

# BEA WebLogic Adapter for PeopleSoft®8

Installation and Configuration Guide for WebLogic Integration 7.0

Release 7.0 Document Date: October 2002

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#### BEA WebLogic Adapter for PeopleSoft 8 Installation and Configuration Guide for WebLogic Integration 7.0

Part Number	Date
N/A	October, 2002

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# **About This Document**

This document explains how to install, configure, and deploy the BEA WebLogic Adapter for PeopleSoft 8 for WebLogic Integration 7.0, 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 7.0," 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 Platform 7.0 installation and user documentation, which is available at the following URL:

```
http://edocs.bea.com/platform/docs70/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 <a href="https://www.bea.com">www.bea.com</a>. 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.		
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. <i>Examples</i> :		
	<pre>#include <iostream.h> void main ( ) the pointer psz</iostream.h></pre>		
	chmod u+w *		
	\tux\data\ap		
	.doc		
	tux.doc		
	BITMAP		
	float		
monospace	Identifies significant words in code.		
boldface	Example:		
text	void commit ( )		
monospace	Identifies variables in code.		
italic	Example:		
text	String expr		
UPPERCASE TEXT	Indicates device names, environment variables, and logical operators.		
	Examples: LPT1		
	SIGNON		
	OR		

Convention	Item	
{ }	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:	
	<pre>buildobjclient [-v] [-o name ] [-f file-list] [-l file-list]</pre>	
	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:	
	<pre>buildobjclient [-v] [-o name ] [-f file-list] [-l file-list]</pre>	
· ·	Indicates the omission of items from a code example or from a syntax line. The vertical ellipsis itself should never be typed.	

# Installing the Adapter for WebLogic Integration 7.0

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
- Understanding the Representation of Paths
- Step 1. Obtaining the BEA WebLogic Adapter for PeopleSoft 8
- Step 2. Configuring the Domain
- Step 3. Extracting JARs and Adjusting the Classpath
- Step 4. Updating the BEA License
- Step 5. Deploying the Adapter Using the WebLogic Server Console
- Step 6. Creating or Updating the Adapter Group
- Next Steps

## **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 7.0 in the default location on a Windows system, WLI HOME represents c:\bea\weblogic700\integration.
- domain is used to indicate the name of a domain.
  - In WebLogic Integration 7.0, a new tool, the Configuration Wizard, is used to create custom user domains. When you use the Configuration Wizard to set up the domain configuration stored on the administration server, you are prompted to assign a domain name, <code>domain</code>, and to specify the location to which the <code>domain</code> directory will be installed. The files required by the administration server are installed in the <code>domain</code> directory under the specified location.

For additional information, see *Using the Configuration Wizard* which is available at the following URL:

http://edocs.bea.com/platform/docs70/confgwiz/index.html

For example, if you accept the Configuration Wizard default location, BEA\_HOME\user\_projects, the files required by the administration server are installed in the following directory:

BEA\_HOME\user\_projects\domain

■ DOMAIN\_HOME represents the complete path to the root of a domain.

#### For example:

• If you use the WebLogic Integration 7.0 Configuration Wizard to create a domain in the default location on a Windows system, <code>DOMAIN\_HOME</code> represents <code>c:\bea\weblogic700\user\_projects\domain</code>.

**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 software is packaged as an EAR file (BEA\_PEOPLESOFT\_1\_0\_70.ear). You can obtain the software on CD or download it from www.bea.com.

# Step 2. Configuring the Domain

The adapter can only be deployed in a domain that includes support for application integration functionality. If you have not already done so, use the Configuration Wizard to create the domain and select one of the following domain templates:

- Enterprise application integration (EAI) domain template
- WebLogic Integration (WLI) domain template
- Platform domain template

For the information you need to configure a fully functional domain based on the template, see the appropriate section of the *Configuration Wizard Template Reference*:

- For the EAI domain template, see the following URL:

  http://edocs.bea.com/platform/docs70/template/eaidomain.html
- For the WLI domain template, see the following URL:

  http://edocs.bea.com/platform/docs70/template/wlidomain.html
- For the platform domain template, see the following URL:

  http://edocs.bea.com/platform/docs70/template/platjar.html

For general information about using the Configuration Wizard, see *Using the Configuration Wizard* at the following URL:

```
http://e-docs.bea.com/platform/docs70/confgwiz/index.html
```

When you use the Configuration Wizard to create a domain based on the WLI or EAI domain template, a domain-specific version of the Database Wizard is installed in the <code>DOMAIN\_HOME</code> directory. You must run the Database Wizard for the domain to initialize the database repository with the required tables and system data. For additional information, see "Configuring the Database for a Domain" in *Starting*, *Stopping and Customizing* BEA WebLogic Integration, at the following URL:

http://edocs.bea.com/wli/docs70/config/index.htm

# Step 3. 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 unzip the adapter JAR files and adjust the classpath on Windows, complete the following steps:

- 1. Use WinZip (or another similar extracting product) to extract the BEA\_PEOPLESOFT\_1\_0\_70.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\_70.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 SetDomainTypeData.cmd file.

Here, <code>DomainType</code> 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 <code>SetwliDomainData.cmd</code> file.

6. Update the SVRCP environment variable settings in the Set DomainTypeData.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%\applications\DefaultWebApp_mys
erver\WEB-INF\classes
```

#### add the following JAR files:

```
REM Set PeopleSoft 8 Adapter classpath

SET SVRCP=%SVRCP%; BEA_HOME\lib\PeopleSoft\psjoa.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, complete the following steps:

- 1. Use jar (or another similar extracting product) to extract BEA\_PEOPLESOFT\_1\_0\_70.ear to a directory of your choice (for example, BEA\_HOME/lib/PeopleSoft).
- Copy the psjoa.jar from your PS\_HOME Web directory to the directory into which you extracted the BEA\_PEOPLESOFT\_1\_0\_70.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 Domain Type Data. cmd file.

Here, <code>DomainType</code> 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 <code>SetwliDomainData.cmd</code> file.

