BEA WebLogic Adapter for PeopleSoft® 8

Installation and Configuration Guide for WebLogic Integration 2.1

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BEA WebLogic Adapter for PeopleSoft 8 Installation and Configuration Guide for WebLogic Integration 2.1

Part Number	Date
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3. Installing and Configuring the BEA TCP/IP Message Router

About This Document

This document explains how to install, configure, and deploy the BEA WebLogic Adapter for PeopleSoft 8 for WebLogic Integration 2.1, which is used to develop online connections to PeopleSoft 8 applications.

This document is organized as follows:

- Chapter 1, "Installing the Adapter for WebLogic Integration 2.1," directs users to the information they need before installing the BEA WebLogic Adapter for PeopleSoft 8 and describes how to install the adapter.
- Chapter 2, "Installing and Compiling the Component Interfaces," describes how to install and compile the component interfaces.
- Chapter 3, "Installing and Configuring the BEA TCP/IP Message Router,"describes how to install and configure the BEA TCP/IP Handler to enable PeopleSoft 8 event functionality.

Audience

This document is written for system integrators who develop client interfaces between PeopleSoft 8 and other applications. It describes how to install and deploy the BEA WebLogic Adapter for PeopleSoft 8 and how to use it with WebLogic Integration and adapter tools to develop online connections to PeopleSoft applications. It is assumed that readers know Web technologies and have a general understanding of Microsoft Windows and UNIX systems as well as:

- General knowledge of the PeopleSoft environment, including Application Designer and PeopleTools.

- General knowledge of PeopleSoft Application Messaging and PeopleSoft Component Interface.
- Business application knowledge in some specific application area.
- Knowledge of PeopleSoft 8 processes and data model for the required application area.
- General knowledge of WebLogic Integration architecture.
- General knowledge of client-server concepts.

Related Information

The BEA corporate Web site (`www.bea.com`) provides all documentation for WebLogic Server and WebLogic Integration. For information about these products, go to `http://e-docs.bea.com`. Documents that you may find helpful when installing the BEA WebLogic Adapter for PeopleSoft 8 are:

- BEA WebLogic Adapter for PeopleSoft 8 User Guide
- *BEA Application Explorer Installation Guide*
- BEA WebLogic Server 6.1 installation and user documentation, which is available at the following URL:

  `http://edocs.bea.com/wls/docs61/index.html`
- BEA WebLogic Integration 2.1 installation and user documentation, which is available at the following URL:

  `http://edocs.bea.com/wlintegration/v2_1sp/index.html`
- PeopleSoft 8 Documentation, available online or on CD-ROM. The following components are applicable:
  - *PeopleSoft Component Interface*
  - PeopleSoft Internet Architecture Administration
  - PeopleSoft Application Messaging

Contact Us!

Your feedback on the BEA WebLogic Adapter for PeopleSoft 8 documentation is important to us. Send us e-mail at docsupport@bea.com if you have questions or comments. Your comments will be reviewed directly by the BEA professionals who create and update the BEA WebLogic Adapter for PeopleSoft 8 documentation.

In your e-mail message, please indicate which version of the BEA WebLogic Adapter for PeopleSoft 8 documentation you are using.

If you have any questions about this version of BEA WebLogic Adapter for PeopleSoft 8, or if you have problems installing and running BEA WebLogic Adapter for PeopleSoft 8, contact BEA Customer Support through BEA WebSupport at www.bea.com. You can also contact Customer Support by using the contact information provided on the Customer Support Card, which is included in the product package.

When contacting Customer Support, be prepared to provide the following information:

- Your name, e-mail address, phone number, and fax number
- Your company name and company address
- Your machine type and authorization codes
- The name and version of the product you are using
- A description of the problem and the content of pertinent error messages

Documentation Conventions

The following documentation conventions are used throughout this document.

Convention	Item
boldface text	Indicates terms defined in the glossary.

Convention	Item
Ctrl+Tab	Indicates that you must press two or more keys simultaneously.
italics	Indicates emphasis or book titles.

`monospace text`	Indicates code samples, commands and their options, data structures and their members, data types, directories, and file names and their extensions. Monospace text also indicates text that you must enter from the keyboard.
	Examples:
	`#include <iostream.h> void main ( ) the pointer psz`
	`chmod u+w *`
	`\tux\data\ap`
	`.doc`
	`tux.doc`
	`BITMAP`
	`float`

`monospace boldface text`	Identifies significant words in code. *Example*: `void` **`commit`** `( )`
`monospace italic text`	Identifies variables in code. *Example*: `String` *`expr`*
UPPERCASE TEXT	Indicates device names, environment variables, and logical operators. *Example*s: LPT1 SIGNON OR
{ }	Indicates a set of choices in a syntax line. The braces themselves should never be typed.

[ ]	Indicates optional items in a syntax line. The brackets themselves should never be typed.
	Example:
	`buildobjclient [-v] [-o name ] [-f` *`file-list`*`]...`
	`[-l` *`file-list`*`]...`

Convention	Item
|	Separates mutually exclusive choices in a syntax line. The symbol itself should never be typed.

. . .	Indicates one of the following in a command line:
	■ That an argument can be repeated several times in a command line
	■ That the statement omits additional optional arguments
	■ That you can enter additional parameters, values, or other information
	The ellipsis itself should never be typed.
	Example:
	`buildobjclient [-v] [-o name ] [-f file-list]...`
	`[-l file-list]...`

. . .	Indicates the omission of items from a code example or from a syntax line. The vertical ellipsis itself should never be typed.

1 Installing the Adapter for WebLogic Integration 2.1

This section provides instructions for installing the BEA WebLogic Adapter for PeopleSoft 8 with WebLogic Integration. It includes the following topics:

Before Installing the Adapter

Before you install the BEA WebLogic Adapter for PeopleSoft 8, you must review the BEA WebLogic Adapter for PeopleSoft 8 *Release Notes* to ensure that you have the required prerequisite software installed. The BEA WebLogic Adapter for PeopleSoft 8 *Release Notes* is available at the following URL:

`http://edocs.bea.com/wladapters/doc70/index.html`

Understanding the Representation of Paths

Because the location of files in the WebLogic Integration environment depends on options selected during installation and configuration, the conventions that follow are used throughout to represent paths.

- *BEA_HOME* represents the BEA Home directory specified for your WebLogic installation.

  For example, if you install the product in the default location on a Windows system, *BEA_HOME* represents `c:\bea`.

- *WLI_HOME* represents the root of your WebLogic Integration installation.

  For example:

  - If you install WebLogic Integration 2.1 in the default location on a Windows system, *WLI_HOME* represents `c:\bea\wlintegration2.1`.

- *domain* is used to indicate the name of a domain.

  - In WebLogic Integration 2.1, preconfigured domains (`bpmdomain`, `eaidomain`, `wlidomain`, and `samples`) are created as subdirectories of the *WLI_HOME*`\config` directory. Therefore, *domain* may be used to represent the root of a preconfigured WebLogic Integration 2.1 domain as follows:

    WLI_HOME`\config\`*domain*

- *DOMAIN_HOME* represents the complete path to the root of a domain.

For example:

- If you install WebLogic Integration 2.1 in the default location on a Windows system, *DOMAIN_HOME* represents `c:\bea\wlintegration2.1\config\`*domain*.

Note: *WLI_HOME* and *BEA_HOME* (italicized) also represent the corresponding Windows and UNIX environment variables. For example, the literal interpretation of *WLI_HOME* is `%WLI_HOME%` for Windows and `$WLI_HOME` for UNIX.

Unlike *WLI_HOME* and *BEA_HOME*, *DOMAIN_HOME* is not an environment variable that is set by default in the WebLogic Integration environment.

Step 1. Obtaining the BEA WebLogic Adapter for PeopleSoft 8

The BEA WebLogic Adapter for PeopleSoft 8 is packaged as an EAR file (`BEA_PEOPLESOFT_1_0.ear`). You can obtain the software on CD or download it from `www.bea.com`.

