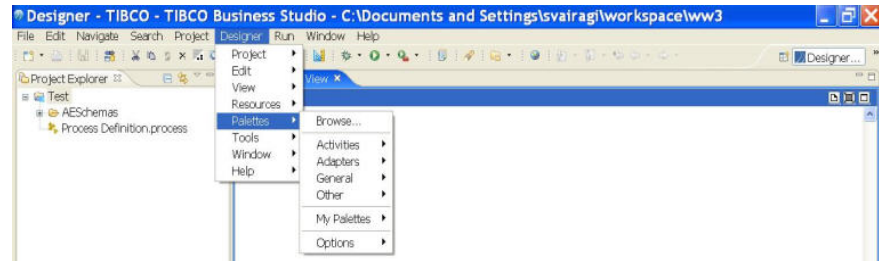
Figure 2 *Designer Perspective.*



To enable the Designer menu, Right-click the project in the Project Explorer and select **Open**.

The following figure shows the items contained in the Designer menu bar. For more information on the menu items refer to the *TIBCO Designer* documentation.

Figure 3 Designer Menu



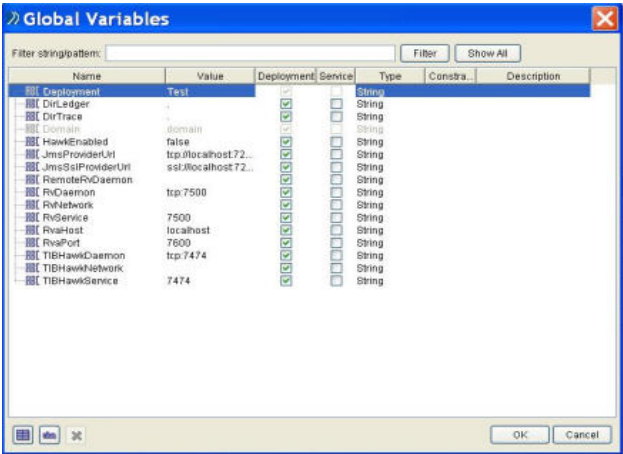
## Accessing Global Variables

To view the global variables click **Window > Show View > Global Variables**. The Global Variables view is opened in a separate tab in the Project Explorer window.

The variables displayed are for the project that is currently active. The name of the project is displayed above the list of variables as shown in the following figure.



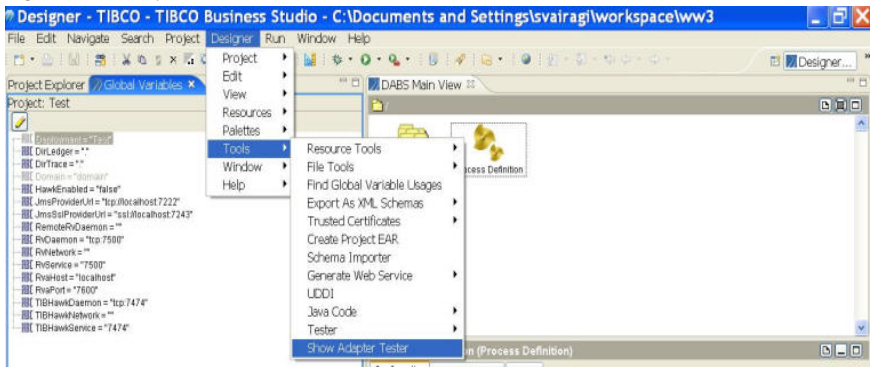
Figure 4 Global Variables Editor



Accessing the Adapter Tester

To use the Adapter Tester click **Designer > Tools > Show Adapter Tester**.  
For more information on using the Adapter Tester see [Chapter 4, TIBCO Adapters Example](#).

Figure 5 Adapter Tester.



Launching the Tester

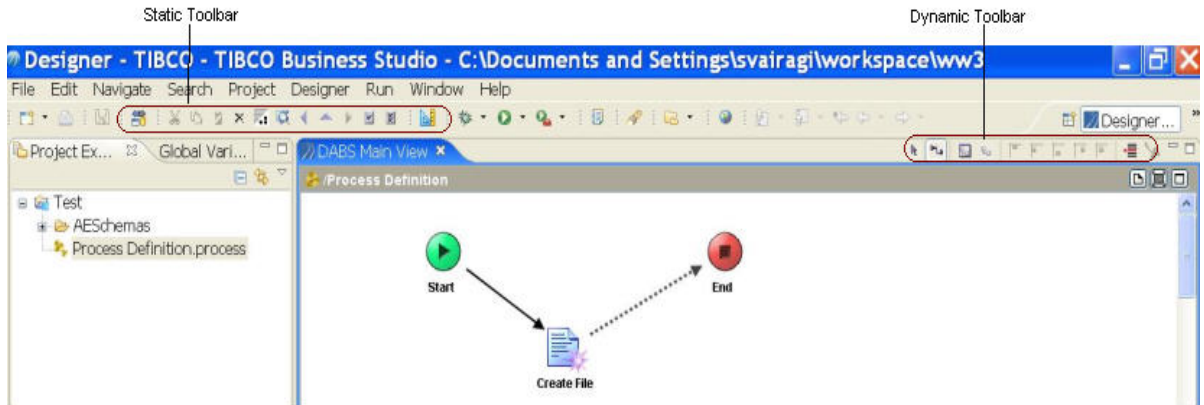
You can test process definitions in your project using the Tester. The Tester is accessed through the Eclipse Launch Configuration by selecting **Run > Run...**  
[Chapter 3, TIBCO BusinessWorks Example](#) provides detailed information on using the Tester.



## Toolbars

TIBCO Designer Add-in for TIBCO Business Studio provides two toolbars: static and dynamic. The contents of the dynamic toolbar change according to the resource selected. The following figure shows the location of both toolbars.

*Figure 6 Location of the Static and Dynamic Toolbar.*



See [Toolbar](#) on page 28 for more information.

## Working with TIBCO Designer Projects

This section describes how to create, import, and edit TIBCO Designer projects.

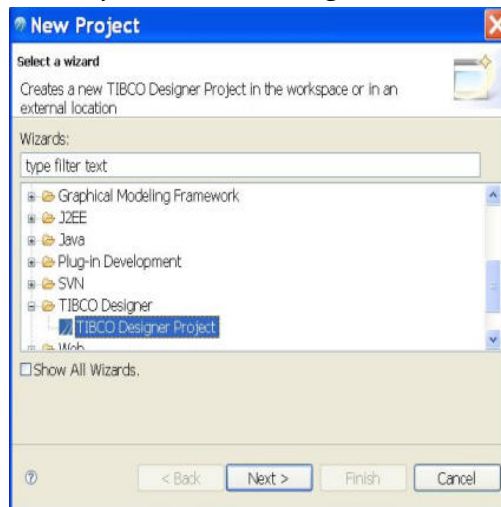


Before working with the projects, convert the standalone TIBCO Designer or TIBCO ActiveMatrix BusinessWorks projects to TIBCO Designer Add-in for TIBCO Business Studio.

### Creating a Project

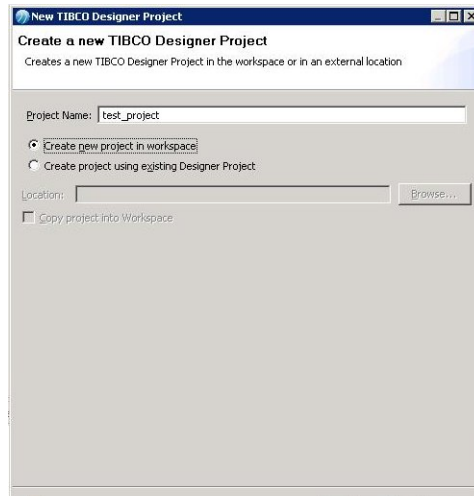
To create a project:

1. Select **File > New > Project > TIBCO Designer > TIBCO Designer Project**.



2. Click **Next**.

3. To create a new project, type a name in the Project Name field and click **Next**. Proceed to [step 5](#).



4. To use an existing TIBCO Designer project:
  - a. Select **Create project using existing Designer Project**.
  - b. Click the **Browse..** button to navigate to the directory where the project is located.
  - c. Click **OK**.
  - d. To copy the project to the workspace, select the **Copy project to Workspace** checkbox. This option allows you to create a local copy of the project in the workspace and edit this copy without making changes to the original project.
  - e. Click **Next**.
5. Click **Finish**.

From the Project Explorer view, right-click the project name and select **Open**. The TIBCO Designer menu option is now added to the menubar and the perspective switches to Designer-TIBCO.

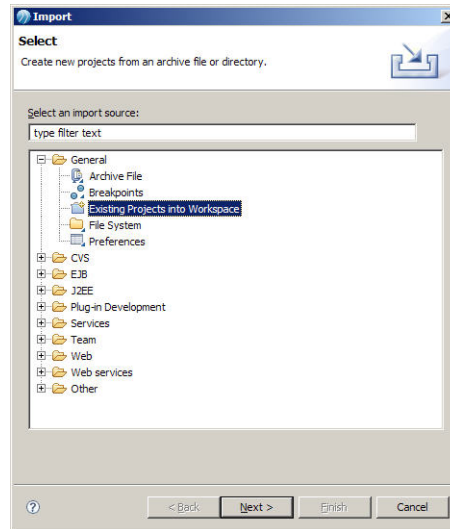
In addition to the Designer perspective, another available perspective is Debugger-TIBCO. This perspective contains the views used to debug TIBCO Designer projects. See [Launching the Tester, page 6](#) for more information.