Update the SVRCP environment variable settings in the SetDomainTypeData.cmd file.

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

#### After the following line:

```
set SVRCP=$SVRCP:$WLI_DOMAIN_HOME/applications/DefaultWebApp_myser
ver/WEB-INF/classes
```

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

```
# Set PeopleSoft 8 Adapter classpath
SET SVRCP=$SVRCP:BEA_HOME/lib/PeopleSoft/psjoa.jar
# For PS 8.1x, use PS_BEA_CI81.jar.
# For PS 8.4x, use PS_BEA_CI84.jar.
SET SVRCP=$SVRCP:BEA_HOME/lib/PeopleSoft/PS_BEA_CInn.jar
# For PS 8.1x, add the location of
# the pstools.properties file
SET SVRCP=$SVRCP:BEA_HOME\lib\PeopleSoft
```

Here, BEA HOME/lib/PeopleSoft is the directory specified in step1.

# Step 4. 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.

When you have obtained a valid license for the adapter, update your license.bea file by completing the following steps:

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, <code>license\_update\_file</code> is the name to which you saved the license update file in step 1.

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

# Step 5. Deploying the Adapter Using the WebLogic Server Console

After the BEA WebLogic Adapter for PeopleSoft 8 is installed, it must be deployed to your domain. To configure and deploy an adapter using the WebLogic Server Administration Console, complete the following steps:

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

```
http://host:port/console/
```

Here, *host* 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.

The WebLogic Server Administration Console opens.



Figure 1-1 WebLogic Server Console

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

The console displays the Applications window.

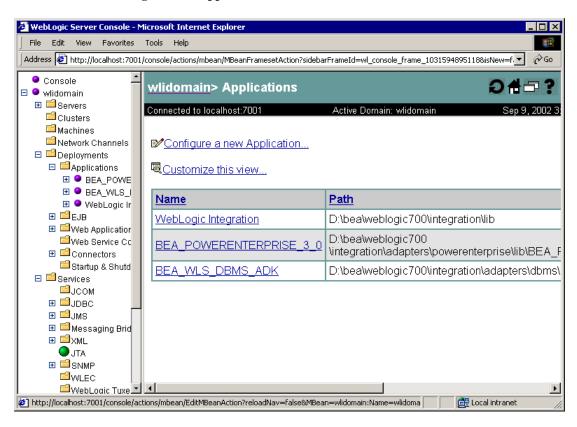


Figure 1-2 Applications Window

5. Click the Configure a new Application link.

The console displays the Locate Application or Component to configure window.

Figure 1-3 Locate Application or Component to Configure Window

#### Locate Application or Component to configure Connected to localhost:7001 Active Domain: wlidomain This wizard will guide you through the process of configuring and deploying a J2EE application or module. This can be any one of the following types of files: A .jar containing EJBs (Enterprise Java Beans) A .war (Web Application Archive) containing JSPs and Servlets A .rar (Resource Adapter Archive) containing a JCA Connector module An .ear (J2EE Enterprise Application Archive) containing any of the above Step 1. The lear, war, jar, or rar file you wish to configure and deploy must be available in the Admin servers file system. It may already be there; if it is not, you can either copy it there yourself or upload it through your browser into the directory selected below. Step 2. Select the .ear, .war, .jar, or .rar file you would like to configure and deploy. Note that you may also configure an 'exploded' application or component by simply selecting its root directory. Click on the [select] link to the left of the desired directory or file to choose it and proceed to the next step. Listing of localhost\D:\bea\user projects\wlidomain [Up to parent directory] [select] applications [select] data [select] dblnfo [select] logs [select] myserver [select] scripts

#### 6. Do one of the following:

[select] userConfig [select] wlai [select] xmlcache [select] wliconfig.jar

If you copied the BEA\_PEOPLESOFT\_1\_0\_70.ear file to a directory on the administrative server, navigate to that directory. For example, if you copied the file to the D:\bea\AdapterEars directory, select the directory as shown in the following figure.

Figure 1-4 Locating the Adapter EAR File

#### 

```
[Up to parent directory]
[select] BEA_PEOPLESOFT_1_0_70.ear
```

If you have not copied the BEA\_PEOPLESOFT\_1\_0\_70.ear file to a directory on the administrative server, do the following:

a. Navigate to the directory to which the file will be uploaded.

For example, to upload the adapter from your local machine to the D:\bea\AdapterEars directory on the administrative server, select the directory as shown in the following figure.

#### Figure 1-5 Selecting the Target Directory

#### Listing of <a href="localhost">localhost</a>\\\D:\\bea\\AdapterEars</a>

[Up to parent directory]

- b. Click the upload it through your browser link to display the Install or Update an Application window.
- c. Click Browse to display the Choose File dialog box.
- d. In the Choose File dialog box, locate the file and then click Open.

The console displays the selected location.

Connected to localhost:7001

Active Domain: wlidomain

Sep 9, 2002 5:01:00 PM EDT

Upload and Install an Application

Click on the 'browse' button below to locate an application archive on the machine from which you are browsing. When you have located the file, click 'upload' to install it on this WebLogic Administration Server. The following types of application files may be uploaded:

A.jar containing EJBs (Enterprise Java Beans)

A.war (Web Application Archive) containing JSPs and Servlets

A.rar (Resource Adapter Archive) containing a JCA Connector module

An.ear (J2EE Enterprise Application Archive) containing any of the above

Note: if you browse for the file, you may have to adjust the file-type filter to 'All' in order to find .jar, .war, .rar and .ear files.

Figure 1-6 Install or Update an Application Window

#### e. Click Upload.

C:\downloads\BEA\_PEOPLESOFT 1 0.e Browse...

The browser status bar indicates upload progress. When the upload is complete, you are returned to the Locate Application or Component to configure window. The uploaded file now resides in the directory selected in step a.