Note: At the time of publication of this document, WebLogic Server 6.1 is unable to explode RAR files (BEA Support CASE number 333672). Use an extraction tool (such as WinZip) to extract the contents of the adapter EAR file, `BEA_PEOPLESOFT_1_0.ear`, and add the location of the unpackaged objects to the server's classpath (see Step 2. Extracting JARs and Adjusting the Classpath).

Step 2. Extracting JARs and Adjusting the Classpath

Set the classpath using the procedure appropriate for your system:

- Extracting JARs and Adjusting the Classpath for Windows
- Extracting JARs and Adjusting the Classpath for UNIX

Extracting JARs and Adjusting the Classpath for Windows

To extract the adapter JAR files and adjust the classpath on Windows:

1. Use WinZip (or another similar extracting product) to extract the `BEA_PEOPLESOFT_1_0.ear` file to a directory of your choice (for example, *`BEA_HOME\lib\PeopleSoft`*).
2. Copy the `psjoa.jar` from your `PS_HOME` Web directory to the directory into which you extracted the `BEA_PEOPLESOFT_1_0.ear` file (for example, *`BEA_HOME\lib\PeopleSoft`*).

   The `psjoa.jar` file is the Java Object Adapter (JOA) shipped with your PeopleSoft application. This file is required by both WebLogic Server and the BEA Application Explorer. It can be found in your `PS_HOME` Web directory.

   Note: The `psjoa.jar` file is release-specific. Each time you upgrade your Peopletools release, you must obtain the current version of `psjoa.jar`, shut down WebLogic Server, and replace the old `psjoa.jar` with the current version.
3. If you are using PeopleSoft release 8.1x, copy the `pstools.properties` file (which is also found in your `PS_HOME` Web directory) to the same directory as the `psjoa.jar` file.
4. Go to the root directory for your domain:

```
cd DOMAIN_HOME
```

Note: You must choose a WebLogic Integration domain that supports application integration functionality.

5. Find the `Set`*`DomainType`*`Data.cmd` file.

   Here, *`DomainType`* is the type of the domain. For example, if your domain is configured to support the development of solutions that employ the full range of WebLogic Integration functionality, it contains the `SetwliDomainData.cmd` file.

Note: In addition, you must also place the component interface API files in the classpath before starting the WebLogic Integration server. For information on compiling the PeopleSoft API Java programs, see the BEA WebLogic Adapter for PeopleSoft® 8 User Guide.

6. Update the `SVRCP` environment variable settings in the `Set`*`DomainType`*`Data.cmd` file.

   Note: The `SVRCP` environment variable is used in the `Set`*`DomainType`*`Data` script to set the classpath for the java executable.

   After the following line:

   ```
   set SVRCP=%SVRCP%;%WLI_DOMAIN_HOME%\wlai
   ```

   add the following JAR files, which are listed in the order required for the classpath:

   ```
   REM Set PeopleSoft 8 Adapter classpath

   SET SVRCP=%SVRCP%;BEA_HOME\lib\PeopleSoft\ibi-edaqm.jar
   SET SVRCP=%SVRCP%;BEA_HOME\lib\PeopleSoft\BEA_PEOPLESOFT_1_0.ja
   r
   SET SVRCP=%SVRCP%;BEA_HOME\lib\PeopleSoft\ibi-psoft.jar
   SET SVRCP=%SVRCP%;BEA_HOME\lib\PeopleSoft\psjoa.jar
   SET SVRCP=%SVRCP%;BEA_HOME\lib\PeopleSoft\xercesImpl.jar
   SET SVRCP=%SVRCP%;BEA_HOME\lib\PeopleSoft\xmlParserAPIs.jar

   REM For PS 8.1x, use PS_BEA_CI81.jar.
   REM For PS 8.4x, use PS_BEA_CI84.jar.

   SET SVRCP=%SVRCP%;BEA_HOME\lib\PeopleSoft\PS_BEA_CInn.jar

   REM For PS 8.1x, add the location of
   REM the pstools.properties file.

   SET SVRCP=%SVRCP%;BEA_HOME\lib\PeopleSoft
   ```

Here, *BEA_HOME*\lib*PeopleSoft* represents the directory specified in step1.

Extracting JARs and Adjusting the Classpath for UNIX

To extract the adapter JAR files and adjust the classpath on UNIX:

1. Use jar (or another similar extracting product) to extract BEA_PEOPLESOFT_1_0.ear to a directory of your choice (for example, *BEA_HOME*/lib/PeopleSoft).
2. Copy the psjoa.jar from your PS_HOME Web directory to the directory into which you extracted the BEA_PEOPLESOFT_1_0.ear file (for example, *BEA_HOME*\lib*PeopleSoft*).

   The psjoa.jar file is the Java Object Adapter (JOA) shipped with your PeopleSoft application. This file is required by both WebLogic Server and the BEA Application Explorer. It can be found in your PS_HOME Web directory.

   Note: The psjoa.jar file is release-specific. Each time you upgrade your Peopletools release, you must obtain the current version of psjoa.jar, shut down WebLogic Server, and replace the old psjoa.jar with the current version.
3. If you are using PeopleSoft release 8.1x, copy the pstools.properties file (which is also found in your PS_HOME Web directory) to the same directory as the psjoa.jar file.
4. Go to the root directory for your domain:

   cd *DOMAIN_HOME*

   Note: You must choose a WebLogic Integration domain that supports application integration functionality.
5. Find the Set*DomainType*Data.cmd file.

   Here, *DomainType* is the type of the domain. For example, if your domain is configured to support the development of solutions that employ the full range of WebLogic Integration functionality, it contains the SetwliDomainData.cmd file.

Note: In addition, you must also place the component interface API files in the classpath before starting the WebLogic Integration server. For information on compiling the PeopleSoft API Java programs, see the BEA WebLogic Adapter for PeopleSoft® 8 User Guide.

6. Update the `SVRCP` environment variable settings in the `Set`*`DomainType`*`Data.cmd` file.

   Note: The `SVRCP` environment variable is used in the `Set`*`DomainType`*`Data` script to set the classpath for the java executable.

   After the following line:

   ```
   set SVRCP=%SVRCP%;%WLI_DOMAIN_HOME%\wlai
   ```

   add the following JAR files:

   ```
   # Set PeopleSoft 8 Adapter classpath

   SVRCP=$SVRCP:BEA_HOME/lib/PeopleSoft/ibi-edaqm.jar
   SVRCP=$SVRCP:BEA_HOME/lib/PeopleSoft/BEA_PEOPLESOFT_1_0.jar
   SVRCP=$SVRCP:BEA_HOME/lib/PeopleSoft/ibi-psoft.jar
   SVRCP=$SVRCP:BEA_HOME/lib/PeopleSoft/psjoa.jar
   SVRCP=$SVRCP:BEA_HOME/lib/PeopleSoft/xercesImpl.jar
   SVRCP=$SVRCP:BEA_HOME/lib/PeopleSoft/xmlParserAPIs.jar

   # For PS 8.1x, use PS_BEA_CI81.jar.
   # For PS 8.4x, use PS_BEA_CI84.jar.

   SVRCP=$SVRCP:BEA_HOME/lib/PeopleSoft/PS_BEA_CInn.jar

   # For PS 8.1x, add the location of
   # the pstools.properties file.

   SVRCP=$SVRCP:BEA_HOME/lib/PeopleSoft
   ```

Here, *`BEA_HOME/lib/PeopleSoft`* is the directory specified in step1.

Step 3. Configuring the WebLogic Integration Database for the Domain

If you have not already done so, you must create the WebLogic Integration database tables for your domain. For detailed instructions, see "Configuring the Database for a Domain" in *Starting, Stopping and Customizing* BEA WebLogic Integration, which is available at the following URL:

`http://edocs.bea.com/wlintegration/v2_1sp/config/index.htm`

Step 4. Replacing the xmltoolkit.jar File

The BEA WebLogic Adapters include a new `xmltoolkit.jar` file. You must replace your existing WebLogic Integration `xmltoolkit.jar` file with the new JAR file.