## Importing a Project

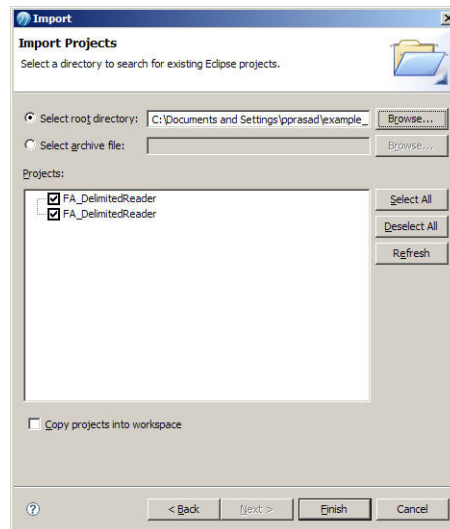
To import a TIBCO Designer project created using TIBCO Business Studio:

1. Click **File > Import ....**

2. Expand the **General** node.
3. Click **Existing Projects into workspace**.



4. Click **Next**.



5. Click **Browse...** located to the right of the Select root directory field.
  - a. Navigate to the directory where the project is located.
  - b. Click **OK**.

6. In the Projects area, select the checkboxes next to the projects you want to import.
7. Optional. Select the checkbox for **Copy projects into workspace** if you want to create a copy of the project in your workspace.
8. Click **Finish**.

## Adding Resources to a Project

After you have created or imported a project, you can start adding resources to your project.

To add a resource to your project:

1. Select a palette from the Palette View.
2. Drag and drop a resource from the palette to the DABS Main View.


Alternatively, from the DABS Main View, right-click and select **Add Resource** and choose the resource from the appropriate sub-menu.



On adding a resource, you must save the project for the newly added resources to appear in the Project Tree (unless auto-save has been enabled explicitly).

## Global Variables

Select **Window > Show View > Global Variables** to display the Global Variables view for your project.

Click the  icon to bring up the Global Variables editor.


See [Global Variables on page 32](#) and *TIBCO Designer* documentation for more information.

## Edit Operations

The Edit operations such as Cut, Paste, Copy, and Delete can be performed by selecting a resource and using the right-click menu.

See [Differences between TIBCO Designer and TIBCO Designer Add-in for TIBCO Business Studio on page 15](#) for more information.

## DABS Synchronize

The basic task of the  button is to provide a short and consistent way to access the **Designer > Resources > Refresh** menu option. While performing this refresh action, it also checks for the unsaved changes in the project and prompts the user accordingly. This button should not be used as a replacement for save

operations. If you have added, removed, or modified resources in the project using the DABS Main View, you must save the project. If resources are imported using the Eclipse Wizards, you can use the DABS Synchronize button to refresh and synchronize the project changes.

Figure 7 Project before Sync

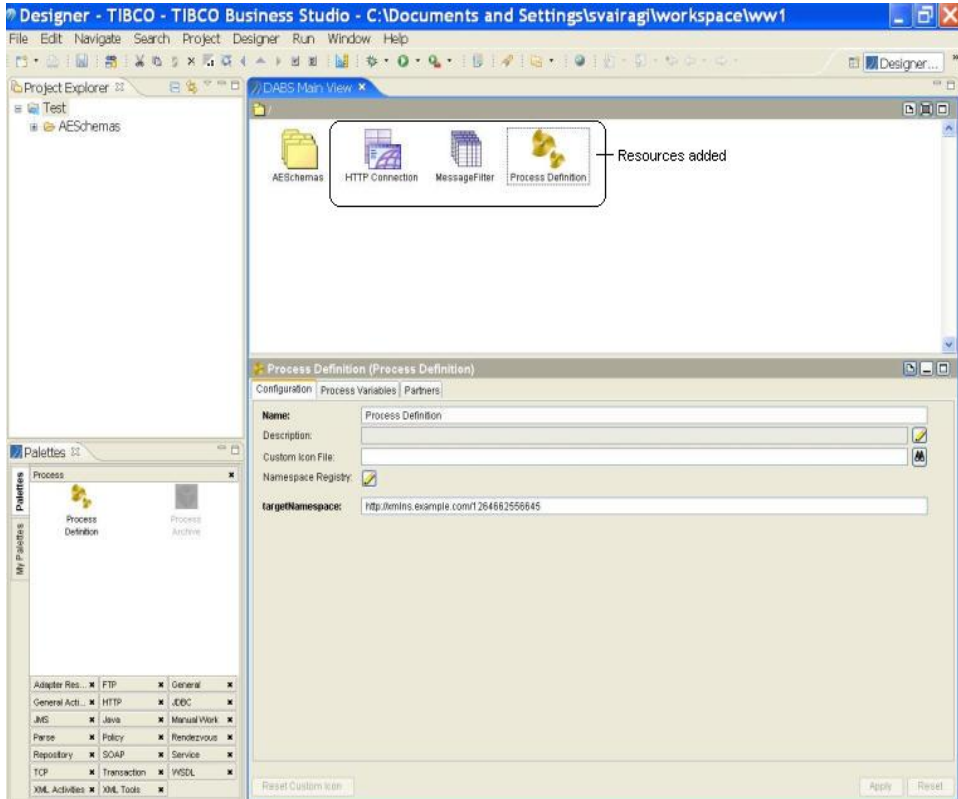
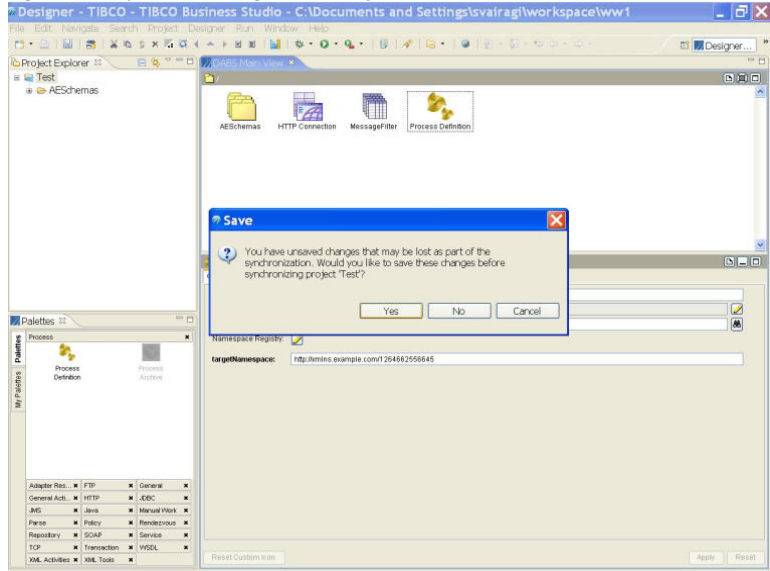
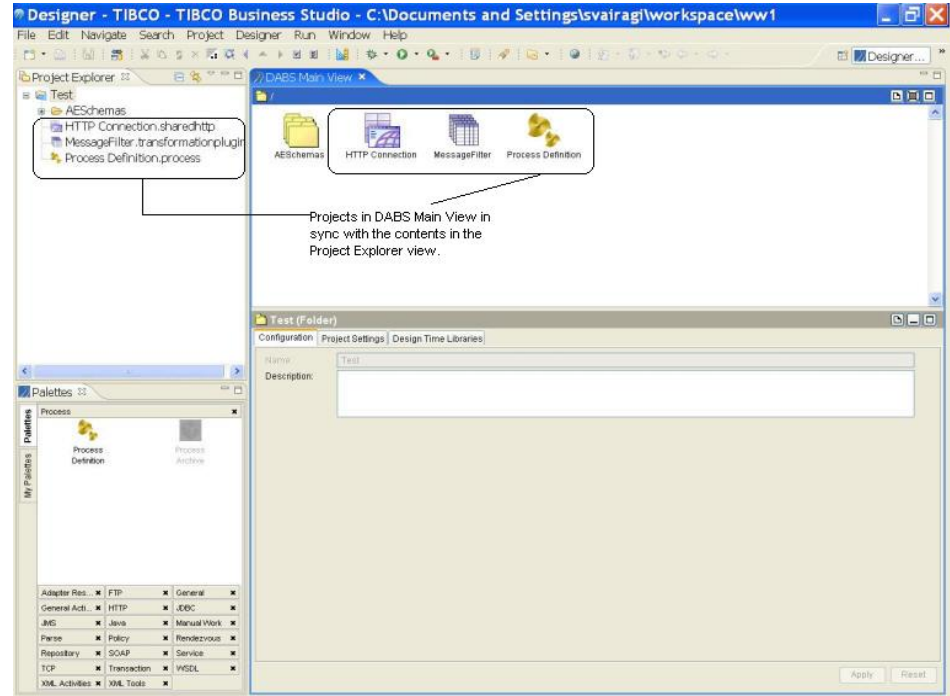


Figure 8 After Clicking DABS Sync Button



Project View after the DABS Synchronize action is shown in Figure 9 .

Figure 9 After Sync



If you select:

- **Yes to save** – unsaved changes will be first written to disk. Other changes will then be transferred from disk to the DABS Main View.
- **No to save** – unsaved changes will be lost as project will restore the state as is on disk with any new files directly available on disk.
- **Cancel** – save or refresh will be canceled.



The contents of the project in the DABS Main View must be kept in sync with the contents in the Project Explorer view as shown in [Figure 9](#).

### Autosave

From release 1.2.0 onwards, Autosave has been made property based and is DISABLED by default.

If this property is manually enabled, then your projects are automatically saved whenever there is a requirement of synchronizing the contents in the DABS Main View and Project Explorer View.

### Closing a Project

To close a project, from the Project Explorer view, right-click the project name, and choose **Close Project**.

### Deleting a Project

To delete a project, from the Project Explorer view, right-click the project name, close the project and then choose **Delete**.

Choose whether or not you want to delete the project from the location where it was saved.