Upload

Cancel

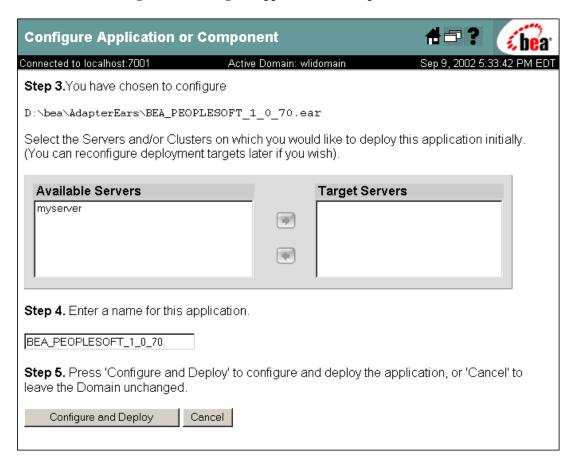
Figure 1-7 Adapter EAR File Uploaded to Administrative Server

#### Listing of <a href="localhost">localhost</a>\\\D:\\\bea\\AdapterEars

[Up to parent directory]
[select] BEA\_PEOPLESOFT\_1\_0\_70.ear

Click the [select] link to the left of the adapter EAR file.
 The console displays the Configure Application or Component window.

Figure 1-8 Configure Application or Component Window

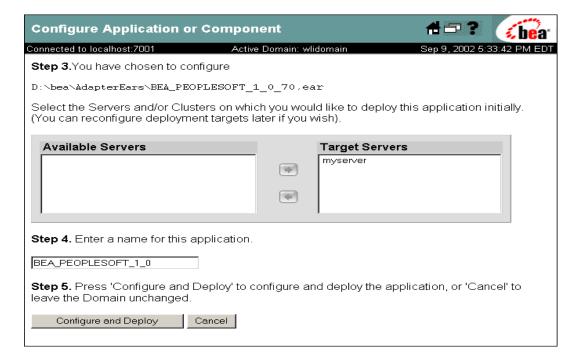


- 8. Select the servers or clusters on which to deploy the adapter by using the arrow buttons to move entries from the available list to the target list.
- 9. You must change the application name from BEA\_PEOPLESOFT\_1\_0\_70 to BEA\_PEOPLESOFT\_1\_0.

**Note:** If you do not change the application name, the adapter will not be available to application views.

The following figure shows a configured application.

Figure 1-9 Configured Application



#### 10. Click Configure and Deploy.

The console displays the deployment status, which includes a description, status, begin time, and end time for the deployed adapter.

# **Step 6. Creating or Updating the Adapter Group**

Before you create an application view that uses the events or services supported by an adapter, the following requirements must be met:

- The user group, adapter, must be defined.
- The administrative server user name must be a member of the adapter group.

The action required to complete the configuration depends on which domain template you selected when you created the domain. See the following table for guidelines.

**Table 1-1 Configuration Requirements** 

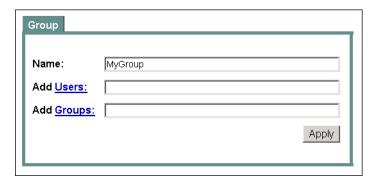
If you created a domain based on the	And the administrative server user name is	Then
Platform domain template	Any value	Create the adapter group and add the administrative user name to it as described in "Creating the Adapter Group" on page 1-19.
WLI or EAI domain template	system	The adapter group is already defined. This group includes the system user name by default.  No further configuration is required.
WLI or EAI domain template	A value other than system	The adapter group is already defined. Add the user name to the group as described in "Adding the User Name to the Adapter Group" on page 1-20.

## **Creating the Adapter Group**

To create the adapter group and add the administrative server user name to it, complete the following steps:

- 1. In the left pane of the WebLogic Server Administration Console, choose Compatibility Security and then Groups from the navigation tree.
- 2. Click the Create a New Group link to display the Group window.

Figure 1-10 Group Window



- 3. Enter adapter in the Name field.
- 4. Enter the administrative server user name in the Add Users field.
- 5. Click Apply.

The Group window is updated as shown in the following figure.

Figure 1-11 Group Window



## **Adding the User Name to the Adapter Group**

To add the administrative server user name to the adapter group, complete the following steps:

- 1. In the left pane of the WebLogic Server Administration Console, choose Compatibility Security and then Groups from the navigation tree.
  - The console displays the groups currently defined for the domain.
- 2. Locate and click the link for the adapter group to display the group definition.

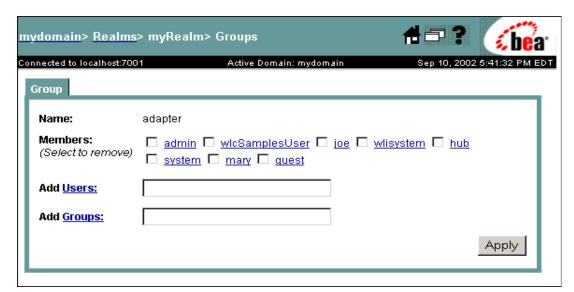


Figure 1-12 Group Definition

- 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:

- BEA WebLogic Adapter for PeopleSoft 8 Component Interfaces
- Step 1. Making Component Interfaces Available to PeopleSoft 8
- Step 2. Configuring Component Interface Security
- Step 3. Testing the Component Interfaces
- Step 4. Modifying the Classpath of the Machine that Runs BEA Application Explorer

**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

The following steps describe how to import the BEA\_CI\_81 or BEA\_CI\_84 project to PeopleSoft 8.

- 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.