To configure the new `xmltoolkit.jar` file:

1. Rename your original `xmltoolkit.jar` file to `xmltoolkit.jar.old` by entering the commands appropriate for your operating system:
   - On a Windows system:

     ```
     cd WLI_HOME\lib
     rename xmltoolkit.jar xmltoolkit.jar.old
     ```

   - On a UNIX system:

     ```
     cd WLI_HOME/lib
     mv xmltoolkit.jar xmltoolkit.jar.old
     ```

2. Extract the `xmltoolkit.jar` file from the adapter EAR file into a temporary directory.
3. Copy the new `xmltoolkit.jar` file (extracted in step 2) to the *WLI_HOME*`\lib` directory for Windows or the *WLI_HOME*`/lib` directory for UNIX.

Caution: Simply replacing the `xmltoolkit.jar` file is not sufficient; you must also make changes to the `setenv` and `Set`*`DomainType`*`Data` scripts as described in the following steps.

4. Edit the top-level `setenv` script and make the appropriate changes for your operating system:
   - On a Windows system, edit the *`WLI_HOME`*`\setenv.cmd` script.

     Replace the line:

     ```
     set WLICOMMONCP=
     ```

     with

     ```
     set WLICOMMONCP=%WLI_HOME%\lib\xmltoolkit.jar
     ```

   - On a UNIX system, edit the *`WLI_HOME`*`/setenv.sh` script.

     Replace the line:

     ```
     WLICOMMONCP=$WLI_LIB/wlicommon.jar
     ```

     with

     ```
     WLICOMMONCP=$WLI_LIB/wlicommon.jar:$WLI_HOME/lib/xmltoolkit.
     jar
     ```

5. Edit the `Set`*`DomainType`*`Data` script.

   Here, *`DomainType`* is the type of the domain. For example, depending on the configuration of your domain, locate and edit the `SetwliDomainData.cmd` or `SeteaiDomainData.cmd` file.

   - On a Windows system:

     For example, edit the *`DOMAIN_HOME`*`\SetwliDomainData.cmd` script.

     Replace the line:

     ```
     set SVRCP=%WLISERVERCP%;%CMNCP%
     ```

     with

     ```
     set
     SVRCP=%WLI_HOME%\lib\xmltoolkit.jar;%WLISERVERCP%;%CMNCP%
     ```

   - On a UNIX system:

     For example, edit the *`DOMAIN_HOME`*`/SetwliDomainData` script.

     Replace the line:

```
SVRCP=$WLISERVERCP:$CMNCP
```

with

```
SVRCP=$WLI_HOME/lib/xmltoolkit.jar:$WLISERVERCP:$CMNCP
```

Step 5. Updating the BEA License

The BEA WebLogic Adapter for PeopleSoft 8 cannot be used without a valid software license. If you have downloaded the adapter for evaluation, you must obtain an evaluation license as described on the adapter download page. If you have purchased a license for the adapter, the license file is typically sent to you as an e-mail attachment.

To update your `license.bea` file:

1. Save the license file that you obtained with a name other than `license.bea`, in the *`BEA_HOME`* directory. For example, save the file as `peoplesoft_adapter_license.bea`. Use this file as the *`license_update_file`* in step 4 of this procedure.

   Warning: Do not overwrite or change the name of the existing `license.bea` file.

2. Perform the step appropriate for your platform:
   - On a Windows system, open an MS-DOS session and go to the *`BEA_HOME`* directory.
   - On a UNIX system, go to the *`BEA_HOME`* directory.
3. If it is not already included, add the JDK to your `PATH` variable by executing the command appropriate to your system:
   - On a Windows system:

     ```
     set PATH=BEA_HOME\jdk131_03\bin;%PATH%
     ```

   - On a UNIX system:

     ```
     PATH=BEA_HOME/jdk131_03/bin:$PATH
     export PATH
     ```

4. Merge the license update file into your existing license by executing the command appropriate to your system:

- On a Windows system:

  `UpdateLicense` *`license_update_file`*

- On a UNIX system:

  `sh UpdateLicense.sh` *`license_update_file`*

Here, *`license_update_file`* is the name to which you saved the license update file in step 1.

5. Save a copy of your updated `license.bea` file in a safe place outside the WebLogic Integration and application installation directories.

Step 6. Deploying the Adapter Using the WebLogic Server Console

After the BEA WebLogic Adapter for PeopleSoft 8 is installed, it must be deployed to WebLogic Server for your domain (for example, `wlidomain`).

To deploy an adapter using the WebLogic Server Administration Console:

1. Start WebLogic Server.
2. Start the WebLogic Server Administration Console in a browser using the following URL:

   `http://`*`localhost:port`*`/console/`

   Here, *`localhost`* represents the machine on which WebLogic Server is running and *`port`* represents the listening port.

   For example, `http://localhost:7001/console/`

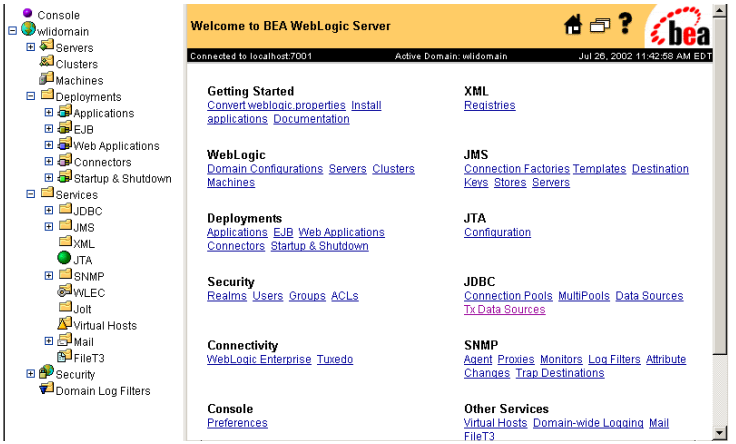
3. When prompted, enter the user name and password for the server.

   Note: If you have not updated the default login, see "WebLogic Integration Users and Passwords" in *Starting, Stopping, and Customizing* WebLogic Integration at the following URL:

   `http://edocs.bea.com/wlintegration/v2_1sp/config/getstart.htm`

   The WebLogic Server Administration Console opens.

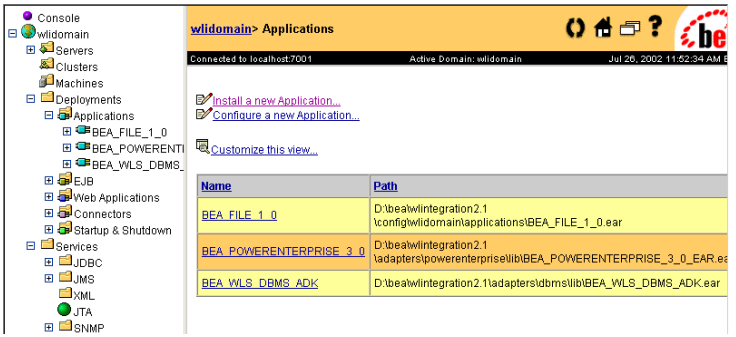
Figure 1-1 WebLogic Server Console



4. In the left pane, choose Deployments and then Applications from the navigation tree.

   The console displays the Applications window.

Figure 1-2 Applications Window

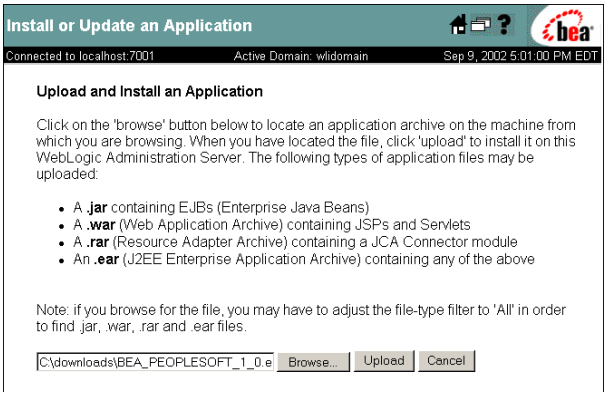


5. Click the Install a new Application link.

   The console displays the Install or Update an Application window.

6. Click Browse to locate the application archive you selected during installation (`BEA_PEOPLESOFT_1_0.ear`).

Figure 1-3 Locating the Application Archive Window



7. Click Upload to upload the `BEA_PEOPLESOFT_1_0.ear` file.

   The console displays the application files currently installed to indicate that the upload is complete and the adapter file is deployed to WebLogic Server.

