

iWay

iWay Adapter for PeopleSoft 8 for BEA WebLogic
User's Guide
Version 5 Release 5

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Preface

This document explains how to use the iWay Adapter for PeopleSoft 8, which is used to develop client-server interfaces between PeopleSoft 8 and other applications. It describes how to use the iWay Adapter for PeopleSoft 8 with BEA WebLogic Server and iWay Application Explorer to develop online connections to PeopleSoft 8 applications.

How This Manual Is Organized

This manual includes the following chapters:

Chapter/Appendix		Contents
1	Introducing the iWay Adapter for PeopleSoft 8	Provides an overview of the iWay Adapter for PeopleSoft 8 and summarizes how to use it to integrate PeopleSoft systems with other applications.
2	Generating Component Interface APIs	Describes how to generate component interface APIs for use with the iWay Adapter for PeopleSoft 8.
3	Configuring the PeopleSoft Message Router	Describes how to configure the TCP/IP Target Connector (in PeopleSoft release 8.4) and the TCP/IP Handler (in PeopleSoft release 8.1).
4	Creating XML Schemas or Web Services for PeopleSoft	Describes how to create XML schemas for PeopleSoft business objects using iWay Servlet Application Explorer (iAE).
5	Listening for PeopleSoft Events	Describes how to use iWay Servlet Application Explorer to connect to PeopleSoft and listen for events.
6	Creating and Publishing iWay Business Services	Describes how to create and publish an iWay Business Service using iWay Servlet Application Explorer.
A	Using Application Explorer in WebLogic Workshop	Describes how to use the iWay Java Swing Application Explorer in BEA WebLogic Workshop to create XML schemas for PeopleSoft Component Interfaces (CI) and Messages.
B	Using Component Interfaces	Describes how to create, secure, and test a component interface for use with the iWay Adapter for PeopleSoft 8.

Chapter/Appendix		Contents
C	Using PeopleSoft 8 Integration Broker	<p>Discusses how to configure and test:</p> <ul style="list-style-type: none"> • PeopleSoft Integration Broker (release 8.4) • PeopleSoft Application Messaging (release 8.1) <p>using a PeopleSoft-supplied File Output interface.</p>

Documentation Conventions

The following conventions apply throughout this manual:

Convention	Description
THIS TYPEFACE or <i>this typeface</i>	Denotes syntax that you must enter exactly as shown.
<i>this typeface</i>	Represents a placeholder (or variable) in syntax for a value that you or the system must supply.
<u>underscore</u>	Indicates a default setting.
<i>this typeface</i>	Represents a placeholder (or variable), a cross-reference, or an important term.
this typeface	Highlights a file name or command.
Key + Key	Indicates keys that you must press simultaneously.
{ }	Indicates two or three choices; type one of them, not the braces.
	Separates mutually exclusive choices in syntax. Type one of them, not the symbol.
...	Indicates that you can enter a parameter multiple times. Type only the parameter, not the ellipsis points (...).
.	Indicates that there are (or could be) intervening or additional commands.

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Call Information Builders Customer Support Service (CSS) at (800) 736-6130 or (212) 736-6130. Customer Support Consultants are available Monday through Friday between 8:00 a.m. and 8:00 p.m. EST to address all your iWay Adapter for PeopleSoft 8 questions. Information Builders consultants can also give you general guidance regarding product capabilities and documentation. Please be ready to provide your six-digit site code number (xxxx.xx) when you call.

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Information You Should Have

To help our consultants answer your questions most effectively, be ready to provide the following information when you call:

- Your six-digit site code number (xxxx.xx).
- Your iWay Software configuration:
 - The iWay Software version and release.
 - The communications protocol (for example, TCP/IP or LU6.2), including vendor and release.
- The stored procedure (preferably with line numbers) or SQL statements being used in server access.
- The database server release level.

- The database name and release level.
- The Master File and Access File.
- The exact nature of the problem:
 - Are the results or the format incorrect? Are the text or calculations missing or misplaced?
 - The error message and return code, if applicable.
 - Is this related to any other problem?
- Has the procedure or query ever worked in its present form? Has it been changed recently? How often does the problem occur?
- What release of the operating system are you using? Has it, your security system, communications protocol, or front-end software changed?
- Is this problem reproducible? If so, how?
- Have you tried to reproduce your problem in the simplest form possible? For example, if you are having problems joining two data sources, have you tried executing a query containing just the code to access the data source?
- Do you have a trace file?
- How is the problem affecting your business? Is it halting development or production? Do you just have questions about functionality or documentation?

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CHAPTER 1

Introducing the iWay Adapter for PeopleSoft 8

Topics:

- Key Features of the iWay Adapter for PeopleSoft 8
- How the iWay Adapter for PeopleSoft 8 Works
- Deployment Information for the iWay Adapter for PeopleSoft 8

This section provides an overview of the iWay Adapter for PeopleSoft 8 and describes how to integrate PeopleSoft systems with other applications.

Key Features of the iWay Adapter for PeopleSoft 8

The iWay Adapter for PeopleSoft 8 enables you to:

- Access a PeopleSoft component using a component interface.

Component methods also are referred to as services.

- Receive messages from a PeopleSoft application.

Messages also are referred to as events.

When you access a PeopleSoft component from another application, you work with:

- **Component interfaces.** If a component interface does not exist, create, secure, and test one. For more information, see Appendix B, *Using Component Interfaces* or your PeopleSoft documentation.

If the component interface exists, but you modified it, secure and test it. For more information, see Appendix B, *Using Component Interfaces* or your PeopleSoft documentation.

Alternatively, you can secure and test the component interface and create the component interface API after you generate schemas or Web services.

- **Component interface APIs.** Create an API for the component interface. For more information, see Chapter 2, *Generating Component Interface APIs*.
- **Schemas and Web services.** Create schemas or Web services for the component's methods. For more information, see Chapter 4, *Creating XML Schemas or Web Services for PeopleSoft*.

To receive a message from PeopleSoft, you work with:

- **The Integration environment.** Configure and test your PeopleSoft Integration Broker (release 8.4) or Application Messaging environment (release 8.1). To ensure that the environment is properly configured, see Appendix C, *Using PeopleSoft 8 Integration Broker* or your PeopleSoft documentation.
- **Message routing.** Configure TCP/IP Target Connector (release 8.4), HTTP Target Connector (release 8.4), or TCP/IP Handler (release 8.1). For more information, see Chapter 3, *Configuring the PeopleSoft Message Router*.

How the iWay Adapter for PeopleSoft 8 Works

The iWay Adapter for PeopleSoft 8 provides a means to exchange real-time business data between PeopleSoft systems and other applications, databases, and external business partner systems. The adapter enables inbound and outbound processing with PeopleSoft.

The adapter uses BEA WebLogic Server and XML messages to enable non-PeopleSoft applications to communicate and exchange transactions using one of following two facilities:

- PeopleSoft component interface
- PeopleSoft Application Messaging Manager

The adapter connects to the PeopleSoft Application Server by accessing APIs for the component interfaces that correspond to its supported business objects. Every component interface contains data and business logic for the business component, thus alleviating a requirement for the adapter to duplicate the processes defined within the business component.

The adapter is bidirectional, enabling it to:

- Detect an event by receiving an XML document from PeopleSoft using Application Messaging.
- Pass an XML request document to execute an instance of the PeopleSoft component interface and its method.

PeopleSoft Enterprise Application Integration Architecture

PeopleSoft provides for integration with other applications and systems through its component interface framework and its Integration Broker (in release 8.4) or Application Messaging (in release 8.1) facility. The iWay Adapter for PeopleSoft 8 uses the PeopleSoft framework and leverages various integration access methods to provide the greatest amount of flexibility and functionality.

Integration access methods supported by the iWay Adapter for PeopleSoft 8 include:

- PeopleSoft Java™ API using component interfaces.
- PeopleSoft XML using Application Messaging.

PeopleSoft Component Interface

In the PeopleSoft environment, a component interface is a container for distributing PeopleSoft application data among PeopleSoft logical systems and for exchanging PeopleSoft application data with non-PeopleSoft systems.

The component interface is based on an existing business process within PeopleSoft. An example is a purchase order entry, which can be a PeopleSoft-delivered process or a user-developed process. The component interface also inherits its methods (Add, Update, and so on) and its business logic from the underlying business process.

PeopleSoft delivers generic component interfaces with each of its applications. These are called Enterprise Integration Points (EIP). Customers also can develop their own custom component interfaces, or they can modify EIP as required.

PeopleSoft Application Messaging Manager

PeopleSoft Application Messaging facilitates the integration of PeopleSoft XML with PeopleSoft. The iWay Adapter for PeopleSoft 8 provides a handler that must be configured within the PeopleSoft application gateway using TCP/IP transport services.

Deployment Information for the iWay Adapter for PeopleSoft 8

The iWay Adapter for PeopleSoft 8 works in conjunction with the following components:

- iWay Servlet Application Explorer

with either

- iWay Business Services Engine (iBSE)

or

- iWay Enterprise Connector for J2EE™ Connector Architecture (JCA)

Application Explorer, used to access PeopleSoft metadata and create Web services and events, can be configured to work in a Web services environment in conjunction with the iWay Business Services Engine (iBSE) or with the iWay Enterprise Connector for J2EE Connector Architecture (JCA). When working in a JCA environment, the connector uses the Common Client Interface (CCI) to provide fast integration services using an iWay Adapter instead of using Web services.

Both iBSE and the iWay Connector for JCA are deployed to your application environment with Application Explorer and the adapters.

Deployment Information Roadmap

The following table lists the location of deployment information for the iWay Adapter for PeopleSoft 8. A description of the iWay Business Services Engine (iBSE) and the iWay Enterprise Connector for J2EE Connector Architecture (JCA) follow the table.

Deployed Component	For more information, see
iWay Application Explorer	<ul style="list-style-type: none">• Chapters 4, 5, and 6 of this guide• Appendix A of this guide when using Application Explorer inside WebLogic Workshop• <i>iWay Servlet Application Explorer User's Guide</i>
iWay Business Services Engine (iBSE)	<ul style="list-style-type: none">• <i>iWay 5.5 Installation and Configuration for BEA WebLogic</i>

Deployed Component	For more information, see
iWay Enterprise Connector for J2EE Connector Architecture (JCA)	<ul style="list-style-type: none"> <i>iWay Connector for JCA for BEA WebLogic User's Guide</i> <i>iWay 5.5 Installation and Configuration for BEA WebLogic</i>

iWay Application Explorer

iWay Application Explorer (iAE) uses an explorer metaphor to browse the PeopleSoft system for metadata and create Web services and events.

The following versions of Application Explorer are available when deploying the adapter with WebLogic Server:

- **Servlet.** Deployed as a Web application on BEA WebLogic Server, this version is accessible through a Web browser. In addition, the servlet Application Explorer can be used with iWay Business Services Engine (iBSE) and iWay Enterprise Connector for J2EE Connector Architecture (JCA). For more information, see the following chapters:
 - Chapter 4, *Creating XML Schemas or Web Services for PeopleSoft*
 - Chapter 5, *Listening for PeopleSoft Events*
 - Chapter 6, *Creating and Publishing iWay Business Services*
- **Integrated Java Swing.** Tightly integrated within the BEA WebLogic toolset, the integrated Java Swing Application Explorer can be accessed directly from WebLogic WorkShop, where WSDL (Web Services Description Language) files generated from iWay Business Services and XML schemas can be shared as resources within a WebLogic WorkShop application. For more information, see Appendix A, *Using Application Explorer in WebLogic Workshop*.

Note: To use Application Explorer within WebLogic WorkShop, you must deploy the iWay Business Services Engine (iBSE). For more information, see the *iWay 5.5 Installation and Configuration for BEA WebLogic* documentation.

The iWay Business Services Engine

The iWay Business Services Engine (iBSE) exposes—as Web services—enterprise assets that are accessible from adapters regardless of the programming language or the particular operating system.

iBSE simplifies the creation and execution of Web services when running:

- Custom and legacy applications
- Database queries and stored procedures

- Packaged applications
- Terminal emulation and screen-based systems
- Transactional systems

Web services is a distributed programming architecture that solves Enterprise Application Integration (EAI) hurdles that other programming models cannot. It enables programs to communicate with one another using a text-based but platform and language independent message format called XML.

Coupled with a platform and language independent messaging protocol called SOAP (Simple Object Access Protocol), XML enables application development and integration by assembling previously built components from multiple Web services.

The iWay Enterprise Connector for J2EE Connector Architecture

The iWay Enterprise Connector for J2EE Connector Architecture (JCA) enables developers of JCA-compliant applications to deploy iWay adapters as JCA resources. The connector is supported on J2EE-compliant application servers such as BEA WebLogic Server.

The iWay Connector for JCA is distributed as a standard Resource Adapter Archive (RAR) for deployment to the application server. Thus, the connector can be used in systems that are non-compliant, although services such as pooled connections are not available.

CHAPTER 2

Generating Component Interface APIs

Topics:

- Building the PeopleSoft API Java Programs
- Compiling the PeopleSoft API Java Programs

This section describes how to generate component interface APIs to use with the iWay Adapter for PeopleSoft 8.

Building the PeopleSoft API Java Programs

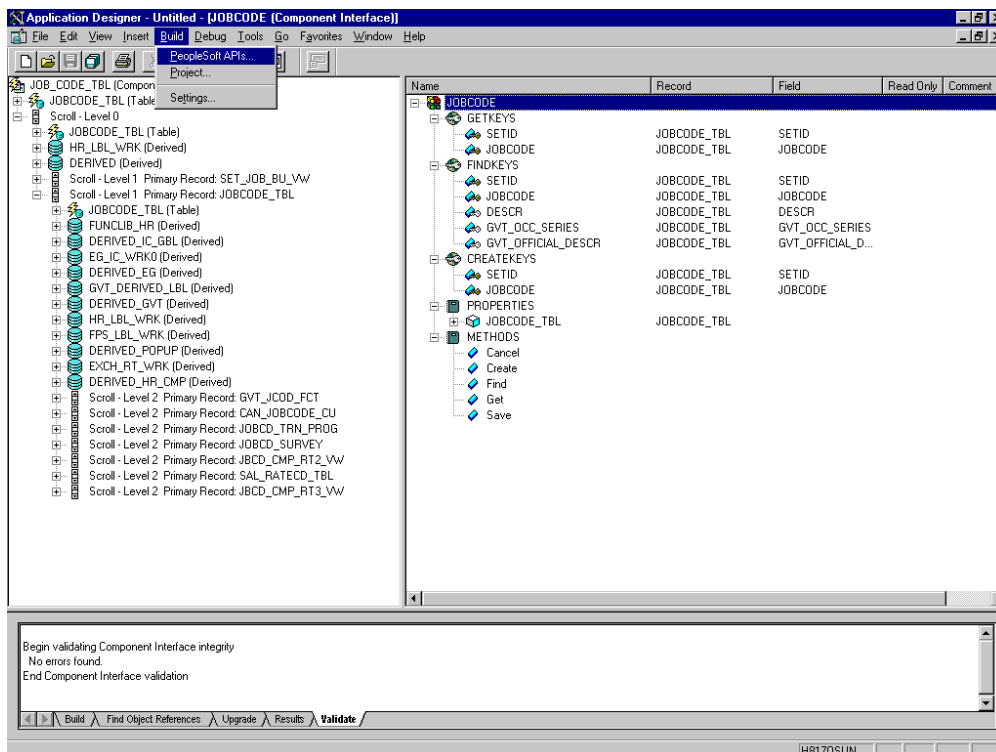
Whether you are using an Enterprise Integration Point (EIP) supplied by PeopleSoft or a customized component interface, you must create a PeopleSoft API to enable communications with the PeopleSoft application. The API is a collection of Java class files that reside on the client machine and mediate between the client application layer and PeopleSoft.

Before using your component interface, you must apply security to it and test it. For information about these tasks, as well as how to create a component interface, see Appendix B, *Using Component Interfaces*.

Procedure How to Build a PeopleSoft API Java Program

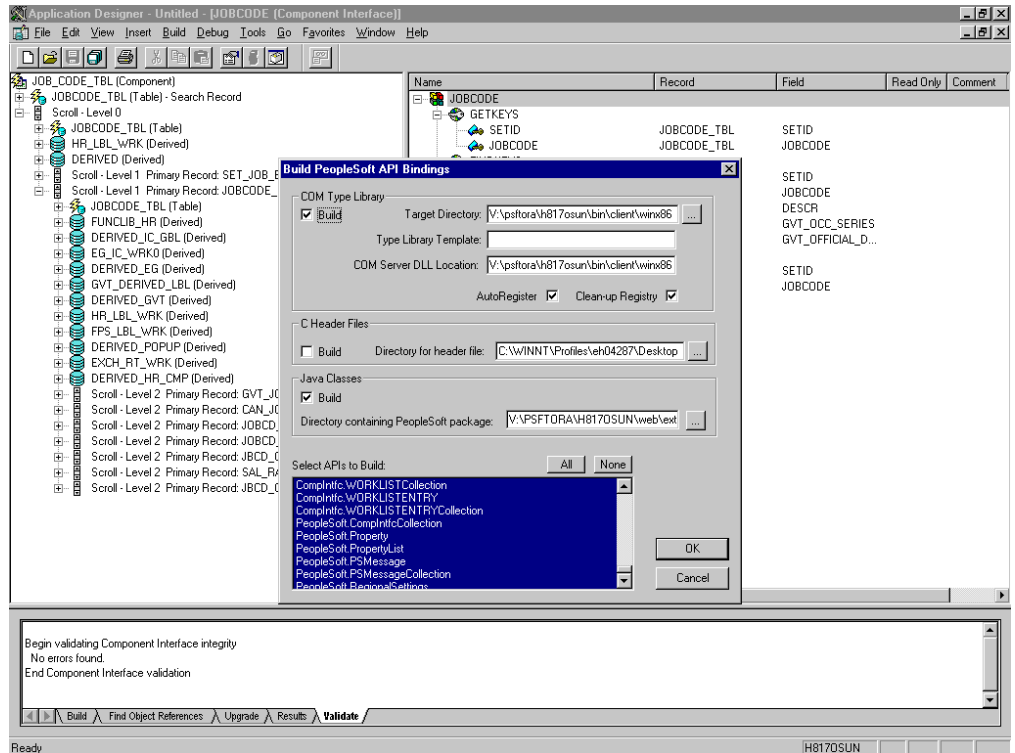
To build a PeopleSoft API Java program:

1. Open the PeopleSoft Application Designer.
2. From the PeopleSoft Application Designer, open a component interface.



3. Click the right pane and then, select *PeopleSoft APIs* from the Build menu.

The Build PeopleSoft API Bindings dialog box opens and prompts you for the types of bindings to create.

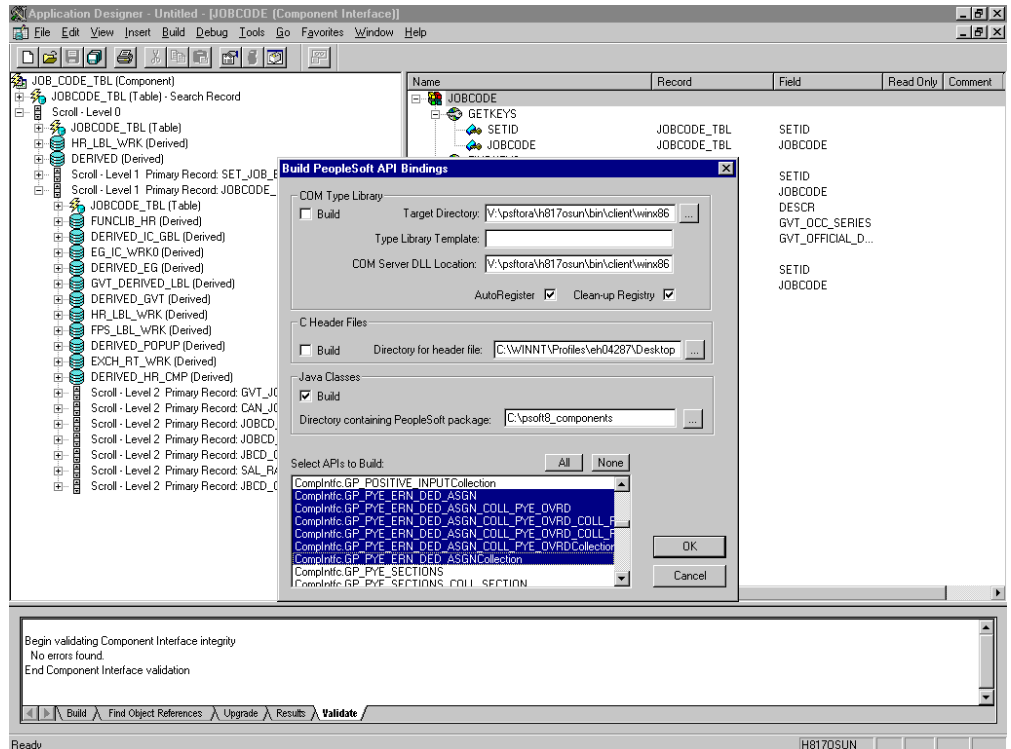


4. Because you are creating Java files, ensure you deselect *COM Type Library Build*.
5. Ensure that *Java Classes Build* is selected and then, select a directory on your local machine where the Java files are to be placed, for example, c:\psoft8_components.
6. Select the APIs to build using one of the following two options:
 - To build all files:
 - a. Select the default, *All* (potentially a large number).
 - b. Click *OK*.

PeopleSoft generates the files. This takes a few minutes. After the process is complete, a message appears in the output window.

You are now ready to compile the Java files. For more information, see *Compiling the PeopleSoft API Java Programs* on page 2-6.

The following pane illustrates the GP_PYE_ERN_DED_ASGN component interface from the HR 8.1 application.

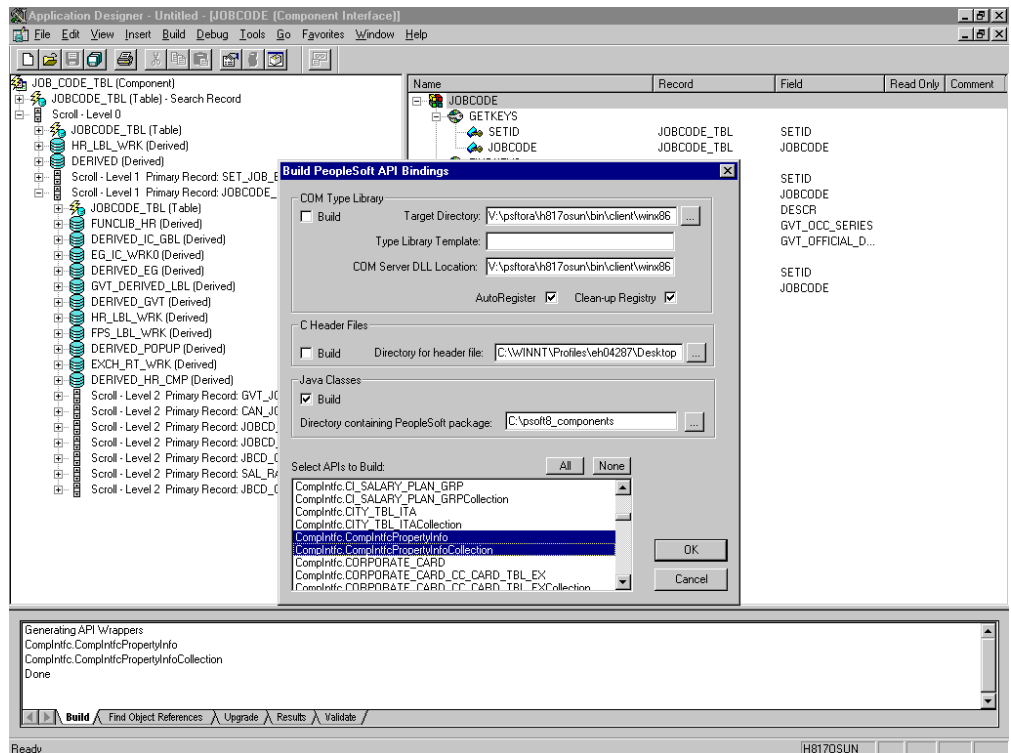


- To create APIs for a specific component interface or interfaces:

a. Click *None*.

This clears the selected APIs, so you can select the appropriate APIs for your component interface. These APIs begin with the name of your component interface. There may be fewer than five, or more than 50 APIs, for a particular component interface.

The dialog box displays the following APIs, including generic component interface properties.



- b. In addition to the APIs for the selected component interface, you also must generate the API files for the following generic component interface properties:

ComplntfcPropertyInfo

ComplntfcPropertyInfoCollection

You may select these items in the same step as the component interface build, or you may select them separately.

- c. Click OK.

PeopleSoft generates the files. This takes a few minutes. After the process is complete, a message appears in the output window.

You are now ready to compile the Java files. For more information, see *Compiling the PeopleSoft API Java Programs* on page 2-6.

Compiling the PeopleSoft API Java Programs

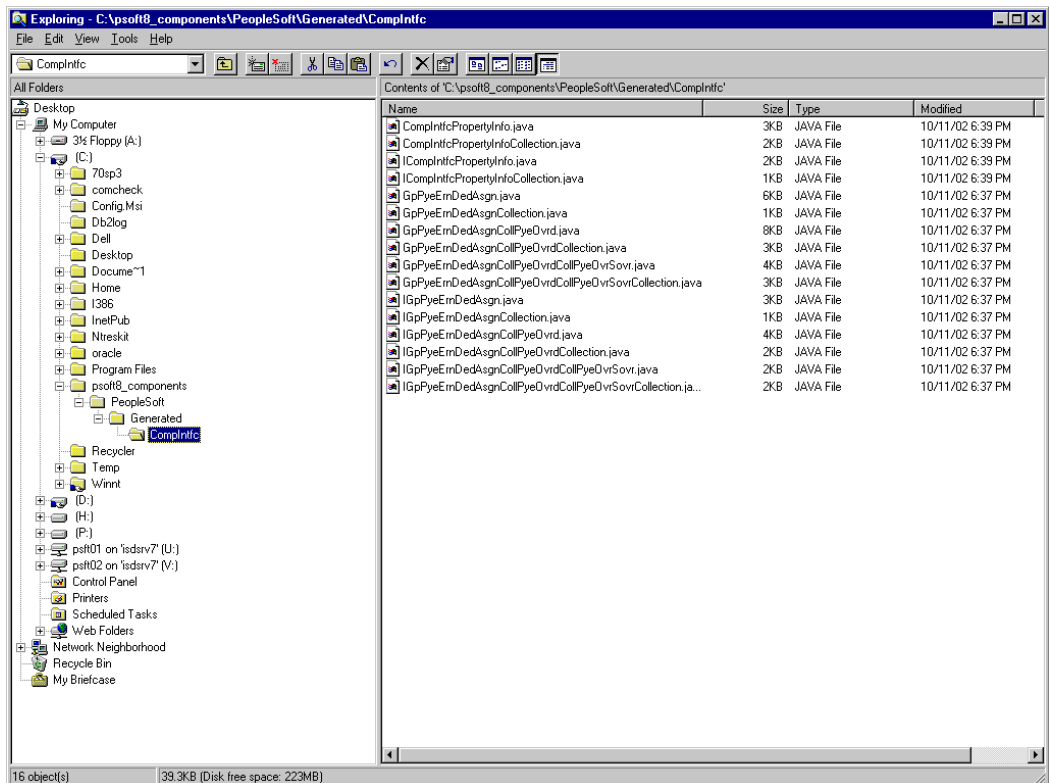
PeopleSoft places the Java programs to compile in the directory called

`psoft8_components\PeopleSoft\Generated\CompIntfc`

where:

`psoft8_components`

Is the directory specified during the build process.



If you chose to generate all APIs, the systems creates a second directory, `psoft8_components\PeopleSoft\Generated\PeopleSoft`. You are not required to access it.

The process for compiling the PeopleSoft API Java Programs depends on whether you are compiling on the machine where you installed Application Explorer or on another machine.

Note: There are two Java programs for every API file that you selected when you built the Java programs. for more information, see *Building the PeopleSoft API Java Programs* on page 2-2.

Before you compile the Java programs, you require the PeopleSoft Java Object Adapter, the `psjoa.jar` file that resides on your PeopleSoft Application Server under the `PS_HOME\Web\psjoa` directory. This is the file that you placed in the adapter lib directory during installation. For more information, see the *iWay 5.5 Installation and Configuration BEA WebLogic* documentation.

Procedure How to Compile the PeopleSoft API Java Programs

To compile the PeopleSoft API Java programs:

- If you are compiling on the same machine where you installed Application Explorer:
 1. Point to the `psjoa.jar` file or copy it to the directory where you placed the Java API files, for example, `c:\psft8_components`. For more information, see *Building the PeopleSoft API Java Programs* on page 2-2.
- If you are compiling on a machine other than the one where you installed Application Explorer:
 1. Obtain a copy of the `psjoa.jar` file from the PeopleSoft Application Server. Ensure that the `psjoa.jar` file is in the Java class path before you compile the programs.
 2. Compile the Java programs and ensure that you include the `\PeopleSoft\Generated\CompIntfc` path.

Note: The path is case-sensitive.

The following Windows/NT BAT file, run from the `psft8_components` directory, properly compiles the Java APIs. (The code assumes that `psjoa.jar` was placed in `psft8_components`.)

```
@echo off
set JAVA_HOME=<my-java-home>
set PATH=%JAVA_HOME%\bin;%PATH%
set CLASSPATH=%JAVA_HOME%\lib\tools.jar;psjoa.jar;%CLASSPATH%
javac -classpath %CLASSPATH% .\PeopleSoft\Generated\CompIntfc\*.java
```

where:

```
<my-java-home>
```

Is the fully qualified path name of your Java home directory.