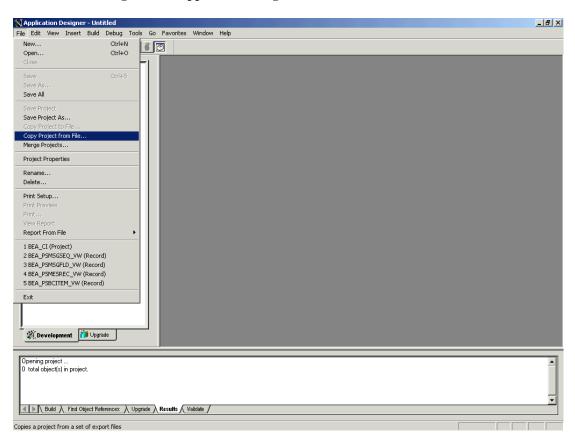


Figure 2-1 Application Designer Window - Release 8.1

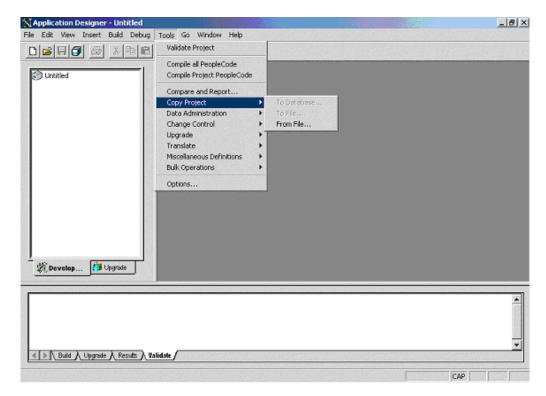


Figure 2-2 Application Designer Window - Release 8.4

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

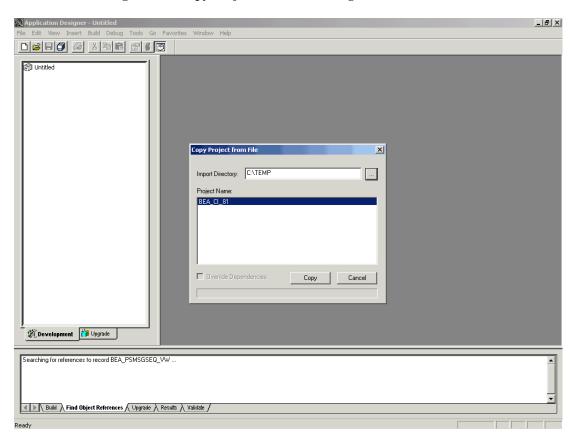


Figure 2-3 Copy Project From File Dialog Box - Release 8.1

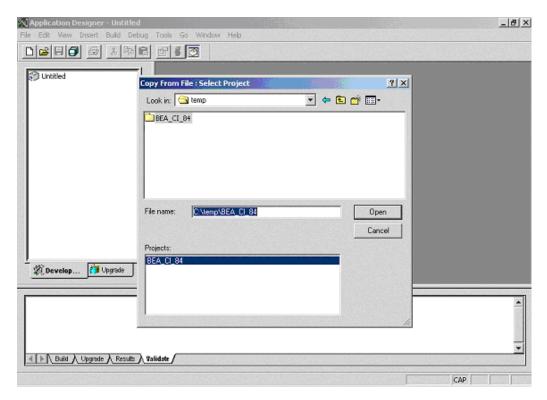


Figure 2-4 Copy From File: Select Project Dialog Box - Release 8.4

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.

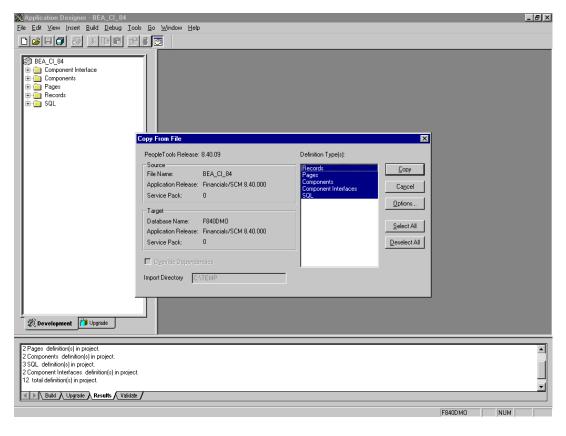


Figure 2-5 Application Designer - Copy From File Dialog Box

 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.

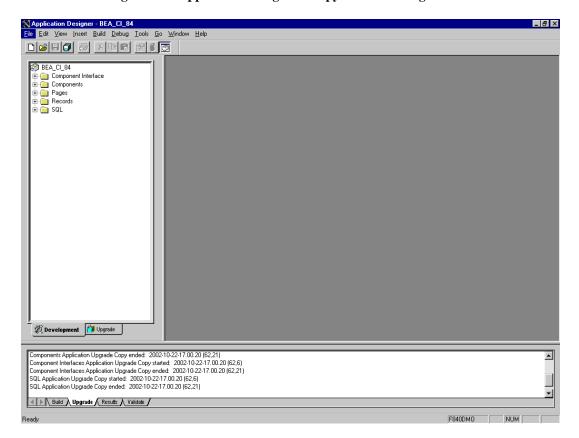


Figure 2-6 Application Designer - Copy Ended Message

Build the views in the project by choosing Build—Project.
 The Build dialog box opens.

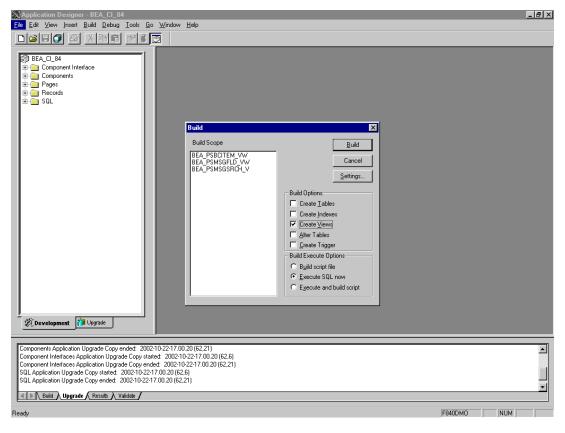


Figure 2-7 Application Designer - Build Dialog Box

- 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.

