TIBCO Spotfire® Connector for Oracle® Essbase Installation and Configuration Manual

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TIBCO Spotfire Documentation and Support Services

All TIBCO documentation is available on the TIBCO Documentation site, which can be found here: https://docs.tibco.com

Product-Specific Documentation

The following documents for this product can be found in the TIBCO Documentation Library:

- TIBCO Spotfire® Deployment and Administration Manual
- TIBCO Spotfire Server Installation and Configuration Manual
- TIBCO Spotfire[®] Automation Services Installation and Deployment Manual
- TIBCO Spotfire® Web Player Installation Manual
- TIBCO Spotfire[®] Connector for Oracle[®] Essbase License Agreement
- TIBCO Spotfire® Connector for Oracle® Essbase Release Notes

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 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:

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

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Introduction

The TIBCO Spotfire[®] Connector for Oracle[®] Essbase allows users to easily connect to an Oracle[®] Essbase multi-dimensional online analytical processing (OLAP) server and analyze data from one or more databases in Spotfire.

Use this document to install and configure the product.

Prerequisites

You must meet the following prerequisites before you start the connector installation.

- You must have a working installation of TIBCO Spotfire[®]. See http://support.spotfire.com/sr.asp for the required version.
- You must have access to a running TIBCO Spotfire Server that Spotfire can connect to. (Installing a TIBCO Spotfire Server is described in the TIBCO Spotfire Server Installation and Configuration Manual.)
- Each client computer or Spotfire Web Player server to run the Spotfire Connector for Oracle Essbase
 must have access to the EssbaseClient C API, as described in Installing oracle EssbaseClient on
 Client Computers.
- At least one Oracle Essbase instance (64-bit) must be available.

For more information about the system requirements of Spotfire, see http://support.spotfire.com/sr.asp.

Roles

TIBCO Spotfire® defines different roles for installing, configuring, and administering the different components of the system.

The roles for administering Spotfire connectors are described as follows:

Role	Description
Spotfire Server Administrator	Responsible for installing and configuring the Spotfire Server (or servers) and the Spotfire database. How to perform these tasks is described in the TIBCO Spotfire Server Installation and Configuration Manual.
Spotfire Admin	Responsible for setting up users and groups in the Spotfire system, assigning licenses and preferences to the Spotfire groups, setting up the Spotfire Library, and deploying Spotfire software packages to the Spotfire Server. How to perform these tasks is described in the TIBCO Spotfire Deployment and Administration Manual.

These roles can be assigned to different persons or to the same person. The person or persons assuming the roles must be familiar with each area of knowledge.

Installing the TIBCO Spotfire Connector

As Spotfire Admin, you must perform a number of steps to set up the Spotfire Connector for Oracle Essbase. The first step is unzipping the package and reviewing the documentation.

Procedure

• Unzip the downloaded Spotfire Connector for Oracle Essbase package, TIB_spc-oracleess_3.2.0_win.zip, to a folder on your local disk.

The zip archive includes this PDF document, release notes and the deployment files AdapterEssbase.spk and FormsAdapterEssbase.spk.

Deploying the TIBCO Spotfire Connector SPK Files to a Server

Use the Spotfire Server Administration Console to deploy the SPK files.



All SPK files must be deployed to the server.

Procedure

- Open the Administration Console located at http://spotserver:port/spotfire/ (where spotserver is the name of a Spotfire Server and port is the port number, if other than the default) in a web browser.
- 2. Log in as a Spotfire Administrator.
- 3. Select the **Deployment** tab.
- 4. In **Deployment areas**, select the **Deployment Area Name**, which specifies where to deploy the connector.



For more information about deployment areas, see the TIBCO Spotfire Deployment and Administration Manual.

5. To the right of the Software packages area, click **Add**.

Response: The **Add to Deployment** dialog is displayed.

- 6. Click Browse, and then browse to the file AdapterEssbase.spk.
- 7. Click **Open**, and then click **OK** in the **Add to Deployment** dialog to upload and add the file to the distribution.

Response: The list of software packages is updated with the contents of the file.

- 8. Repeat Step 5 to Step 7 for the next SPK file.
- 9. Click Validate to ensure the deployment is consistent with the current version.
- 10. Click **Save** to save and publish the deployment.

Response: The **Save Deployment** dialog is displayed.

11. Type a version number and a description for the deployment and click **OK**.



For more information, see the online help for the Administration Console.

Updating Clients with the Connector Packages

When the SPK files have been deployed to the Spotfire Server, you must perform some additional steps to update the Spotfire clients. These steps must be performed on all computers running Spotfire.