## Chapter 2

# Differences between TIBCO Designer and TIBCO Designer Add-in for TIBCO Business Studio

When working with TIBCO Designer Add-in for TIBCO Business Studio, some of TIBCO Designer's features behave differently. This chapter describes the differences in the TIBCO Designer and TIBCO Designer Add-in for TIBCO Business Studio graphical user interface and features.

## Topics

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- [Menu Bar, page 16](#)
- [Toolbar, page 28](#)
- [TIBCO Designer Project Tree, page 29](#)
- [Global Variables, page 32](#)
- [Debugger, page 33](#)
- [TIBCO Business Studio Features, page 34](#)

## Menu Bar

The TIBCO Designer menu items are integrated with the TIBCO Business Studio menu bar and are available under the **Designer** menu item. [Table 2](#) lists the differences between the menu bar items available in TIBCO Designer and those available under the TIBCO Designer Add-in for TIBCO Business Studio Designer menu.

Table 2 Menu Bar Differences

TIBCO Designer Features	Behavior in TIBCO Designer Add-in for TIBCO Business Studio
Menu Item: Project	
New Project > New Empty Project	Available.  Navigate to File > New > Project and choose the TIBCO Designer > TIBCO Designer Project Wizard. Select the <b>Create new project</b> in workspace checkbox.  To copy the project to the workspace, select the <b>Copy project to Workspace</b> checkbox.
New Project > New from Template	Unavailable

Table 2 Menu Bar Differences

TIBCO Designer Features	Behavior in TIBCO Designer Add-in for TIBCO Business Studio
Open	<p>In order to open a TIBCO Designer project, there are two possibilities:</p> <ol style="list-style-type: none"> <li>1. Project not converted to a DABS project: <ul style="list-style-type: none"> <li>— Use the File &gt; New &gt; Project &gt; TIBCO Designer &gt; TIBCO Designer Project wizard.</li> <li>— Select <b>Create project</b> using an existing Designer Project and provide the location of the Designer project you want to open in the workspace.</li> </ul> </li> <li>2. Project converted previously to a DABS project: <ul style="list-style-type: none"> <li>— Use the Import &gt; General &gt; Existing Projects into Workspace wizard to bring these projects into the workspace.</li> </ul> </li> </ol> <p>Once the project has been brought into the workspace by either of the above two methods:</p> <ul style="list-style-type: none"> <li>— <b>Right-click &gt; Open Project</b> on a closed project to open and initialize the project. However, the contents of the project are not displayed.</li> <li>— <b>Right-click &gt; Open</b> on an open project displays the project.</li> </ul>
Reopen	<p>Unavailable.</p> <p>This functionality is not required as multiple projects can be opened simultaneously and the user can switch between the open projects. However, only one project can be active at any given time.</p>
Close	<p>Right-click the project name in the Project Explorer and select Close Project.</p>
Save	<p>Use the native Eclipse functionary from the menu File &gt; Save.</p>

Table 2 Menu Bar Differences



TIBCO Designer Features	Behavior in TIBCO Designer Add-in for TIBCO Business Studio
Save As	Unavailable. Use the native Eclipse functionary from the menu File > Export
Save As Template	Unavailable
Validate Project for Deployment	Designer > Project > Validate Project for Deployment
Load Full Project	Designer > Project > Load Full Project
Hide Library Resources	Designer > Project > Hide Library Resources
Import Full Project	Designer > Project > Import Full Project...
Export Full Project	Designer > Project > Export Full Project...
Import Project from File, Folder, URL,...	Designer > Project > Import Project from File, Folder, URL,...
Export Resources to File...	Designer > Project > Export Resources to File...
Print Setup	Designer > Project > Print Setup
Print	Designer > Project > Print
Save as JPEG	Designer > Project > Save as JPEG
Generate HTML Report	Designer > Project > Generate HTML Report
Exit	Use the native Eclipse functionary from the menu File > Exit
<b>Menu Item: Edit</b>	
Cut	Use right-click > Cut, or use the Cut icon  in the static toolbar.
Copy	Use right-click > Copy, or use the Copy icon  in the static toolbar.
Extended Copy	Designer > Edit > Extended Copy

Table 2 Menu Bar Differences



TIBCO Designer Features	Behavior in TIBCO Designer Add-in for TIBCO Business Studio
Paste	Use right-click > Paste, or use the Paste icon  in the static toolbar.
Delete	Use right-click > Delete, or use the Delete icon  in the static toolbar.
Export to Clipboard	Designer > Edit > Export to Clipboard
Import From Clipboard...	Designer > Edit > Import From Clipboard...
Find	Designer > Edit > Find
Find/Replace	Designer > Edit > Find/Replace
Preferences	<p>Designer &gt; Edit &gt; Preferences.</p> <p>Changing some preferences is not recommended as the change may result in unexpected behavior. For example, the Designer menu item disappears when the layout under Preferences &gt; View &gt; Layout is changed.</p>
<p>Preferences &gt; General &gt; Display Options</p> <p>When leaving a configuration pane with unsaved changes:</p> <ul style="list-style-type: none"> <li>• Ask user whether to save changes</li> <li>• Save changes without asking</li> <li>• Discard changes without asking</li> </ul>	<p>Designer &gt; Edit &gt; Preferences &gt; General &gt; Display Options</p> <p>When leaving a configuration pane with unsaved changes:</p> <ul style="list-style-type: none"> <li>• Ask user whether to save changes</li> <li>• Save changes without asking</li> <li>• Discard changes without asking</li> </ul>
<p>Preferences &gt; General &gt; User Directories</p> <ul style="list-style-type: none"> <li>• User palette directory</li> <li>• User log directory</li> <li>• Maximum size of log file (in MB)</li> </ul>	<p>Designer &gt; Edit &gt; Preferences &gt; General &gt; User Directories</p> <ul style="list-style-type: none"> <li>• User palette directory</li> <li>• User log directory</li> <li>• Maximum size of log file (in MB)</li> </ul>

Table 2 Menu Bar Differences

TIBCO Designer Features	Behavior in TIBCO Designer Add-in for TIBCO Business Studio
Preferences > General > Startup Options <ul style="list-style-type: none"> <li>• Load full project</li> <li>• Open most recent project on startup</li> <li>• Show save dialog for new project</li> <li>• Sort folders on loading</li> </ul>	Designer > Edit > Preferences > General > Startup Options <ul style="list-style-type: none"> <li>• Load full project</li> <li>• Open most recent project on startup</li> <li>• Show save dialog for new project</li> <li>• Sort folders on loading</li> </ul>
Preferences > View > Font The font preferences will be set the next time the application is launched. <ul style="list-style-type: none"> <li>• UI Font type</li> <li>• Script Font type</li> </ul>	Designer > Edit > Preferences > View > Font The font preferences will be set the next time the application is launched. <ul style="list-style-type: none"> <li>• UI Font type</li> <li>• Script Font type</li> </ul>
Preferences > View > Layout <ul style="list-style-type: none"> <li>• Use tabs</li> <li>• Use drop downs (requires document reopen)</li> </ul>	Designer > Edit > Preferences > View > Layout Editing the layout is not recommended.
Preferences > View > Palettes <ul style="list-style-type: none"> <li>• Minimum Selector Size</li> <li>• Initiate drag-n-drop through double-clicks</li> </ul>	Designer > Edit > Preferences > View > Palettes <ul style="list-style-type: none"> <li>• Minimum Selector Size</li> <li>• Initiate drag-n-drop through double-clicks</li> </ul> NOTE: You may have to expand the Palette view when the minimum selector size is increased.
Preferences > References > References <ul style="list-style-type: none"> <li>• Always ask me to perform reference checks and updates</li> <li>• Perform automatic reference checks and updates</li> <li>• Never perform references checks</li> </ul>	Designer > Edit > Preferences > References > References <ul style="list-style-type: none"> <li>• Always ask me to perform reference checks and updates</li> <li>• Perform automatic reference checks and updates</li> <li>• Never perform references checks</li> </ul>

Table 2 Menu Bar Differences

TIBCO Designer Features	Behavior in TIBCO Designer Add-in for TIBCO Business Studio
Preferences > File Aliases > File Aliases <ul style="list-style-type: none"> <li>• Filter</li> <li>• Alias, File Path</li> <li>• Import</li> <li>• Export</li> </ul>	Designer > Edit > Preferences > File Aliases > File Aliases <ul style="list-style-type: none"> <li>• Filter</li> <li>• Alias, File Path</li> <li>• Import</li> <li>• Export</li> <li>• New</li> <li>• Delete</li> </ul>
Preferences > Other > Application Paths <ul style="list-style-type: none"> <li>• Browser path</li> <li>• Text editor path</li> <li>• Java editor path</li> </ul>	Designer > Edit > Preferences > Other > Application Paths <ul style="list-style-type: none"> <li>• Browser path</li> <li>• Text editor path</li> <li>• Java editor path</li> </ul>
Preferences > XML Editing > General <ul style="list-style-type: none"> <li>• Determinism checking</li> <li>• Default encoding</li> <li>• Enable support logging</li> </ul>	Designer > Edit > Preferences > XML Editing > General <ul style="list-style-type: none"> <li>• Determinism checking</li> <li>• Default encoding</li> <li>• Enable support logging</li> </ul>
Preferences > XML Editing > XML Schema Editor <ul style="list-style-type: none"> <li>• Show documentation panel by default</li> <li>• Show overview panel by default</li> <li>• Target namespace prefix</li> <li>• Use tabs in generated source</li> <li>• Indent width</li> </ul>	Designer > Edit > Preferences > XML Editing > XML Schema Editor <ul style="list-style-type: none"> <li>• Show documentation panel by default</li> <li>• Show overview panel by default</li> <li>• Target namespace prefix</li> <li>• Use tabs in generated source</li> <li>• Indent width</li> </ul>

Table 2 Menu Bar Differences

TIBCO Designer Features	Behavior in TIBCO Designer Add-in for TIBCO Business Studio
Preferences > XML Editing > XML Instance Editor <ul style="list-style-type: none"> <li>Markup icons</li> <li>Content hints</li> <li>Errors</li> </ul>	Designer > Edit > Preferences > XML Editing > XML Instance Editor <ul style="list-style-type: none"> <li>Markup icons</li> <li>Content hints</li> <li>Errors</li> </ul>
Preferences > Restore Default Settings	Designer > Edit > Preferences > Restore Default Settings
<b>Menu Item: View</b>	
Large Icons	Designer > View > Large Icons
Small Icons	Designer > View > Small Icons
List	Designer > View > List
Details	Designer > View > Details
<b>Menu Item: Resources</b>	
Add Resource	Designer > Resources > Add Resource
Validate Resource	Designer > Resources > Validate Resource
Inspect Resource	Designer > Resources > Inspect Resource
Edit Extended Properties	Designer > Resources > Edit Extended Properties
Refresh	Designer > Resources > Refresh
Find References In	Designer > Resources > Find References In
Find References To	Designer > Resources > Find References To
View Library Conflicts	Designer > Resources > View Library Conflicts
<b>Menu Item: Palettes</b>	
Browse...	Designer > Palettes > Browse...