This code places the class files in the same directory with the Java files, but you can choose a different location depending on your site requirements.

3. Compress the class files into a JAR file.

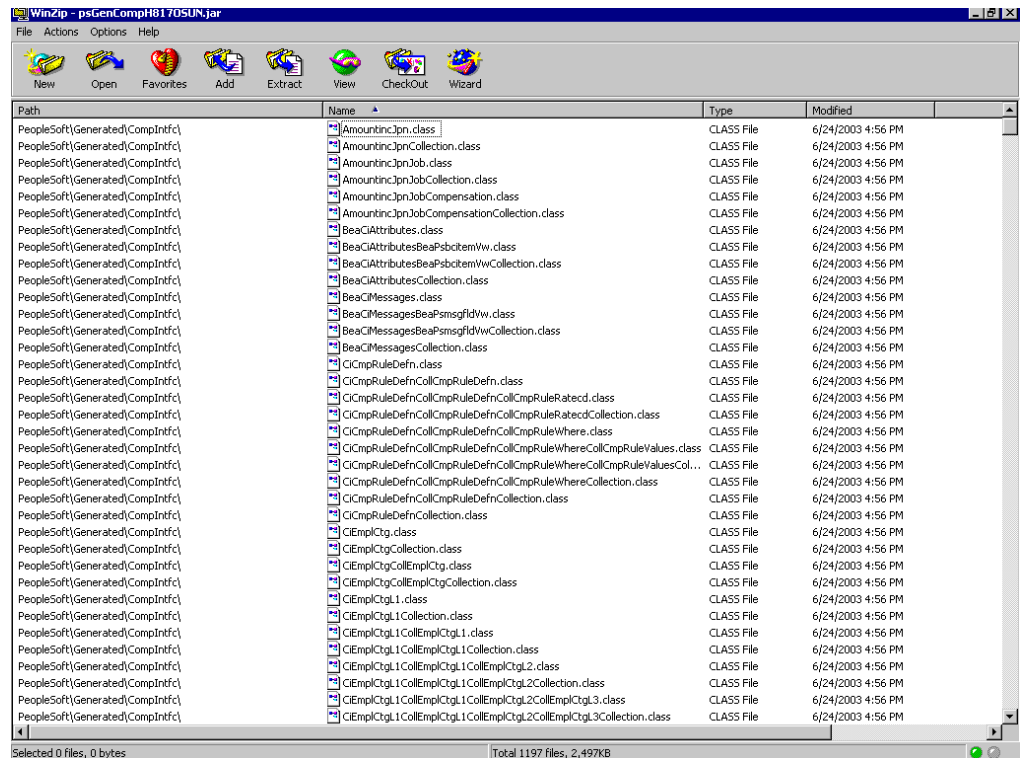
The following Windows BAT file, if run from the psoft8_components directory, creates a correct JAR file:

```
@echo off
set JAVA_HOME= my-java-home
set PATH=%JAVA_HOME%\bin;%PATH%
set CLASSPATH=%JAVA_HOME%\lib\tools.jar;%CLASSPATH%
jar cvf my-jar-file.jar .\PeopleSoft\Generated\CompIntfc\*.class
```

Where appropriate, substitutions are made for my-java-home and my-jar-file.

4. To verify that your JAR file is correct, open it with the WinZip application.

The JAR file looks similar to the following example.



If the JAR file does not use the case-sensitive PeopleSoft\Generated\CompIntfc\ path, you must go back and correct it.

5. Place the JAR file in the iWay Adapters common lib directory.

This enables the iWay Adapter for PeopleSoft 8 to communicate with the PeopleSoft component interface.

For the current Windows/NT version of the product, the default location is:

`iway55\lib`

where:

`iway55`

Is the full path to your iWay installation.

For UNIX, the location is:

`iway55/lib`

where:

`iway55`

Is the destination of the original adapter installation.

For more information, see your iWay installation documentation.

Note: If you are running on UNIX, do the compile and JAR steps on Windows/NT and then move the file to your UNIX machine. The JAR file is binary. If you use an FTP-based tool to move your JAR file from Windows/NT to UNIX, the file format must be set to binary.

CHAPTER 3

Configuring the PeopleSoft Message Router

Topics:

- Configuring the TCP/IP or HTTP Target Connector for PeopleSoft 8.4
- Configuring the TCP/IP Handler for PeopleSoft 8.1
- Testing Your PeopleSoft Configuration

This section describes how to configure and test a TCP/IP or HTTP target connector and a TCP/IP handler for PeopleSoft.

The TCP/IP message routing software, provided with the iWay Adapter for PeopleSoft, passes XML documents from PeopleSoft Integration Gateway to BEA WebLogic Server.

The HTTP Outbound Connector, provided by PeopleSoft, may be used in place of the iWAY TCP/IP84 Connector in release 8.4.

The following configuration topics assume you are familiar with PeopleSoft Integration Broker (in release 8.4) or Application Messaging (in release 8.1). If not, see Appendix C, *Using PeopleSoft 8 Integration Broker*, for basic information about configuring and testing. For a complete description *before* you work with the iWay Adapter for PeopleSoft 8, see your PeopleSoft documentation.

Note: In PeopleSoft release 8.1, the messaging architecture is called Application Messaging and includes Application Messaging Gateway. In release 8.4, the messaging architecture is called Integration Broker, which includes Integration Gateway. When discussing release-independent issues, this section uses release 8.4 terminology. When discussing release-specific issues, it uses release-specific terminology.

Configuring the TCP/IP or HTTP Target Connector for PeopleSoft 8.4

The procedures in this topic assume that your Integration Broker environment is configured and tested. For more information, see Appendix C, *Using PeopleSoft 8 Integration Broker*.

To configure the PeopleSoft 8.4 TCP/IP or HTTP Target Connector to send messages to your BEA WebLogic Server:

1. Configure the gateway for the TCP/IP Target Connector or HTTP Target Connector.

Note: This step is optional when configuring the HTTP Connector.

2. Configure the node.

Configuring the TCP/IP Target Connector

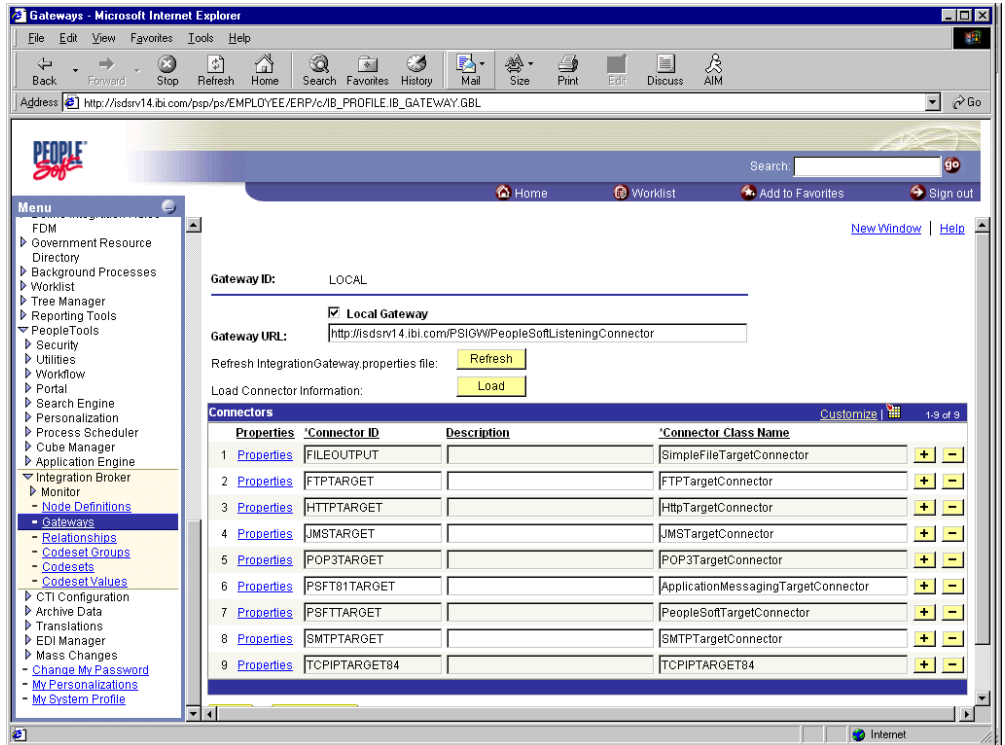
To configure a TCP/IP Target Connector, perform the following procedures.

Procedure How to Configure the Gateway for the TCP/IP Target Connector

To configure the gateway for the TCP/IP Target Connector:

1. In a Web browser, open your PeopleSoft release 8.4 application.
2. In the menu pane, expand *PeopleTools*, then expand *Integration Broker*, and click *Gateways*.
3. Open the *LOCAL Gateway ID*.

A pane similar to the following Gateway ID pane opens.

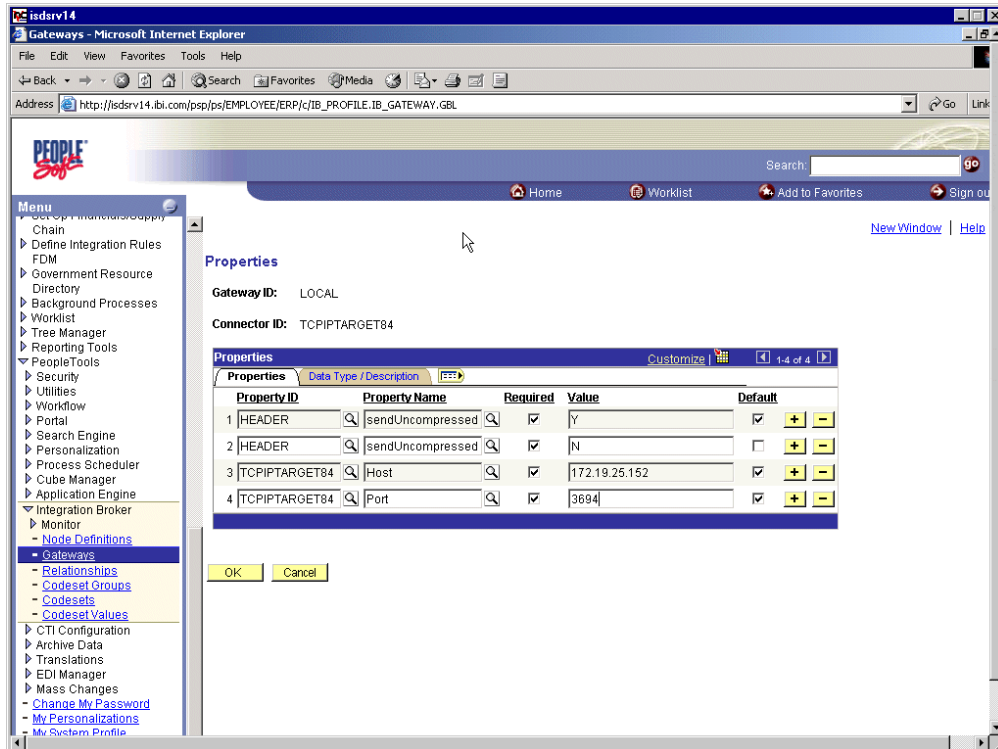


4. If you do not see the TCPIPTARGET84 Connector ID, click *Load* and scroll to locate *TCPIPTARGET84* in the list.

If TCPIPTARGET84 still does not appear, the connector class file was not installed in the Integration Gateway. For information about installing the TCPIPTAGER84 connector, see the *iWay 5.5 Installation and Configuration for BEA WebLogic* documentation.

- a. Click the *Properties* URL for TCPIPTARGET84.

The Properties pane for TCPIPTARGET84 opens.



Default values appear for the host and the port. For complex business situations, you can override this setting on the individual node.

- b. Type the values for the host and the port for the machine on which your PeopleSoft XML listener is listening for incoming messages.
5. Click OK.

The Gateway window opens.

6. Scroll to the bottom of the window and click Save.

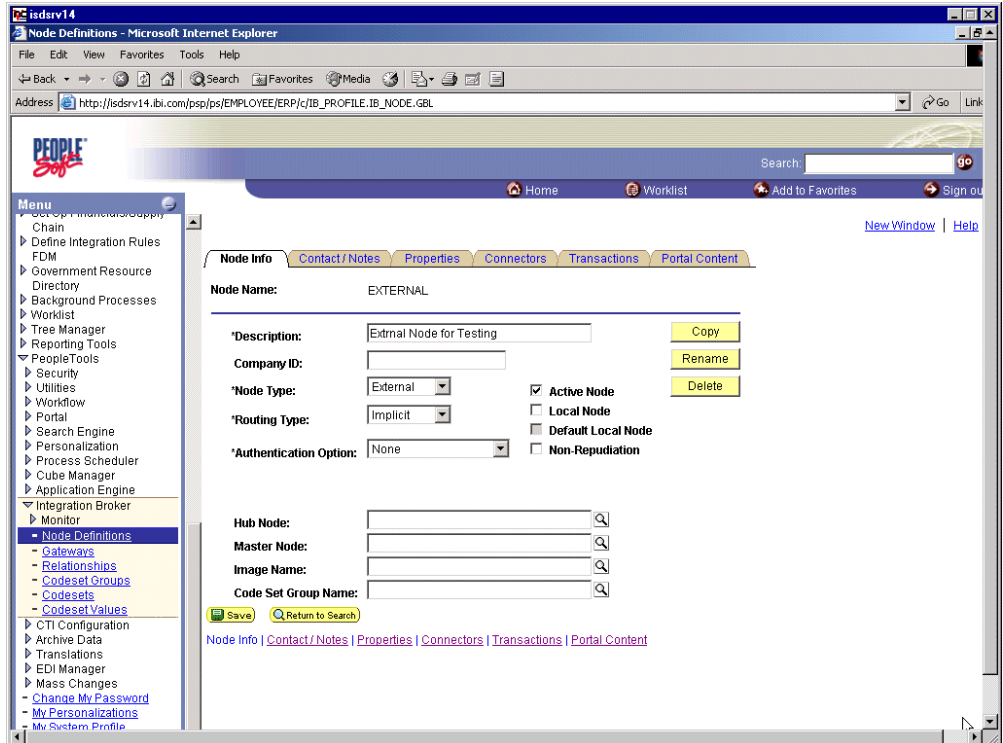
You have finished configuring the gateway for the TCP/IP Target Connector.

Procedure How to Configure the Node for the TCP/IP84 Connector

To configure the node for the TCP/IP84 Connector:

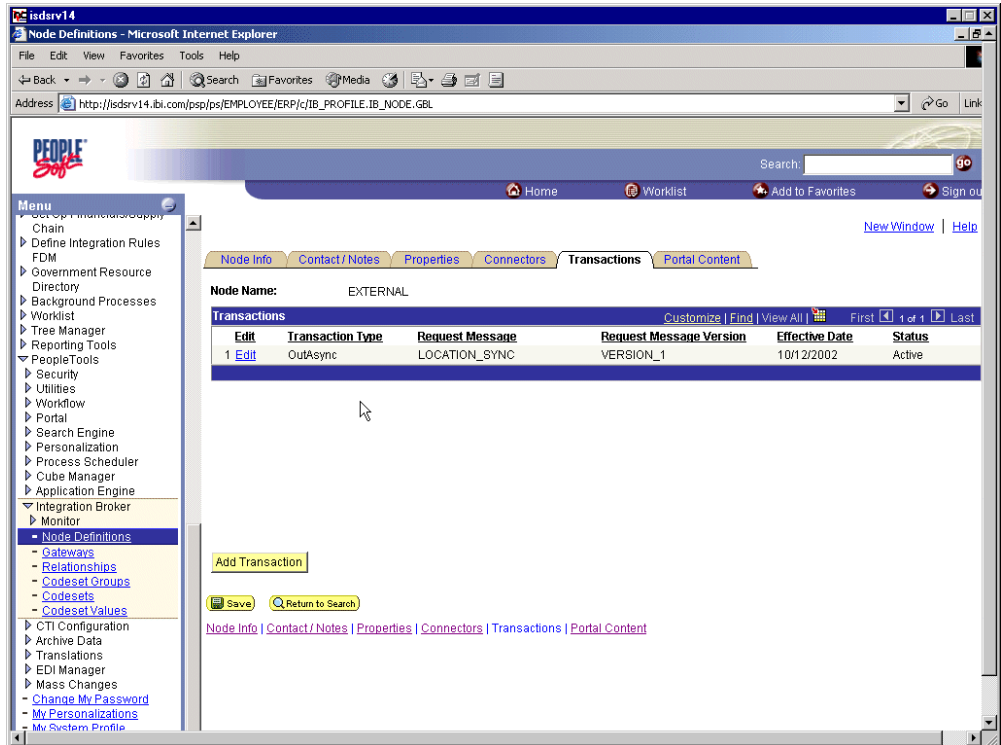
1. In the Menu pane, select *PeopleTools, Integration Broker*, and then, click *Node Definitions*.
2. Select the node that you want to configure.

Note: This procedure uses a node called EXTERNAL. For more information about creating and using nodes, see Appendix C, *Using PeopleSoft 8 Integration Broker* or your PeopleSoft documentation.



- a. Select *External* from the Node Type drop-down list.
- b. Select *Implicit* from the Routing Type drop-down list.
3. Select the *Connectors* tab.
 - a. Select *TCPIPTARGET84* as the Connector ID.
Default values appear for the host and the port.
 - b. Type the values for the host and the port for the machine and port that route XML to your BEA WebLogic Server.
You can accept or override the default values for individual nodes.
 - c. Click *Save*.
4. If you are warned that you are changing the Connector, click *OK*.

5. Select the *Transactions* tab.

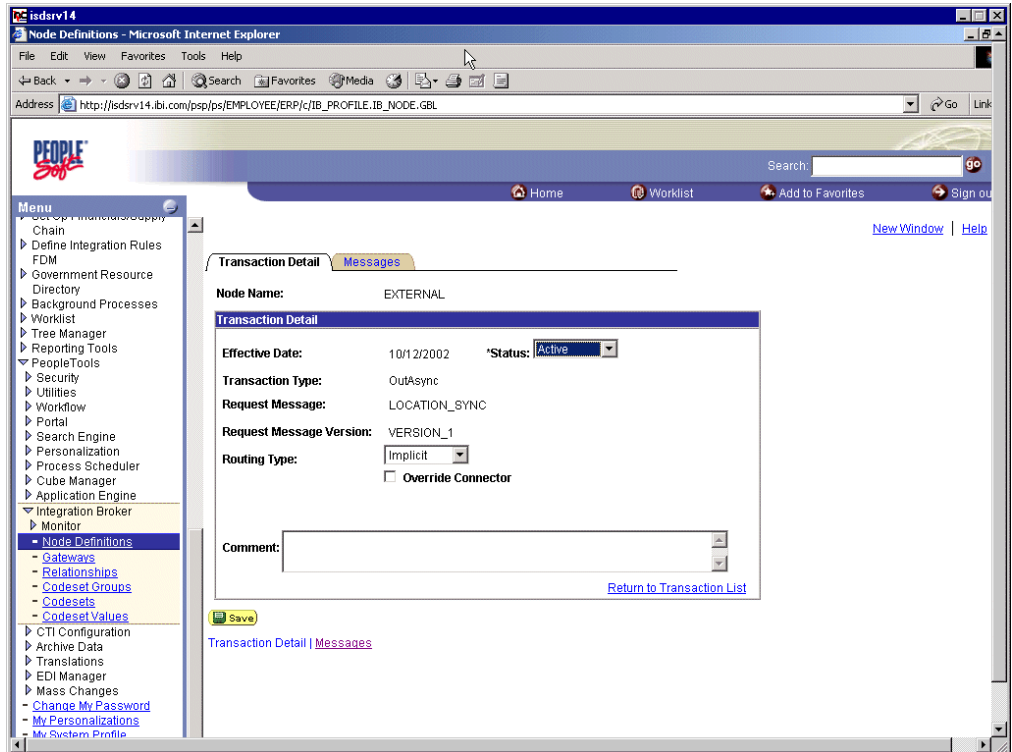


- a. If there are no transactions, click *Add Transaction* to add the message with which you are working.

In this procedure, the node is already configured with the LOCATION_SYNC message.

- b. To view transaction details for the LOCATION_SYNC message, click *Edit*.

The Transaction Detail tab appears.



You can add the message with which you are working.

- c. Verify that the Routing Type is *Implicit*.
6. Click **Save**.
7. Return to the *Transactions* tab.
 - a. To edit additional transactions, click the *Edit* link to navigate to the Transaction Detail tab.
 - b. In the Transaction Detail tab, select *Inactive* from the Status drop-down list.

Inactive status is for initial testing only. After you test your configuration, you may change the status to Active and have as many nodes and transactions as required to satisfy your business requirements.
8. Click **Save**.

You are ready to send XML messages to your PeopleSoft XML Listener.

Configuring the HTTP Target Connector

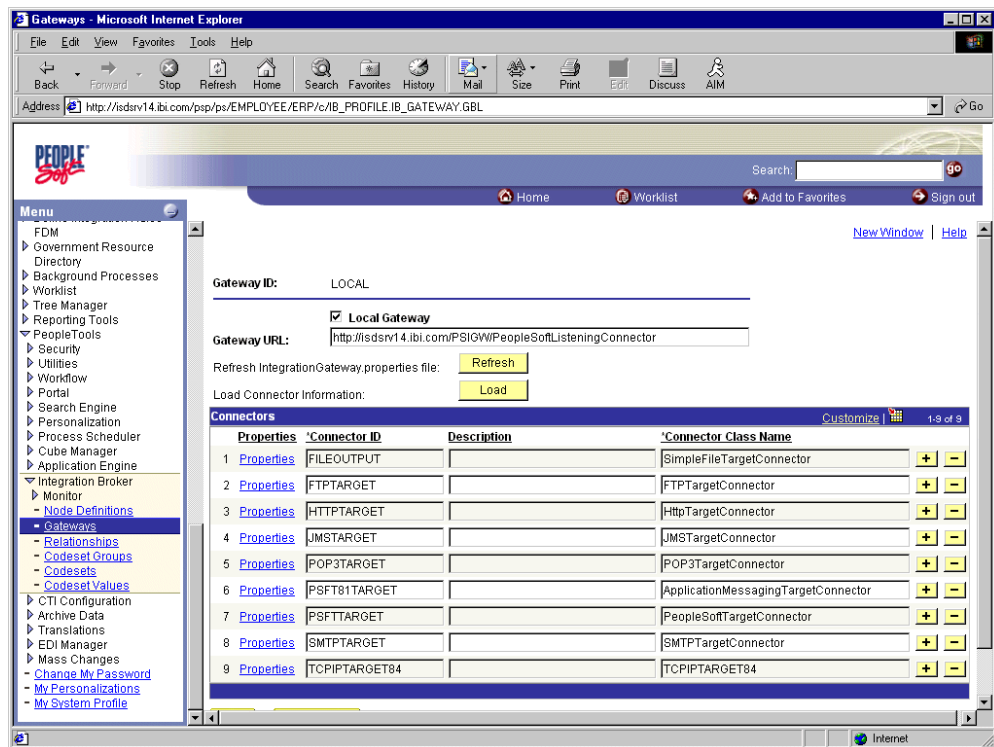
The HTTP Target Connector is supplied with your PeopleSoft application, and no special configuration steps are required. If you choose, you may configure default connection values on the Gateway. You can override these values when you configure the node.

Procedure How to Configure the Gateway for the HTTP Target Connector

To configure the gateway for the HTTP Target Connector:

1. In a Web browser, open your PeopleSoft 8.4 application.
2. In the Menu pane, expand *PeopleTools*, then expand *Integration Broker*, and click *Gateways*.
3. Open the *LOCAL Gateway ID*.

A pane similar to the following Gateway ID pane opens.



4. If you do not see the HTTPTARGET Connector ID, click *Load*.

If it does not appear, your Gateway was not installed properly. Check with your PeopleSoft system administrator.

5. Click the *Properties* URL for HTTPTARGET.

The Properties pane for HTTPTARGET opens, with default values.

Header/Property	Value	Enabled	Default
38 HEADER	Max-Forwards	<input type="checkbox"/>	
39 HEADER	Pragma	<input type="checkbox"/>	
40 HEADER	Proxy-Authenticate	<input type="checkbox"/>	
41 HEADER	Proxy-Authorization	<input type="checkbox"/>	
42 HEADER	Range	<input type="checkbox"/>	
43 HEADER	Referer	<input type="checkbox"/>	
44 HEADER	Retry-After	<input type="checkbox"/>	
45 HEADER	SOAPAction	<input type="checkbox"/>	""
46 HEADER	Timeout	<input type="checkbox"/>	
47 HEADER	Trailer	<input type="checkbox"/>	
48 HEADER	Transfer-Encoding	<input type="checkbox"/>	
49 HEADER	Upgrade	<input type="checkbox"/>	
50 HEADER	User-Agent	<input type="checkbox"/>	
51 HEADER	Vary	<input type="checkbox"/>	
52 HEADER	Via	<input type="checkbox"/>	
53 HEADER	WWW-Authenticate	<input type="checkbox"/>	
54 HEADER	Warning	<input type="checkbox"/>	
55 HEADER	sendUncompressed	<input checked="" type="checkbox"/>	Y
56 HEADER	sendUncompressed	<input checked="" type="checkbox"/>	N
57 HTTPPROPERTY	Method	<input checked="" type="checkbox"/>	POST
58 HTTPPROPERTY	Method	<input checked="" type="checkbox"/>	GET
59 PRIMARYURL	URL	<input checked="" type="checkbox"/>	http://172.30.172.39:5576

OK Cancel

6. Scroll to the bottom and type a value for the PRIMARYURL.

This is the default HTTP address (machine and port) on which your PeopleSoft XML Listener is listening for incoming messages.

Note: For complex business situations, you can override this setting on the individual node.

7. Click OK.

The Gateway window opens.

8. Scroll to the bottom of the window and click Save.

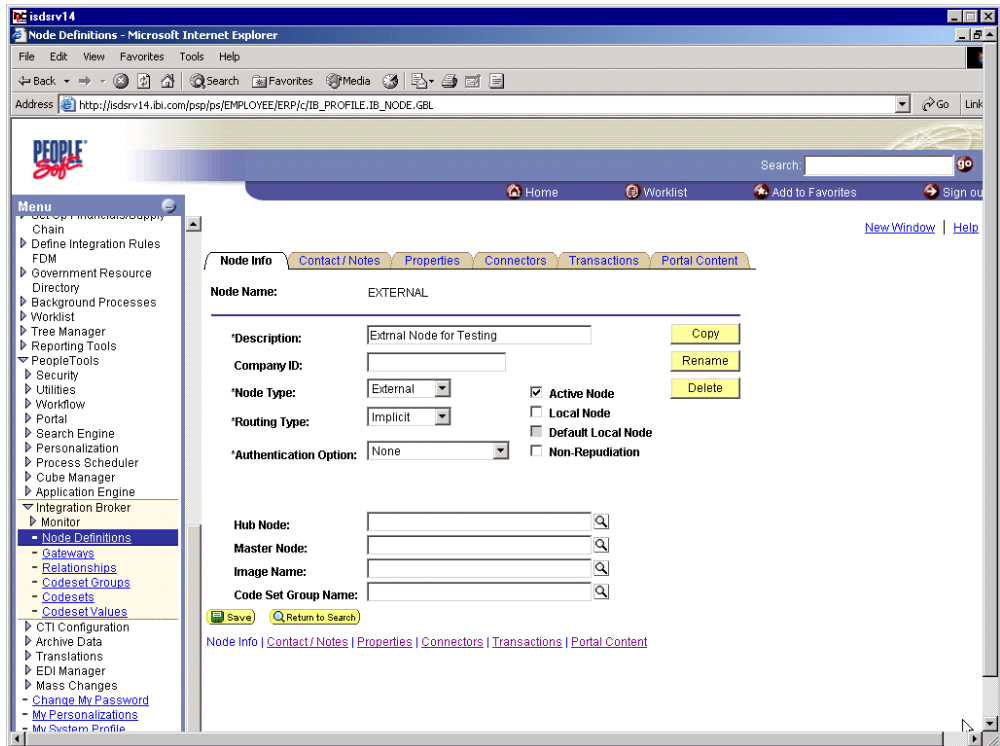
You have finished configuring the gateway for the HTTP Target Connector.

Configuring the HTTP Connector

Starting with release 8.4, the Integration Broker is delivered with an HTTP Outbound Connector. This connector can be used in place of the iWAY TCP/IP84 Connector for sending messages to your BEA WebLogic Server.

Procedure How to Configure the Node to Use the HTTP Connector

To configure the node to use the HTTP Connector:



1. In the Menu pane, expand *PeopleTools*, *Integration Broker*, and then, click *Node Definitions*.
2. Select the node that you want to configure.

Note: This procedure uses a node called EXTERNAL. For more information about creating and using nodes, see Appendix C, *Using PeopleSoft 8 Integration Broker* or your PeopleSoft documentation.

- a. From the Node Type drop-down list, select *External*.
- b. From the Routing Type drop-down list, select *Implicit*.