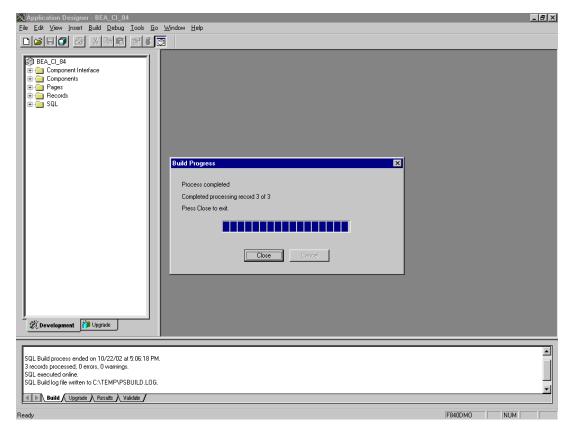


Figure 2-8 Application Designer - Build Progress Dialog Box

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.

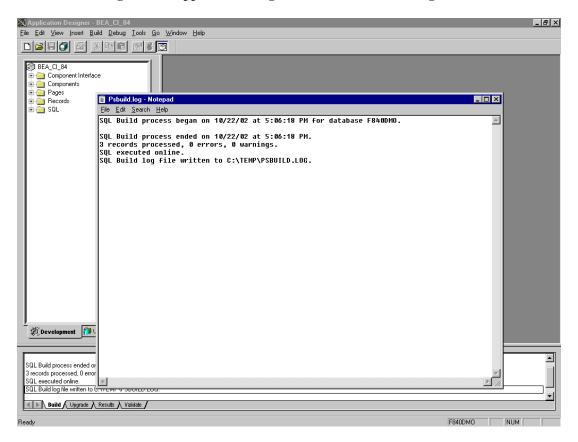


Figure 2-9 Application Designer - PSBUILD Process Log File

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

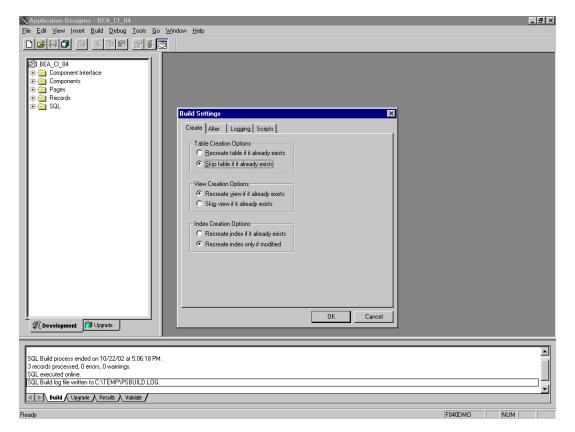


Figure 2-10 Application Designer - Build Settings Dialog Box

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.

 Choose PeopleTools→Security→User Profiles→Permissions & Roles→ Permission Lists.

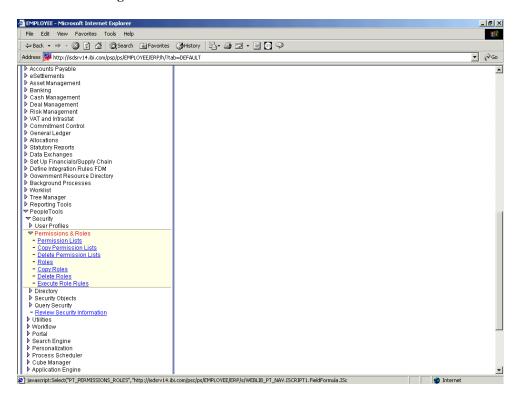
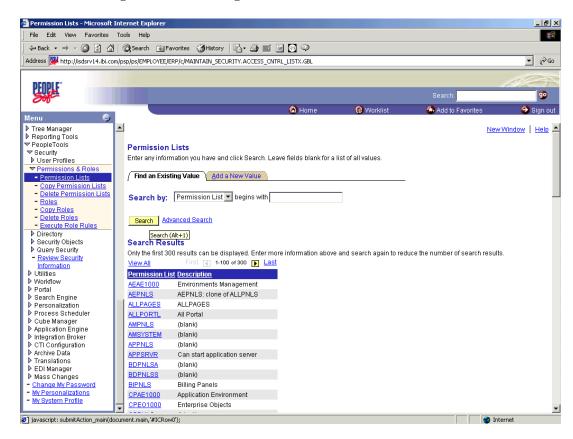


Figure 2-11 Permission Lists Window

2. Click Search and select the relevant Permission List.

Figure 2-12 Searching for Permission Lists



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

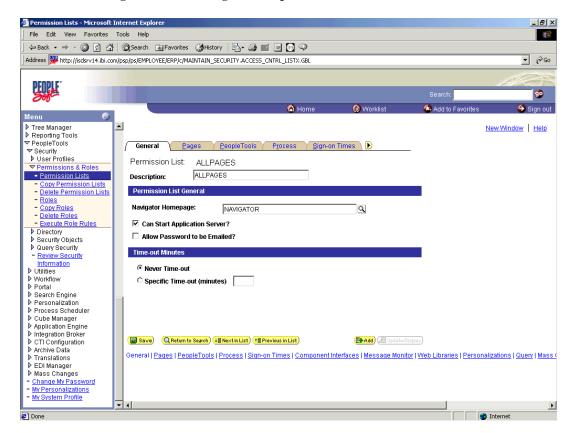


Figure 2-13 Finding the Component Interfaces tab