Table 2 Menu Bar Differences

TIBCO Designer Features	Behavior in TIBCO Designer Add-in for TIBCO Business Studio
Activities	Designer > Palettes > Activities (Consists a list of all the activities)
Adapters	Designer > Palettes > Adapters
General	Designer > Palettes > General
Other	Designer > Palettes > Other
My Palettes	Designer > Palettes > My Palettes
Options	Designer > Palettes > Options
<b>Menu Item: Multi-User</b> The Multi-User menu items are deprecated. Instead, you can use Eclipse Revision Control System. See <a href="#">Chapter 5, Working with a Revision Control System</a> for details on using the Eclipse Revision Control System.	
Add Resource to RCS	Removed
Acquire-Check out Resource	Removed
Acquire-Check out Resource Following References	Removed
Release-Revert Resource	Removed
View RCS Info for Resource	Removed
Check In Changes	Removed
Synchronize Project	Removed
<b>Menu Item: Tools</b>	
Resource Tools > Link Resource...	Designer > Tools > Resource Tools > Link Resource...
Resource Tools > Move Resource...	Designer > Tools > Resource Tools > Move Resource...
Find Global Variable Usages	Designer > Tools > Find Global Variable Usages

Table 2 Menu Bar Differences

TIBCO Designer Features	Behavior in TIBCO Designer Add-in for TIBCO Business Studio
Export as XML Schemas > Export AESchemas As XML Schemas	Designer > Tools > Export as XML Schemas > Export AESchemas As XML Schemas
File Tools > Change File Extension For Resource	Designer > Tools > File Tools > Change File Extension For Resource
File Tools > Change File Extension For All Of Same Type	Designer > Tools > File Tools > Change File Extension For All Of Same Type
File Tools > Copy A File From The Project	Designer > Tools > File Tools > Copy A File From The Project
File Tools > Copy A Directory From The Project	Designer > Tools > File Tools > Copy A Directory From The Project
Create Project EAR	Designer > Tools > Create Project EAR
Trusted Certificates > Import Into PEM Format	Designer > Tools > Trusted Certificates > Import Into PEM Format
Schema Importer	Designer > Tools > Schema Importer
Generate Web Service > From Process	Designer > Tools > Generate Web Service > From Process
Generate Web Service > From WSDL	Designer > Tools > Generate Web Service > From WSDL
UDDI	Designer > Tools > UDDI
Java Code > Compile All Code	Designer > Tools > Java Code > Compile All Code
Tester > Start	<p>Designer &gt; Tools &gt; Tester &gt; Start</p> <p>Instead, you can use the Tester available through the Eclipse Launch Configuration by selecting <b>Run &gt; Run....</b></p>
Tester > Stop	<p>Designer &gt; Tools &gt; Tester &gt; Stop</p> <p>Instead, you can use the Tester available through the Eclipse Launch Configuration by selecting <b>Run &gt; Run....</b></p>

Table 2 Menu Bar Differences

TIBCO Designer Features	Behavior in TIBCO Designer Add-in for TIBCO Business Studio
Tester > Pause	<p>Designer &gt; Tools &gt; Tester &gt; Pause</p> <p>Instead, you can use the Tester available through the Eclipse Launch Configuration by selecting <b>Run &gt; Run....</b></p>
Tester > Step Over	<p>Designer &gt; Tools &gt; Tester &gt; Step Over</p> <p>Instead, you can use the Tester available through the Eclipse Launch Configuration by selecting <b>Run &gt; Run....</b></p>
Tester > Step Into	<p>Designer &gt; Tools &gt; Tester &gt; Step Into</p> <p>Instead, you can use the Tester available through the Eclipse Launch Configuration by selecting <b>Run &gt; Run....</b></p>
Tester > Step Out	<p>Designer &gt; Tools &gt; Tester &gt; Step Out</p> <p>Instead, you can use the Tester available through the Eclipse Launch Configuration by selecting <b>Run &gt; Run....</b></p>
Tester > Show Current Job Location	<p>Designer &gt; Tools &gt; Tester &gt; Show Current Job Location</p> <p>Instead, you can use the Tester available through the Eclipse Launch Configuration by selecting <b>Run &gt; Run....</b></p>
Tester > Stop Current Job	<p>Designer &gt; Tools &gt; Tester &gt; Stop Current Job</p> <p>Instead, you can use the Tester available through the Eclipse Launch Configuration by selecting <b>Run &gt; Run....</b></p>
Show Adapter Tester	Designer > Tools > Show Adapter Tester
<b>Menu Item: Window</b>	
Show Console	Designer > Window > Show Console
<b>Menu Item: Help</b>	

Table 2 Menu Bar Differences

TIBCO Designer Features	Behavior in TIBCO Designer Add-in for TIBCO Business Studio
Designer Help	Designer > Help > Designer Help
Tip of the Day	Designer > Help > Tip of the Day
Help For	Designer > Help > Help For
About...	Designer > Help > About...
Runtime Environment...	Designer > Help > Runtime Environment...

Differences in Version 1.2 and 1.3

In version 1.3, the **Copy project to Workspace** checkbox is provided to copy a project to the workspace.

Differences in Version 1.1 and 1.2

Table 3 lists the differences between the release version 1.1 and 1.2 of the TIBCO Designer Add-in for TIBCO Business Studio.

Table 3 Differences in Versions 1.1 and 1.2

TIBCO Designer Add-in for TIBCO Business Studio 1.1	TIBCO Designer Add-in for TIBCO Business Studio 1.2
<b>Save</b>	
Auto-save available.	Auto-save and Auto-refresh has been made property driven. By default the property is set to false.  When adding/removing/renaming resources, you must manually save it to see the changes reflected in the project tree.
<b>Menu Item: Multi-user</b>	
Unavailable	Removed
<b>New Tools</b>	

Table 3 Differences in Versions 1.1 and 1.2

TIBCO Designer Add-in for TIBCO Business Studio 1.1	TIBCO Designer Add-in for TIBCO Business Studio 1.2
Unavailable	<b>generateManifest</b> - generates the manifest information/metadata for the <code>com.tibco.bsdesigner.plugin</code>
Unavailable	<b>enableTargetEclipse</b> - creates a LINK in the "Eclipse" installation directory specified as an argument while running the tool.
<b>Menu Item: Tool Bar</b>	
Designer > Resources > Refresh	Designer > Resources > Refresh  <b>DABS Synchronize</b> button provides a quick way to refresh the contents visible in the DABS Main View and synchronize them with the contents in the 'Project Tree'.
<b>Editor Area in TIBCO Business Studio</b>	
Editor View and Configuration View in Designer	DABS Main View

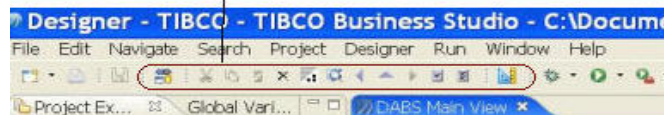
## Toolbar

TIBCO Designer Add-in for TIBCO Business Studio provides two types of toolbars: static and dynamic. The TIBCO Designer toolbar items are grouped based on their applicability to the resources.

### Static Toolbar

The static toolbar is integrated with the TIBCO Business Studio toolbar and is common to all the resources in the project.

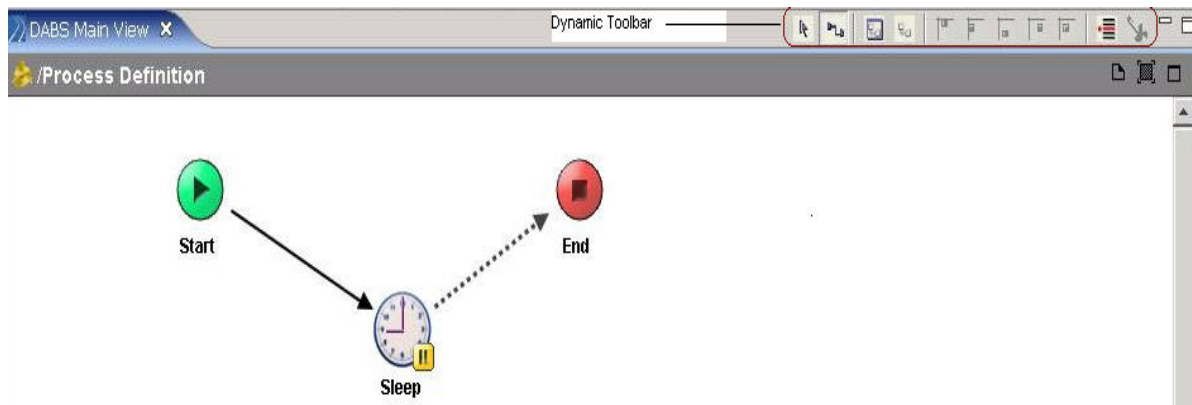
Figure 10 Static Toolbar



### Dynamic Toolbar

The dynamic toolbar is context-sensitive and is populated based on the resource selected in the DABS Main View. The dynamic toolbar is available in the DABS Main View. This aligns the toolbar with the TIBCO Business Studio (Eclipse) way of working. Figure 11 shows the dynamic toolbar for the Process Definition.