8. You can verify deployment by viewing the adapter configuration, as follows:

   a. Choose Deployments and then Applications from the navigation tree.

   b. Click the `BEA_PEOPLESOFT_1_0.ear` file link.

Step 7. Adding the Administrative Server User Name to the Adapter Group

A user group, `adapter`, is defined in each domain that supports application integration functionality. Before you create an application view that employs the events or services supported by an adapter, you must add the user name defined for the administrative server to the `adapter` group.

Note: By default, the `adapter` group includes the user `system`. If the user name defined for the administrative server is `system`, skip this step. For example, if you are starting the server in a preconfigured domain, and you have not modified the default administrative server login, you can skip this step.

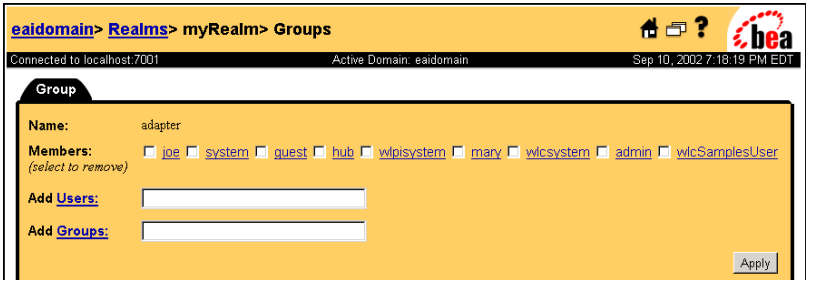
To add the administrative server user name to the `adapter` group:

1. In the left pane of the WebLogic Server Administration Console, choose Security and then Groups from the navigation tree.

   The console displays groups currently defined for the domain.

2. Locate and click the link for the `adapter` group to display the group definition.

Figure 1-4 Group Definition



3. If the administrative server user name is not included in the Members list, enter the user name in the Add Users field.

4. Click Apply to add the user name to the group.

   The name is added to the Members list.

Next Steps

If you have not already installed the BEA Application Explorer, install it now. See the *BEA Application Explorer Installation and Configuration Guide.*

When you have successfully deployed the adapter and installed the BEA Application Explorer, you can log on to the WebLogic Integration Application View Console to create application views that employ events and services supported by the BEA WebLogic Adapter for PeopleSoft 8. For more information, see the BEA WebLogic Adapter for PeopleSoft 8 *User Guide*.

2 Installing and Compiling the Component Interfaces

This section describes how to install and compile the component interfaces. It includes the following topic and installation steps:

Note: For more information about the BEA Application Explorer, see the *BEA Application Explorer User Guide*.

BEA WebLogic Adapter for PeopleSoft 8 Component Interfaces

BEA delivers two component interfaces as part of the BEA WebLogic Adapter for PeopleSoft 8. These component interfaces are used in conjunction with the BEA Application Explorer to facilitate the creation of schemas for events and services. The BEA Application Explorer uses the delivered components for metadata information to build schemas.

For the delivered component interfaces, you must perform the following steps:

1. Make the delivered component interfaces available to PeopleSoft 8.
2. Configure the component interface security.
3. Test the component interfaces.
4. Modify the classpath of the machine that runs BEA Application Explorer.

Step 1. Making Component Interfaces Available to PeopleSoft 8

The supplied component interfaces are delivered via a PeopleSoft project. For PeopleSoft release 8.1x, the project is called BEA_CI_81 and is contained within file, `BEA_CI_81.zip`. For PeopleSoft release 8.4x, the project and file name are BEA_CI_84 and `BEA_CI_84.zip`, respectively. The zip files are located within the `BEA_PEOPLESOFT_1_0.ear` file. You can extract it using any extraction software.

Importing Project BEA_CI_81 or BEA_CI_84 to PeopleSoft 8

To import the `BEA_CI_81 or BEA_CI_84` project to PeopleSoft 8:

1. Unzip the `BEA_CI_81.zip` or `BEA_CI_84.zip` file to a directory of your choice.

   The unzip process will create its own subdirectory.

   For example, if you extract it to `c:\temp`, a subdirectory called `BEA_CI_81 or BEA_CI_84` is created in `c:\temp`.

2. Launch the PeopleSoft 8 Application Designer in two-tier mode.

3. From the File menu, choose Copy Project from File.

Note: In PeopleSoft release 8.4 or higher, from the Tools menu, you must choose Copy Project→From File.

4. Navigate to the original directory to which you unzipped the file.

Figure 2-1 Application Designer Window - Release 8.1

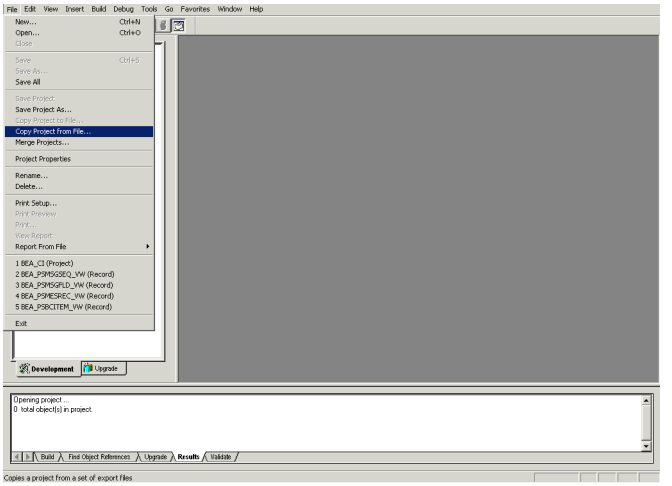
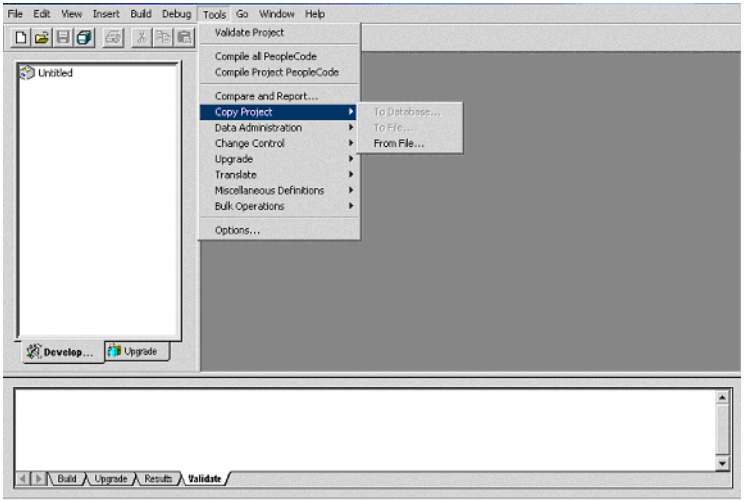


Figure 2-2 Application Designer Window - Release 8.4



The Application Designer displays the Copy Project From File dialog box.