3. Select the *Connectors* tab.

PeopleSoft

Menu

- My Favorites
 - Gateways
 - Location
 - Monitor Message
 - Node Definitions
 - Synchronous Details
 - Web Services for Cls
 - Edit Favorites
- Employee Self-Service
- Manager Self-Service
- Demand Planning
- Enterprise Planning
- Production Planning
- Customers
- Products
- Promotions
- Customer Contracts
- Order Management
- Order Pricing
- Customer Returns
- Items
- Cost Accounting
- Vendors
- Purchasing
- Inventory
- eProcurement
- Sourcing
- Engineering
- Manufacturing Definitions
- Production Control
- Configuration Modeler
- Product Configurations

Node Info | Contact / Notes | Properties | **Connectors** | Transactions | Portal Content

Node Name: EXTERNAL

Gateway ID: LOCAL

Connector ID: HTTPTARGET

Properties

Property ID	Property Name	Required	Value
1 HEADER	sendUncompress	<input checked="" type="checkbox"/>	Y
2 HTTPPROPERTY	Method	<input checked="" type="checkbox"/>	POST
3 PRIMARYURL	URL	<input checked="" type="checkbox"/>	http://172.30.172.39:5576

Save Return to Search

Node Info | Contact / Notes | Properties | Connectors | Transactions | Portal Content

- Change the Connector ID to *HTTPTARGET*.
- Type a value for each property based on the following:

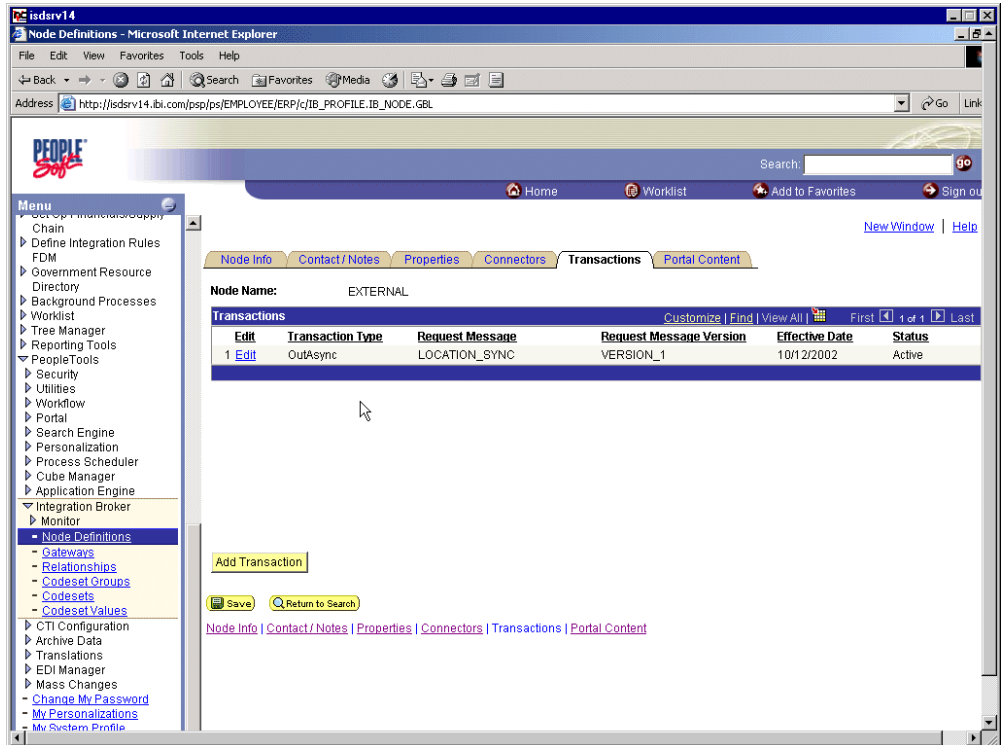
Property ID	Property Name	Value
HEADER	sendUncompressed	Y
HTTPPROPERTY	Method	POST
PRIMARYURL	URL	URL and the port of the HTTP listener

Note: For complex business situations you can configure multiple nodes and multiple listeners.

- Click *Save*.
- If you are warned that you are changing the Connector, click *OK*.
- Select the *Transactions* tab.

Configuring the TCP/IP or HTTP Target Connector for PeopleSoft 8.4

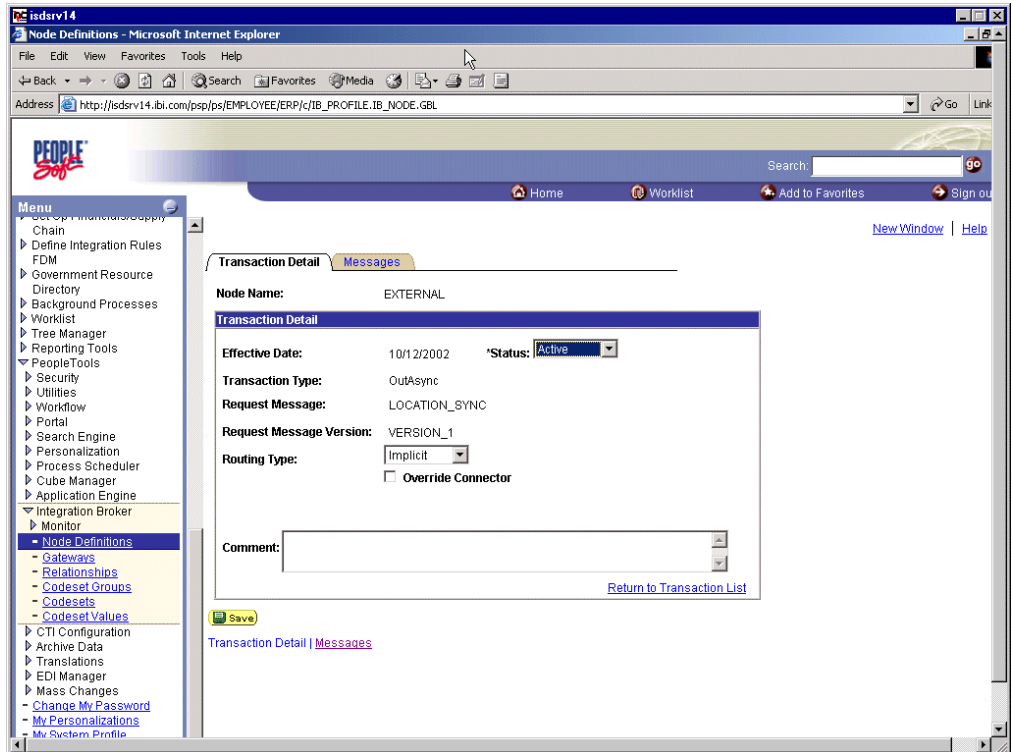
The following pane opens.



7. If there are no transactions, click *Add Transaction*.

In this procedure, the node is already configured with the LOCATION_SYNC message.

The Transaction Detail tab appears.



You can add the message with which you are working.

- a. Verify that the Routing Type is *Implicit*.
 - b. Click **Save**.
8. Return to the *Transaction List*.
 - a. If there are other transactions, edit them.
 - b. Set the status to *Inactive*.

Inactive status is for initial testing only. After you test your configuration, you may change the status to Active and have as many nodes and transactions as required to satisfy your business requirements.

9. Click **Save** on the Transaction List.

You are ready to send XML messages to your PeopleSoft XML Listener.

Configuring the TCP/IP Handler for PeopleSoft 8.1

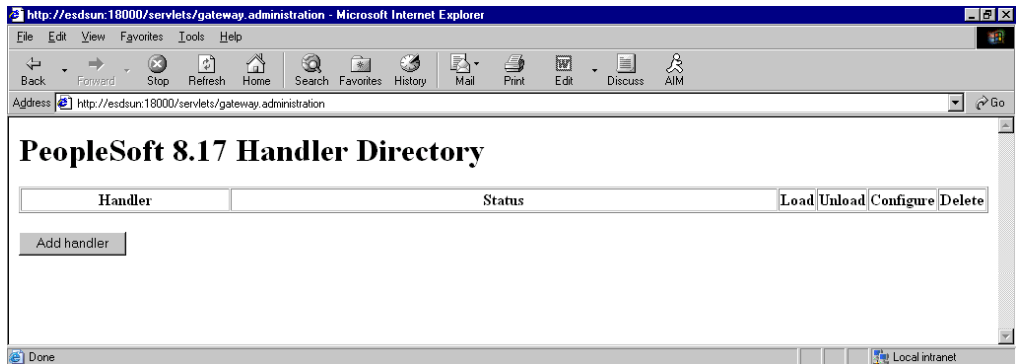
The following procedure assumes that your Application Messaging environment is properly configured and tested. For more information, see Appendix C, *Using PeopleSoft 8 Integration Broker*.

Procedure How to Configure the TCP/IP Handler for PeopleSoft 8.1

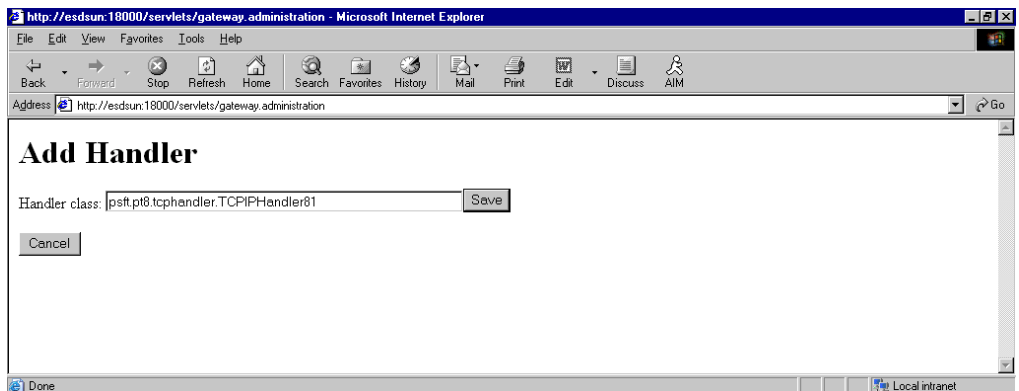
To configure the TCP/IP Handler for PeopleSoft 8.1 to send messages to your BEA WebLogic Server:

1. In a Web browser, launch the *PeopleSoft 8.1 Gateway Configuration* servlet interface.
2. If the Simple File Handler is currently loaded, unload and delete it before proceeding.

You must see an empty Handler directory.



3. Click *Add handler*.



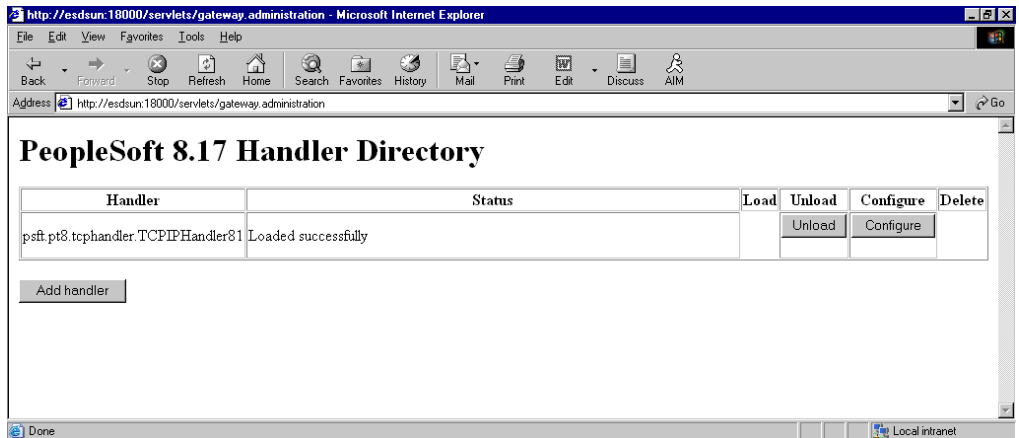
- a. Type the full path of TCPIPHandler81 (case-sensitive):

`psft.pt8.tcphandler.TCPIPHandler81`

b. Click *Save*.

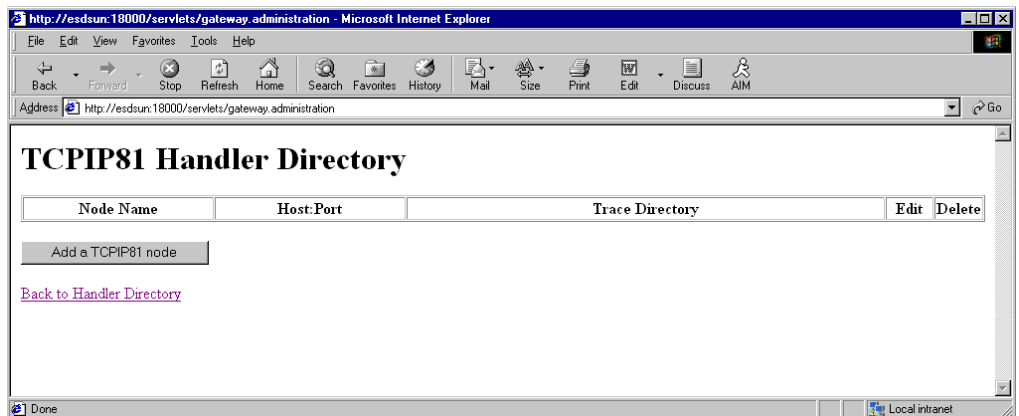
4. Click *Load*.

The PeopleSoft Handler Directory window opens.



5. Click *Configure*.

The TCPIP81 Handler Directory window opens.



6. Click *Add a TCPIP81 node*.

Note: The screens illustrating this procedure show a node named EXTERNAL. For more information about creating and using nodes, see Appendix C, *Using PeopleSoft 8 Integration Broker* or your PeopleSoft documentation.

The Add TCPIP81 Handler window opens.

The screenshot shows a web browser window titled "http://esdsun:18000/servlets/gateway.administration - Microsoft Internet Explorer". The address bar contains the URL "http://esdsun:18000/servlets/gateway.administration". The main content area displays the "Add TCPIP81 Handler" form. The form consists of a table with four columns: "Node Name", "Host Name", "Port", and "Trace Directory". The "Node Name" field contains "EXTERNAL", "Host Name" contains "172.19.25.152", "Port" contains "3694", and "Trace Directory" contains "/tmp". Below the table are two buttons: "Save" and "Cancel". The status bar at the bottom shows "Done" and "Local intranet".

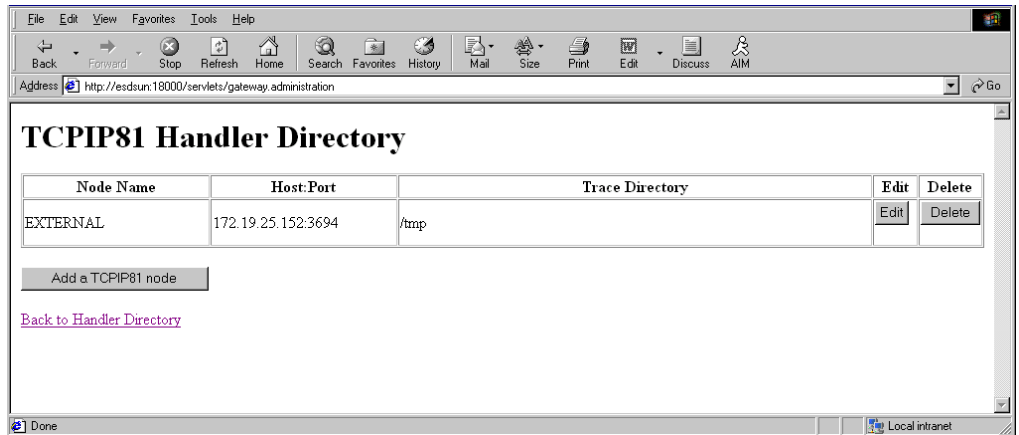
7. Enter the requested values based on the information in the following table.

Field	Value Example	Description
Node Name	EXTERNAL	The name of the TCP/IP node.
Host Name	172.19.25.152	The machine on which your PeopleSoft XML listener is listening for incoming messages.
Port	3694	The port on which your PeopleSoft XML listener is listening for incoming messages.
Trace Directory	/tmp	The directory where a trace file is created when errors occur in message delivery.

The system does not validate your entries.

8. Click **Save**.

The TCPIP81 Handler Directory window opens.



9. For your changes to take effect, click *Back to Handler Directory* to return to the PeopleSoft 8.1 Handler Directory window.
10. Click *Unload and re-Load TCPIPHandler81*.

You are now ready to send messages from PeopleSoft to your iWay Adapter for PeopleSoft 8.

Testing Your PeopleSoft Configuration

PeopleSoft 8.1 and 8.4 provide a ping node mechanism for testing your configuration. The mechanism functions identically in both versions.

Test your configuration to ensure that:

- BEA WebLogic Server is up and running.
- The server name and/or port number for PeopleSoft and BEA WebLogic Server match.
- The default page for HTTP exists.

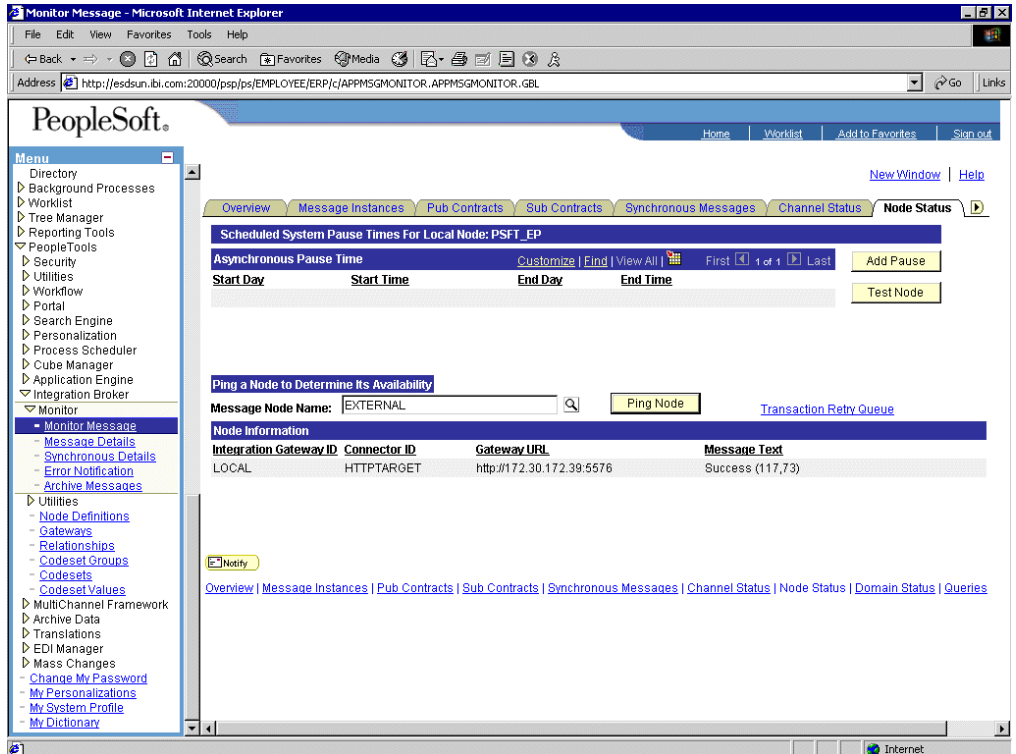
Procedure How to Test a PeopleSoft Configuration

To test a PeopleSoft configuration:

1. In a Web browser, open your PeopleSoft application.
2. Navigate to the message monitoring menu.
 - For PeopleSoft 8.4:
 - a. In the menu pane, expand *PeopleTools, Integration Broker, and Monitor*.
 - b. Select *Monitor Message*.

Testing Your PeopleSoft Configuration

- For PeopleSoft 8.1:
 - a. In the menu pane, expand *Home*, *PeopleTools*, *Application Message Monitor*, and *Use*.
 - b. Select *Application Message Monitor*.
- 3. Click the *Node Status* tab.



- a. From the Message Node Name drop-down list, select your node.
- b. Click *Ping Node*.

If you properly configured both PeopleSoft and your BEA WebLogic Server, you receive a Success message.

An error indicates a configuration problem. For more information, see the Integration Broker error log.

CHAPTER 4

Creating XML Schemas or Web Services for PeopleSoft

Topics:

- Overview
- Starting iWay Servlet Application Explorer
- Establishing a Target for PeopleSoft
- Viewing Application System Objects
- Creating an XML Schema

This section describes how to create XML schemas for PeopleSoft business objects using iWay Servlet Application Explorer.

Overview

The iWay Adapter for PeopleSoft 8 enables the processing of Component Interfaces and Messages.

External applications that access PeopleSoft through the adapter use either XML schemas or Web services to pass data between the external application and the adapter. You can use iWay Servlet Application Explorer to create the required XML schemas and Web services.

Application Explorer is a Web application running within a servlet container that is accessible through a Web browser. It is packaged as an archive located in the following directory:

`drive:\iWay55\etc\setup\iwa.e.war`

You must deploy the iwa.e.war file through a servlet container or J2EE application server. In addition, PeopleSoft must be installed, configured, and available for client access. Application Explorer need not reside on the same system as the application system being accessed, but network access is required.

For more information on installing and configuring Application Explorer, see the *iWay 5.5 Installation and Configuration for BEA WebLogic* documentation.

Starting iWay Servlet Application Explorer

Before you can use iWay Servlet Application Explorer, you must start your application server.

Procedure How to Start BEA WebLogic Server on Windows or on UNIX

- To start BEA WebLogic Server on Windows:
 1. Click the Start menu.
 2. Select *Programs, BEA WebLogic Platform 8.1, User Projects, your domain for iWay*, and then, click *Start Server*.
- To start BEA WebLogic Server on UNIX or from a command line, type the following at the prompt:

`BEA_HOME/user_projects/domains/DOMAIN_NAME/startWebLogic.cmd`

where:

`BEA_HOME`

Is the directory where BEA WebLogic is installed.

`DOMAIN_NAME`

Is the domain you are using for iWay.

Procedure How to Open iWay Servlet Application Explorer

To open Application Explorer:

1. Ensure that your application server is running.
2. Enter the following URL in your browser:

<http://hostname:port/iwae/index.html>

where:

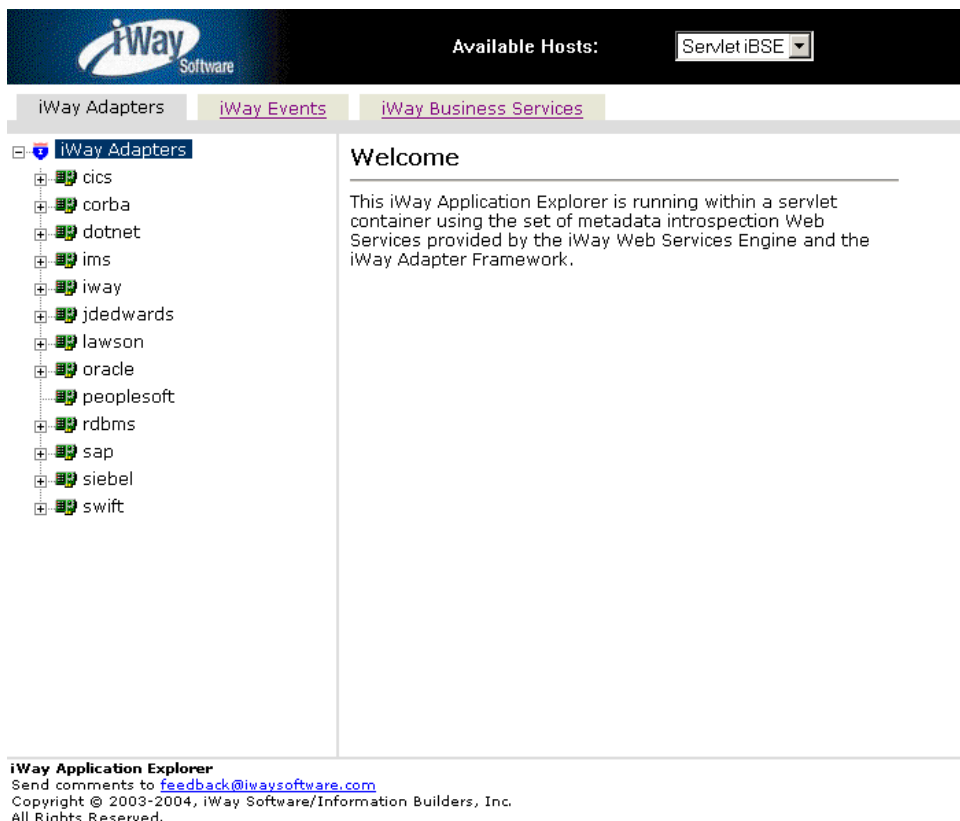
[hostname](#)

Is the name of the machine where your application server is running.

[port](#)

Is the port for the domain you are using for iWay. The port for the default domain is 7001.

After you start Application Explorer, the following window opens.



On the upper right, the Available Hosts drop-down list displays the iWay Connector for JCA or Servlet iBSE instance you can access.

For more information on adding instances, see the *iWay 5.5 Installation and Configuration for BEA WebLogic* documentation.

You are ready to create new targets for PeopleSoft.

Establishing a Target for PeopleSoft

To browse PeopleSoft business objects, you must create a target for the system you intend to use. The target serves as your connection point and is automatically saved after you create it. You must establish a connection to this system every time you start iWay Application Explorer or after you disconnect from the system.

When you open Application Explorer, a list of supported application systems appears in the left pane. The list is based on the iWay Adapters that you installed and have licenses to use.

Creating a New Target

To connect to PeopleSoft for the first time, you must create a new target.

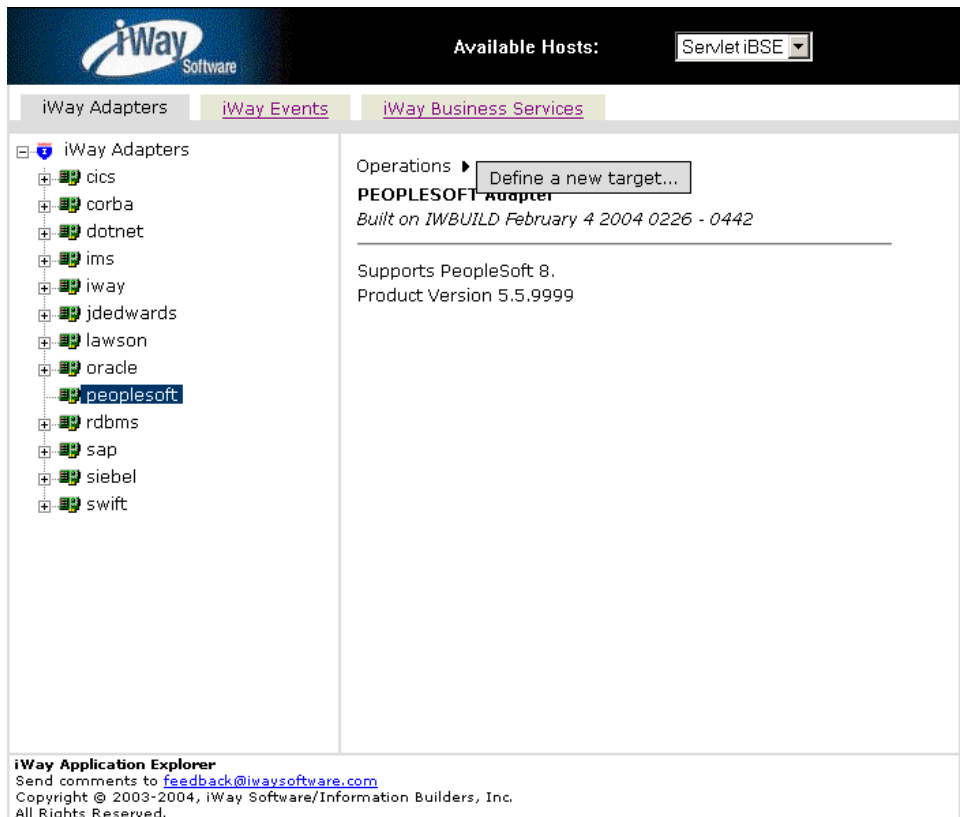
Procedure How to Create a New Target

To create a new target using Application Explorer:

1. In the left pane, click the *peoplesoft* node.

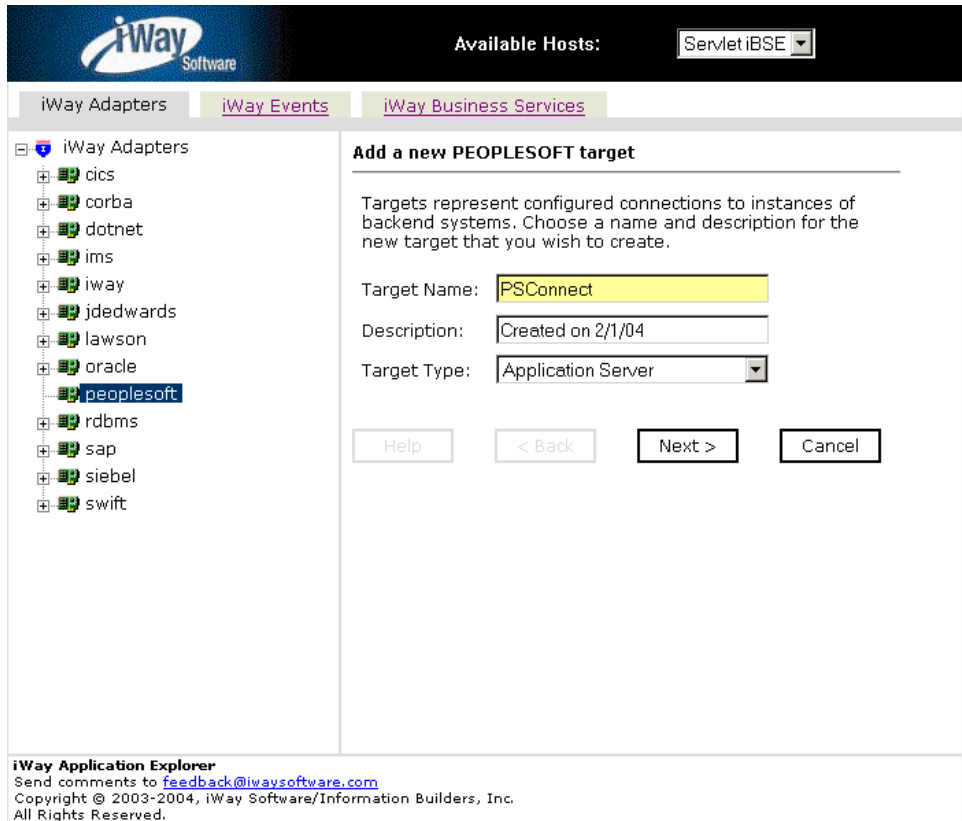


In the right pane, descriptive information for the adapter appears, for example, title and product version.