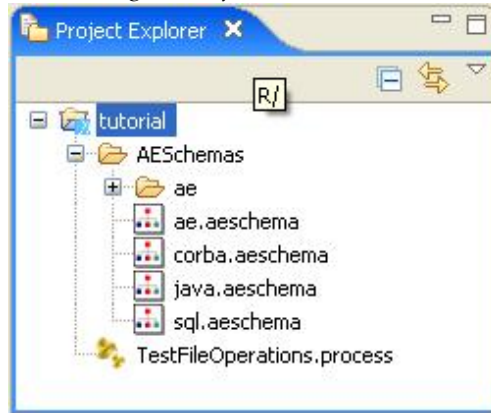
Figure 11 Dynamic Toolbar for Process Definition



## TIBCO Designer Project Tree

A new project type, TIBCO Designer Project, has been introduced in TIBCO Designer Add-in for TIBCO Business Studio and its project tree is integrated with the TIBCO Business Studio project tree. The add-in specific behavior is available only in the Project Explorer view of TIBCO Business Studio. The tree structure of a project of type TIBCO Designer as seen in the TIBCO Business Studio Project Explorer view is shown in [Figure 12](#).

*Figure 12 Typical TIBCO Designer Project Tree in TIBCO Business Studio*



[Table 4](#) lists the differences between the project tree structure for a TIBCO Designer project created using TIBCO Designer and the structure for a project created using TIBCO Designer Add-in for TIBCO Business Studio.

*Table 4 Differences in the Project Tree*

TIBCO Designer	TIBCO Designer Add-in for TIBCO Business Studio
Allows opening only one project at a time.	Multiple projects can be open. However, there is only one DABS Main view available and only one project can be active at any given time.

Table 4 Differences in the Project Tree

TIBCO Designer	TIBCO Designer Add-in for TIBCO Business Studio
<p>Selection of resources and updates to the panels are driven by single-clicks.</p>	<p>Single-click on a resource:</p> <ul style="list-style-type: none"> <li>— updates the selected resource.</li> <li>— displays the selected resource's parent and highlights the selected resource in the DABS Main View with a dotted line box.</li> </ul> <p>Double-click on a resource opens the selected resource in the DABS Main View.</p>
<p>You can drag and drop resources on the project tree.</p>	<p>Unavailable.</p> <p>On adding the resource and saving the project, the new resource will reflect in the project tree.</p>
<p>Provides right-click menu on the project tree to perform the following operations:</p> <ul style="list-style-type: none"> <li>• Cut, Copy, Paste, Delete, Rename</li> <li>• Inspect Resource, Move Resource, Link Resource</li> <li>• New folder, Add Resource options</li> <li>• Add Resource to RCS, Acquire-Check out Resource, Acquire-Check out Resource Following References, Release-Revert Resource, View RCS Info For Resource</li> <li>• Toggle Custom Icon Support, Expand All, Collapse All</li> <li>• Tools or Multi-user &gt; Generate Web Service</li> </ul>	<p>Provides right-click menu on the project tree to perform the following operations:</p> <ul style="list-style-type: none"> <li>• Cut, Copy, Paste, Delete, Rename</li> </ul> <p>Rest of the options are unavailable from the right-click menu on the project tree. You can perform these operations using the drag-and-drop mechanism, along with the options available in the menu bar and toolbar.</p>



Table 4 Differences in the Project Tree

TIBCO Designer	TIBCO Designer Add-in for TIBCO Business Studio
<p>A typical project consists of the following on disk:</p> <ul style="list-style-type: none"> <li>• AESchemas folder</li> <li>• Default Vars folder</li> <li>• .vcrepo DAT file</li> </ul>	<p>A typical project consists of the following:</p> <ul style="list-style-type: none"> <li>• AESchemas folder</li> <li>• Default Vars folder</li> <li>• .vcrepo DAT file</li> <li>• .project file</li> </ul>
<p>Browsing and accessing the contents of the folders in the Project panel is available upto the data/scalar/sequence level.</p>	<p>Browsing and accessing the contents of the folders in the Project panel is available only upto the .aeschema folder level. You can access the contents of this folder in the Editor view.</p> <p>The leaf nodes on the project tree correspond to a file on the disk. Any content inside the file will not be represented as nodes on the project tree. For example, adapter configuration files and WSDLs.</p>
<p>The file extension of tree items is not displayed on the project tree.</p>	<p>The file extension of tree items is displayed on the project tree. For example, ae . aeschema</p>

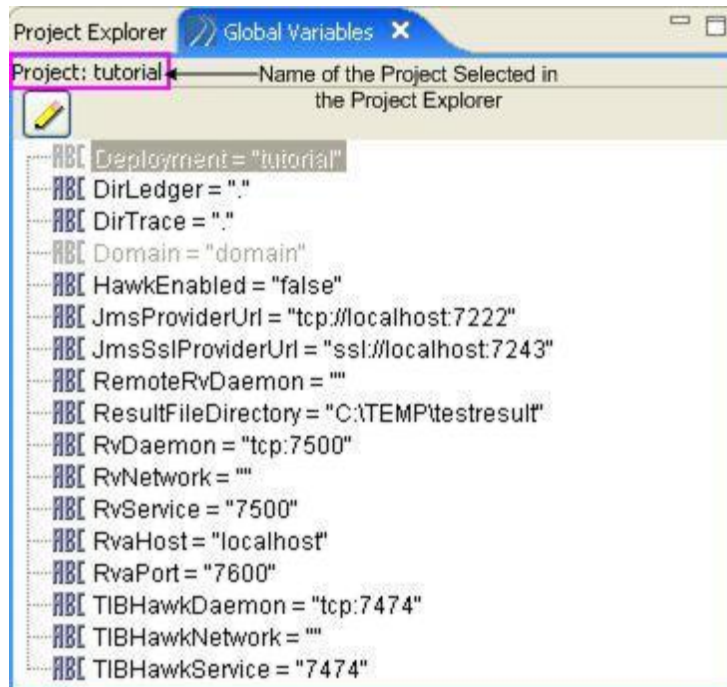
## Global Variables

The Global Variables view is available separately and is not displayed by default. Select the menu item **Window > Show View > Global Variables** to display the Global Variables view.

Although multiple projects can be open at a given time, a single Global Variables view is available which displays the global variables for the currently active project, that is, the project selected in the Project Explorer. The Global Variable view is updated when a project is selected in the Project Explorer.

A label at the top of the Global Variables view displays the name of the project whose global variables have been displayed as shown in [Figure 13](#).

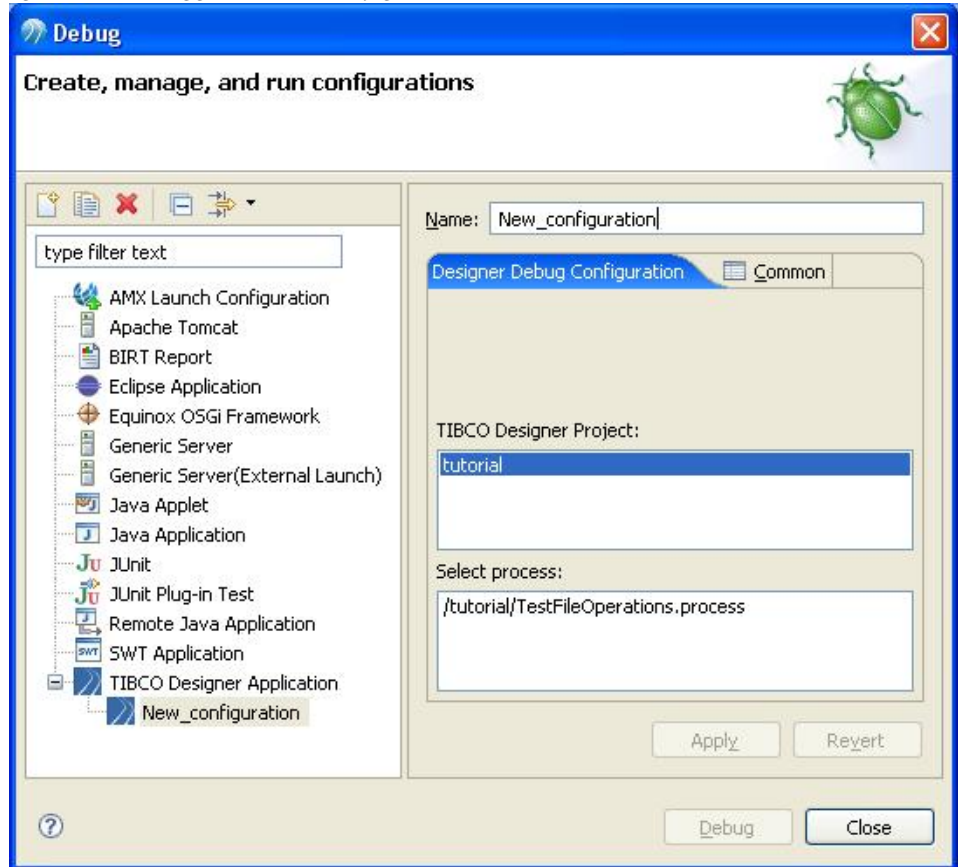
Figure 13 Global Variables View



## Debugger

The ActiveMatrix BusinessWorks Debugger (Tester) is integrated with the TIBCO Business Studio Launch Configuration.