As a Spotfire Server Administrator with responsibility to upgrade a Spotfire Automation Services server, you must perform these steps to obtain the DLLs that must be copied to the Spotfire Automation Services server.

Procedure

- 1. Exit Spotfire.
- 2. Restart Spotfire and log in as usual to the server and the deployment area where you deployed the connector packages. Spotfire notifies you that new packages are deployed on the server. Accept the updates to download and install the new packages by clicking **Update Now**.

Updating TIBCO Spotfire Web Player

To make the TIBCO Spotfire[®] Connector work on a Spotfire Web Player server, you must update the configuration with information about the connector.

Procedure

- 1. Provide server access to the EssbaseClient C API, as described in the Installing Oracle EssbaseClient on Client computers. Install Oracle EssbaseClient as described in Step 1.
- 2. Create environment variables as described in Creating Environment Variables.

Make sure that they are specified as System variables and not as User variables.

- Locate the web.config file in the webroot folder.
 For example, C:\Program Files\TIBCO\Spotfire Web Player\[version number]\webroot.
- 4. Open the web.config file, and in it, find the section <Spotfire.Dxp.Data.Access.Adapters.Settings>.
- 5. If the connector is not available in the <value><adapters> subsection, add an item like the following example: <adapter name="Spotfire.EssbaseAdapter" mode="Prompt" /> where the *mode* is set to the type of authentication that you want to use. The authentication types are described in the TIBCO Spotfire® Web Player Installation and Configuration Manual.
- 6. Restart the computer to ensure that IIS picks up the new system variables.

What to do next

Run the webupdate.bat tool to upgrade the Spotfire Web Player server with the new packages, as described in the TIBCO Spotfire Web Player Installation and Configuration Manual.

Updating TIBCO Spotfire Automation Services

To make the TIBCO Spotfire® connector work on a Spotfire Automation Services server, you must perform the following:

Procedure

1. Provide server access to the EssbaseClient C API, as described in Installing Oracle EssbaseClient on Client computers. Install Oracle EssbaseClient as described in Step 1.

2. Create environment variables as described in Creating Environment Variables.



Make sure that they are specified as System variables and not as User variables.

3. Locate the file AddIns.xml in the webroot\bin folder.

For example, C:\Program Files\TIBCO\Automation Services\[version number]\webroot\bin.

- 4. In the <AddInRegistry> subsection, add the following item: <AddIn FullTypeName="Spotfire.Dxp.Data.Adapters.Essbase.EssbaseAdapterAddIn, Spotfire.Dxp.Data.Adapters.Essbase.AddIn"/>.
- 5. Restart the computer to ensure that IIS picks up the new system variables.
- 6. Copy the downloaded connector DLLs/files from the client to the Spotfire Automation Services server. For more details about how to update Spotfire Automation Services, see Updating Automation Services with DLLs.

Updating Automation Services with DLLs

Before you can use the connector, you must update the Automation Services server with the connector DLLs.

Prerequisites

Complete the steps in Updating Clients with the Connector Packages.

Procedure

1. On the client computer, locate the Modules folder for your Spotfire installation.

By default, the Modules folder includes the hidden attribute. The path is usually one of the following:

- C:\Program Files\TIBCO\Spotfire\[version number]\Modules
- C:\Program Files (x86)\TIBCO\Spotfire\[version number]\Modules
- 2. Locate the folder called Spotfire Oracle Essbase Connector_xx.x.xxxx. (The connector folder with the word Forms is used only by the Spotfire Professional Client and not by Spotfire Automation Services.)

The TIBCO Spotfire® Connector for Oracle Essbase creates these folders under the Modules folder when the client is updated with connector packages.

- 3. Copy the following files from the folder:
 - Spotfire.Dxp.Data.Adapters.Essbase.AddIn.dll
 - Spotfire.Dxp.Data.Adapters.Essbase.Internal.dll
 - Spotfire.Dxp.Data.Adapters.Essbase.dll
 - Spotfire.Dxp.Data.Adapters.EssbaseNative64.dll



32-bit systems are not supported.

- Spotfire.Dxp.Data.Adapters.Essbase.Client.exe
- 4. Log in to the Automation Services server (either locally or through a remote desktop session).
- 5. Open the Automation Services webroot folder and then open the bin folder. For example, C:\Program Files\TIBCO\Automation Services\[[version number]]\]\webroot\bin.

6. Paste the copied DLLs in the webroot\bin folder.

Access Rights

You can specify access rights to the Oracle Essbase data.

In TIBCO Spotfire® the access rights to the data from the connector is controlled by the following two things:

- The data source authentication. (See the Help for your data source for more information.)
- The licenses enabled for the end user groups.