2. Move the pointer over *Operations* and select *Define a new target*.

The Add a new PeopleSoft target pane opens on the right.

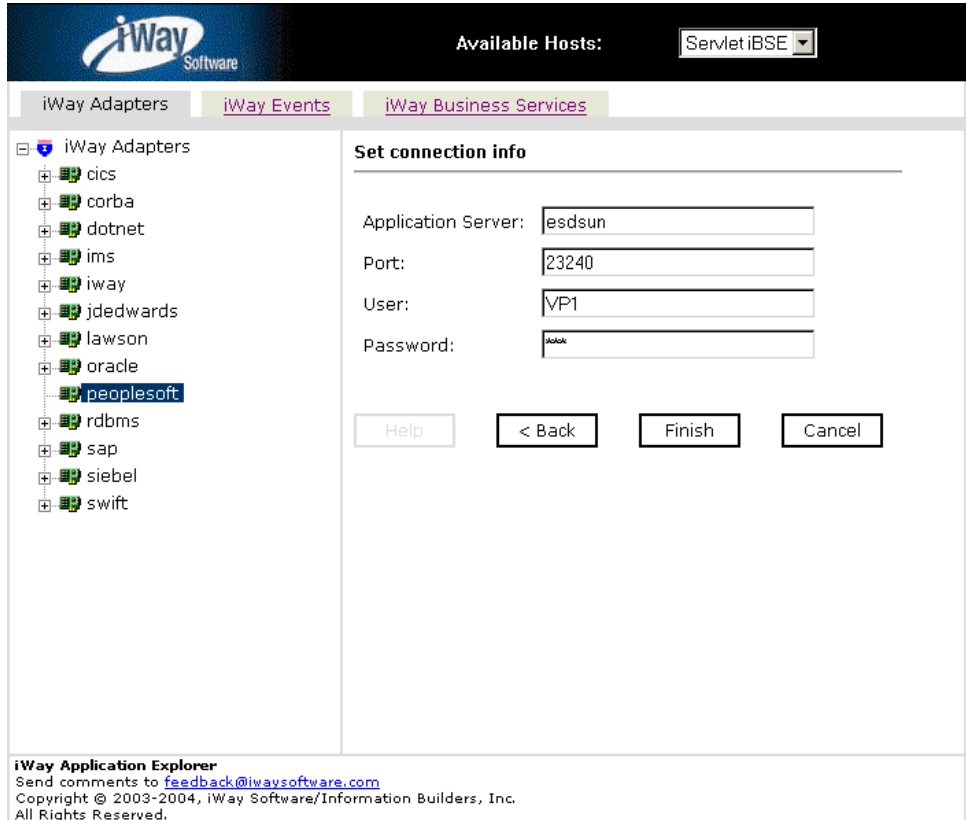


- a. In the Target Name field, type a descriptive name for the target, for example, PSConnect.
- b. In the Description field, type a brief description for the connection.
- c. From the Target Type drop-down list, select the type of target to which you are connecting.

The default value is *Application Server*.

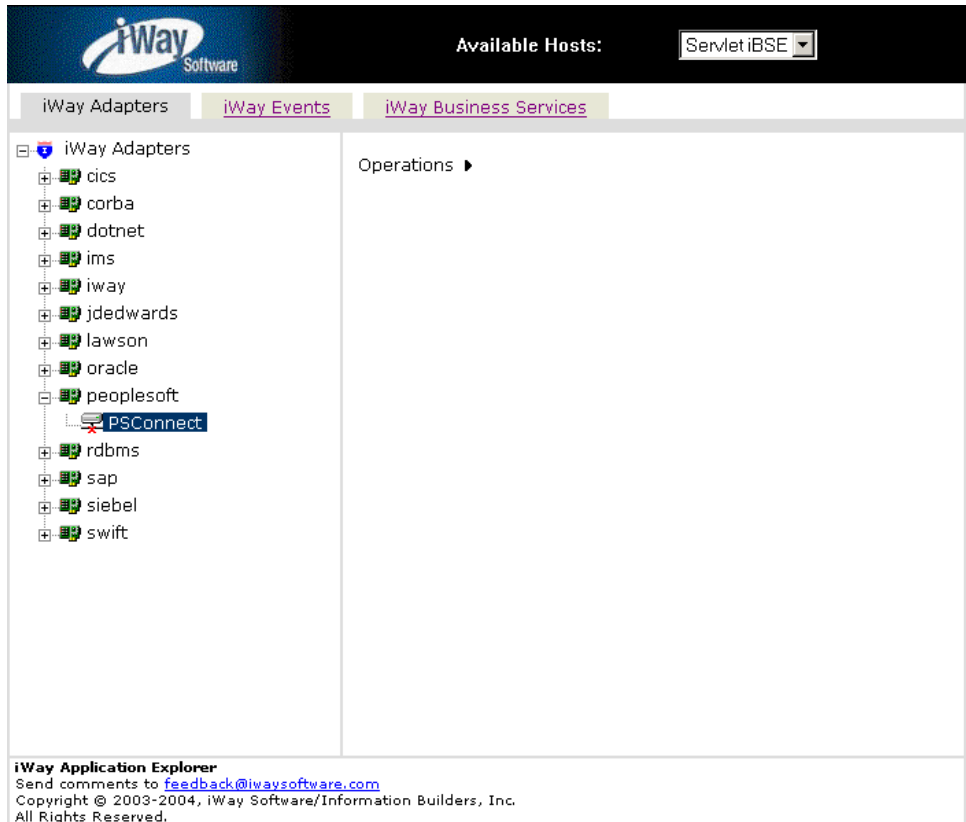
3. Click *Next*.

The Set connection info pane appears on the right.



- a. In the Application Server field, type the host name or IP address for the computer that is hosting the PeopleSoft application.
 - b. In the Port field, type the port number where the PeopleSoft application is listening.
 - c. In the User field, type a valid user ID for the PeopleSoft application.
 - d. In the Password field, type a valid password for the PeopleSoft application.
4. Click *Finish*.

In the left pane, the PeopleSoft target, PSConnect, appears below the peoplesoft node.



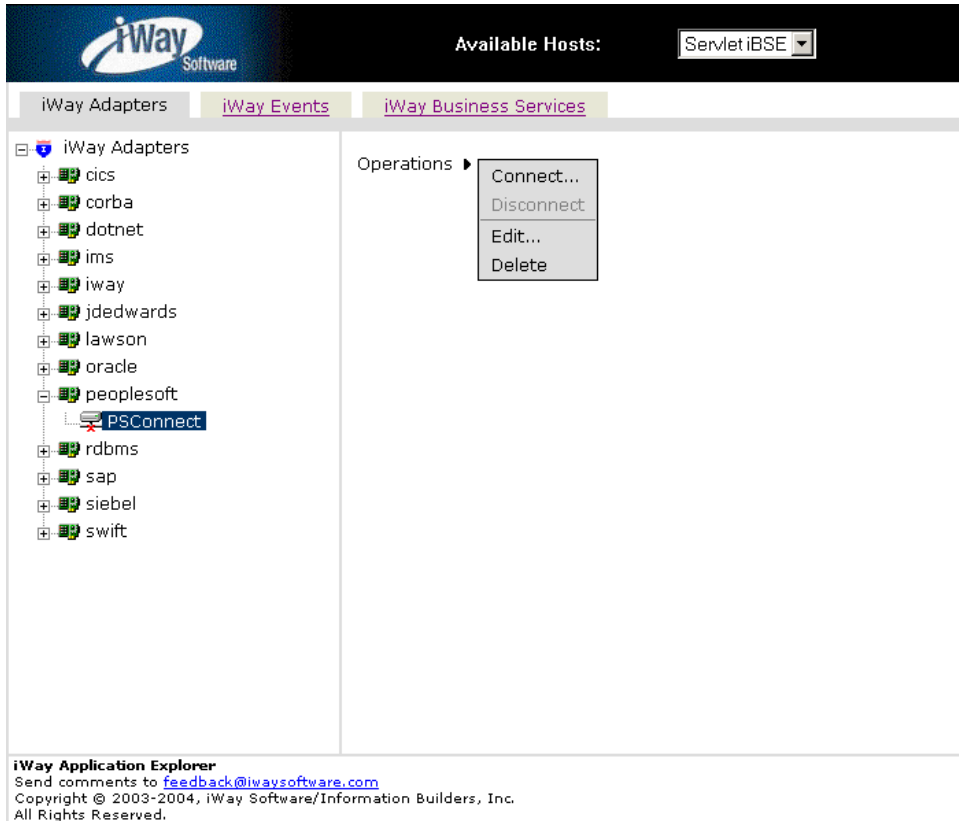
You are ready to connect to your PeopleSoft target.

Connecting to a Target

To connect to PeopleSoft, you must use the target you defined.

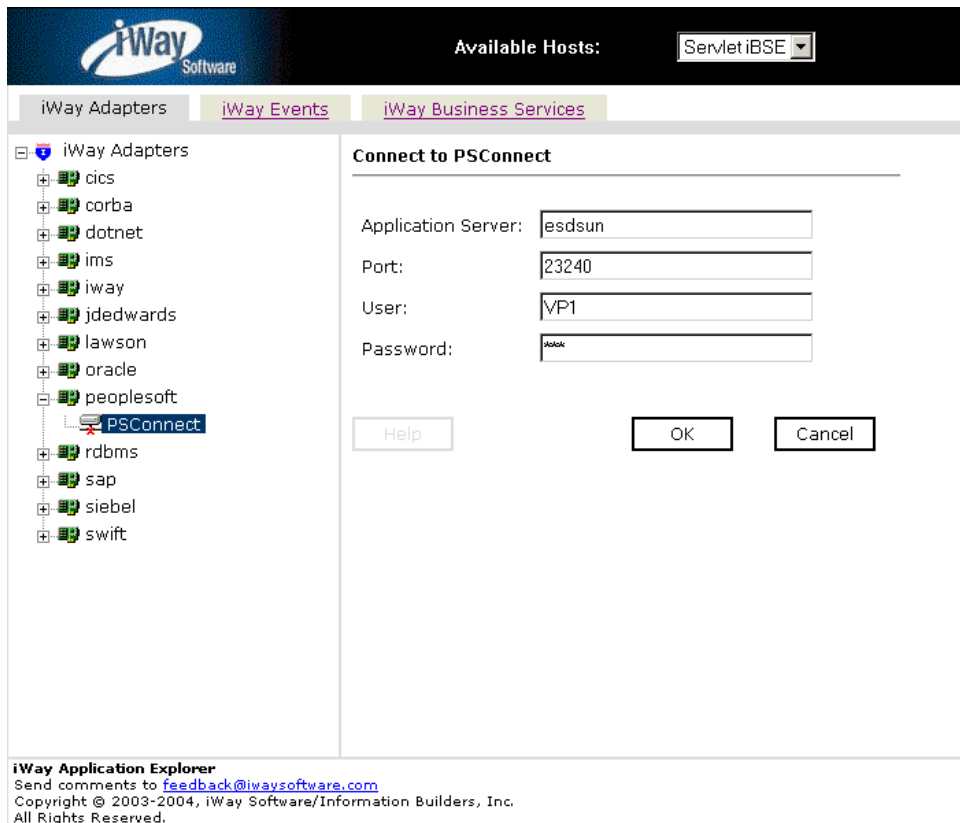
Procedure How to Connect to a Target

To connect to a target using Application Explorer:



1. In the left pane, expand the *peoplesoft* node and select the target you defined, for example, PSConnect.
2. In the right pane, move the pointer over *Operations* and select *Connect*.

The Connect to PSConnect pane opens on the right.



3. Enter a valid password and click **OK**.

In the left pane, the PSConnect node changes to reflect that a connection was made.



4. Expand the *PSConnect* node.

The following PeopleSoft business objects appear:

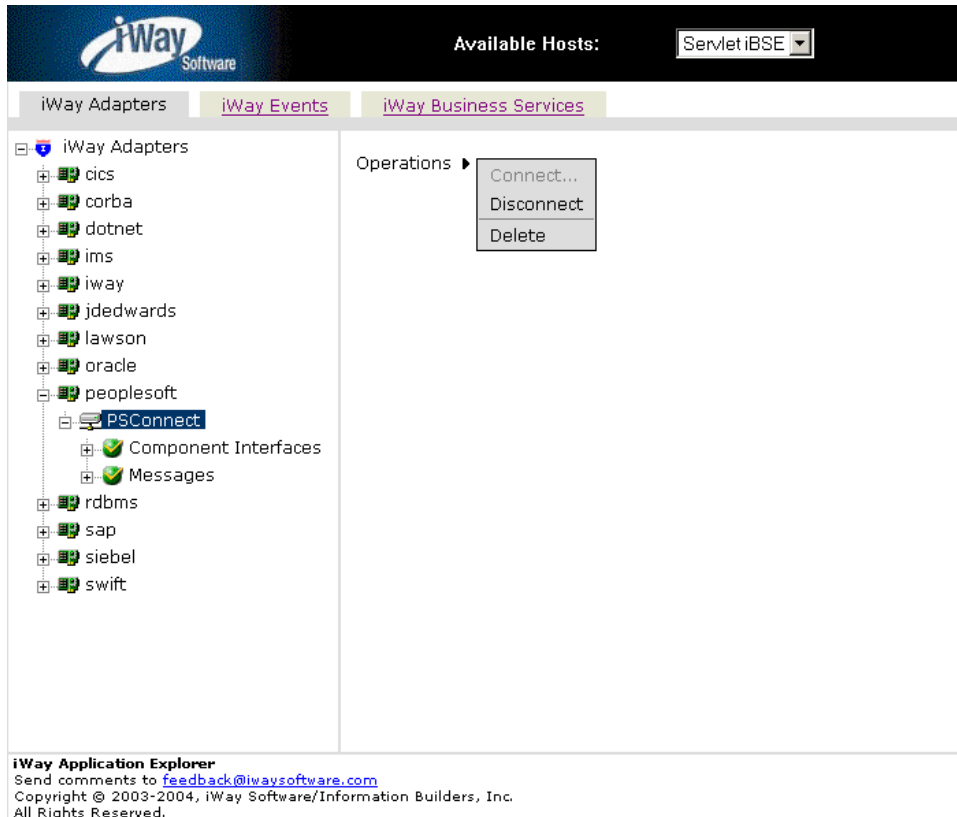
- Component Interfaces
- Messages

Disconnecting From a Target

Although you can maintain multiple open connections to different application systems, it is recommended to close connections when you are not using them.

Procedure How to Disconnect From a Target

To disconnect from a target using Application Explorer:



1. From the left pane, click the target to which you are connected, for example, PSConnect.
2. In the right pane, move the pointer over *Operations* and select *Disconnect*.
Disconnecting from the application system drops the connection, but the node remains.

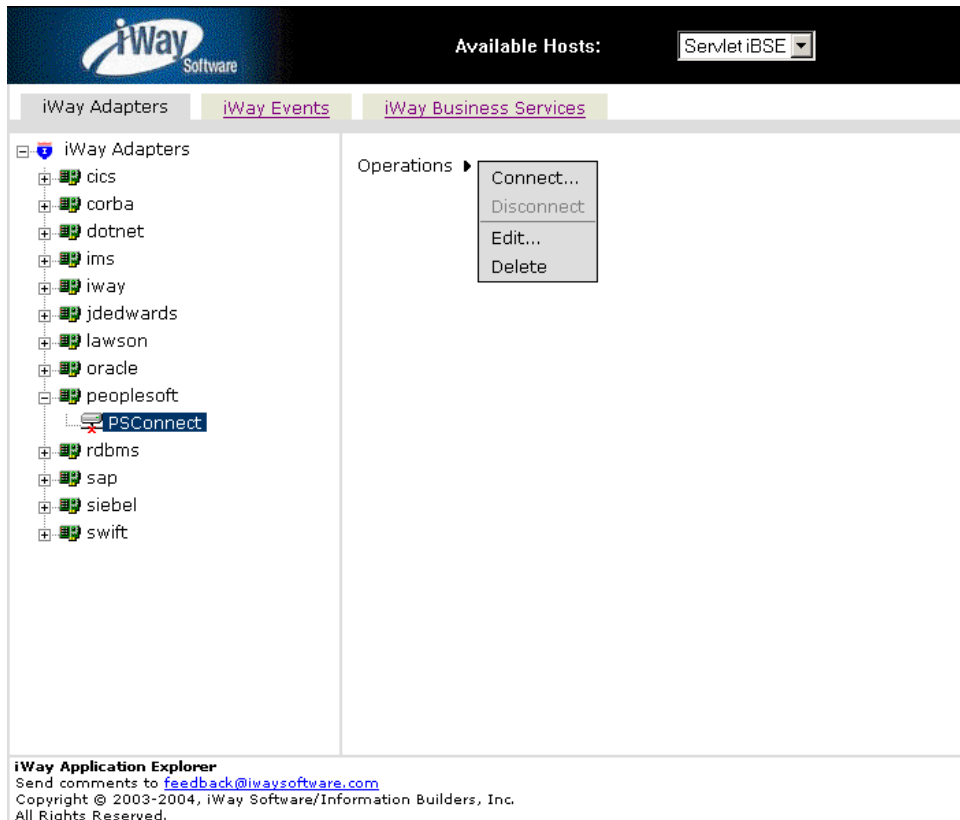
The PSConnect node in the left pane changes to reflect that a connection was closed.

Modifying a Target

After you create a target for PeopleSoft using iWay Servlet Application Explorer, you can edit any of the information that you provided previously.

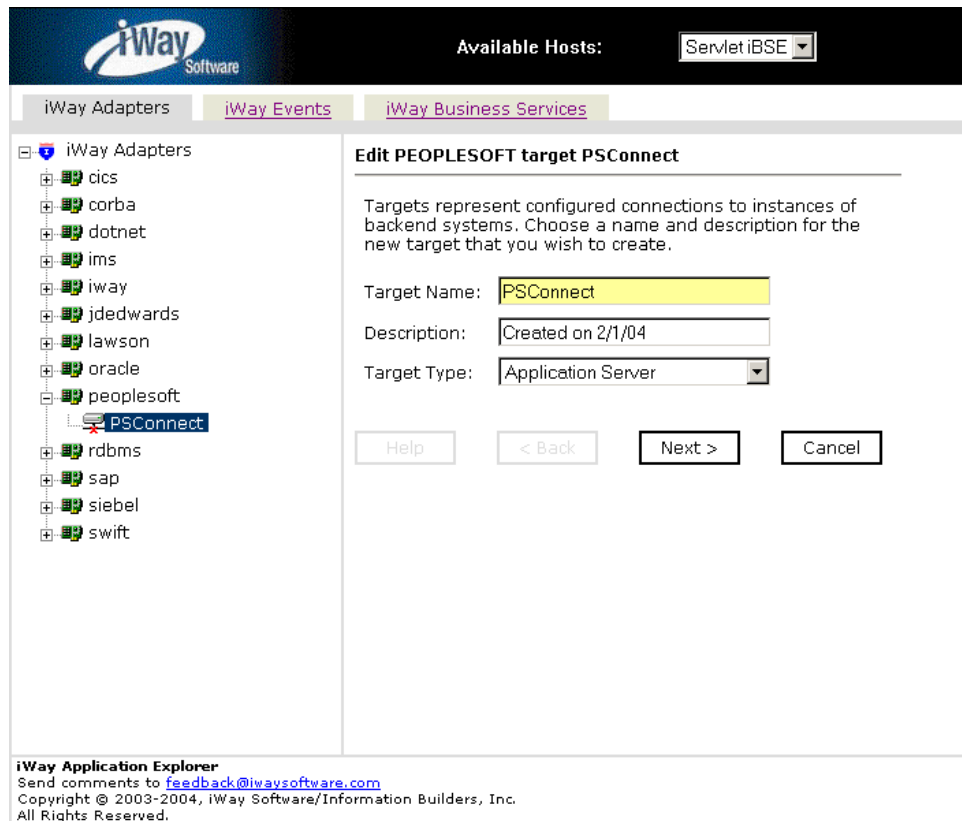
Procedure How to Edit a Target

To edit a target using Application Explorer:



1. In the left pane, click the target, for example, PSConnect.
2. In the right pane, move the pointer over *Operations* and select *Edit*.

The Edit pane opens on the right.



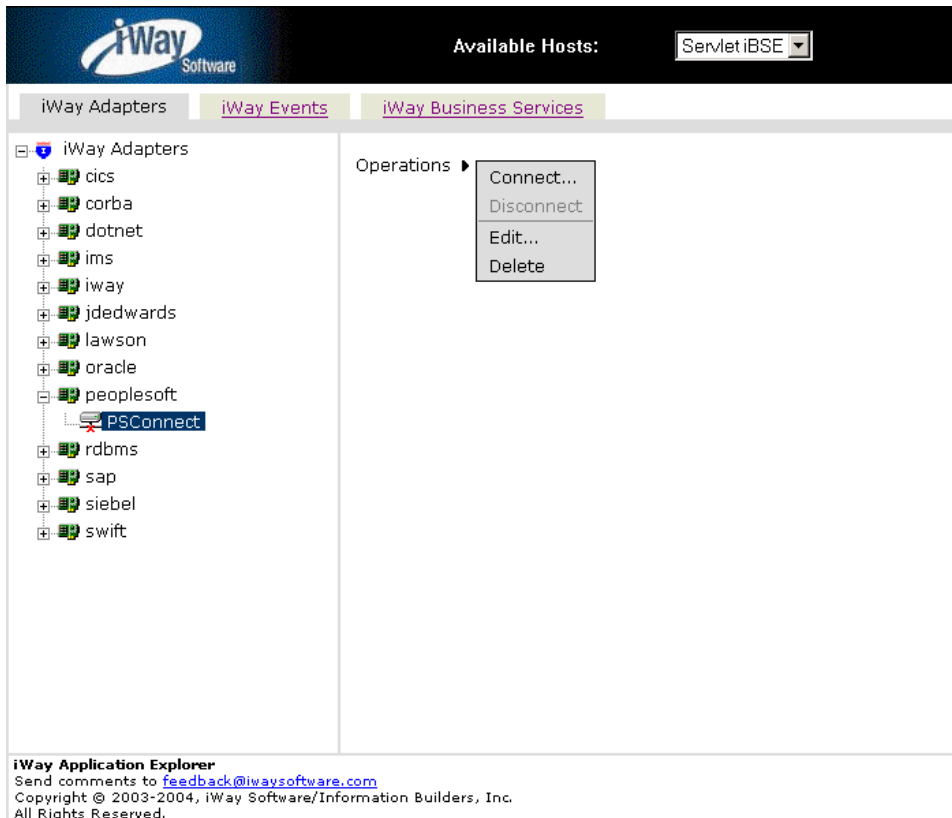
3. Modify the connection information.
4. To display additional information, click *Next*.
5. When you complete your edits, click *Finish*.

Deleting a Target

In addition to closing a target, you can delete a target that is no longer required. You can delete it whether or not it is closed. If open, the target automatically closes before it is deleted.

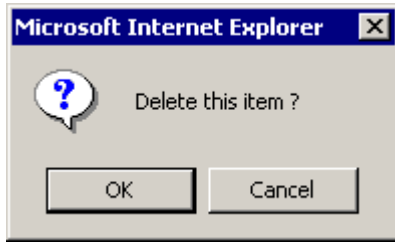
Procedure How to Delete a Target

To delete a target using Application Explorer:



1. In the left pane, click the target, for example, PSConnect.
2. In the right pane, move the pointer over *Operations* and select *Delete*.

The following confirmation dialog box opens.



3. To delete the target you selected, click *OK*.

The PSConnect node disappears from the left pane.

Viewing Application System Objects

After you are connected to PeopleSoft, iWay Servlet Application Explorer enables you to explore and browse business object metadata. For example, Application Explorer enables you to view PeopleSoft Component Interface and Message metadata stored in the PeopleSoft business object repository.

Procedure How to View Application System Objects

To view application system objects:

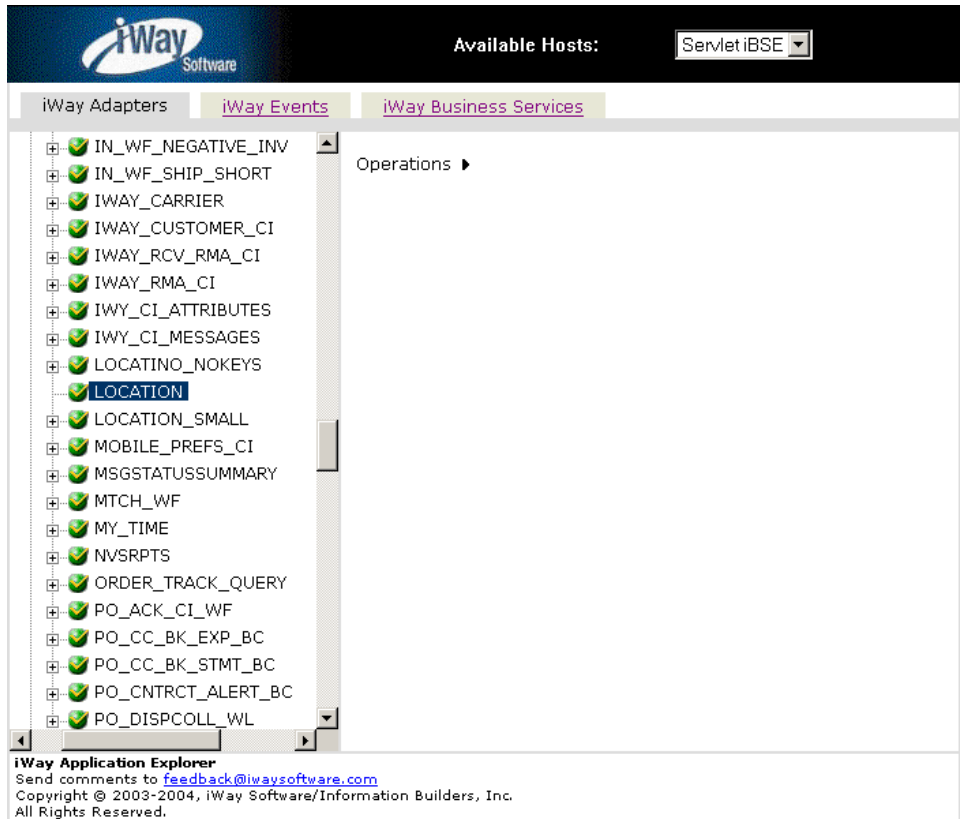
1. Click the icon to the left of the target name, for example, PSConnect.

The target expands to expose the available system objects.



2. To expand the desired PeopleSoft repository node, click the icon to the left of the repository name, for example, Component Interfaces.

A list of PeopleSoft Component Interfaces appears.



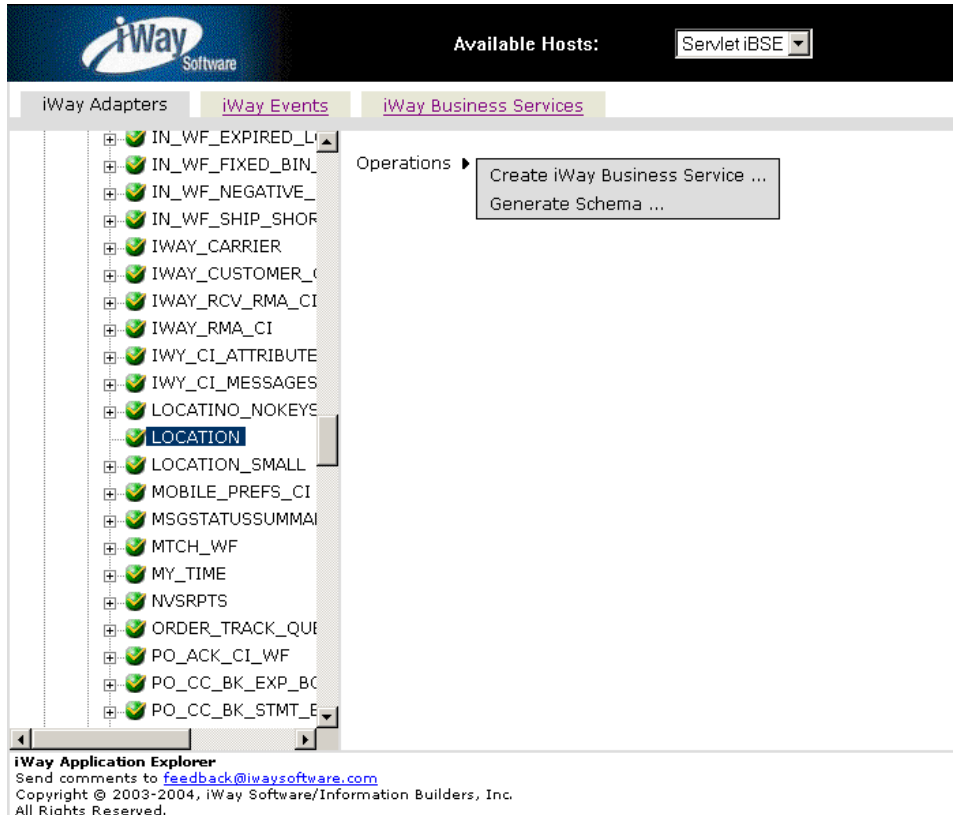
You can now generate schemas. For more information, see *Creating an XML Schema*.