Figure 14 Debugger Launch Configuration



When the project you want to run in the test environment is selected, TIBCO Designer Add-in for TIBCO Business Studio makes this project active and opens the process selection dialog box for the project.

You can save the debug launch configuration. You can reuse the saved configuration to run the project later, without having to recreate the launch configuration. Use the TIBCO Designer Debugger perspective for all debugging related activities.

## TIBCO Business Studio Features

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Following are the TIBCO Business Studio features that are available when working with a project of type TIBCO Designer.

### Revision Control System

The Revision Control System (RCS) available with TIBCO Business Studio can be used with SVN to store projects in SVN and also synchronize or checkout the projects from the SVN location. See [Chapter 5, Working with a Revision Control System](#) for details on using the Eclipse Revision Control System.

### Debug Launch Configuration

The debug launch configuration can be saved and re-used whenever the same configuration is required; thus reducing the need to create a new debug launch configuration for every run.

### Right-click Menu to Import File System Resources to the Project Tree

TIBCO Business Studio allows you to import file system resources into the project tree by using the **Right-click > Import** menu. This feature is used to:

- Import existing TIBCO Designer Projects into the workspace.
- Import files such as WSDLs, schemas, etc into the project.

Use the DABS Synchronize button when making use of this import.

## Chapter 3

**TIBCO BusinessWorks Example**

This chapter walks you through the process of designing and testing a simple project using TIBCO Designer Add-in for TIBCO Business Studio.

## Topics

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- [Introduction, page 36](#)
- [Prerequisites, page 37](#)
- [Starting the Design-time and Saving Your Project, page 38](#)
- [Creating the TestFileOperations Process, page 39](#)
- [Testing the TestFileOperations Process, page 44](#)

## Introduction

---

This tutorial steps you through the creation of a simple TIBCO ActiveMatrix BusinessWorks project using TIBCO Designer Add-in for TIBCO Business Studio. The goal of this tutorial is to introduce you to the TIBCO Designer Add-in for TIBCO Business Studio design-time features using the Design and Testing phases of typical project lifecycle.

The project in this tutorial is fairly simple so that you can focus on how to use the TIBCO Designer Add-in for TIBCO Business Studio design-time. After completing the tutorial, you can create your own TIBCO ActiveMatrix BusinessWorks projects using the TIBCO Designer Add-in for TIBCO Business Studio design-time.

Before starting this tutorial, get familiar with TIBCO ActiveMatrix BusinessWorks terminology and basic concepts.

## Overview of Example Process

The project you create watches a directory for a specific file. When the file is created, modified, or deleted, a new file is created in a separate directory which contains the result files. The new file is named `TestResult-action.txt`.

This tutorial is not intended to illustrate every aspect of TIBCO Designer Add-in for TIBCO Business Studio, so only a subset of the available features will be used.

The tutorial steps you through the following tasks:

- [Starting the Design-time and Saving Your Project](#)
- [Creating the TestFileOperations Process](#)
- [Testing the TestFileOperations Process](#)

## Prerequisites

---

To perform the tasks in this tutorial, you must have installed and properly configured the following software:

1. All components of TIBCO Runtime Agent (TRA).
2. All components of TIBCO Designer Add-in for TIBCO Business Studio.
3. All components of TIBCO ActiveMatrix BusinessWorks.

## Starting the Design-time and Saving Your Project

---

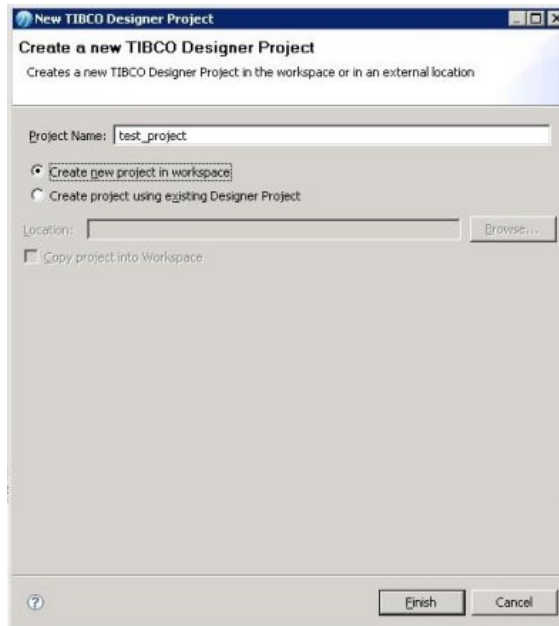
To start TIBCO Designer Add-in for TIBCO Business Studio and save your project, follow these steps:

1. From the **Start** menu, choose **Programs > TIBCO > TIBCO Business Studio > TIBCO Business Studio**

The Workspace Launcher window displays if you are launching TIBCO Business Studio for the first time, or if the option to use default workspace has not been set.

In this example, the default workspace is set to C:\TEMP\workspace.

2. Select **File > New > Project > TIBCO Designer > TIBCO Designer Project**.
3. Click **Next**.
4. Type a name in the Project Name field, for example *tutorial*, and click **Next**.
5. To create a new TIBCO Designer Project, select the **Create new project in workspace** option.



6. Click **Finish**.

You are now ready to create a process definition using TIBCO Designer Add-in for TIBCO Business Studio.



## Creating the TestFileOperations Process

This section guides you through creating a simple process definition using TIBCO Designer Add-in for TIBCO Business Studio. The process, which is named `TestFileOperations`, polls a directory for a specified file and writes a new file to a specified result directory each time the file changes. The new file's name includes the type of change that occurred to the original file (create, modify, or remove). The contents of the changed file is then written to the new file, and the time the change in the file occurred is appended to the end of the contents. The time of the file change is represented as the number of milliseconds since January 1, 1970.


For example, if the text in the changed file is "The cherry blossoms are beautiful." the content of the new file will be "The cherry blossoms are beautiful.  
1017163931036"



Before you start to design the process, create a directory for the test data. Then create a text file with some simple content (for example, "Roses are red and violets are blue.") in the directory. This file will be needed by the `File Poller` activity. This example uses the directory `C:\TEMP\testdata` and the file `PolledFileTest.txt`. The result directory is specified in a global variable and can be modified before running the process.

### To create the TestFileOperations process, follow these steps:



1. Open the TIBCO Designer project created in the previous section (for example tutorial) in the TIBCO Designer perspective. You can do so in the following ways:
  - Right-click the project in the Project Explorer and select **Open**.
  - Double-click the project in the Project Explorer.
2. In the palette view, select the Process palette.
 

If no palettes are displayed in the palette view, select the menu **Designer > Palettes > Options > Switch Palette Mode** to display the palettes.
3. From the palette view, drag and drop a Process Definition resource into the DABS Main view. You can also add a resource using the **Right-click > Add Resource** menu in the DABS Main view.
4. In the DABS Main view, type the name `TestFileOperations` in the **Name** field to rename the process. Then click **Apply**.
5. Save your project by choosing **File > Save** from the menu or by clicking the  icon in the toolbar.

**To set the result file directory in the Global Variables view, follow these steps:**

1. To open the Global Variables view, select **Window > Show View > Global Variables** in the menu bar.

The Global Variables view is opened beside the Project Explorer.

2. In the Global Variables view, click the  icon to open the Global Variables editor.
3. Click the  icon to add a global variable. Edit the newly added global variable's name and value. (for example, the global variable name is set to `ResultFileDirectory` and value is `C:\TEMP\testresult`)
4. Click **OK** to save and close the Global Variables editor.
5. Save the project.

**To add activities to the process, follow these steps:**

1. Double-click the `TestFileOperations` process in the Project Explorer to open the process in the DABS Main view.

The Start and End activities should be displayed in the DABS Main view.

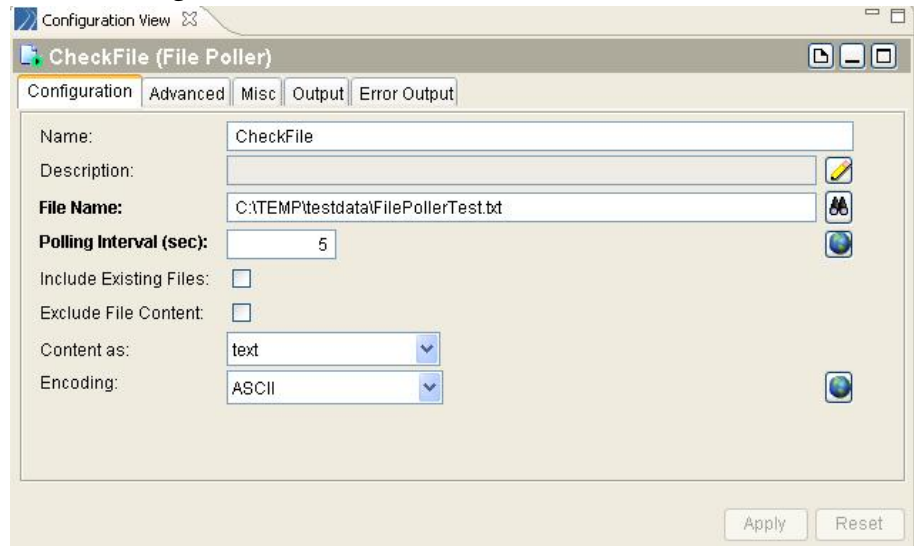
2. Select the File palette in the palette view.




If the File palette is not one of the available palettes, choose **Designer > Palettes > Activities > File** to make the palette available.