4. Click the Component Interfaces tab.

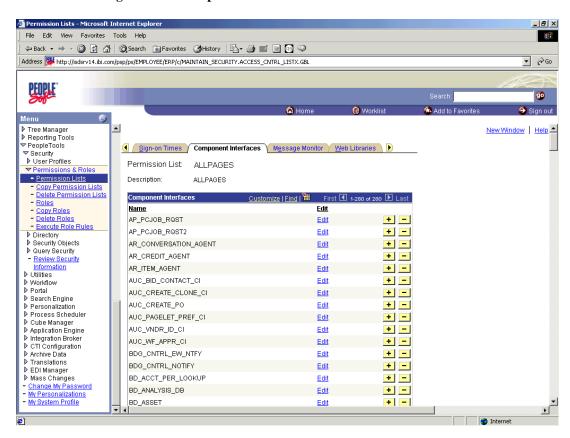


Figure 2-14 Component Interfaces Window

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

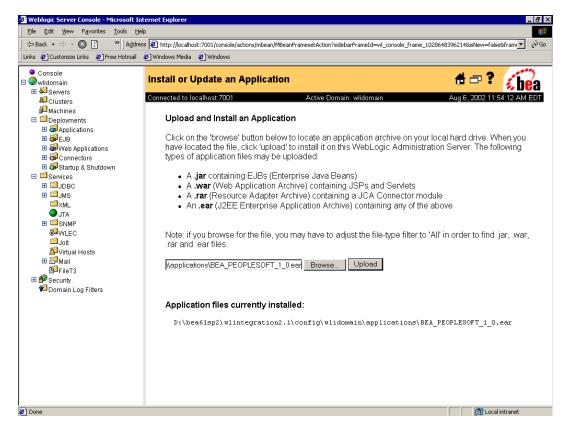


Figure 2-15 Component Interfaces List

6. Enter or select the BEA CI ATTRIBUTES component interface and click Edit.

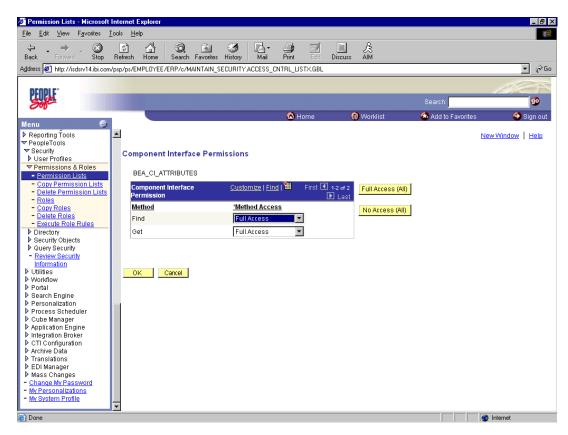


Figure 2-16 Component Interface Permissions Window

- 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.

- 1. Open the BEA\_CI\_ATTRIBUTES Component Interface.
- 2. Choose Tools→Test Component Interface.

The Component Interface Tester dialog box opens.

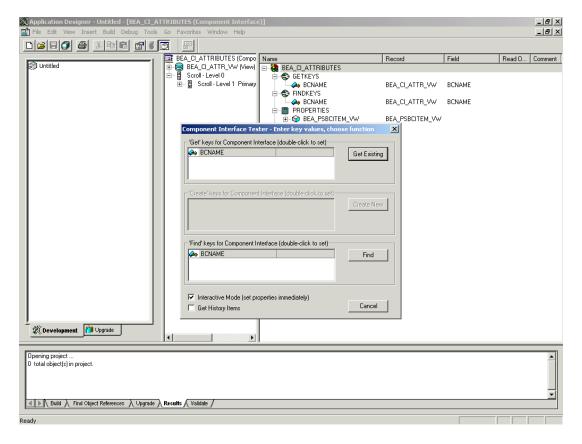


Figure 2-17 Component Interface Tester Dialog Box

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.

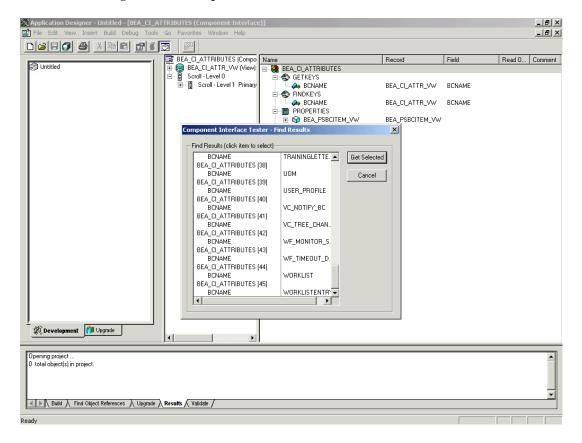


Figure 2-18 Component Interface Tester - Find Results Window

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.

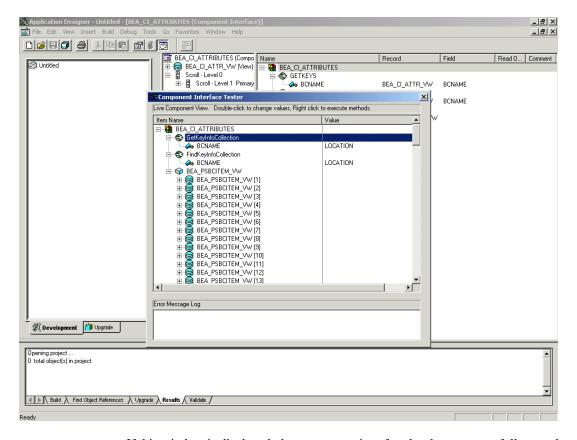


Figure 2-19 Component Interface Tester Window

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.

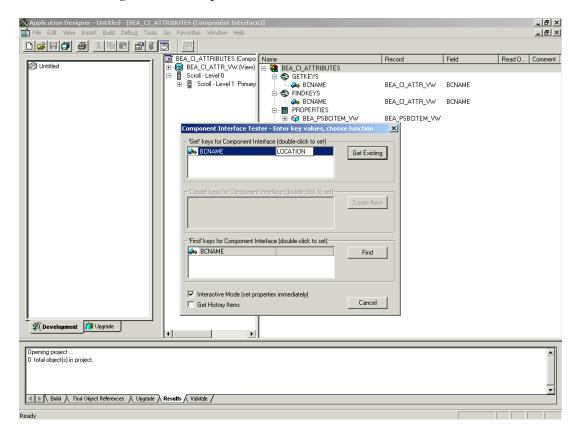


Figure 2-20 Component Interface Tester Window

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

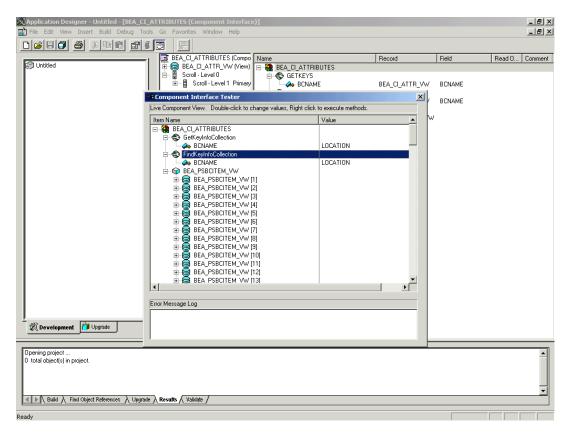


Figure 2-21 Component Interface Tester - Results Window

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 3. Extracting JARs and Adjusting the Classpath in Chapter 1, "Installing the Adapter for WebLogic Integration 7.0," 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 3. Extracting JARs and Adjusting the Classpath in Chapter 1, "Installing the Adapter for WebLogic Integration 7.0."