Creating an XML Schema

After you browse the PeopleSoft business object repository, you can generate XML request and response schemas for the object you wish to use with your adapter.

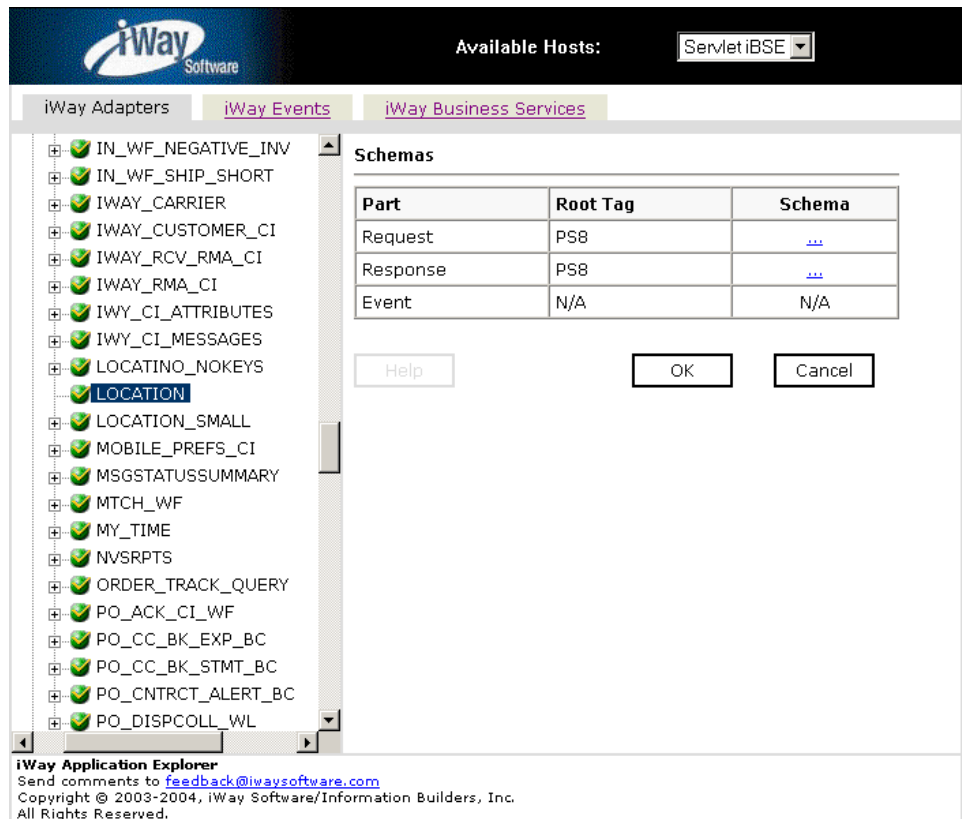
Procedure How to Create XML Schemas

To create XML request and response schemas for a PeopleSoft Component Interface using Application Explorer:



1. From the list of Component Interfaces, select *LOCATION*.
2. In the right pane, move the pointer over *Operations* and select *Generate Schema*.

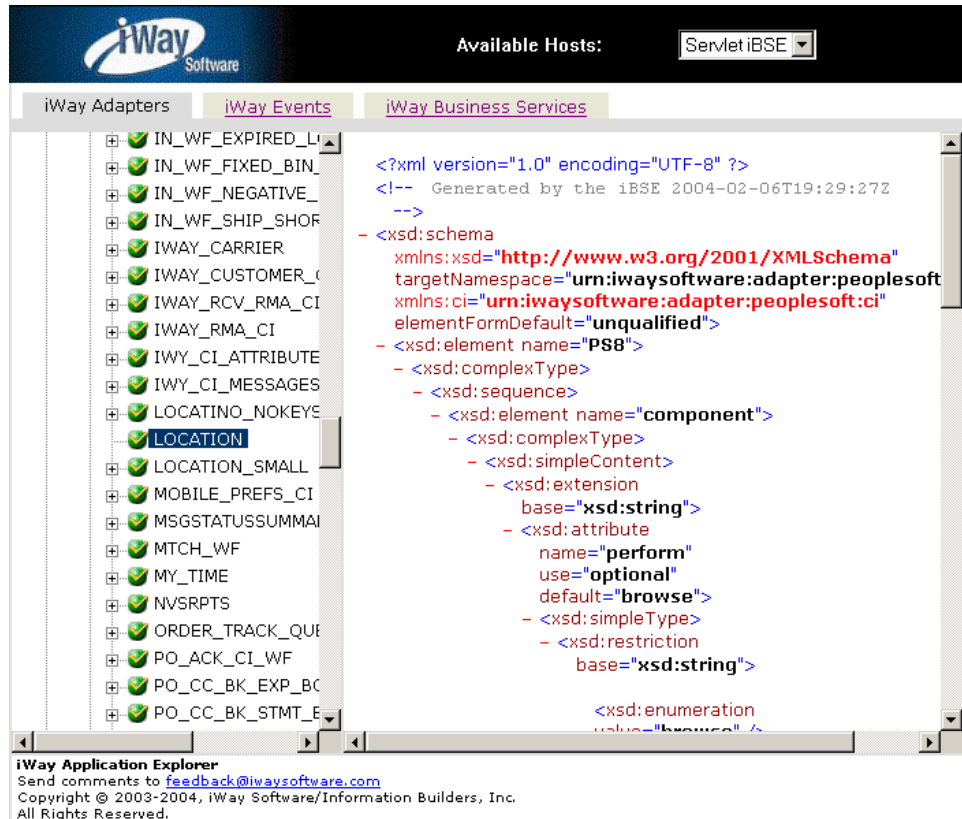
The Schemas pane opens on the right.



A table defines the root tag for each schema and provides hyperlinks.

3. Click the hyperlink associated with the type of schema you want to view.

For example, if you click the Request schema, the schema appears on the right.



4. Click the *Back* button on your Web browser to return to the previous window.

After you create schemas, you can create iWay Business Services. For more information, see Chapter 6, *Creating and Publishing iWay Business Services*.

After you create schemas, you can also create events. For more information, see Chapter 5, *Listening for PeopleSoft Events*.

CHAPTER 5

Listening for PeopleSoft Events

Topics:

- Understanding iWay Event Functionality
- Adding, Modifying, or Deleting a Port
- Adding, Modifying, or Deleting a Channel

This section describes how to use iWay Servlet Application Explorer to connect to PeopleSoft and listen for events. Several port dispositions are available, and you can choose the technique that best suits your requirements.

Understanding iWay Event Functionality

Events are generated as a result of activity in an application system. You can use events to trigger an action in your application. For example, PeopleSoft may generate an event when customer information is updated. If your application performs an action when this happens, your application is a consumer of this event.

After you create a connection to PeopleSoft, you can add events using iWay Servlet Application Explorer. To create an iWay event, you must create a port and a channel.

- **Port**

A port associates a particular business object exposed by the iWay Adapter for PeopleSoft 8 with a particular disposition. The port disposition defines the destination of event data and is an attribute of the channel provided by the container. For more information, see *Adding, Modifying, or Deleting a Port*.

- **Channel**

A channel represents configured connections to particular instances of back-end systems. A channel is used to bind one or more ports to a particular listener managed by the iWay Adapter for PeopleSoft 8. For more information, see *Adding, Modifying, or Deleting a Channel* on page 5-17.

Adding, Modifying, or Deleting a Port

The following procedures describe how to create an event port using iWay Servlet Application Explorer. You can create a port for a PeopleSoft Message from the iWay Adapters tab or from the iWay Events tab.

When you use Application Explorer with an iWay Business Services Engine (iBSE) implementation, the following port dispositions are available:

- File
- HTTP
- iBSE
- JMS
- MQ Series
- MSMQ
- SOAP

With a JCA implementation, the following port dispositions are available:

- File
- HTTP
- JMS
- MQ Series

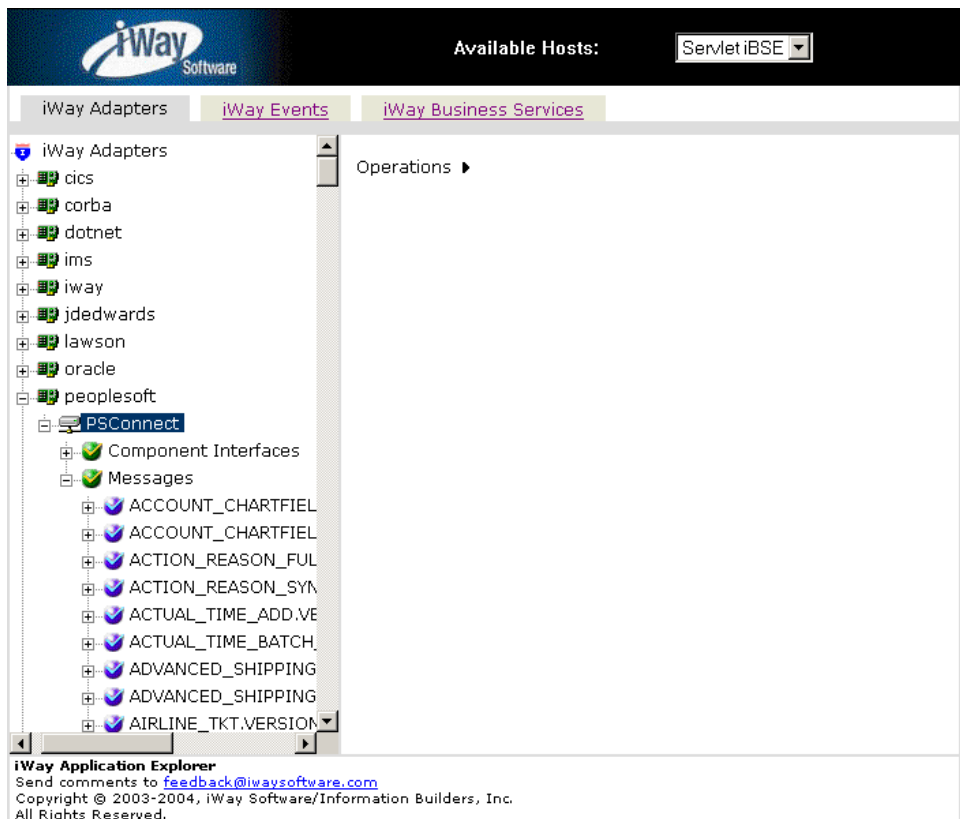
Creating an Event Port for the File Disposition

The File disposition uses a file URL to specify the destination file name or directory where the event document will be written. During run time, the destination file name may require indexing to avoid overwriting.

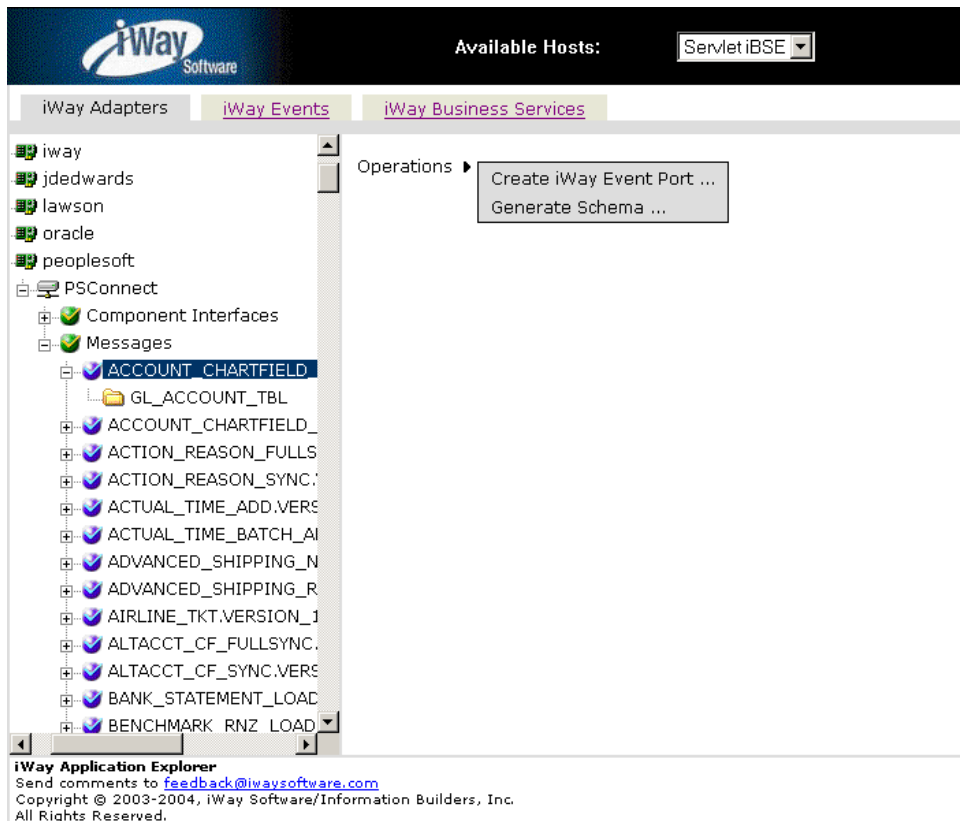
Procedure How to Create an Event Port for the File Disposition

To create a specific event port for the File disposition using Application Explorer:

1. Click the *iWay Adapters* tab

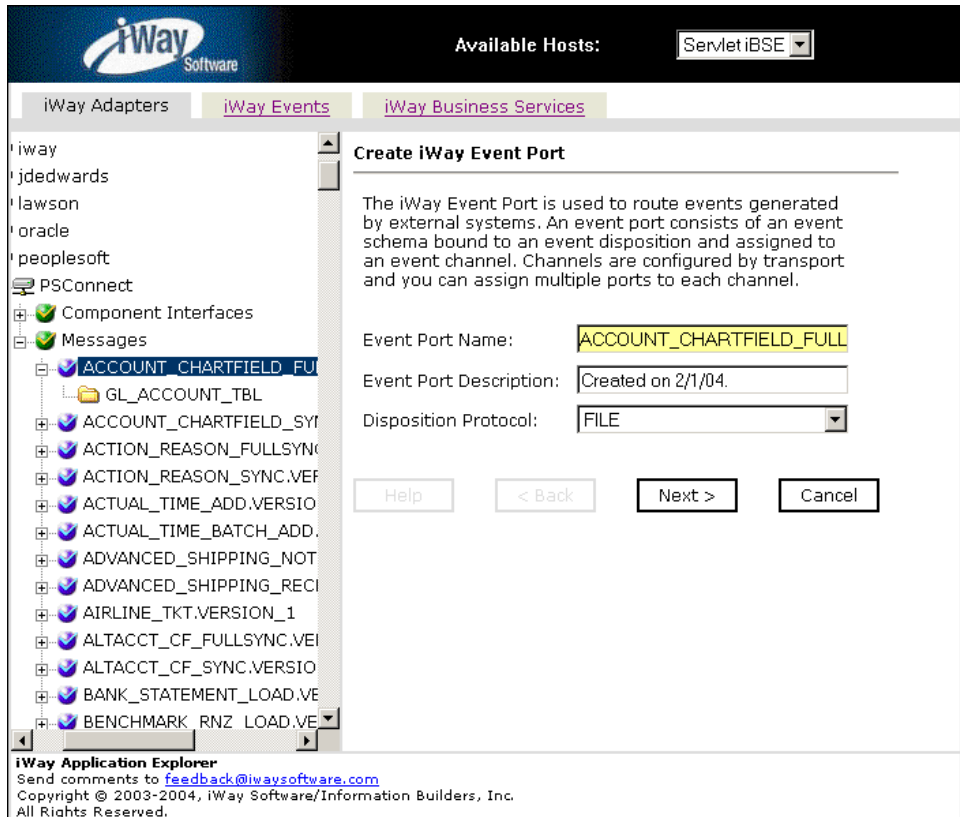


2. From the Messages business object repository, select the `ACCOUNT_CHARTFIELD_FULLSYNC.VERSION_1` PeopleSoft Message.



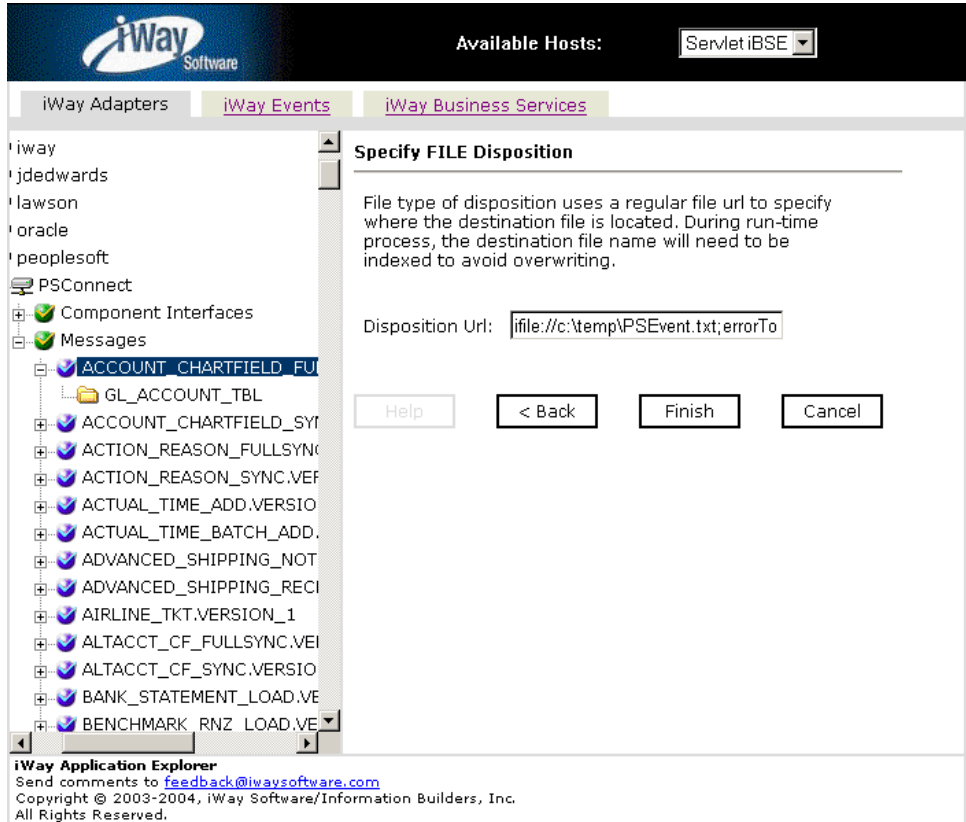
3. In the right pane, move the pointer over *Operations* and select *Create iWay Event Port*.

The Create iWay Event Port pane opens on the right.



- a. In the Event Port Name field, type a name.
Note: Ensure that you specify a name that conforms to standards set by PeopleSoft. For example, when using PeopleSoft, periods are not allowed, and you must remove any instances of this character.
 - b. In the Event Port Description field, type a brief description.
 - c. From the Disposition Protocol drop-down list, select *FILE*.
4. Click *Next*.

The Specify FILE Disposition pane opens on the right



5. In the Disposition Url field, type a File destination to which event data is written.

When pointing Application Explorer to an **IBSE** deployment, specify the destination file using the following format:

`ifile:///[[location]];errorTo=[[pre-defined port name or another disposition url]]`

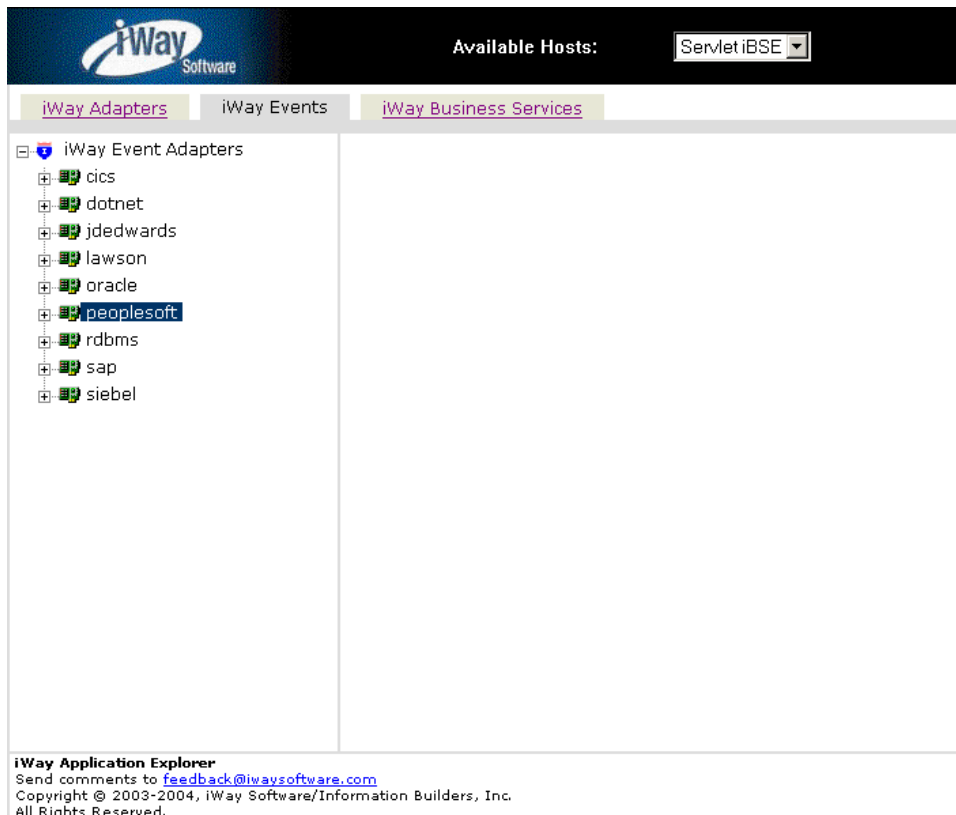
When pointing Application Explorer to a **JCA** deployment, provide the full path to the directory.

The following table describes the parameters for the disposition.

Parameter	Description
location	The destination and filename of the document where event data will be written, for example, <code>ifile:///D:\in\x.txt;errorTo=ifile:///D:\error.</code>
errorTo	Predefined port name or another disposition URL to which error logs are sent.

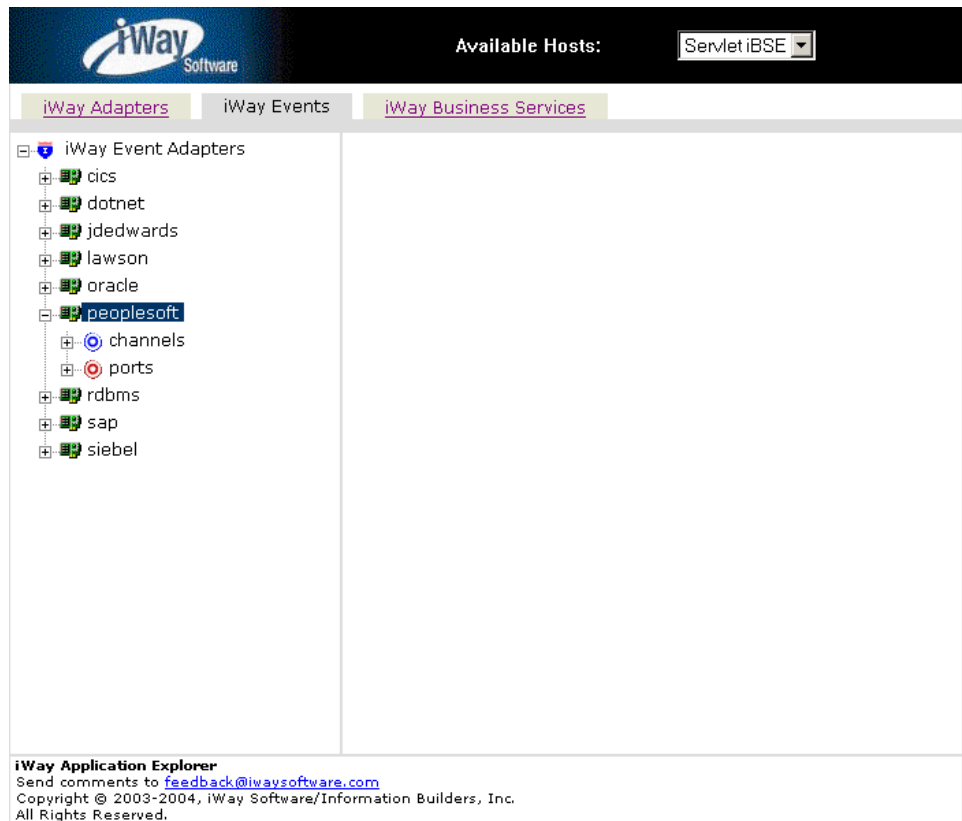
6. Click *Finish*.

The iWay Events tab opens.



7. Expand the *iWay Event Adapters* node and *peoplesoft* node.

The channels and ports nodes appear.



8. Expand the *ports* node.

The event port appears under the ports node in the left pane. In the right pane, a table summarizes all the information associated with the port you created.



9. To view the event schema that was created for the event port, click *SchemaLink*.

You are ready to associate the event port with a channel. For more information, see *Adding, Modifying, or Deleting a Channel* on page 5-17.

Creating an Event Port for the iBSE Disposition

The iBSE disposition enables an event to launch an iWay Business Service Method.

Procedure How to Create a Port for the iBSE Disposition

To create a port for an iBSE disposition using Application Explorer:

1. Click the *iWay Events* tab.

The iWay Event Adapters window opens.

- a. In the left pane, expand the *peoplesoft* node.

- b. Select the *ports* node.
2. Move the pointer over *Operations* and select *Add a new port*.
The Create Event Port pane opens on the right.
 - a. Type a name for the event port and provide a brief description.
 - b. From the Disposition Protocol drop-down list, select *MSMQ*.
 - c. In the Disposition field, enter a MSMQ destination in the form of:

```
msmq://host/private$/qName;errorTo=[pre-defined port name or another disposition url]
```

The following table defines the parameters for the disposition.

Parameter	Description
host	Machine name where the Microsoft Queuing system is running.
Queue Type	Private queues are queues that are not published in Active Directory. They appear only on the local computer that contains them. Private queues are accessible only by Message Queuing applications that recognize the full path name or format name of the queue. For private queues, enter <i>Private\$</i> .
qName	Name of the private queue where messages are placed.
errorTo	Location where error documents are sent. A predefined port name or another full URL. Optional.

3. Click *OK*.

The port appears under the ports node in the left pane. In the right pane, a table appears that summarizes the information associated with the port you created.

You are ready to associate the event port with a channel. For more information, see *Adding, Modifying, or Deleting a Channel* on page 5-17.

Creating an Event Port for the JMS Queue Disposition

The JMS queue disposition allows an event to be enqueued to a JMS queue.

Procedure How to Create a Port for the JMS Queue Disposition

To create a port for a JMS queue disposition using Application Explorer:

1. Click the *iWay Events* tab.
The iWay Event Adapters window opens.

- a. In the left pane, expand the *peoplesoft* node.
 - b. Select the *ports* node.
2. Move the pointer over *Operations* and select *Add a new port*.

The Create Event Port pane opens on the right.

- a. Type a name for the event port and provide a brief description.
- b. From the Disposition Protocol drop-down list, select *JMSQ*.
- c. In the Disposition field, enter a JMS destination.

When pointing Application Explorer to an **ibSE** deployment, use the following format:

```
jmsq:myQueueName@myQueueFac;jndiurl=[myurl];jndifactory=[myfactory];user=[user];password=[xxx];errorTo=[pre-defined port name or another disposition url]
```

When pointing Application Explorer to a **JCA** deployment, use the following format:

```
jms:jmsqueue@jmsfactory;jndiurl=;jndifactory=;
```

The following table defines the parameters for the disposition.

Parameter	Description
queue	Name of a queue to which events are emitted.
Connection Factory	A resource that contains information about the JMS Server. The WebLogic connection factory is: <code>javax.jms.QueueConnectionFactory</code>
jndi_url	URL of the application server. For BEA WebLogic Server, the URL is <code>t3://host:port</code> where: <code>host</code> Is the machine name where WebLogic Server is installed. <code>port</code> Is the port on which WebLogic server is listening. The default port, if not changed at installation, is 7001.

Parameter	Description
jndi_factory	Is JNDI context.INITIAL_CONTEXT_FACTORY and is provided by the JNDI service provider. For WebLogic Server, the WebLogic factory is weblogic.jndi.WLInitialContextFactory.
user	A user ID associated with this queue.
password	The password for this user ID.
errorTo	The location where error logs are sent. Optional. A predefined port name or another disposition URL. The URL must be complete, including the protocol.

3. Click *OK*.

The port appears under the ports node in the left pane. In the right pane, a table appears that summarizes the information associated with the port you created.

You are ready to associate the event port with a channel. For more information, see *Adding, Modifying, or Deleting a Channel* on page 5-17.

Creating an Event Port for the SOAP Disposition

The SOAP disposition allows an event to launch a Web service specified by a WSDL file. A soap action is optional. The default value is "".

Procedure How to Create a Port for the SOAP Disposition

To create a port for a SOAP disposition using Application Explorer:

1. Click the *iWay Events* tab.

The iWay Event Adapters window opens.

a. In the left pane, expand the *peoplesoft* node.

b. Select the *ports* node.

2. Move the pointer over *Operations* and select *Add a new port*.

The Create Event Port pane opens on the right.

a. Type a name for the event port and provide a brief description.

b. From the Disposition Protocol drop-down list, select *SOAP*.