3. Drag and drop the File Poller activity into the Editor view. The Start activity is replaced by the File Poller activity.
4. With the File Poller still selected, enter the following values in the DABS Main view:
  - a. Name the File Poller `CheckFile`.
  - b. Click **Browse** to the right of the File Name field and select the file you want to poll. Use the Select File dialog to locate the directory and file you created. (for example, `C:\TEMP\testdata\FilePollerTest.txt`)
  - c. Accept default values for the Polling Interval, Include Existing Files, and Exclude File Content fields. The **Content as** field is set to `text` by default.

Select the appropriate encoding for your operating system in the **Encoding** field.



- d. Click **Apply**.
5. Drag and drop a Write File activity into the DABS Main view and place it to the right of the CheckFile (File Poller) activity and before the End activity.
6. Name the Write File activity WriteTestResult, then click **Apply**.
7. In the DABS Main view, select the **Create transition** icon  on the dynamic toolbar.
8. Select the CheckFile process starter and drag a transition to the WriteTestResult. Then connect the WriteTestResult and End activities in the same manner.



The result should appear as follows:



9. Choose **File > Save** from the menu.

The process now includes appropriately connected activities. However, to include information about the name and content of the result files, the data flow between the activities has to be mapped.

**To map the data flow between activities, follow these steps:**

1. In the DABS Main view, choose the Select icon  on the dynamic toolbar, if it is not already selected.
2. Select the WriteTestResult activity, then click the Input tab in the configuration view.
3. Map the data as follows:
  - a. Select the fileName field in the Activity Input pane and click the XPath Formula Builder icon .
  - b. In the XPath Formula Builder, drag a concat function into the XPath formula panel.
  - c. Add "\TestResult-" between <<string1>> and <<string2>> and ".txt" after <<string2>> so that the new file is created in the specified directory, with name TestResult-action.txt.
  - d. Select \$\_globalVariables/GlobalVariables/ResultFileDirectory and drag it over the <<string1>>.
  - e. Drag \$CheckFile/EventSourceOuputTextClass/action over <<string2>>.

The formula should look like this:

```
concat($_globalVariables/ns1:GlobalVariables/
ResultFileDirectory, "\TestResult-",
$CheckFile/ns:EventSourceOuputTextClass/action, ".txt" )
```

- f. Click **Apply** to accept the formula and dismiss the XPath Formula Builder by clicking **Close**.
- g. Select the **textContent** field in the Activity Input pane and click the XPath Formula Builder icon.
- h. In the XPath Formula Builder, drag a concat function into the XPath formula panel.
- i. Add " ", between <<string1>> and <<string2>> so that there is a space between the two strings in the concat function.
- j. In the Process Data pane, drag \$CheckFile/EventSourceOutputTextClass/fileContent/textContent over <<string1>>.
- k. Drag \$CheckFile/EventSourceOutputTextClass/timeOccurred over <<string2>>.

The formula must look like:

```
concat($CheckFile/EventSourceOutputTextClass/fileContent/
textContent, " ", $CheckFile/EventSourceOutputTextClass/
```


```
timeOccurred )
```

1. Click **Apply** to accept the formula and dismiss the XPath Formula Builder by clicking **Close**.
4. Click **Apply** on the activity's Input tab, then choose **File > Save** to save your project.



You are now ready to test the project.

## Testing the TestFileOperations Process


You can test the TestFileOperations process directly from the Tester or by using the Eclipse Launch Configuration. This example walks you through the steps to test the process using the Eclipse Launch Configuration in TIBCO Business Studio. Running the process model in the test environment allows you to make sure the process works correctly before you deploy it. Follow these steps:

1. Click the Designer Debug Breakpoint Action icon  in the toolbar.
2. In the window that appears, choose **Select All**, then click **OK**.

Breakpoints allow you to step through the process. Stepping helps you see what happens when each activity executes.

3. To load the TIBCO Debugger perspective, follow these steps:
  - a. Click the Run icon  in the toolbar or the menu item **Run > Run....**
  - b. To create a new debug launch configuration, select TIBCO Designer Application in the Debug window and click on the New launch configuration icon .
  - c. The Select Designer Project pane lists all the available projects in the workspace. Select the project that is to be run in the debugger. (for example, tutorial)
  - d. The Select Process pane lists all the processes available in the selected project. Select the process that is to be run. (for example, TestFileOperations)
  - e. Click **Apply** and then click **Run**. The selected project is opened in the TIBCO Debugger perspective.
4. In the process selection window that appears, the TestFileOperations process is selected by default. Click **Load and Start Current**.


The process is now in Test mode.

5. Make a change to the polled file to start the process.
6. Once the CheckFile process starter is highlighted (indicating a process has started), click the Step to next activity icon  to step through the process.

TIBCO BusinessWorks creates an output file named `TestResult-modify.txt` after you have stepped into the WriteTestResult activity and writes the appropriate text to the file.


The text must be the text of the modified file followed by the time, in milliseconds, since January 1, 1970.

You can click on each activity in the process definition as you step through it. If you click on the Process Data or Output tabs for the activity, you will see the actual process data and output of the activity as the process executes.

7. Next, delete `FilePollerTest.txt`.
8. Step through the process once more.  
TIBCO ActiveMatrix BusinessWorks creates a file `TestResult-remove.txt`. The content of `TestResult-remove.txt` is just the time of modification, because the polled file no longer exists.
9. Click the Stop Test Mode icon  to stop the process running in debug mode.

## Returning to Designer Perspective

After stopping the running TestFileOperations process, you must remove the break points and return to the Designer perspective where you can edit the process. To clear the breakpoints and return to the Designer perspective:

1. Click the Designer Debug Breakpoint Action icon  in the toolbar.
2. In the window that appears, select **Clear All**, then click **OK**.  
The break points are cleared.
3. To load the TIBCO Designer perspective:
  - a. Select the menu item **Window > Open Perspective > Designer - TIBCO**  
The Designer perspective is loaded.

OR

  - b. Click the **Designer - TIBCO perspective** button available just above the Editor view's top right corner to open the Designer perspective.





## Chapter 4 **TIBCO Adapters Example**

This chapter walks you through the process of designing and testing a simple adapter project using TIBCO Designer Add-in for TIBCO Business Studio.

### Topics

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- [Overview, page 48](#)
- [Sample Adapter Project, page 48](#)
- [Setup for Using the Adapter Tester, page 52](#)

## Overview

---

This chapter walks you through the process of creating and testing a simple adapter project. This example uses TIBCO ActiveMatrix Adapter for Files. Some of the resources used are specific to this adapter but help illustrate the design-time environment of TIBCO Designer Add-in for TIBCO Business Studio and also the use of the Adapter Tester.

### Sample Adapter Project

The project that will be created in the following sections will read and publish contents of the specified file. The file is *c:\FileAdapter\_Example\inputfile.txt*. Create this folder and the input file before proceeding with the example.

#### Create the input file

The input file is a comma delimited file and contains the following text:

```
BookName,User's Guide  
BookName, Release Notes
```

#### Create the project

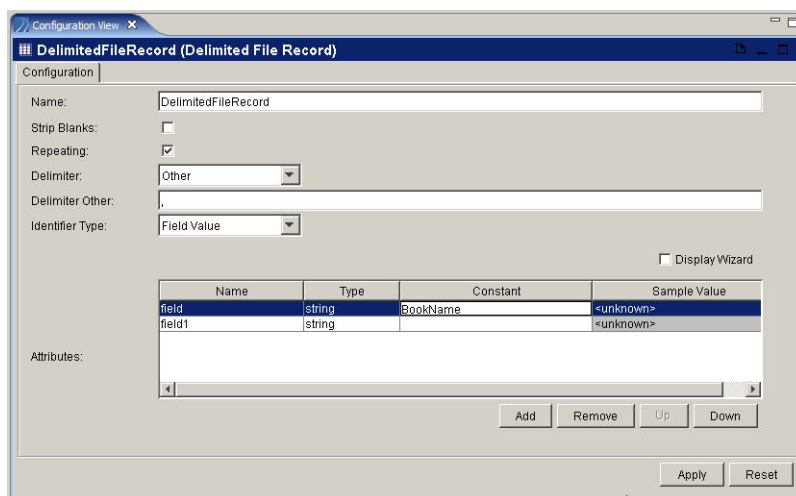
In this project, we will first create the schema for the input file, then create and configure the publication service, and lastly assign the schema to the publication service.

1. Create a project, **AdapterExample**.

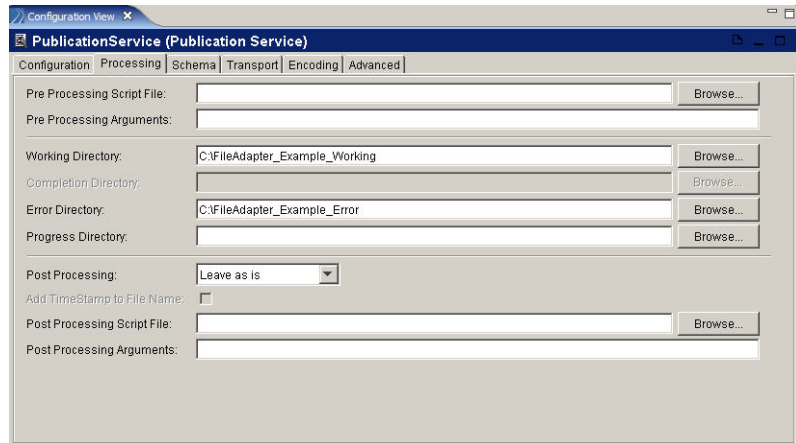
See [Chapter 1, Overview](#) for instructions on launching TIBCO Designer Add-in for TIBCO Business Studio and creating a project.

2. Right-click the project name and select **Open**. The Designer menu is now added to the menubar and also the perspective changes to Designer-TIBCO.
3. Drag and drop a **File Adapter Configuration** from the Palettes view to the Editor View.
4. In the Logging tab, select the checkbox for Log Debug Messages.
5. Double-click the **File Schemas** folder and then drag and drop a **Read Schema** resource to the Editor View.
6. Double-click the Read Schema and then drag and drop a **Delimited File Record** from the Palettes View to the Editor View.