Figure 2-3 Copy Project From File Dialog Box - Release 8.1

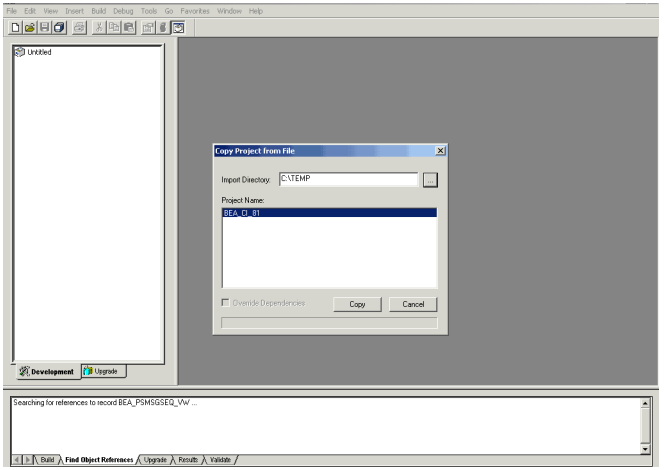
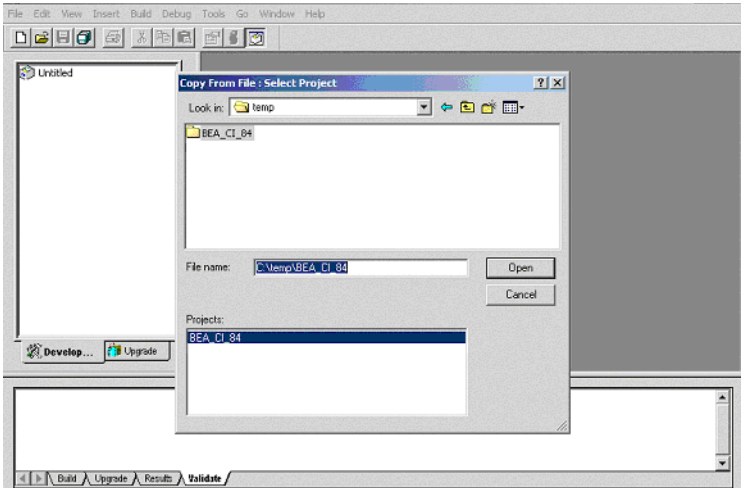


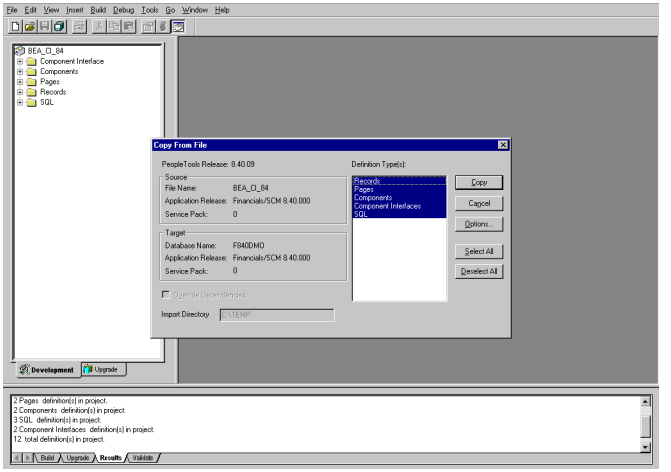
Figure 2-4 Copy From File: Select Project Dialog Box - Release 8.4



5. Click Copy (in release 8.1) or Open (in release 8.4) to open the Copy dialog box.

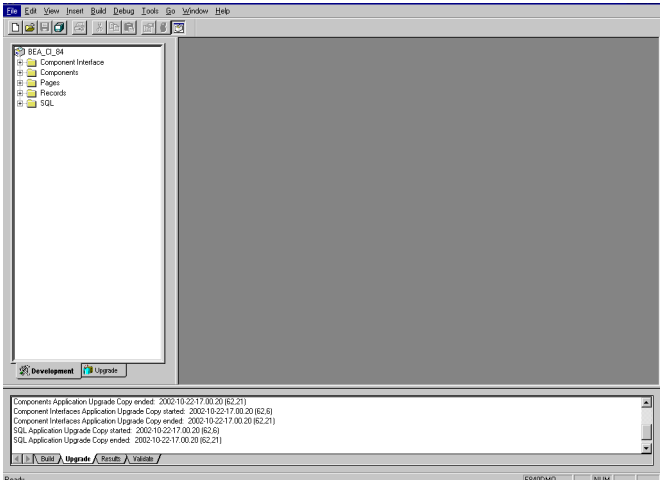
   Note: Although the following figures illustrate PeopleSoft release 8.4, the corresponding steps are accurate for releases 8.1 and 8.4.

Figure 2-5 Application Designer - Copy From File Dialog Box



6. Make sure that all the objects listed under Object Types are highlighted and click Copy. The Application Designer displays a copy ended message to indicate successful completion.

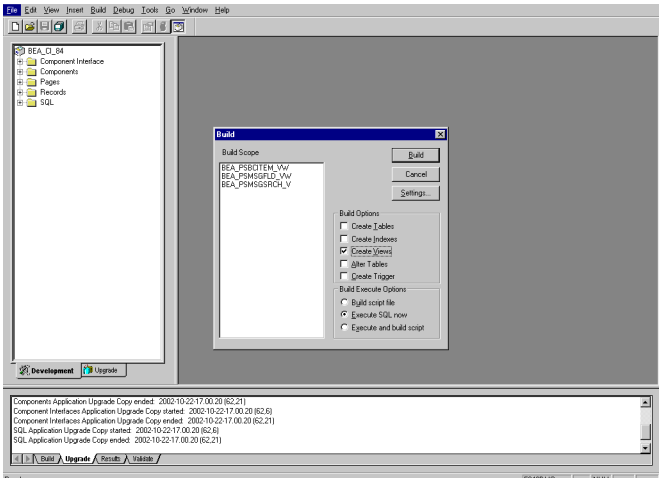
Figure 2-6 Application Designer - Copy Ended Message



7. Build the views in the project by choosing Build→Project.

   The Build dialog box opens.

Figure 2-7 Application Designer - Build Dialog Box

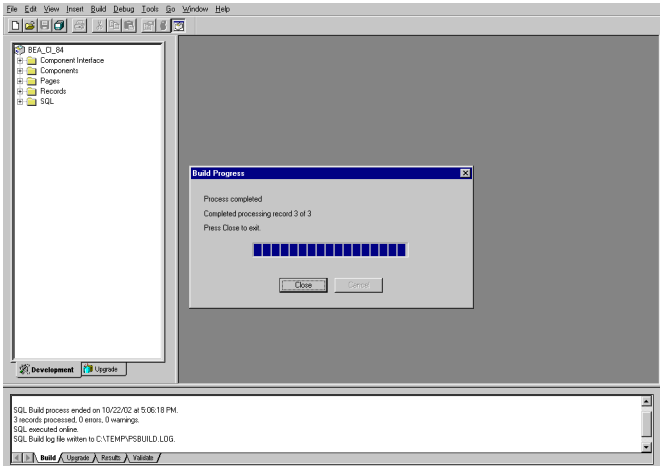


8. Select Create Views in Build Options. Select your site's customary option in Build Execute Options. (In the previous figure, we have selected Execute SQL now.)

9. Click Build.

   The Application Designer displays a Build Progress status window.

Figure 2-8 Application Designer - Build Progress Dialog Box



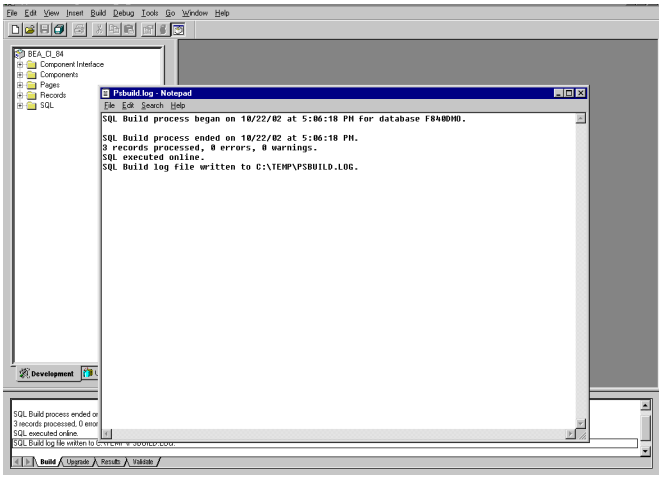
   Notice that there are zero errors and zero warnings.

   You may use your native SQL Tool to view the records from the generated view to ensure that they have been created correctly.

10. If the view has not been generated correctly, click Close and double-click the SQL Build log statement.

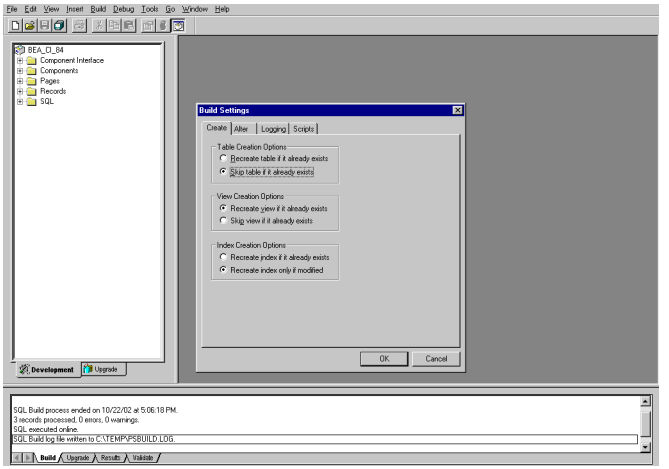
    The PSBUILD log file displays.