Assigning the License

The license assignment for TIBCO Spotfire® Connector for Oracle Essbase gives access to the **Oracle Essbase Connection** dialog. Enable or disable this license for groups of users by following these steps.

Procedure

- 1. Log into TIBCO Spotfire® as a user with Administration privileges.
- 2. Select Tools > Administration Manager.
- 3. Click the **Groups and Licenses** tab and select the group for which to enable or disable the Oracle Essbase license.



Licenses are always assigned to groups, not to individual users.

- 4. On the **Licenses** tab, click **Edit**.
- Assign the license by selecting the checkbox for the TIBCO Spotfire Connectors license group, and the checkbox for the underlying Oracle Essbase function. Disable the license by clearing the checkboxes.
- 6. Repeat Step 3 through Step 5 for all groups that should or should not have access to the Oracle Essbase Connector functionality.

Access to the TIBCO Spotfire Connector

After you have installed and configured the connector, you can set up connections to the Oracle Essbase data in two different ways.

You can either:

- Add a shared connection to the library and use it in one or more analyses.
- Add a local connection directly to the analysis.

If the steps in Updating TIBCO Spotfire Web Player were performed on the Spotfire Web Player server, and an analysis using a connection has been set up, then users of the Spotfire Web Player can connect to the Oracle Essbase data directly.

Adding a Shared Data Connection to the Library

Procedure

- 1. Select Tools > Manage Data Connections.
- 2. Click **Add New**, and then select **Data Connection > Oracle Essbase**.

What to do next

The shared data connection can then be used in an analysis by selecting **Add > Connection To > Shared Connection in Library** from the **Add Data Tables** dialog. See the *TIBCO Spotfire User's Guide* for more information about using the **Add Data Tables** dialog.

Adding a Local Data Connection to an Analysis

Procedure

- 1. Click File > Add Data Tables.
- In the Add Data Tables dialog, select one or multiple data sources to be added in a single step.
 For users with access to the function, the Oracle Essbase option appears in the Add drop-down list in the dialog.

See the TIBCO Spotfire User's Guide for more information about using the Add Data Tables dialog.

Installing Oracle EssbaseClient on Client computers

Prerequisites

Ensure that you have access to the appropriate Oracle Essbase Client installer and unzip any zipped files on your computer. (For example, ClientInstallers-11122.zip.)

For more information about the supported Oracle Essbase versions, see http://support.spotfire.com/sr.asp.

Procedure

- 1. In the extracted archive, locate the EssbaseClient directory containing the installation program EssbaseClient.exe.
- Double-click EssbaseClient.exe.
- 3. Select the appropriate language and continue.
- 4. In the installer pane, click **Next**.
- 5. Make a note of the destination folder. (You need it for creating the appropriate environment variables.) Click **Next**.
- 6. In the Custom Setup pane, ensure that both **Essbase Client** and **Essbase Client C API** are selected to be installed before you click **Next**.

The Essbase Client C API is not selected by default. You must select it manually.

7. Click **Install**, and then click **Finish** when the installation is completed.



In the **Installed Programs** list of the Control Panel, you can find a listing for Oracle[®] Hyperion Essbase Client. Use this entry if you must uninstall Oracle Essbase. Also, remember to remove the created environment variables listed in Creating Environment Variables.

Creating Environment Variables

You must set up the required environment variables to access the C API.



The environment variables must be exactly as specified, and they must point to the correct paths. Make sure no additional blank spaces are added.

Procedure

- 1. Open the **System Properties** of your computer. (On Windows 7 this is reached from **Control Panel** > **All Control Panel Items** > **System**, **Advanced system settings**.)
- 2. On the **Advanced** tab, click **Environment Variables**.
- 3. On client computers, under **System variables**, click **New**, and then create the variable EPMHOME and set its value to the home path for the Oracle Enterprise Management System. (For example, C: \oracle\Middleware\EPMSystem11R1.)

This home path contains the directories bin, bin-32, common, and products.



We recommend always using System variables, if possible. For TIBCO Spotfire® Web Player and Spotfire Automation Services servers, the environment variables must be defined as System variables

- 4. Create the variable ARBORPATH and set it to the destination folder chosen in the installer. (For example, C:\oracle\Middleware\EPMSystem11R1\products\EssbaseClient (or %EPMHOME%\products\EssbaseClient).)
- 5. Create the variable ESSBASEPATH and set it to %ARBORPATH%.
- 6. Add the following to the PATH variable (or create the PATH variable): %ARBORPATH%\bin; %EPMHOME% \bin;



32-bit systems are not supported.