7. In the Configuration tab of the Delimited File Record resource
  - a. Select the checkbox for Repeating.
  - b. Choose **Other** from the drop-down list for Delimiter.
  - c. Type ',' (comma) in the Delimiter Other field.
  - d. Use the **Add** button to add two rows to the Attributes table.
  - e. Edit the Constant field for the first record and type **BookName**.
  - f. Click **Apply**.



8. Click **FileAdapterConfiguration.adfiles** in the Project Explorer view.
9. Drag and drop a Publication Service from the Palettes views to the Editor View.
10. In the Configuration tab of the publication service,
  - a. Click **Browse** next to the Input Directory field to locate the directory and the file that you created (*c:\FileAdapter\_Example*).
  - b. Type the name of the file, `inputfile.txt`.
11. In the Processing tab
  - a. Specify the Working Directory and the Error Directory.
  - b. Select **Leave as is** in the drop-down list of the Post Processing field.



12. In the Schema tab, click the **Add**  icon and select the schema created earlier from the **Select a Resource** dialog box.

13. Click **Apply**.

14. Save the project.

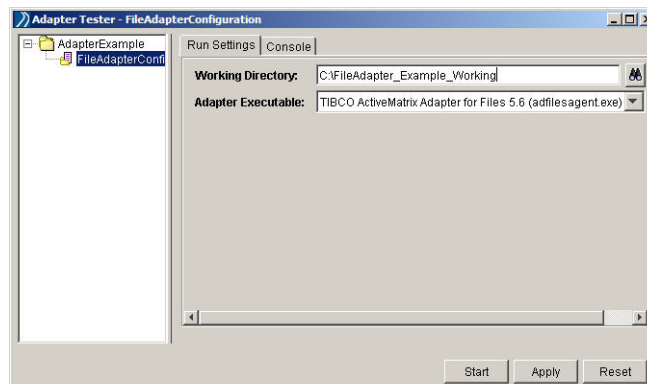
You are now ready to test the project.

### Test the project

15. Click **Designer> Tools> Show Adapter Tester**.

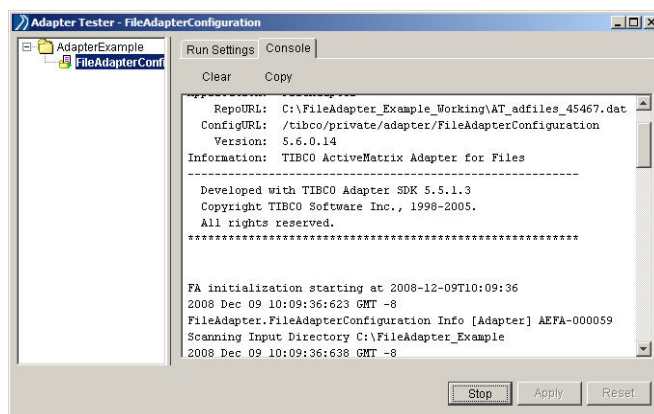
16. Click **FileAdapter Configuration**.

17. In the Run Settings tab, add information as shown in the following figure.



18. Click **Start**.

The Console tab displays the trace messages as the adapter executes. The following figure shows a sample Adapter Tester Console screen.



# Setup for Using the Adapter Tester

Provide the following information before using the Adapter Tester:

Working Directory	Working directory from which to execute the adapter. Click <b>Browse</b> to select the directory.
Adapter Executable	Name of the executable for the adapter. Click <b>Browse</b> to select the executable.



There is no change in the procedure when using custom adapters.

## Chapter 5

# Working with a Revision Control System

This chapter provides instructions on working with a revision control system (RCS).

## Topics

---

- [Using CVS, page 54](#)

## Using CVS

CVS is a version control system that records the history of source files used to build a software product. CVS also allows engineers to work in their own directory, and merges the work of each engineer into a source tree.

This section shows how you can use the CVS revision control system (RCS) when using TIBCO Designer Add-in for TIBCO Business Studio.

At the RCS server repository, before starting, create a folder at the same level as your RCS Designer projects. Move the RCS Designer projects to this newly created folder. For example, if your projects are located in  
 C:\RCS\CVS\MyProjects, move them to the directory  
 C:\RCS\CVS\ServerCVS\MyProjects.

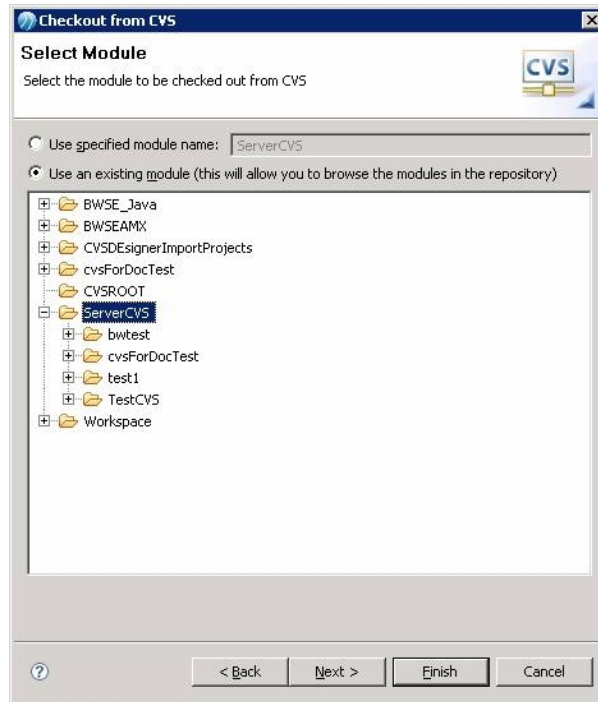
Though the following steps are specific to CVS, the process is similar for using any other RCS.

1. Select **File > Import > CVS > Projects from CVS**.
2. In the **Checkout from CVS** dialog box, provide details of your CVS server.

3. In the **Select Module** dialog box, select the checkbox for **Use an existing module**.

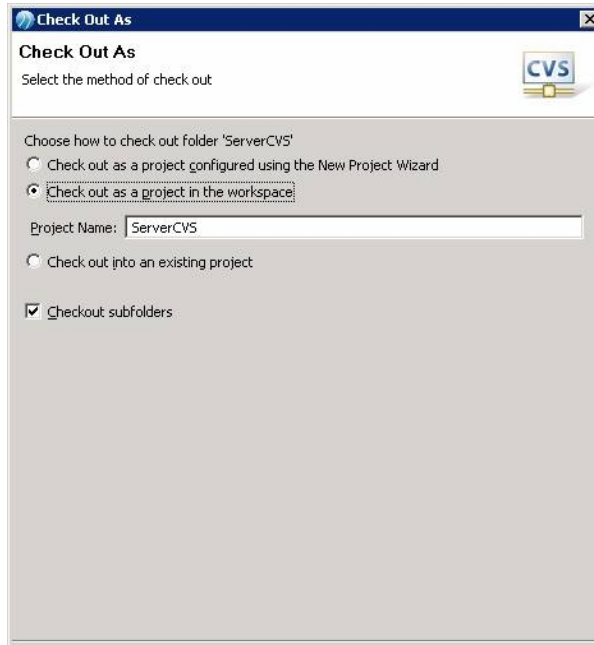


All directories, workspaces, and projects located in the specified under the CVS root directory are now displayed.



4. Choose the parent-level directory and click **Next**.
5. In the **Check Out As** dialog box select the checkbox for **Checkout as a project in the workspace** and click **Next**.

Do not modify the value of the Project Name field.



6. Select the location where the projects will be imported. It is recommended that the location is such as *<local RCS repository directory>/<name of the parent directory>*.

For example, if the local RCS repository directory is C:\RCS\LocalSVN, and the parent directory is ServerCVS, the location of the imported projects will be C:\RCS\LocalSVN\ServerCVS.

Click **Next**.

7. Choose a tag and click **Finish**.

The entire parent directory is now imported into your workspace as a General Eclipse Project.

8. Delete this project, making sure you select the option **Do not delete contents**.

You can now add these projects to your workspace by creating a new Designer project. See [Creating a Project, page 8](#) for more information. Make sure to select the **Create project using existing Designer Project** option.

You can now select a project in the Project Explorer view and use the right-click **Team** menu for performing RCS-related activities.

# Index

## A

Adapter Tester [52](#)  
     using custom adapters [52](#)  
 Adapters Example  
     about [48](#)  
     create project [48](#)  
     test project [50](#)

## B

BusinessWorks example [35](#)  
     create process [39](#)  
     overview [36](#)  
     prerequisites [37](#)  
     return to Designer perspective [45](#)  
     saving the project [38](#)  
     start Business Studio [38](#)  
     test process [44](#)

## C

changes from the previous release [vi](#)  
 copy project to workspace [16](#)  
 customer support [x](#)  
 CVS [54](#)

## D

differences [15](#)  
     debugger [33](#)  
     features in TIBCO Business Studio [34](#)  
         debug launch configuration [34](#)

    revision control system [34](#)  
     right-click menu to import resources [34](#)  
 global variables [32](#)  
 menu bar [16](#)  
 TIBCO Designer project tree [29](#)  
 toolbar [28](#)  
     dynamic [28](#)  
     static [28](#)

## P

Projects  
     closing [14](#)  
     deleting [14](#)  
     importing [9](#)

## S

support, contacting [x](#)

## T

technical support [x](#)  
 TIBCO Designer Add-in for TIBCO Business Studio  
     adapter tester [6](#)  
     global variables [5](#)  
     interface overview [3, 4](#)  
     starting [1, 3](#)  
     working with RCS [54](#)  
 TIBCO\_HOME [viii](#)