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

## 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. Extract and Install the BEA TCP/IP Handler
- Step 2. Configure the BEA TCP/IP Handler on the PeopleSoft 8 Gateway Server

#### Step 1. Extract and Install 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$PublicationHandler.class
extracted:
psft/pt8/tcphandler/TCPIPHandler81$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.

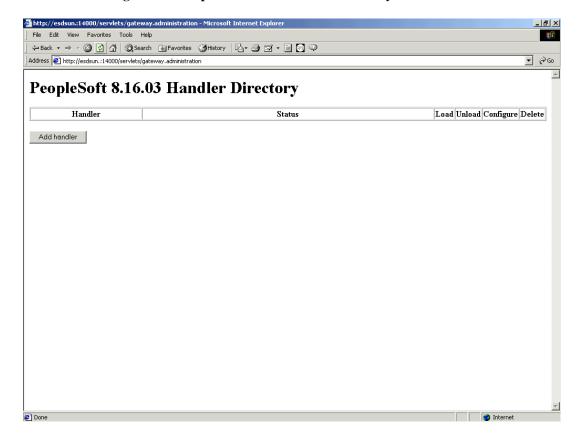
#### Step 2. Configure the BEA TCP/IP Handler on the PeopleSoft 8 Gateway Server

To configure the BEA TCP/IP Handler software, perform the following steps:

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

http://serverURL/servlets/gateway.administration

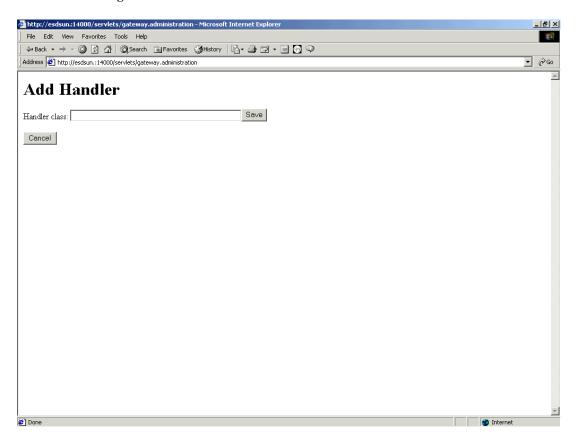
Figure 3-1 PeopleSoft 8.16.03 Handler Directory Window



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:

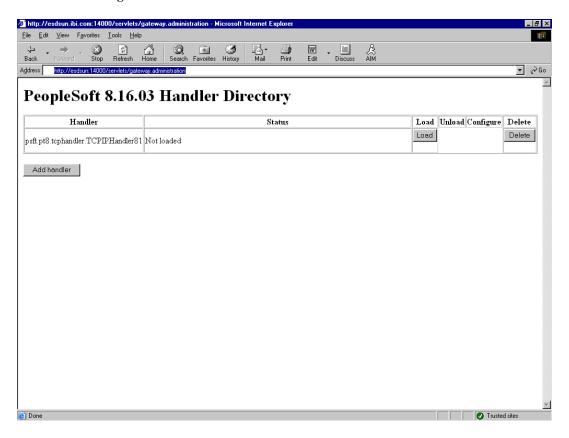


Figure 3-3 Handler Status Window

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

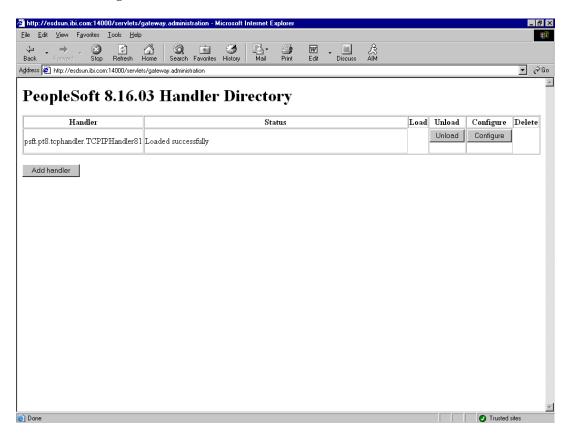
5. Click Load to activate that handler. Once loaded, the gateway servlet loads the specified Java class in memory after searching the machine Classpath.

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.