- c. In the Disposition field, enter a SOAP destination in the form of:

```
soap:[wsdl-url];soapaction=[myaction];responseTo=[pre-defined port  
name or another disposition URL];errorTo=[pre-defined port name or  
another disposition url]
```

The following table defines the parameters for the disposition.

Parameter	Description
wsdl-url	URL to the WSDL file that is required to create the SOAP message.
soapaction	Method called by the disposition.
responseTo	Predefined port name or another disposition URL where response documents are sent. Optional.
errorTo	Location where error documents are sent. A predefined port name or another full URL. Optional.

3. Click OK.

The port appears under the ports node in the left pane. In the right pane, a table appears that summarizes the information associated with the port you created.

You are ready to associate the event port with a channel. For more information, see *Adding, Modifying, or Deleting a Channel* on page 5-17.

Creating an Event Port for the HTTP Disposition

The HTTP disposition uses an HTTP URL to specify an HTTP end point to which the event document is posted.

Procedure How to Create a Port for the HTTP Disposition

To create a port for an HTTP disposition using iWay Application Explorer:

1. Click the *iWay Events* tab.

The iWay Event Adapters window opens.

- a. In the left pane, expand the *peoplesoft* node.
- b. Select the *ports* node.

2. Move the pointer over *Operations* and select *Add a new port*.

The Create Event Port pane opens on the right.

- a. Type a name for the event port and provide a brief description.
- b. From the Disposition Protocol drop-down list, select *HTTP*.

- c. In the Disposition field, enter an HTTP destination.

When pointing Application Explorer to an **ibSE** deployment, use the following format:

```
ihttp://[myurl];responseTo=[pre-defined port name or another disposition url];
```

where:

url

Is the URL target for the post operation, for example,

```
http://myhost:1234/docroot
```

responseTo

Is the location where responses are posted, if desired.

When pointing Application Explorer to a **JCA** deployment, use the following format:

```
http://host:port/uri
```

where:

host:port

Is the combination of the name of the host on which the Web server resides and the port on which the server is listening for the post operation.

uri

Is the universal resource identifier that completes the url specification.

3. Click **OK**.

The port appears under the ports node in the left pane. In the right pane, a table appears that summarizes the information associated with the event port you created.

You are ready to associate the event port with a channel. For more information, see *Adding, Modifying, or Deleting a Channel* on page 5-17.

Creating an Event Port for the MQ Series Disposition

The MQ Series disposition enables an event to be enqueued to an MQ Series queue. Both queue manager and queue name may be specified.

Procedure How to Create a Port for the MQ Series Disposition

To create a port for an MQ Series disposition using iWay Application Explorer:

1. Click the *iWay Events* tab.

The iWay Event Adapters window opens.

- a. In the left pane, expand the *peoplesoft* node.
- b. Select the *ports* node.

2. Move the pointer over *Operations* and select *Add a new port*.

The Create Event Port pane opens on the right.

- a. Type a name for the event port and provide a brief description.
- b. From the Disposition Protocol drop-down list, select *MQ Series*.
- c. In the Disposition field, enter an MQ Series destination.

When pointing Application Explorer to an **iBSE** deployment, use the following format:

```
mqseries:/qManager/qName;host=[hostname];port=[port];channel=[channelname];errorTo=[pre-defined port name or another disposition url]
```

When pointing Application Explorer to a **JCA** deployment, use the following format:

```
mq:qmanager@respqueue;host=;port=;channel=
```

The following table defines the parameters for the disposition.

Parameter	Description
qManager	Name of the queue manager to which the server must connect.
qName or respqueue	Name of the queue where messages are placed.
host	Host on which the MQ server is located (for the MQ Client only).
port	Number to connect to an MQ server queue manager (for the MQ client only).
channel	Case-sensitive name of the channel that connects with the remote MQ server queue manager (for the MQ client only). The default channel name for MQSeries is SYSTEM.DEF.SVRCONN.
errorTo	Location where error documents are sent. A predefined port name or another full URL. Optional.

3. Click *OK*.

The port appears under the ports node in the left pane. In the right pane, a table appears that summarizes the information associated with the event port you created.

You are ready to associate the event port with a channel. For more information, see *Adding, Modifying, or Deleting a Channel* on page 5-17.

Editing an Event Port

You can edit an existing event port.

Procedure How to Edit an Event Port

To edit an event port:

1. Select the event port you want to edit.
2. In the right pane, move the pointer over *Operations* and select *Edit*.
The Edit Port pane opens on the right.
3. Make the required changes to the event port configuration fields.
4. Click *OK*.

Deleting an Event Port

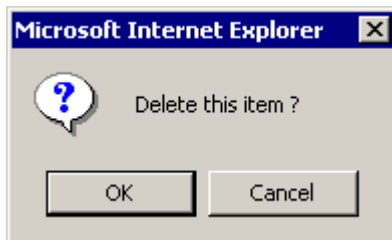
You can delete an existing event port.

Procedure How to Delete an Event Port

To delete an event port:

1. Select the event port you want to delete.
2. In the right pane, move the pointer over *Operations* and select *Delete*.

The following confirmation dialog box opens.



3. To delete the event port you selected, click *OK*.

The event port disappears from the list in the left pane.

Adding, Modifying, or Deleting a Channel

The following topics describe how to create, modify, or remove a channel for your event adapter. All defined event ports must be associated with a channel.

Creating a Channel

You can create a channel using iWay Servlet Application Explorer. The following procedure also describes how to start or stop a channel.

Procedure How to Create a Channel

To create a channel using Application Explorer:

1. Click the *iWay Events* tab.

The iWay Event Adapters window opens.



The list of iWay adapters that support events appears in the left pane.

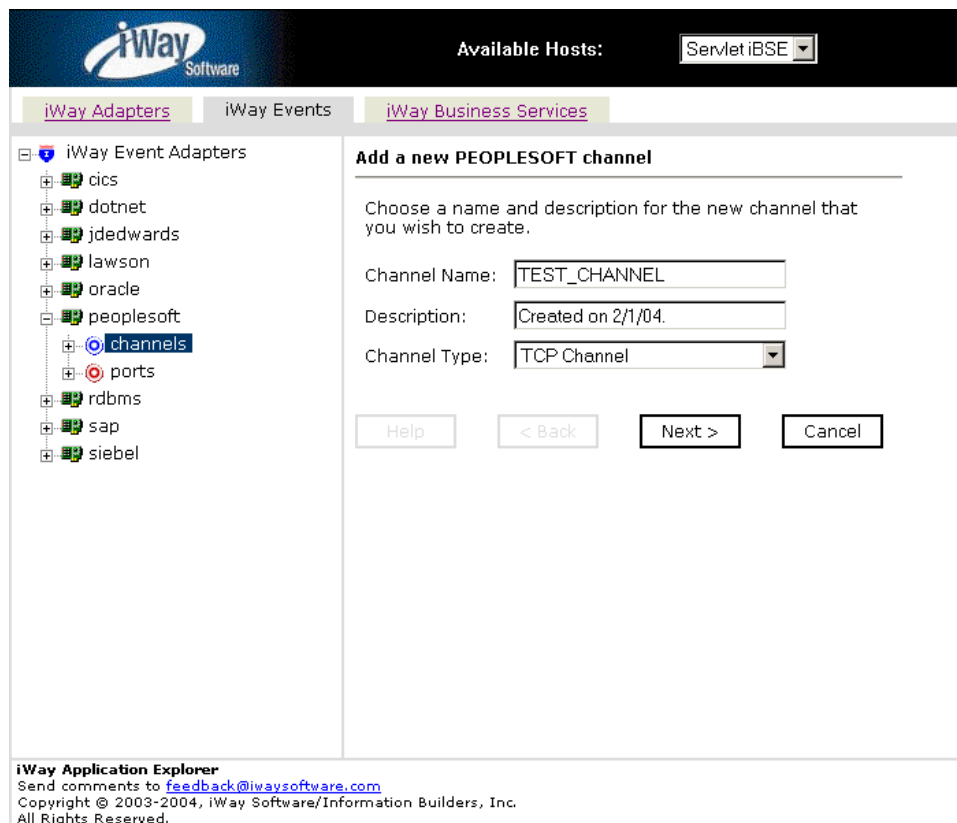
2. Expand the *peoplesoft* node.

The ports and channels nodes appear in the left pane.



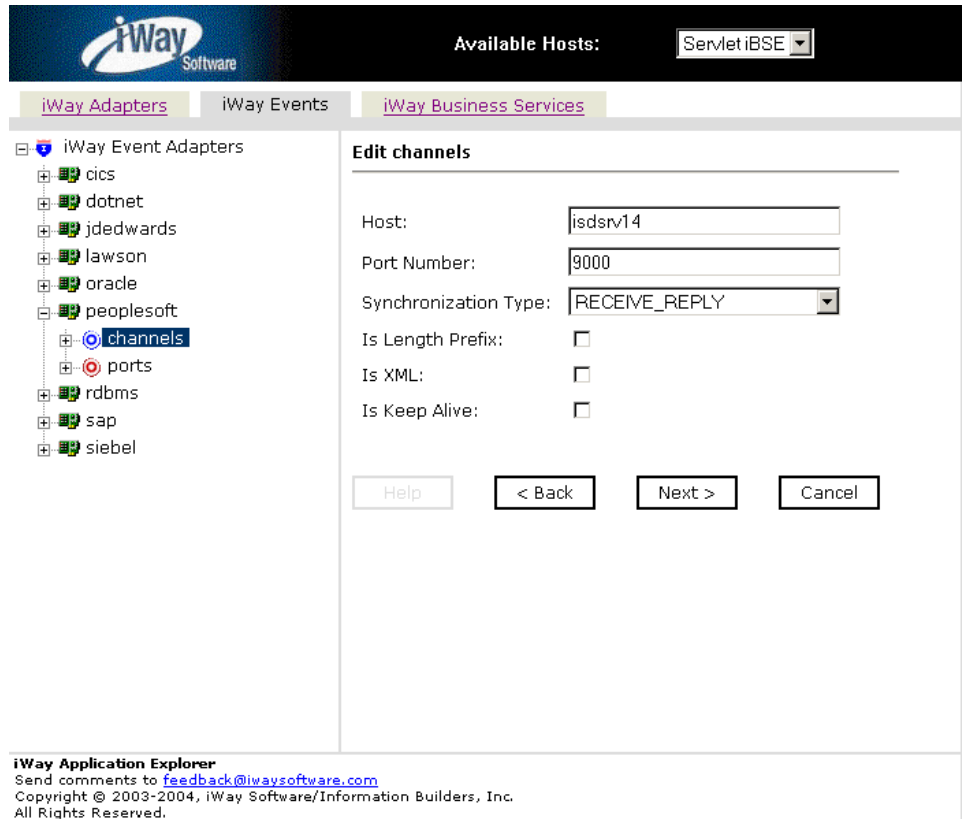
3. Click the *channels* node.
4. In the right pane, move the pointer over *Operations* and select *Add a new channel*.

The Add a new PEOPLESOFT channel pane opens on the right.



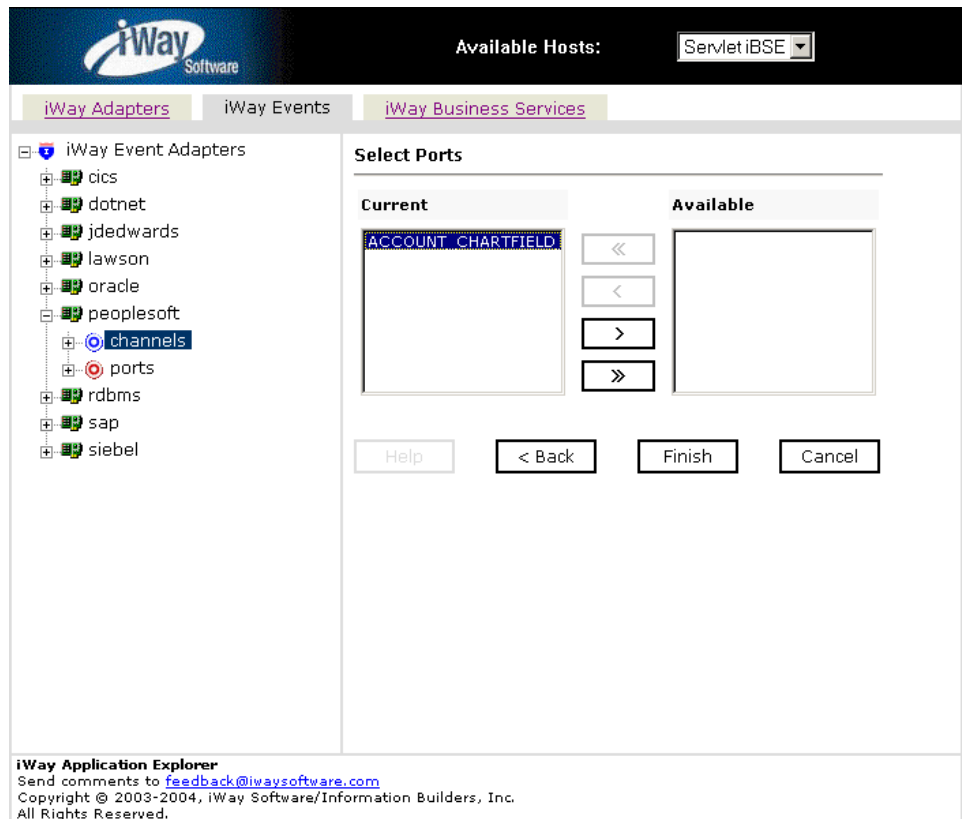
- a. In the Channel Name field, type a name, for example, TEST_CHANNEL.
 - b. In the Description field, type a brief description.
 - c. From the drop-down list, select a channel type, for example, TCP Channel.
5. Click Next.

The Edit channels pane opens on the right.



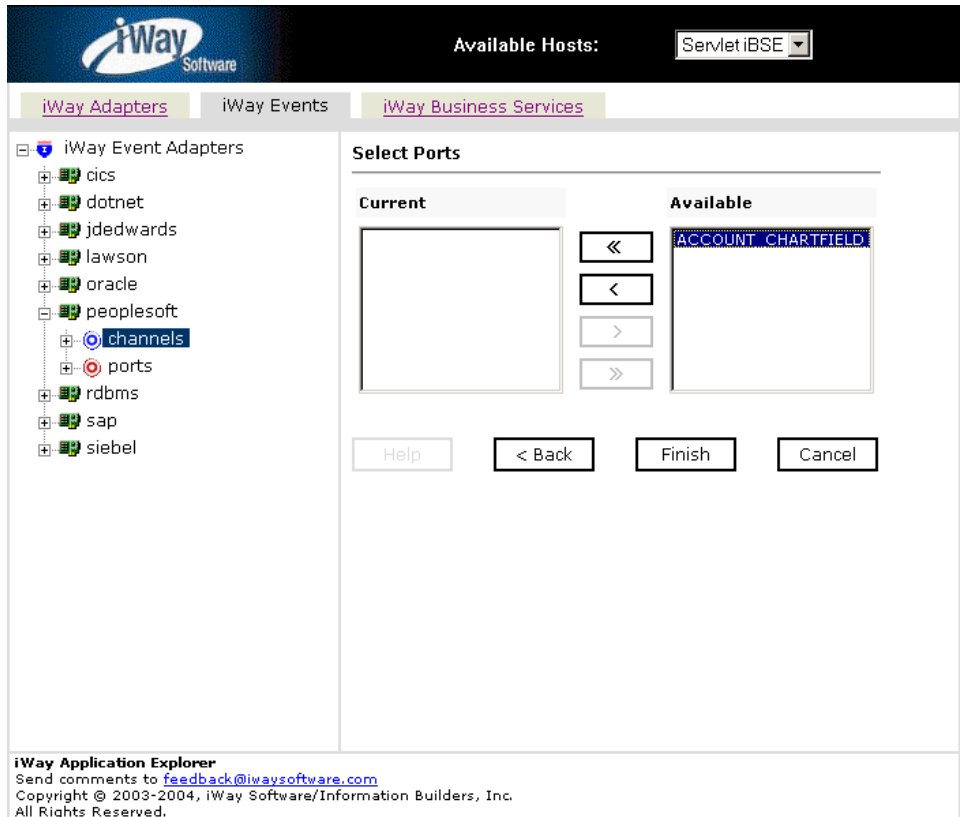
6. Enter the information that is specific to your PeopleSoft system and the channel you are creating.
7. Click **Next**.

The Select Ports pane opens on the right.



- a. Select an event port from the list of current ports.
- b. To transfer the port to the list of available ports, click the single right (>) arrow button. To associate all event ports, click the double right (>>) arrow button.

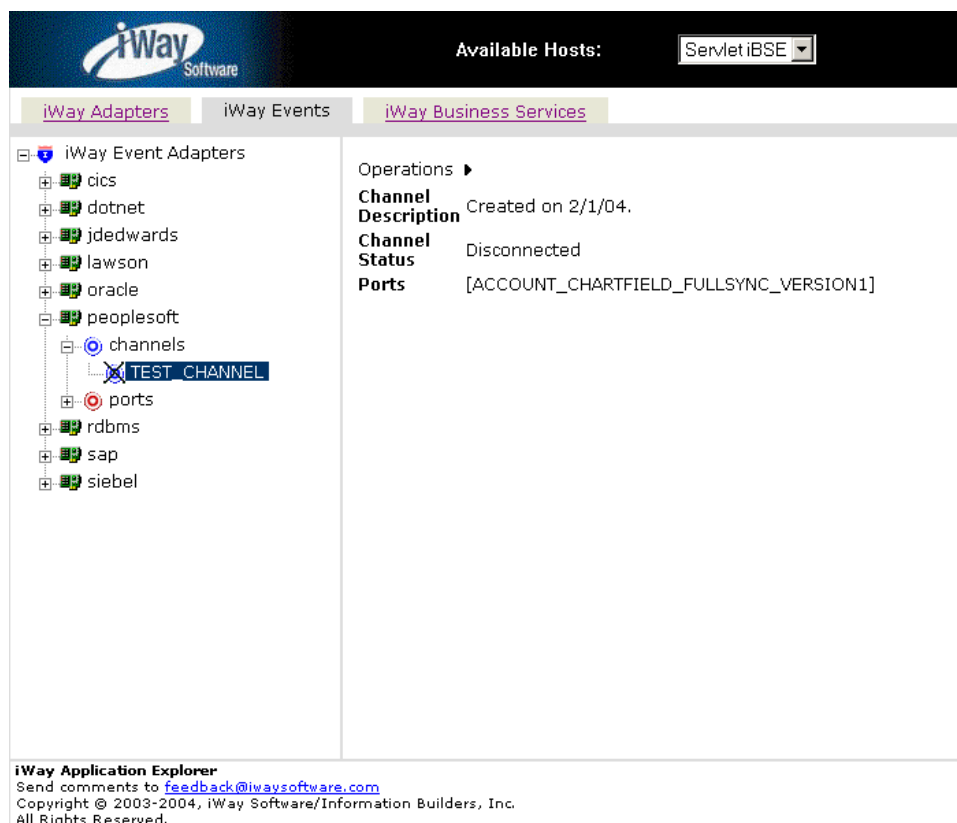
The port appears in the list of available ports.



8. Click *Finish*.

Adding, Modifying, or Deleting a Channel

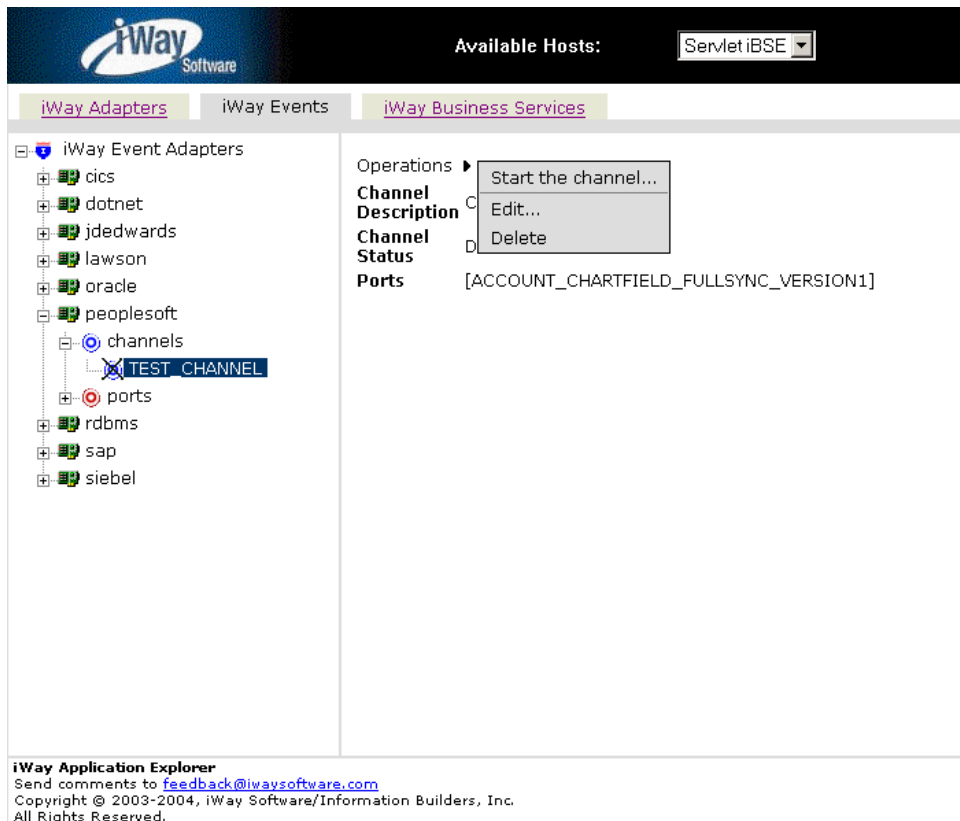
The summary pane opens on the right.



The channel appears under the channels node in the left pane. An X through the icon indicates that the channel is currently disconnected.

A summary provides the channel description, channel status, and available ports. All the information is associated with the channel you created.

You must start the channel to activate your event configuration.



9. In the right pane, move the pointer over *Operations* and select *Start the channel*.
When the channel is activated, the X through the icon in the left pane disappears.
10. To stop the channel at any time, move the pointer over *Operations* and select *Stop the channel*.

Creating a Channel Using Specific Protocols

You also can create the following types of channels using iWay Servlet Application Explorer:

- HTTP
- File
- MQ Series

The following procedures explain how to create these channels.

Procedure How to Create an HTTP Channel

To create an HTTP channel using Application Explorer:

1. Click the *iWay Events* tab.

The iWay Event Adapters window opens. The adapters that appear in the left pane support events.

2. Expand the *iWay Adapter* node.

The ports and channels nodes appear in the left pane.

3. Click the *channels* node.

4. In the right pane, move the pointer over *Operations* and select *Add a new channel*.

The Add a new channel pane opens.

- a. Type a name for the channel, for example, NewChannel.
- b. Type a brief description.
- c. From the drop-down list, select *HTTP Listener*.

5. Click *Next*.

The Edit Channels pane opens on the right.

6. Provide the values based on the description in the following table:

Parameter	Description
www root	Root directory where PeopleSoft event data is posted.
Listener port	Port on which to listen for PeopleSoft event data.
Synchronization Type	Choose from three synchronization options: <ul style="list-style-type: none">• REQUEST• REQUEST_RESPONSE• REQUEST_ACK

7. Click *Next*.

The Select Ports pane opens.

- a. Select an event port from the list of current ports.
- b. To transfer the port to the list of available ports, click the single right (>) arrow button. To associate all the event ports, click the double right (>>) arrow button.

8. Click *Finish*.

The channel appears under the channels node in the left pane. An X over the icon indicates that the channel is currently disconnected. You must start the channel to activate your event configuration.

In the right pane, a summary provides the channel description, channel status, and available ports. All the information is associated with the channel you created

9. In the right pane, move the pointer over *Operations* and select *Start the channel*.

The channel you created becomes active. The X over the icon disappears.

10. To stop the channel, move the pointer over *Operations* and select *Stop the channel*.

Procedure How to Create a File Channel

To create a File channel using Application Explorer:

1. Click the *iWay Events* tab.

The iWay Event Adapters window opens. The adapters that appear in the left pane support events.

2. Expand the *iWay Adapter* node.

The ports and channels nodes appear in the left pane.

3. Click the *channels* node.

4. In the right pane, move the pointer over *Operations* and select *Add a new channel*.

The Add a new channel window opens.

a. Type a name for the channel, for example, NewChannel.

b. Type a brief description.

c. From the drop-down list, select *File Listener*.

5. Click *Next*.

The Edit Channels pane opens with three tabs in the right pane.

a. In the Request tab, enter values for the following parameters:

Parameter	Description
Polling Location	Target file system location for the PeopleSoft XML file.
File Mask	File name to be used for the output file generated as a result of the operation.

- b.** In the Response tab, enter values for the following parameters:

Parameter	Description
Synchronization Type	Target file system location for the PeopleSoft XML file.
Response/Ack Directory	Choose from three options: <ul style="list-style-type: none">• REQUEST• REQUEST_RESPONSE• REQUEST_ACK

- c.** In the Advanced tab, enter values for the following parameters:

Parameter	Description
Error Directory	Directory to which documents with errors are written.
Poll interval (msec):	Interval (in milliseconds) when to check for new input Optional. The default is 3 seconds.
Processing Mode	<ul style="list-style-type: none">• Sequential indicates single processing of requests.• Threaded indicates processing of multiple requests simultaneously.
Thread limit	If you selected threaded processing, indicate the maximum number of requests that can be processed simultaneously.

- 6.** Click *Next*.

The Select Ports pane opens.

- a.** Select an event port from the list of current ports.
- b.** To transfer the port to the list of available ports, click the single right (>) arrow button. To associate all the event ports, click the double right (>>) arrow button.

- 7.** Click *Finish*.

The channel appears under the channels node in the left pane. An X over the icon indicates that the channel is currently disconnected. You must start the channel to activate your event configuration.

In the right pane, a summary provides the channel description, channel status, and available ports. All the information is associated with the channel you created.

8. Move the pointer over *Operations* and select *Start the channel*.

The channel becomes active. The X over the icon disappears.

9. To stop the channel, move the pointer over *Operations* and select *Stop the channel*.

Procedure How to Create an MQ Series Channel

To create an MQ Series channel using Application Explorer:

1. Click the *iWay Events* tab.

The iWay Event Adapters window opens. The adapters that appear in the left pane support events.

2. Expand the *iWay Adapter* node.

The ports and channels nodes appear in the left pane.

3. Click the *channels* node.

4. In the right pane, move the pointer over *Operations* and select *Add a new channel*.

The Add a new channel window opens.

- a. Type a name for the channel, for example, NewChannel.
- b. Type a brief description.
- c. From the drop-down list, select *MQ Series Listener*.

5. Click *Next*.

The Edit Channels window opens with three tabs in the right pane.

- a. In the Request tab, enter values for the following parameters:

Parameter	Description
Queue manager name	Name of the queue manager to which the server must connect.
MQ server host for MQClient operation	The host on which the MQ Server is located (for the MQ Client only).
MQ server port for MQClient operation	The number to connect to an MQ Server queue manager (for the MQ client only).

Parameter	Description
MQ server channel for MQClient operation	The case-sensitive name of the channel that connects with the remote MQ Server queue manager (for the MQ client only). The default channel name for MQ Series is SYSTEM.DEF.SVRCONN.
Document type XML	Accept the default selection.
Request queue name	<p>Queue where the message is routed and where request documents are received. The name of the queue is case-sensitive and conforms to the following format:</p> <p><i>Host\queue type\$qName</i></p> <p>where:</p> <p><i>Host</i></p> <p>Is the machine name where the MQ Series queuing system is running.</p> <p><i>queue type</i></p> <p>The type of queue. Private queues are queues that are not published in Active Directory and appear only on the local computer where they reside. Private queues are accessible only by Message Queuing applications that recognize the full path name or format name of the queue. For private queues, enter <i>Private\$</i></p> <p><i>qName</i></p> <p>Is the name of the queue where messages are placed, for example,</p> <p><i>iwaykxcl\Private\$\peoplesoft</i></p>

- b.** In the Response tab, enter values for the following parameters:

Parameter	Description
Synchronization Type	<p>Choose from three synchronization options:</p> <ul style="list-style-type: none"> REQUEST REQUEST_RESPONSE REQUEST_ACK

- c. In the Advanced tab, enter values for the following parameters:

Parameter	Description
Error Directory	Directory to which documents with errors are written.
Message wait interval (msec):	Interval (in milliseconds) when to check for new input. The default is 3 seconds. Optional.
Mode of operation	<ul style="list-style-type: none"> Sequential indicates single processing of requests. Threaded indicates processing of multiple requests simultaneously.
Thread limit	If you selected threaded processing, indicate the maximum number of requests that can be processed simultaneously.

6. Click *Next*.

The Select Ports pane opens.

- Select an event port from the list of current ports.
- To transfer the port to the list of available ports, click the single right (>) arrow button. To associate all the event ports, click the double right (>>) arrow button.

7. Click *Finish*.

The channel appears under the channels node in the left pane. An X over the icon indicates that the channel is currently disconnected. You must start the channel to activate your event configuration.

In the right pane, a summary provides the channel description, channel status, and available ports. All the information is associated with the channel you created.

8. Move the pointer over *Operations* and select *Start the channel*.

The channel you created becomes active. The X over the icon disappears.

9. To stop the channel, move the pointer over *Operations* and select *Stop the channel*.

Modifying a Channel

You can edit an existing channel.