Figure 2-9 Application Designer - PSBUILD Process Log File



11. If you encounter problems, check the Build settings options by choosing Build→Settings.

Figure 2-10 Application Designer - Build Settings Dialog Box



Depending on the application server database for PeopleSoft 8, some databases may require the Tablespace name. Consult your PeopleSoft 8 database administrator for more information regarding this function.

Step 2. Configuring Component Interface Security

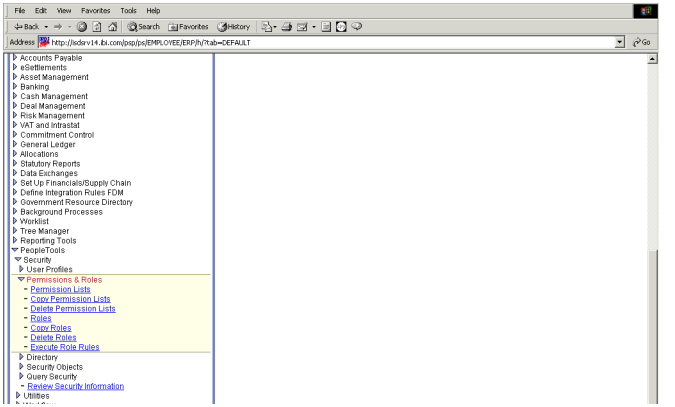
Before the delivered component interfaces can be used, security for each component interface must be set. Component interface security should be set for each distinct Permission List belonging to users who are going to use the product being installed.

You must set the security for all delivered component interfaces in the project. In PeopleSoft release 8.1, you may set security in 2, 3, or 4-tier mode; in release 8.4 and higher, you may set security 4-tier mode. Regardless of your release level or interface, you must follow the same steps. The figures in the following steps show how to configure component interface security for PeopleSoft release 8.4 in 4-tier mode.

To configure component interface security:

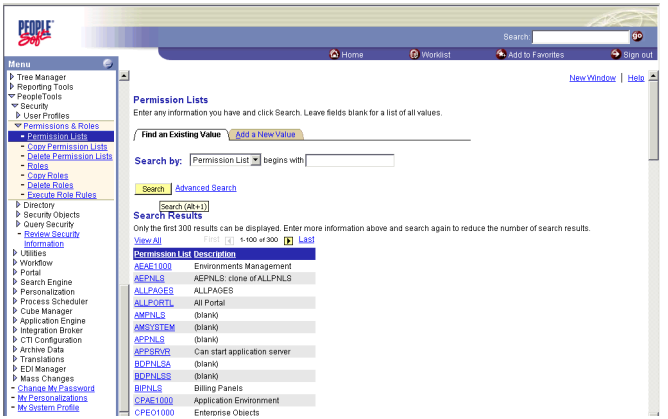
1. ChoosePeopleTools→Security→UserProfiles→Permissions&Roles→Permission Lists.

Figure 2-11 Permission Lists Window



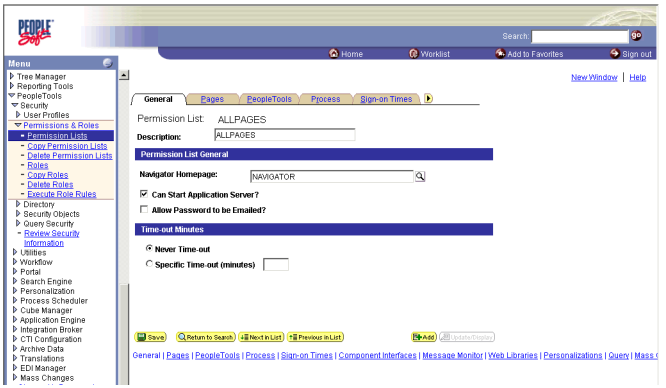
2. Click Search and select the relevant Permission List.

Figure 2-12 Searching for Permission Lists



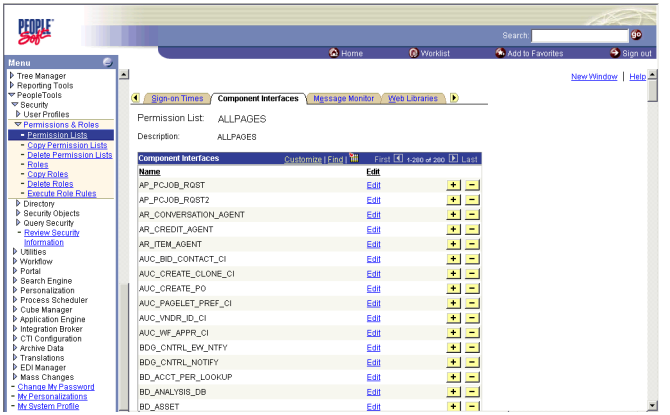
3. Click the right arrow next to the Sign-on Times tab to display the Component Interfaces tab.

Figure 2-13 Finding the Component Interfaces tab



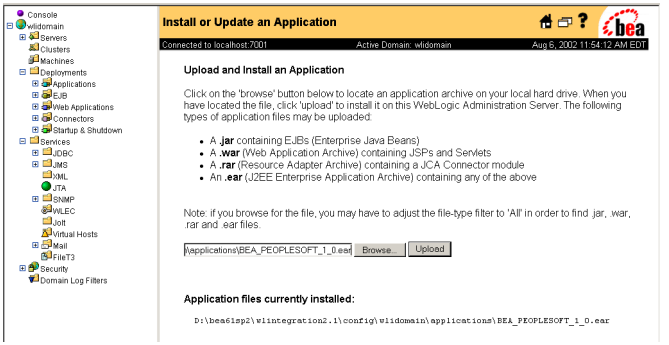
4. Click the Component Interfaces tab.

Figure 2-14 Component Interfaces Window



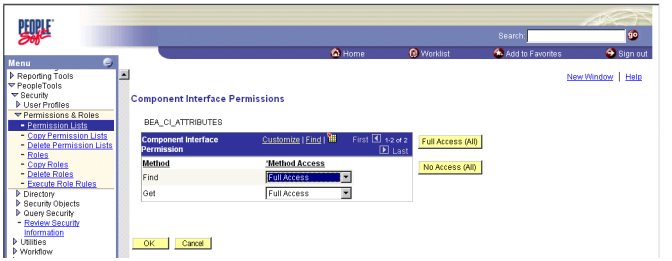
5. Click the + button to add a new row to the Component Interfaces list.

Figure 2-15 Component Interfaces List



6. Enter or select the `BEA_CI_ATTRIBUTES` component interface and click Edit.

Figure 2-16 Component Interface Permissions Window



7. Click Full Access (All) to set the Get and Find methods to Full Access.
8. Click OK.
9. Repeat steps 5 through 8 for the `BEA_CI_MESSAGES` component interface.
10. Scroll down to the bottom of the Component Interfaces window and click Save.

Step 3. Testing the Component Interfaces

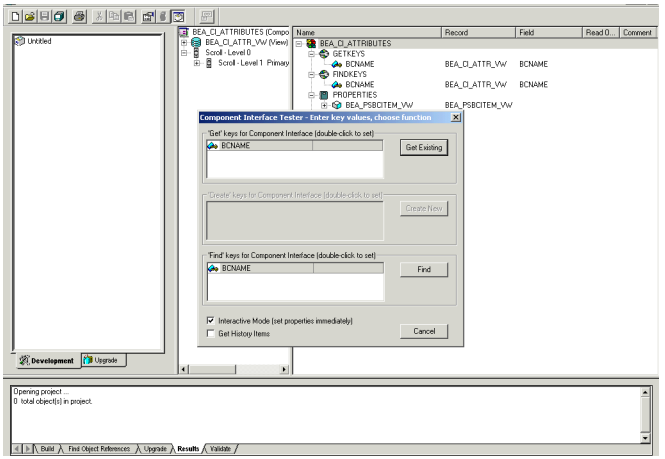
All BEA delivered component interfaces must be tested individually before continuing. Using Application Designer, open each component interface individually and test the component interfaces `BEA_CI_ATTRIBUTES` and `BEA_CI_MESSAGES` by executing the Find and Get methods.