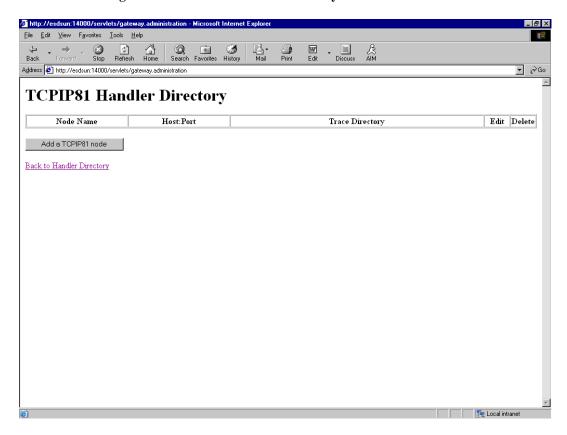


Figure 3-5 TCPIP81 Handler Directory Window

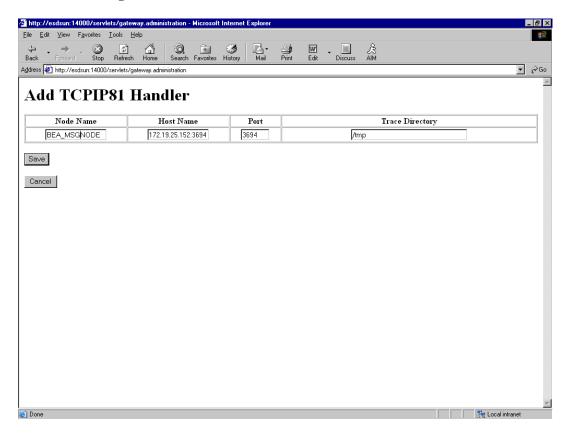
7. Click the Add a TCPIP81 node button.

The TCPIP81 Handler window opens.

- 8. In the Node Name field, enter the name of the node you want to add, such as  ${\tt BEA\_MSGNODE}.$
- 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.





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

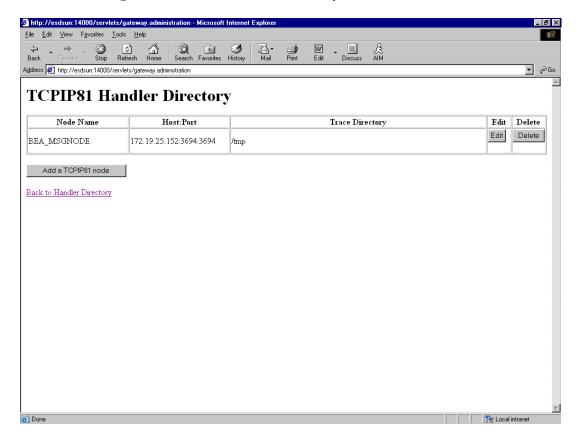


Figure 3-7 TCPIP81 Handler Directory Window With Node

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

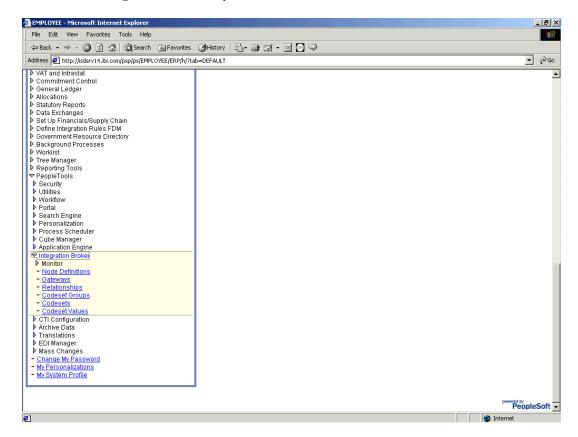
■ For WebSphere,

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

#### **How to Create a Gateway**

1. Click PeopleTools  $\rightarrow$  Integration Broker  $\rightarrow$  Gateways.

Figure 3-8 Gateways Window



Find the Local Gateway and enter the URL in the Gateway URL field.This URL is usually set during installation.

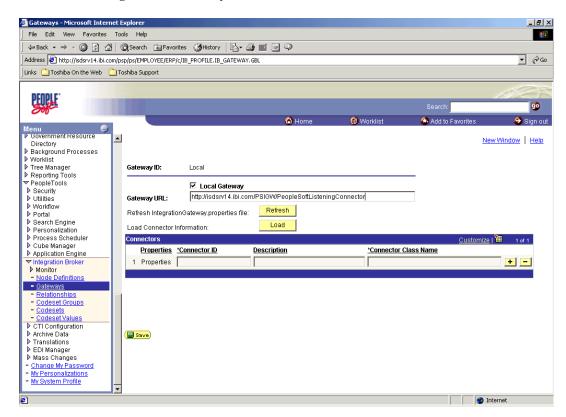


Figure 3-9 Gateway URL Window

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

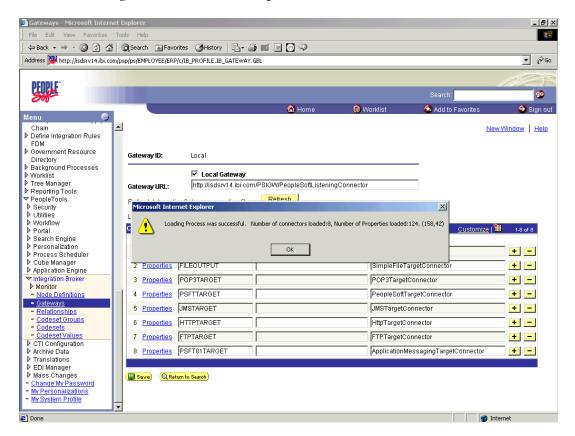


Figure 3-10 Connector Properties Window

- 4. Click OK. The TCPIPTARGET84 connector is included in the Connectors list.
- 5. Enter the Gateway URL. The following window opens.

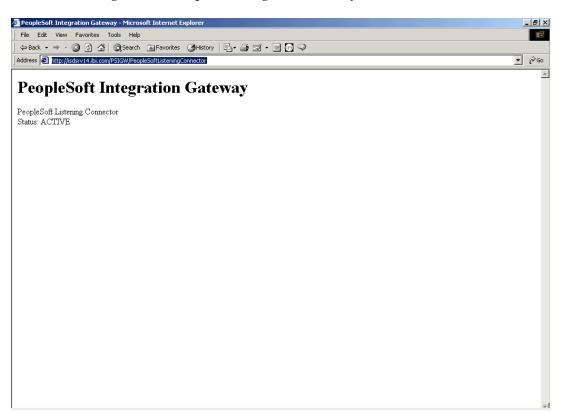


Figure 3-11 PeopleSoft Integration Gateway Window

The Gateway is now configured.