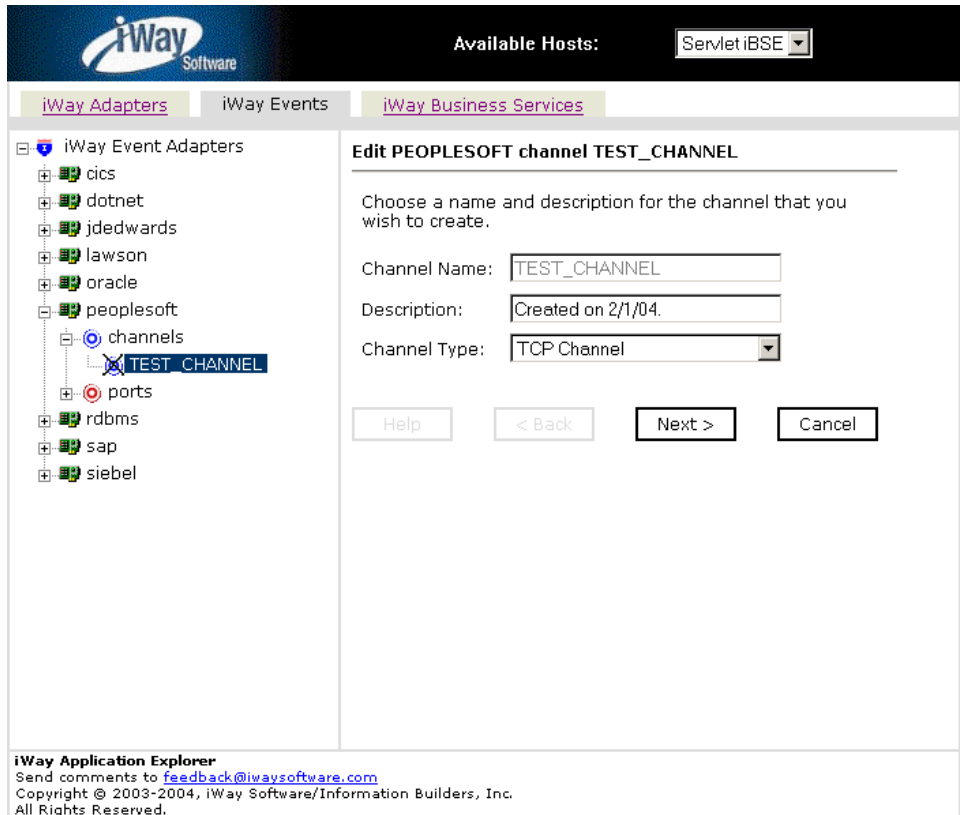
Procedure How to Edit a Channel

To edit an existing channel:

- In the left pane, select the channel you want to edit.

2. In the right pane, move the pointer over *Operations* and select *Edit*.

The Edit channels pane opens on the right.



3. Make the required changes to the channel configuration fields and click *Finish*.

Deleting a Channel

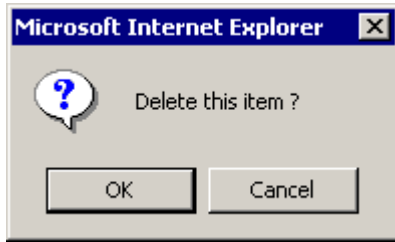
You can remove an existing channel.

Procedure How to Delete a Channel

To delete an existing channel:

1. In the left pane, select the channel you want to delete.
2. In the right pane, move the pointer over *Operations* and select *Delete*.

The following confirmation dialog box opens.



- 3.** To delete the channel you selected, click *OK*.
The channel disappears from the list in the left pane.

CHAPTER 6

Creating and Publishing iWay Business Services

Topics:

- Understanding an iWay Business Service
- Creating an iWay Business Service

This section describes how to create and publish an iWay Business Service using iWay Servlet Application Explorer.

Understanding an iWay Business Service

iWay Servlet Application Explorer provides Web developers with a simple, consistent mechanism for extending the capabilities of the iWay Adapter for PeopleSoft. The iWay Business Services Engine (iBSE) exposes functionality as Web services. It serves as a gateway to heterogeneous back-end applications and databases.

A Web service is a self-contained, modularized function that can be published and accessed across a network using open standards. It is the implementation of an interface by a component and is an executable entity. For the caller or sender, a Web service can be considered as a “black box” that may require input and delivers a result. Web services integrate within an enterprise as well as across enterprises on any communication technology stack, whether asynchronous or synchronous, in any format.

After you browse the PeopleSoft business object repository and create an XML schema for the object, you can generate an iWay Business Service for the object you wish to use with your adapter.

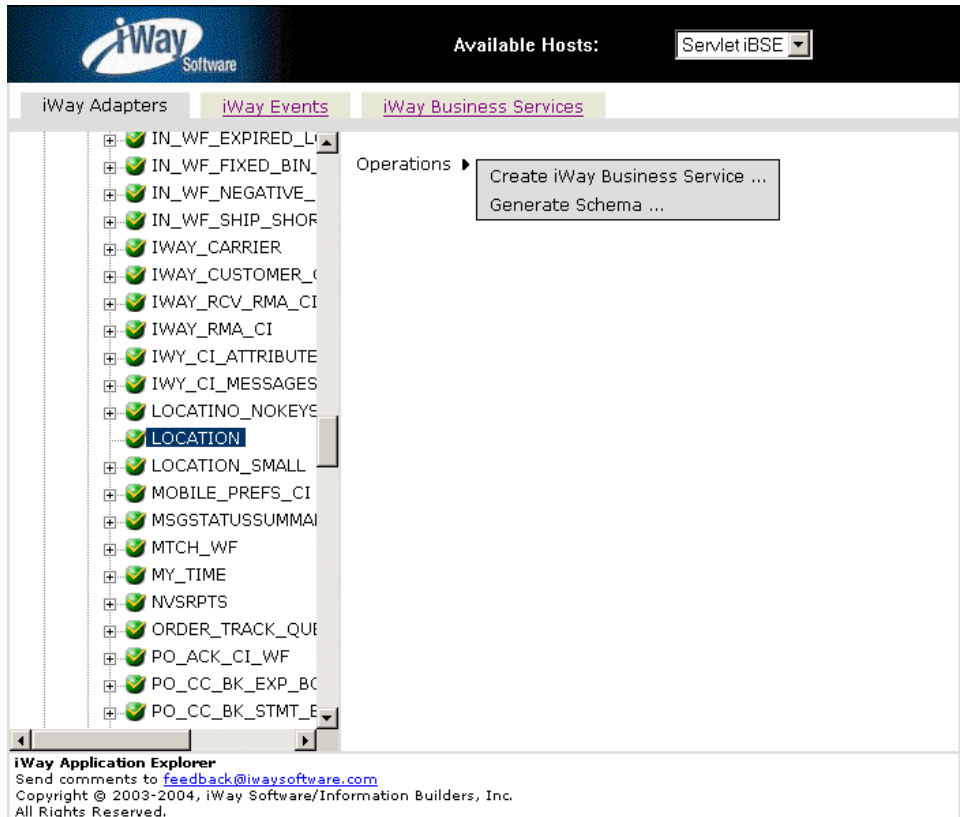
Creating an iWay Business Service

The following procedure describes how to create iWay Business Services using iWay Servlet Application Explorer. The PeopleSoft Component Interface called LOCATION is used as an example.

Procedure How to Create an iWay Business Service

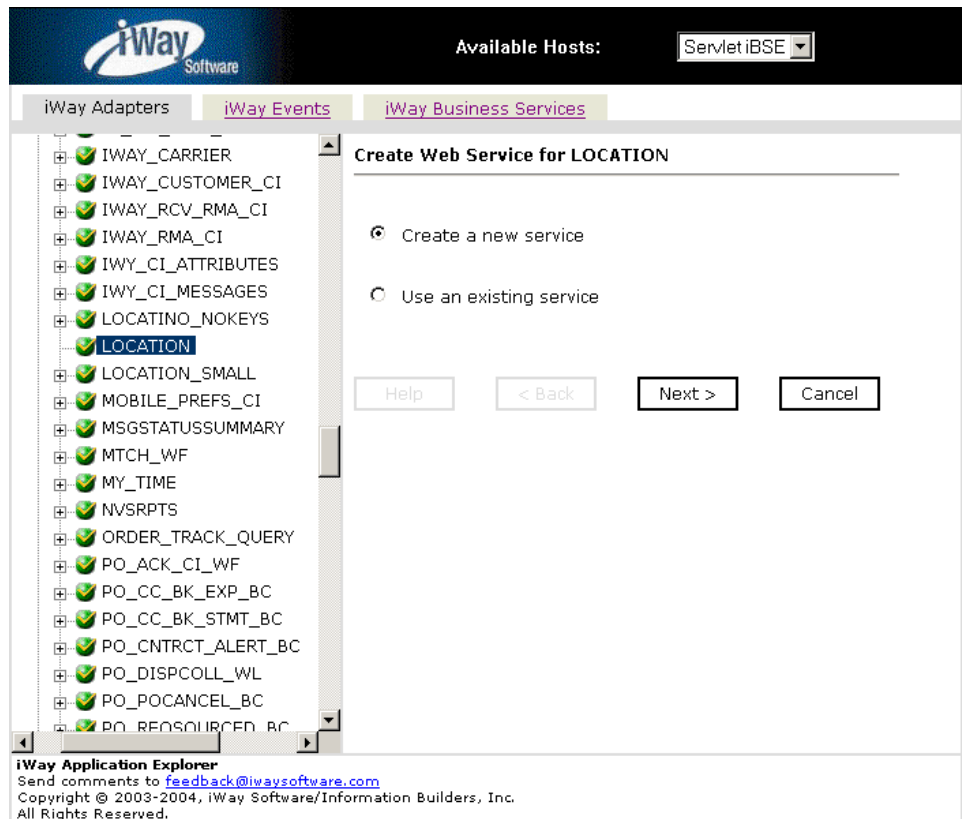
To create an iWay Business Service:

1. Display the *iWay Adapters* tab.
2. In the Component Interface Repository, select *LOCATION*.



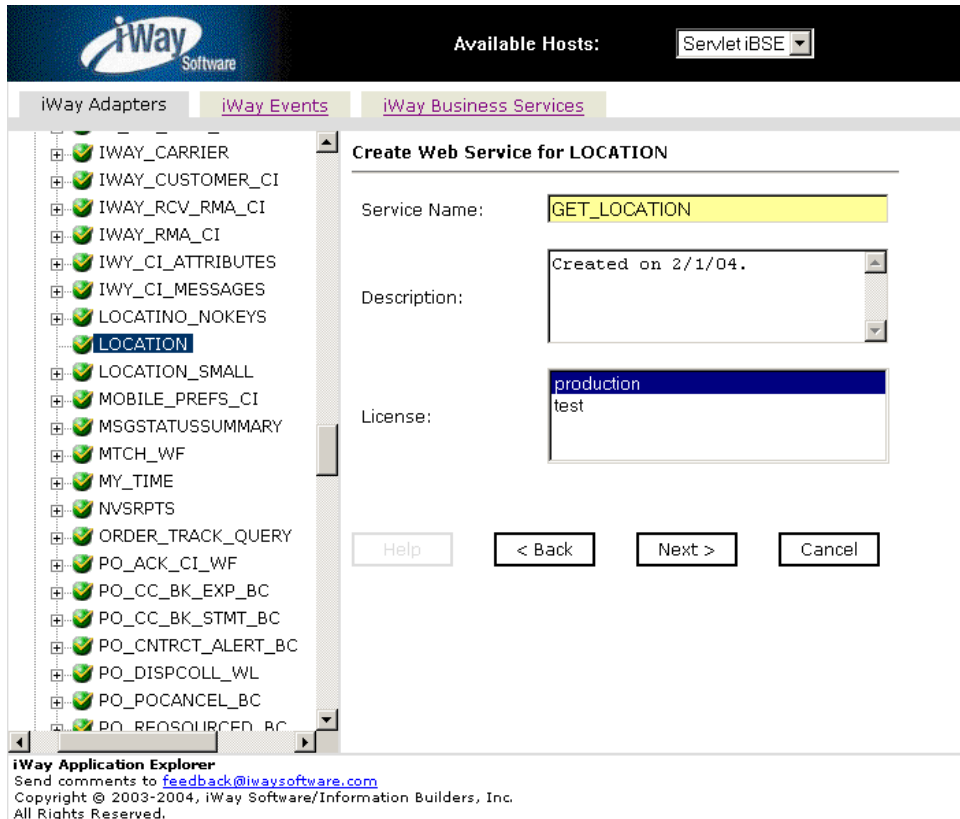
3. Move the pointer over *Operations* and select *Create iWay Business Service*.

The Create Web Service for LOCATION pane opens on the right.



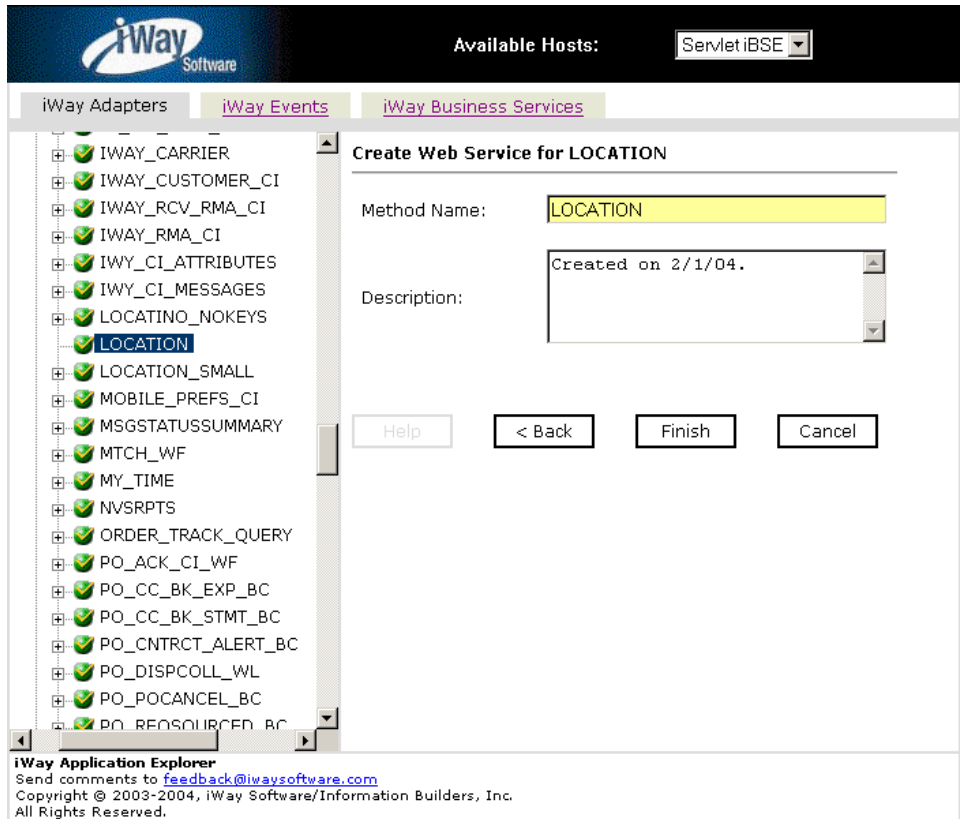
4. Select *Create a new service* and click *Next*.

The following fields appear in the right pane.



5. Specify information that is specific to the iWay Business Service you are defining:
 - a. In the Service Name field, enter a descriptive name for the iWay Business Service.
 - b. In the Description field, enter a brief description.
 - c. In the License field, select the license definition you want to use.
6. Click **Next**.

The following fields appear in the right pane.

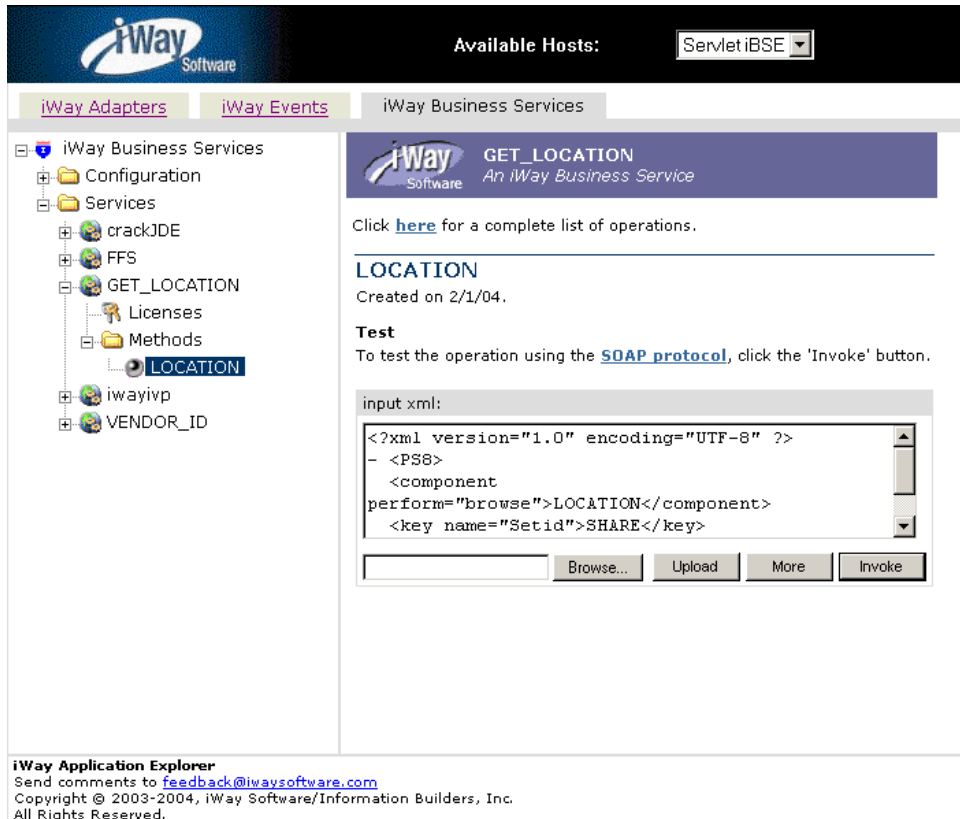


7. Specify information that is specific to the iWay Business Service you are defining:
 - a. In the Method Name field, enter a descriptive name for the method.
 - b. In the Description field, enter a brief description for the method.
8. Click *Finish*.

The iWay Business Services Engine tab opens.

The left pane lists all the available services that were created. The GET_LOCATION service node is expanded for you and the LOCATION method is automatically selected.

The test window for the LOCATION method opens in the right pane.



9. Enter a sample XML document that will query the service in the input xml field.

Note: To use the identical sample input XML that is shown in this example, see Sample Run-Time XML File for the LOCATION Component Interface.

10. Click *Invoke*.

The XML result appears in the right pane.

Reference Sample Run-Time XML File for the LOCATION Component Interface

The following input XML retrieves a list of locations.

```
<?xml version="1.0" encoding="UTF-8" ?>
<PS8>
  <component perform="browse">LOCATION</component>
  <key name="Setid">SHARE</key>
  <key name="Location">ALBERTA</key>
</PS8>
```

Generating WSDL From a Web Service

Generating Web Services Description Language (WSDL) from a Web service enables you to make the Web service available to other services within a host server.

Procedure How to Generate WSDL From a Web Service

To generate WSDL from a Web service:

1. If you are not already in the iWay Business Services tab, click the tab to access it.
2. In the left pane, expand the list of services to display the service for which you want to generate a WSDL.
3. Select the service.

The link for the service appears in the right pane.

- a. Right-click the *Service Description* link and choose *Save Target As*.
 - b. Choose a location for the file and add a .wsdl file extension.
4. Click *Save*.

For example, saving a Web service called LOCATION for PeopleSoft creates a file named LOCATION.wsdl.

Note: The file extension must be .wsdl.

APPENDIX A

Using Application Explorer in WebLogic Workshop

Topics:

- Overview and Key Features
- Installing and Configuring Application Explorer
- Starting Application Explorer
- Creating a New Configuration
- Connecting to PeopleSoft
- Modifying a Target
- Viewing an Application System Object
- Creating an XML Schema
- Understanding iWay Business Services
- Creating an iWay Business Service
- Understanding iWay Event Functionality
- Creating an Event Port
- Creating a Channel

This section describes how to use the iWay Java Swing Application Explorer in BEA WebLogic Workshop to create XML schemas for PeopleSoft Component Interfaces (CI) and Messages. In addition, information on listening for events in PeopleSoft and creating Web services that are published by the iWay Business Services Engine (iBSE) is provided.

Overview and Key Features

iWay Java Swing Application Explorer supports access to several Enterprise Information Systems (EIS). Although the underlying technology that is used to access the systems varies significantly from EIS to EIS, the Application Explorer user interface varies only slightly to accommodate the differences.

In addition, Application Explorer uses EIS interfaces and in-depth knowledge of application systems to access and browse business object metadata. After an object is selected, Application Explorer can generate an XML schema or Web service to define the object for use in conjunction with an iWay adapter.

External applications, accessing a different EIS or database using an iWay adapter, use either the XML schema or Web service to pass data between the external application and the adapter.

Key features of Application Explorer include:

- The capability of connecting to and exploring a variety of application systems.
- Access to application system object metadata.
- A point-and-click process for generating XML schemas and Web services.

Installing and Configuring Application Explorer

Before you install the iAE, PeopleSoft 8 must be installed, configured, and available for client access. Application Explorer does not need to reside on the same system as the application system being accessed, but network access is required.

Application Explorer is accessible as a window within WebLogic Workshop or as an independent Java application. On Windows, the iWay installation for BEA WebLogic installs this into WebLogic Workshop for you.

For more information on installing and configuring Application Explorer, see the *iWay 5.5 Installation and Configuration for BEA WebLogic* documentation.

Starting Application Explorer

You can run iWay's Application Explorer running in BEA WebLogic Workshop using an iWay Business Services Engine (iBSE) configuration.

If you wish to use Application Explorer with a JCA configuration instead of iBSE, you must use the servlet version of Application Explorer, which runs outside of WebLogic Workshop. For more information about the servlet version, see Chapter 4, *Creating XML Schemas or Web Services for PeopleSoft*.

Before you can use Application Explorer, you must start the BEA WebLogic Server. To start the BEA WebLogic Server on Windows, click the *Windows Start menu*, select *Programs, BEA WebLogic Platform 8.1, User Projects, your domain for iWay*, and click *Start Server*. If you are using UNIX or want to start the BEA WebLogic Server from a command line, type the following at the prompt:

```
BEA_HOME\user_projects\domains\DOMAIN_NAME\startWebLogic.cmd
```

where:

BEA_HOME

Is the directory where BEA WebLogic is installed.

DOMAIN_NAME

Is the domain you are using for iWay.

Once BEA WebLogic Server is running, enter the following URL in your browser window:

```
http://hostname:port/iwae/index.html
```

where:

hostname

Is the hostname for your application server.

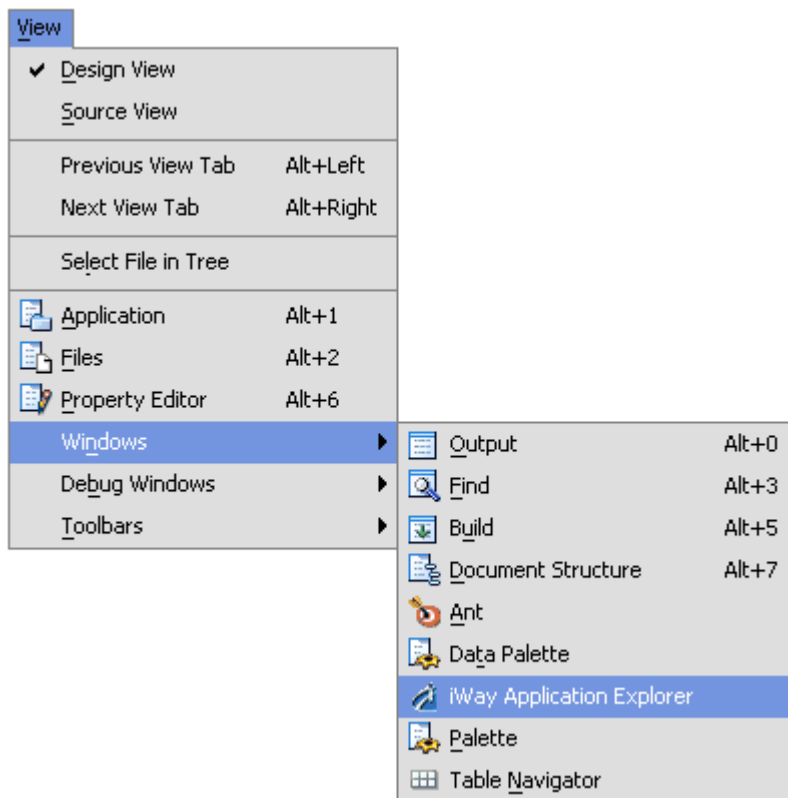
port

Is the port for the domain you are using for iWay. The port for the default domain is 7001.

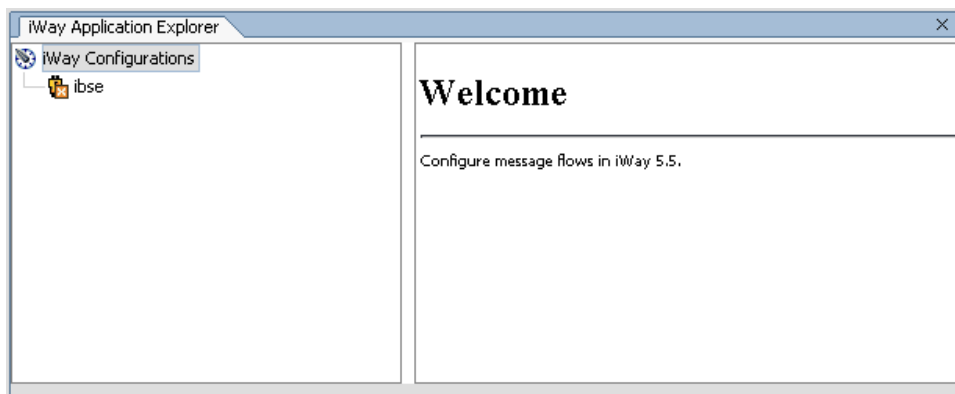
Procedure How to Start Application Explorer

To start Application Explorer:

1. In BEA WebLogic Workshop, click *View* from the menubar, select *Windows*, and click *iWay Application Explorer*.



When you start the Application Explorer, the following window opens within the WebLogic Workshop console.



You can resize and drag-and-drop the Application Explorer window within the WebLogic Workshop console.

Creating a New Configuration

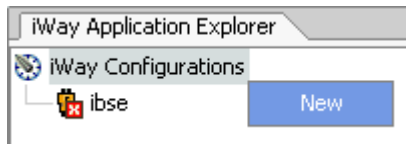
Application Explorer enables you to configure iWay Adapters and Web services. To configure adapters, you must specify a configuration that behaves as a repository where all data generated by Application Explorer is written. Application Explorer supports the following repositories:

- File System
- Oracle
- SQL Server

For more information on configuring these repositories, see the *iWay 5.5 Installation and Configuration for BEA WebLogic Version 5 Release 5* documentation.

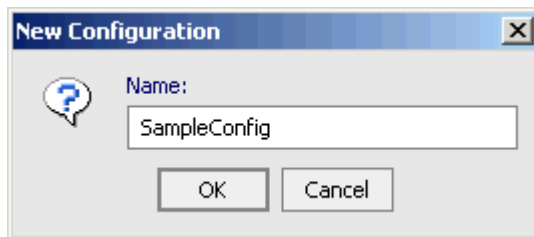
Procedure How to Create a New Configuration

To create a new configuration using Application Explorer:



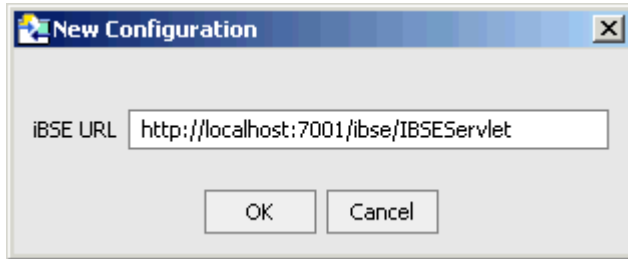
1. Right-click *iWay Configurations* and select *New*.

The New Configuration dialog box opens.



2. Type a name for the configuration (for example, SampleConfig) and click *OK*.

The New Configuration dialog box opens.

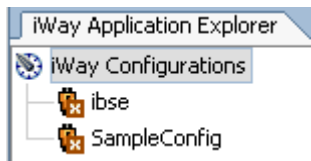


When you create a new configuration, you must connect to the iWay Business Services Engine (iBSE).

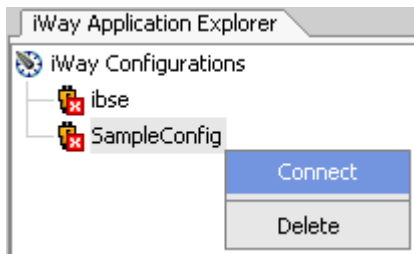
- To access iBSE, use the following URL:
<http://localhost:9000>
- For Servlet iBSE, use the following URL:
<http://hostname:port/ibse/IBSEServlet/>

Note: Before you create a configuration, you must configure a repository using the iBSE configuration utility. For more information, see the *iWay 5.5 Installation and Configuration for BEA WebLogic Version 5 Release 5* documentation.

3. Click OK.

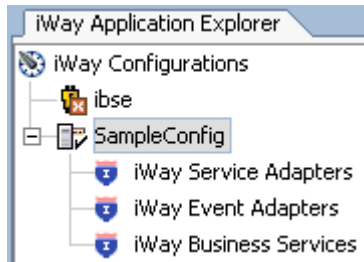


The new configuration (for example, *SampleConfig*) appears as a node under the iWay Configurations node. The right pane provides details of the configuration you created. You must connect to your configuration after it is added.