To test the component interfaces:

1. Open the BEA_CI_ATTRIBUTES Component Interface.
2. Choose Tools→Test Component Interface.

   The Component Interface Tester dialog box opens.

Figure 2-17 Component Interface Tester Dialog Box

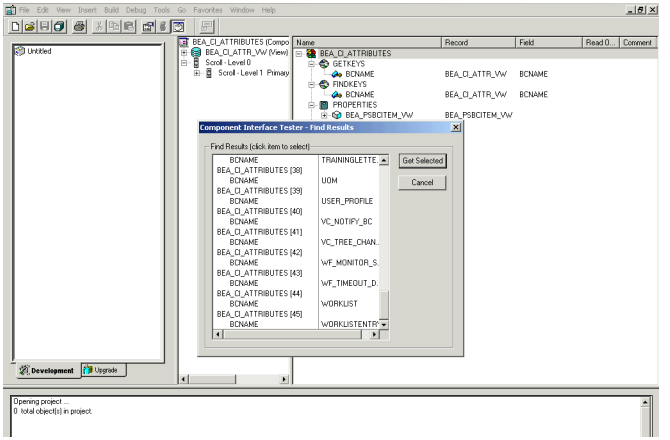


Note that the Create New option is disabled. This is because the Add method is not applicable to this component interface.

3. Click the Find button. Entries for the underlying component are displayed.

   A message may appear stating that display is limited to a certain number of entries; this is not a problem.

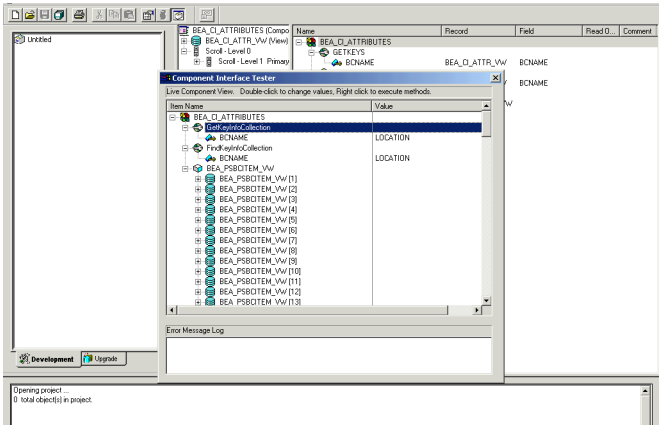
Figure 2-18 Component Interface Tester - Find Results Window



4. Highlight one of the lines with its corresponding key in the Find Results window and click the Get Selected button.

   The relevant data for the selected key is displayed.

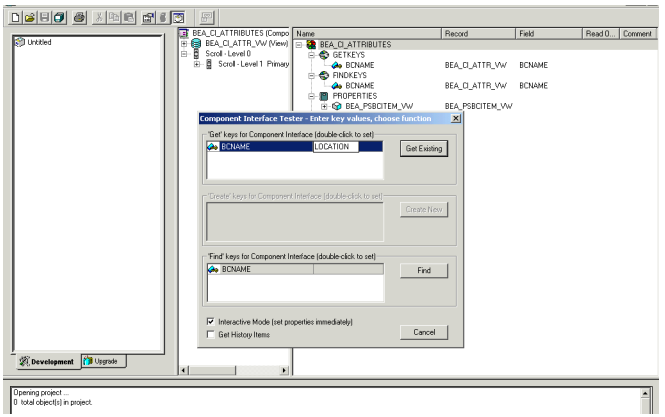
Figure 2-19 Component Interface Tester Window



If this window is displayed, the component interface has been successfully tested for the Find method.

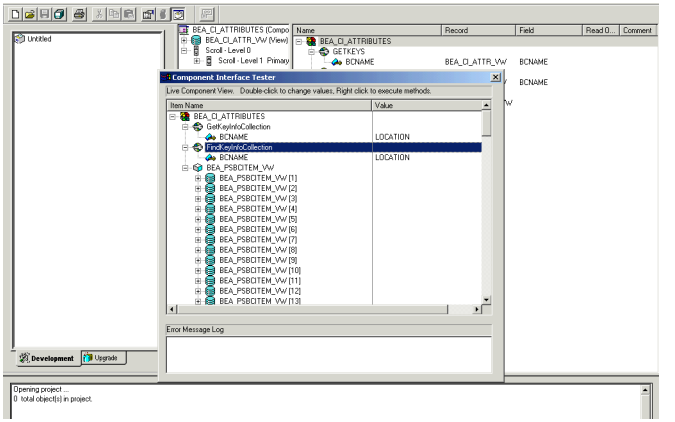
5. Click the Get button. For the Get method, an existing key must be entered.

Figure 2-20 Component Interface Tester Window



The exposed properties for the key that is entered are returned.

Figure 2-21 Component Interface Tester - Results Window



If this window is displayed, the component interface has been successfully tested for the Get method.

6. Repeat this process for each of the delivered component interfaces.

Step 4. Modifying the Classpath of the Machine that Runs BEA Application Explorer

The BEA Application Explorer requires the same set of jar files as required by the WebLogic Integration Server. These are the jar files that were extracted in Step 2. Extracting JARs and Adjusting the Classpath in Chapter 1, "Installing the Adapter for WebLogic Integration 2.1," and put in the classpath in the SetDomainTypeData.cmd file.

However, unlike the WebLogic Integration Server, no changes in command files are required. It is sufficient to simply place these files in the lib directory of the BEA Application Explorer. These files include the PeopleSoft Java Object Adapter file (psjoa.jar) and pstools.properties (for release 8.1)

The `psjoa.jar` and the pstools.properties change with each release. For information on replacing these files, see the warning at the end of the section called Step 2. Extracting JARs and Adjusting the Classpath in Chapter 1, "Installing the Adapter for WebLogic Integration 2.1."

3 Installing and Configuring the BEA TCP/IP Message Router

To enable PeopleSoft 8 to send an XML event document to the WebLogic environment using TC/PIP, you must load the required software on the PeopleSoft 8 system and configure the PeopleSoft 8 application gateway. This section describes how to do so, and includes the following topics:

Installing BEA TCP/IP Handler for PeopleSoft Release 8.1

This topic provides instructions for installing the BEA TCP/IP Handler for PeopleSoft release 8.1. It includes the following steps:

Step 1. Extracting and Installing the BEA TCP/IP Handler

The BEA TCP/IP Handler software for PeopleSoft release 8.1 is in the `TCPIPHandler81.jar` file and is located within the `BEA_PEOPLESOFT_1_0.ear` archive. To extract the `.jar` file from the `.ear` archive, use WinZip or a similar extraction tool. Once extracted, you must port the file to the platform where the PeopleSoft 8 gateway Web server is located, place it in the `servletclasses` directory under the PeopleSoft Web server, and extract the embedded `class` files.

The following example illustrates an installation on a UNIX SUN/Solaris machine where the PeopleSoft 8 application server is running:

1. Log on to the UNIX machine with the proper PeopleSoft 8 ID and permissions.
2. Navigate to the PeopleSoft 8 Web servlets directory. This may vary between releases and may change according to you r Web Server, but typically it is:

   ```
   $PS_HOME/webserv/servletclasses
   ```

3. Issue the `jar` command to extract the class files required by PeopleSoft.

   This is a sample command:

   ```
   jar -xvf /tmp/TCPIPHandler81.jar
   ```

   The following output would be displayed:

   ```
   $ jar -xvf /tmp/TCPIPHandler81.jar
     created: META-INF/
   extracted: META-INF/MANIFEST.MF
   extracted: psft/pt8/tcphandler/TCPIPHandler81$Entry.class
   extracted:
   psft/pt8/tcphandler/TCPIPHandler81$HandlerEntry.class
   extracted:
   psft/pt8/tcphandler/TCPIPHandler81$PublicationHandler.class
   extracted: psft/pt8/tcphandler/TCPIPHandler81.class
   $
   ```

   Notice that the files are placed in a new directory, `tcphandler`, under the `psft/pt8` directory structure.

Step 2. Configuring the BEA TCP/IP Handler on the PeopleSoft 8 Gateway Server

To configure the BEA TCP/IP Handler:

1. Launch the PeopleSoft 8 configuration servlet interface (server gateway). This is typically under:

   `http://`*`serverURL`*`/servlets/gateway.administration`

Figure 3-1 PeopleSoft 8.16.03 Handler Directory Window

2. Click the Add handler button.

   The Add Handler window opens.

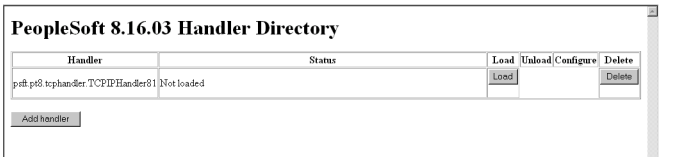
Figure 3-2 Add Handler Window

3. In the Handler class field, enter the name of the BEA PeopleSoft 8 handler class:

   `psft.pt8.tcphandler.TCPIPHandler81`

4. Click Save. The Handler displays the following status window:

Figure 3-3 Handler Status Window



   The handler appears in the Handler directory list, but the Status reads Not loaded.

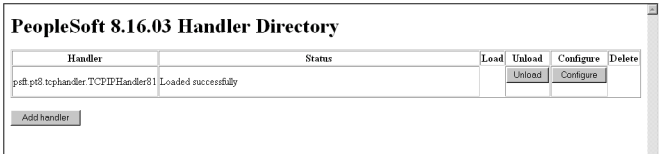
5. Click Load to activate that handler. Once loaded, the gateway servlet loads the specified Java class in memory after searching the machine Classpath.

   The Status column should read Loaded successfully. If you receive a ClassNotFoundException error as the status, the gateway servlet did not find the particular Java class you indicated. Make sure that the Classpath is correct. If necessary, you may need to restart your Web server.

   During production, you may want to temporarily deactivate a handler. To deactivate a handler, click the Unload button. This removes the particular handler from the list of active registered handlers to which the gateway servlet can publish messages.

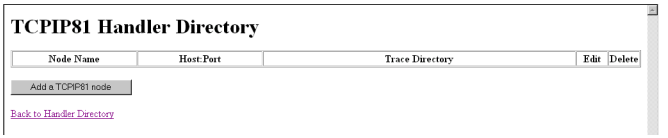
   If the .jar file was placed in the correct PeopleSoft 8 application directory on the correct application server, the following screen opens:

Figure 3-4 Load Handler Window



6. Click the Configure button to switch to the lookup table view.

Figure 3-5 TCPIP81 Handler Directory Window



7. Click the Add a TCPIP81 node button.

   The TCPIP81 Handler window opens.

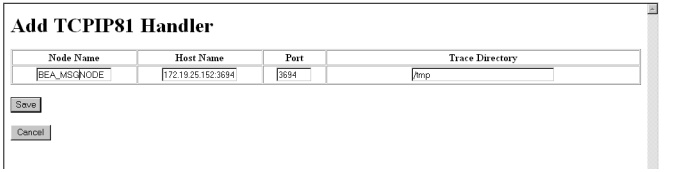
8. In the Node Name field, enter the name of the node you want to add, such as `BEA_MSGNODE`.

9. In the Host Name field, enter the name of the host machine of the WebLogic Integration server.

10. In the Port field, enter the TCP port that was entered during the adding of the application view event.

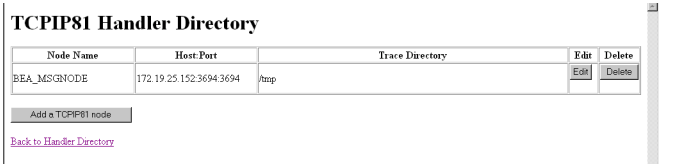
11. In the Trace Directory field, enter the directory where the trace file should be created in case the handler experiences some problem with the message delivery.

Figure 3-6 Add TCPIP81 Handler Window



12. Click Save. The BEA Handler Directory window opens.

Figure 3-7 TCPIP81 Handler Directory Window With Node



The BEA TCP/IP Handler configuration is now complete.

Installing BEA TCP/IP Target Connector for PeopleSoft Release 8.4 and Higher

The BEA TCP/IP Target Connector software for PeopleSoft release 8.4 is in the `TCPIPTARGET84.class` file and is located within the `BEA_PEOPLESOFT_1_0.ear` archive. To extract the .class file from the `.ear` archive, use WinZip or a similar extraction program. Once extracted, you must port the file to the platform where the PeopleSoft 8 gateway Web server is located and place it in the PS server target connector directory. This will be located in different places depending on your web server. Typically, these will be:

- For WebLogic,

  ```
  c:\bea\wlserver6.1\config\peoplesoft\applications\PSIGW\Web-inf
  \classes\com\peoplesoft\pt\integrationgateway\targetconnector
  ```

- For WebSphere,

  ```
  c:\websphere\AppServer\installedApps\peoplesoft\PSIGW\Web-inf\
  classes\com\peoplesoft\pt\integrationgateway\targetconnector
  ```

Creating a Gateway

To create a gateway:

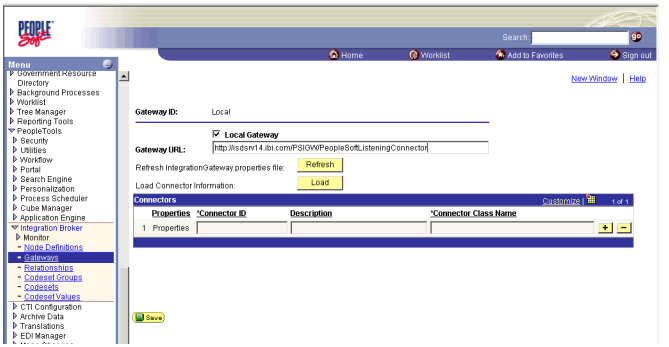
1. Click PeopleTools → Integration Broker → Gateways.

Figure 3-8 Gateways Window

2. Find the Local Gateway and enter the URL in the Gateway URL field.

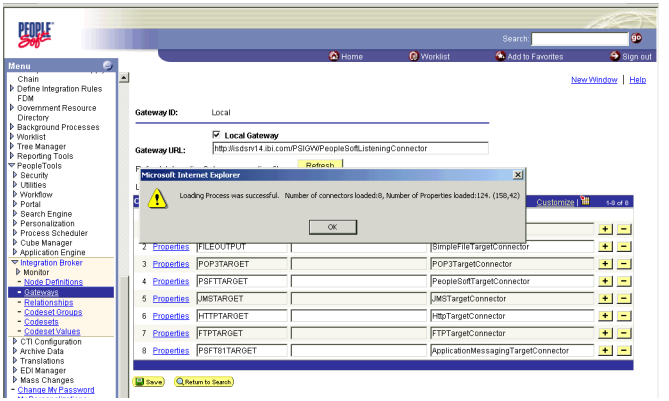
   This URL is usually set during installation.

Figure 3-9 Gateway URL Window



3. Click the Load button. The Connector Properties are displayed. These are predefined during the Integration Broker installation.

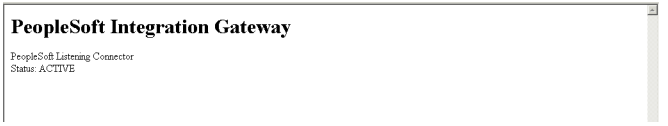
Figure 3-10 Connector Properties Window



4. Click OK. The `TCPIPTARGET84` connector is included in the Connectors list.

5. Enter the Gateway URL. The following window opens.

Figure 3-11 PeopleSoft Integration Gateway Window



The Gateway is now configured.