4. Right-click *SampleConfig* and select *Connect*.

The iWay Service Adapters, iWay Event Adapters, and iWay Business Services nodes appear.



5. Expand the respective nodes to display the service and event adapters that are installed.

You must install each adapter before using it with Application Explorer. For more information, see the *iWay 5.5 Installation and Configuration for BEA WebLogic Version 5 Release 5* documentation.

The Service Adapters list includes a PeopleSoft node, which enables you to connect to PeopleSoft metadata and create XML request and response schemas that can be used to listen for events or create Web Services. For more information, see *Creating an iWay Business Service* on page A-17.

The Event Adapters list also includes a PeopleSoft node, which enables you to create ports and channels for PeopleSoft event handling. For more information, see *Understanding iWay Event Functionality* on page A-22.

Connecting to PeopleSoft

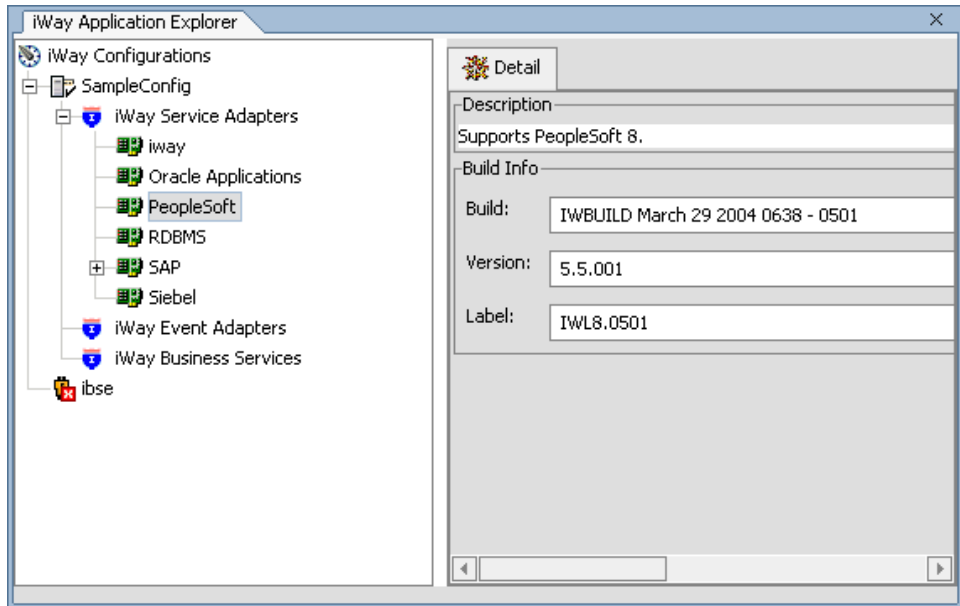
To browse PeopleSoft Component Interfaces (CI) and Messages, you must create a target for PeopleSoft. This target serves as your connection point and is automatically saved after it is created. You must establish a connection to PeopleSoft every time you start Application Explorer or after you disconnect from the PeopleSoft.

The left pane displays the application systems supported by Application Explorer, which are based on the iWay adapters you installed and are licensed to use.

Procedure How to Create a New Target for PeopleSoft

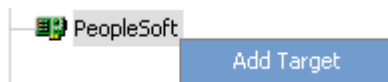
To connect to PeopleSoft for the first time, you must create a new target. To create a target for PeopleSoft:

1. In the left pane, click the *PeopleSoft* node.

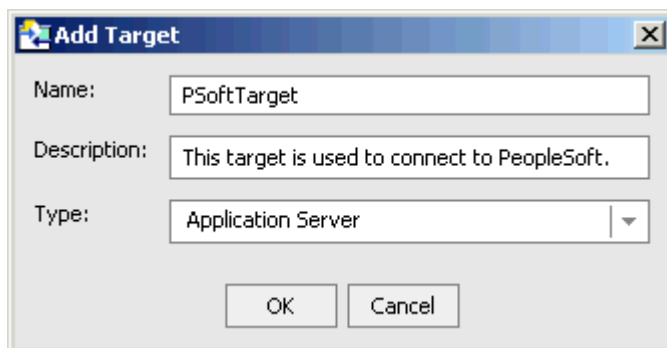


Descriptive information (for example, title and product version) for the iWay Adapter for PeopleSoft 8 appears in the right pane.

2. Right-click the PeopleSoft adapter node and select *Add target*.



The Add target dialog box opens.



3. Perform the following steps:

- a. In the Name field, enter a descriptive name for the target (for example, PSoftTarget).
- b. In the Description field, enter a brief description for the target.
- c. From the Options drop-down list, select the type of server to which you are connecting.

The default value is *Application Server*.

4. Click OK.

The Application Server dialog box opens where you must specify connection information for PeopleSoft and the application server that is hosting PeopleSoft.

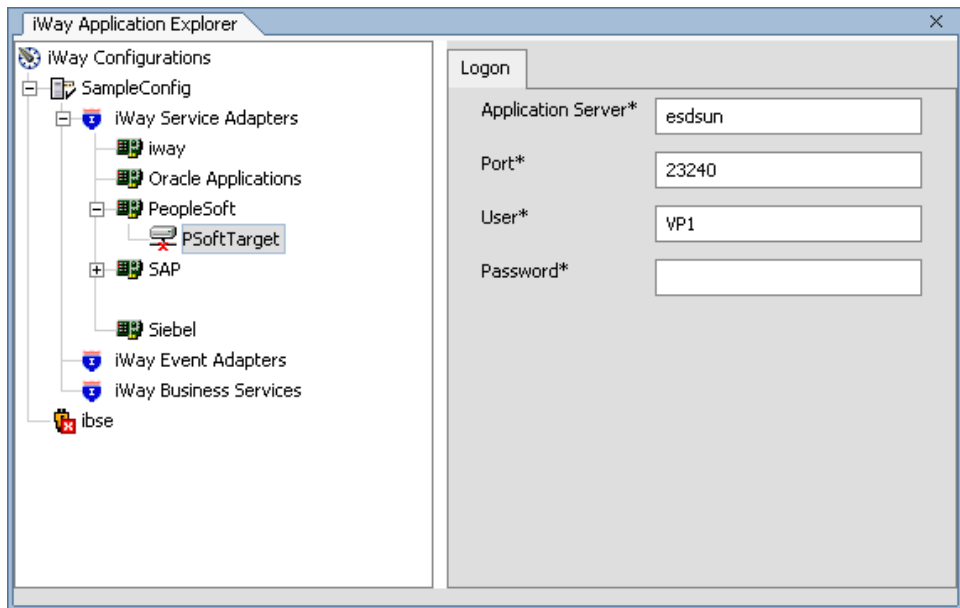
The screenshot shows a standard Windows-style dialog box titled "Application Server". It contains four labeled text input fields, each with an asterisk indicating it is required: "Application Server*" (containing "esdsun"), "Port*" (containing "23240"), "User*" (containing "VP1"), and "Password*" (containing "****"). Below these fields are two buttons, "OK" and "Cancel". At the bottom of the dialog, a red text label states "Fields marked with * are required."

5. Enter the following PeopleSoft system information:

- **Application Server.** The host name or IP address for the machine that is hosting the PeopleSoft application.
- **Port.** The port number where the application server listens.
- **User.** A valid user name to access PeopleSoft.
- **Password.** A valid password that is associated with the user name.

6. Click OK.

The target (PSoftTarget) is listed beneath the PeopleSoft node in the left pane.



You can review the connection information you specified for the target in the right pane.

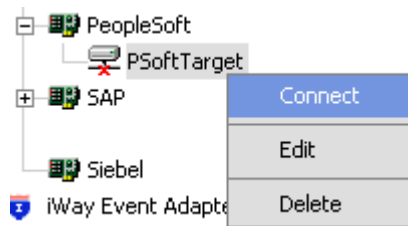
You are ready to connect to the application target you defined.

Connecting to a Target

You must use the target you defined to connect to PeopleSoft.

Procedure How to Connect to a Target

To connect to PeopleSoft:



1. In the left pane, expand the *PeopleSoft* node and select the target you defined (for example, PSoftTarget).
2. In the right pane, enter a valid password for the PeopleSoft application.

3. In the left pane, right-click the target and select *Connect*.

The PSoftTarget node in the left pane changes to reflect that a connection was made.

4. Expand the target node to reveal the list of PeopleSoft business objects.



Disconnecting from a Target

Although you can maintain multiple open connections to different application systems, it is recommended to close connections when they are not being used.

Procedure How to Disconnect From a Target

To disconnect from a target:

1. In the left pane, click the target (for example, PSoftTarget) to which you are connected.



2. Right-click the target and select *Disconnect*.

Disconnecting from the application system drops the connection, but the node remains. The PSoftTarget node in the left pane changes to reflect that a connection was terminated.

Modifying a Target

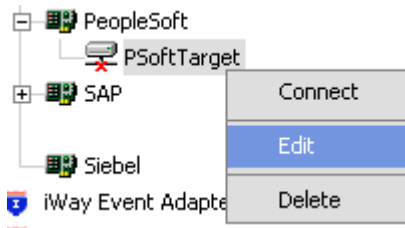
After you create a target for an EIS using Application Explorer, you can edit information that you provided when you created the target.

Procedure How to Edit a Target

To edit a target:

1. In the left pane, click the target (for example, PSoftTarget).

Modifying a Target



2. Right-click the target and select *Edit* from the context menu.
The Application Server dialog box opens.

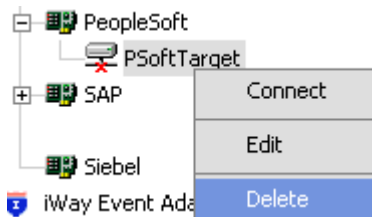
A screenshot of the 'Application Server' dialog box. It has a title bar with a close button. Inside, there are four labeled text input fields: 'Application Server*' with the value 'esdsun', 'Port*' with the value '23240', 'User*' with the value 'VP1', and 'Password*'. At the bottom are 'OK' and 'Cancel' buttons. Below the buttons, a red text label reads 'Fields marked with * are required.'

3. Modify the connection information and click *OK* when you are finished making your changes.

Procedure How to Delete a Target

To delete a target:

1. In the left pane, click the target (for example, PSoftTarget).



2. Right-click the target and select *Delete* from the context menu.

The PSoftTarget node disappears from the left pane.

Viewing an Application System Object

After you create a new configuration and connect to PeopleSoft, Application Explorer enables you to explore and browse business object metadata. For example, Application Explorer enables you to view Component Interface and Message metadata stored in the PeopleSoft.

Procedure How to View PeopleSoft Metadata

To view PeopleSoft metadata:

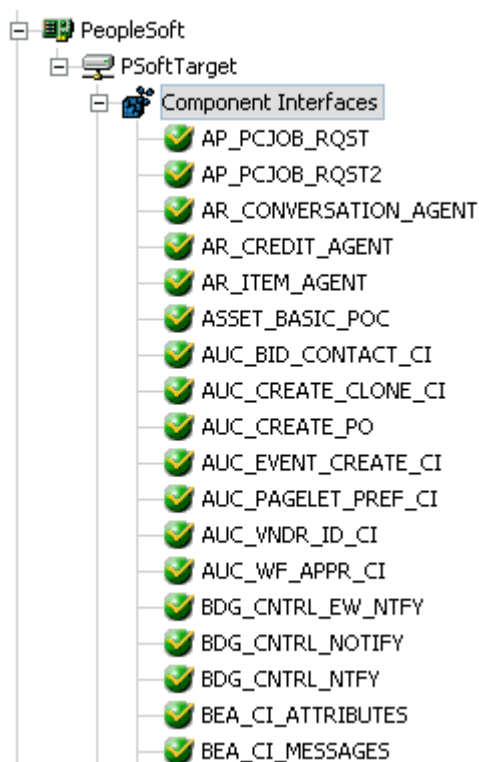
1. Click the icon to the left of the target name, for example, PSoftTarget.

The available system objects appear.



2. Click the icon to the left of the repository name, for example, Component Interfaces, to expand the desired PeopleSoft repository node.

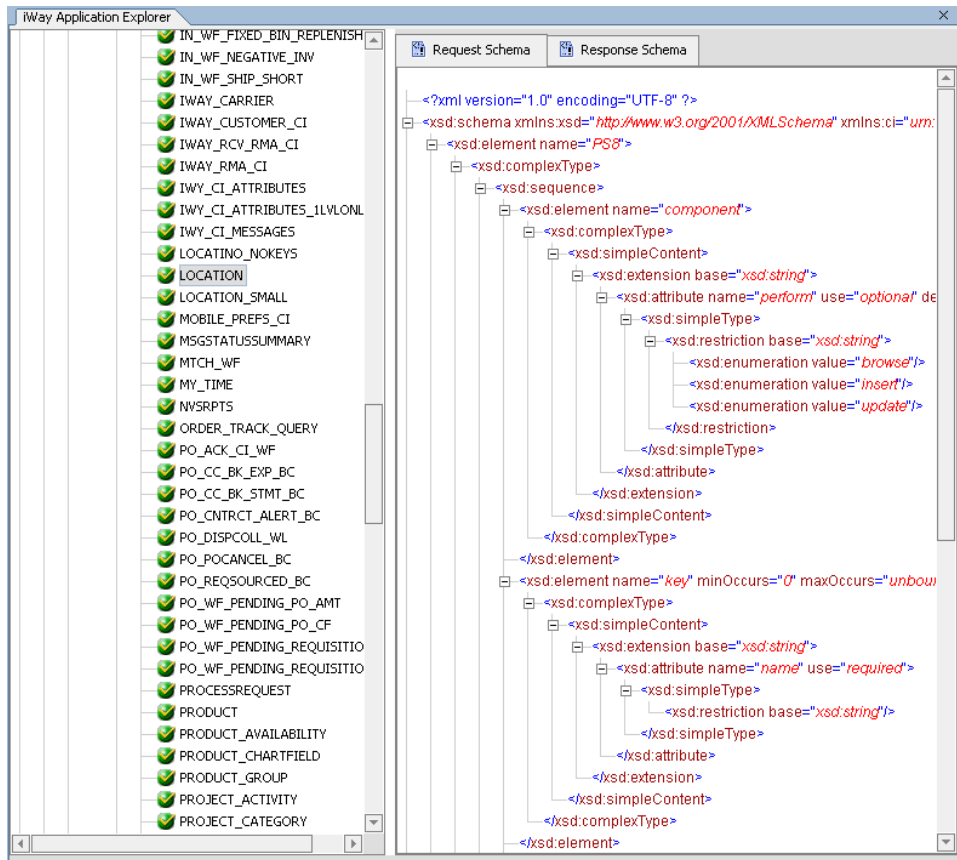
A list of business object groups appears.



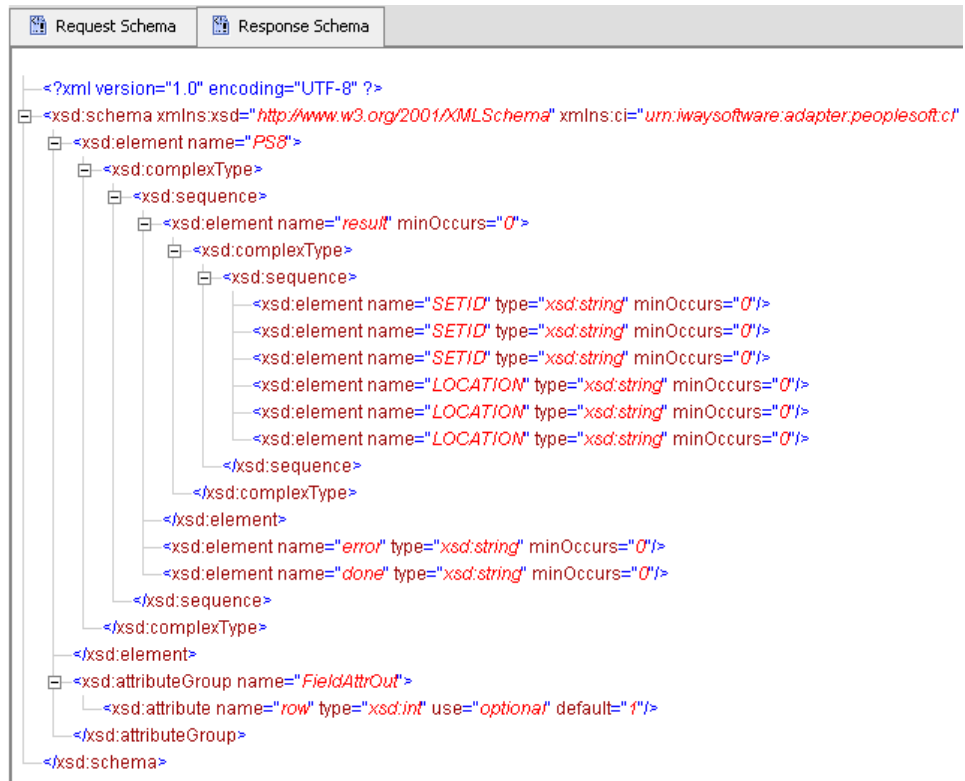
3. Click the *LOCATION* Component Interface.

The following XML schemas are created for the *LOCATION* Component Interface:

- Request
- Response



4. Click the *Request Schema* or *Response Schema* tab to view the appropriate schema in the right pane.



Creating an XML Schema

After you browse the Component Interfaces and make a selection, the request and response XML schemas are automatically created for that Component Interface and stored in the repository you created, for example:

`drive:\Program Files\iWay55\bea\ibse\wsdl\schemas\service\PeopleSoft\PSoftTarget\S5710F9F`

where

`PSoftTarget`

Is the name of the PeopleSoft target.

`S5710F9F`

Is a randomly generated folder name in which the schemas are stored.

Understanding iWay Business Services

iWay Java Swing Application Explorer provides Web developers with a simple, consistent mechanism for extending the capabilities of the iWay Adapter. The iWay Business Services Engine (iBSE) exposes functionality as Web services. It serves as a gateway to heterogeneous back-end applications and databases.

A Web service is a self-contained, modularized function that can be published and accessed across a network using open standards. It is the implementation of an interface by a component and is an executable entity. For the caller or sender, a Web service can be considered as a “black box” that may require input and delivers a result. Web services integrate within an enterprise as well as across enterprises on any communication technology stack, whether asynchronous or synchronous, in any format.

After you browse the application system business object repository and create an XML schema for the object, you can generate an iWay Business Service for the object you wish to use with your adapter.

Creating an iWay Business Service

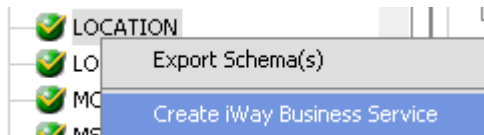
You can generate a business service (also known as a Web service) for objects you wish to use with your adapter. After creating the Web service, you can export the WSDL file for the Web service to a directory accessible by BEA WebLogic Workshop, making it easy to incorporate iWay Web services into BEA WebLogic Workshop workflows.

The following procedures use the PeopleSoft Component Interface called *LOCATION* as an example, which returns a list of vendor locations from PeopleSoft.

Procedure How to Create an iWay Business Service

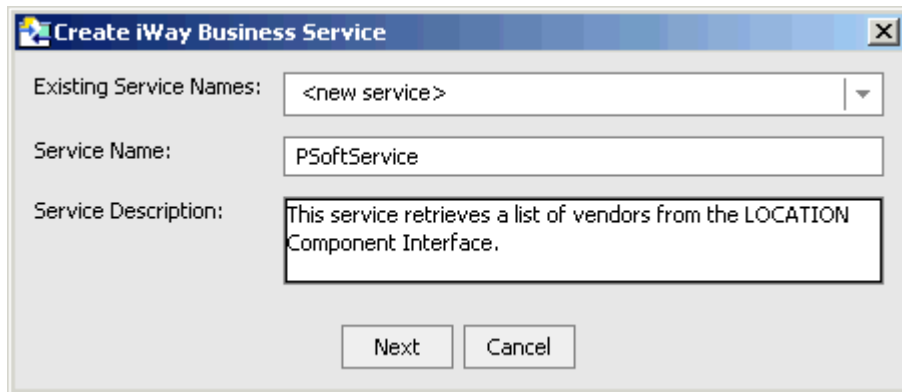
To create an iWay Business Service:

1. Select the *LOCATION* from the list of Component Interfaces.



2. Right-click *LOCATION* and select *Create iWay Business Service*.

The Create iWay Business Service dialog box opens.

A screenshot of the 'Create iWay Business Service' dialog box. It has a title bar with a blue gradient and a close button. The dialog contains three fields: 'Existing Service Names' with a dropdown menu showing '<new service>', 'Service Name' with a text box containing 'PSoftService', and 'Service Description' with a text box containing 'This service retrieves a list of vendors from the LOCATION Component Interface.' At the bottom are 'Next' and 'Cancel' buttons.

Create iWay Business Service

Existing Service Names: <new service>

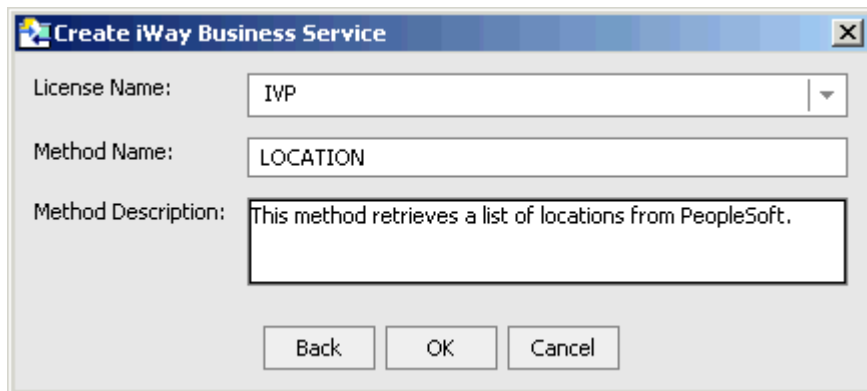
Service Name: PSoftService

Service Description: This service retrieves a list of vendors from the LOCATION Component Interface.

Next Cancel

- a. In the Existing Service Names field, indicate whether you want to use a new service name or using an existing service name from the drop-down list.
 - b. In the Service Name field, type a name for the business service, for example, PSoftService.
 - c. In the Service Description field, type a brief description for the business service.
3. Click **Next**.

The following Create iWay Business Service dialog box opens.

A screenshot of the 'Create iWay Business Service' dialog box, showing the second step. It has a title bar with a blue gradient and a close button. The dialog contains three fields: 'License Name' with a dropdown menu showing 'IYP', 'Method Name' with a text box containing 'LOCATION', and 'Method Description' with a text box containing 'This method retrieves a list of locations from PeopleSoft.' At the bottom are 'Back', 'OK', and 'Cancel' buttons.

Create iWay Business Service

License Name: IYP

Method Name: LOCATION

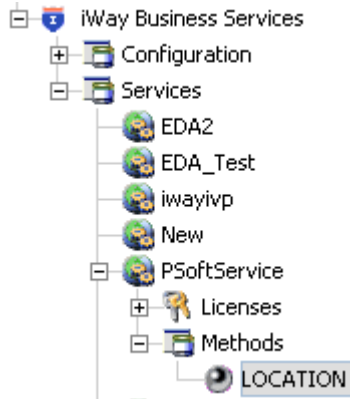
Method Description: This method retrieves a list of locations from PeopleSoft.

Back OK Cancel

- a. In the License Name field, select the license definition you want to use.
 - b. In the Method Name field, type a name for the method, for example, LOCATION.
 - c. In the Method Description field, type a brief description for the method.
4. Click **OK**.

The iWay Business Services node expands.

A new node (for example, LOCATION) appears below the Methods node in the left pane.



In the left pane, all the available business services that are created appear. The PSoftService node is expanded and the LOCATION method is automatically selected.

On the right, the test pane for the BAPI_MATERIAL_GETLIST method opens.

The screenshot shows a web interface for testing a service. At the top left is the iWay Software logo. To its right, the text reads "PSoftService" and "An iWay Business Service". Below this, a link "here" is provided for a complete list of operations. The section is titled "LOCATION" and describes the method's function: "This method retrieves a list of locations from PeopleSoft." It then includes a "Test" section with instructions: "To test the operation using the SOAP protocol, click the 'Invoke' button." Below the text is a large text area labeled "input xml:" with a scrollbar. At the bottom, there is a "Browse..." button next to a small input field, and an "Invoke" button on the right.

- a. In the input xml field, enter a sample XML document that queries the service.
 - b. To use a sample input XML example, see *Sample Run-Time XML File for the LOCATION Component Interface* on page A-21.
5. Click *Invoke*.

The result appears in the right pane.

Procedure How to Export iWay WSDL for Use in BEA WebLogic Workshop Workflows

Because Application Explorer runs within BEA WebLogic Workshop, you can easily incorporate iWay Web services into BEA WebLogic Workflows. To enable BEA WebLogic Workshop to use iWay Web services, you simply export the WSDL to a directory accessible to BEA WebLogic Workshop.

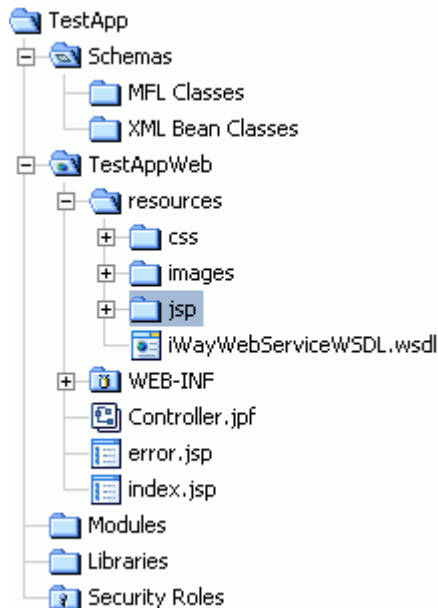
1. After creating the Web service, right-click the Web service name, and select *Export WSDL* from the pop-up menu.



The Save dialog box appears.

2. Save the WSDL to a directory accessible to BEA WebLogic Workshop, for example, the \resources directory in your BEA WebLogic Workshop Web application directory structure.

The WSDL file is listed under the resources folder of your Web application:



Reference Sample Run-Time XML File for the LOCATION Component Interface

The following input XML retrieves a list of locations.

```
<?xml version="1.0" encoding="UTF-8" ?>
<PS8>
  <component perform="browse">LOCATION</component>
  <key name="Setid">SHARE</key>
  <key name="Location">ALBERTA</key>
</PS8>
```

Understanding iWay Event Functionality

Events are generated as a result of activity in an application system. You can use an event to trigger an action in your application. For example, PeopleSoft may generate an event when customer information is updated. If your application must perform when this happens, your application is a consumer of this event.

After you create a connection to your application system, you can add events using iWay Java Swing Application Explorer. To create an iWay Event, you must create a:

1. Port

A port associates a particular business object exposed by the iWay Adapter with a particular disposition. A disposition is a URL that defines the protocol and location of the event data. The port defines the end point of the event consumption. For more information, see *Creating an Event Port* on page A-22.

2. Channel

A channel represents configured connections to particular instances of back-end systems. A channel binds one or more event ports to a particular listener managed by the iWay Adapter. For more information, see *Creating a Channel* on page A-45.

Creating an Event Port

The following procedures describe how to create an event port using iWay Java Swing Application Explorer and how to modify and delete an event port.

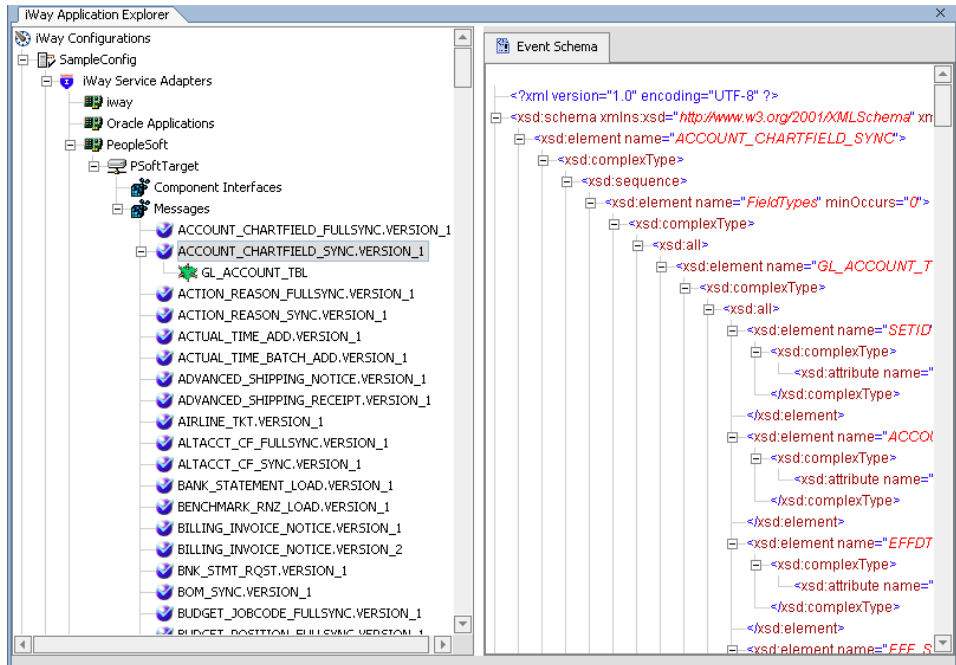
When you use Application Explorer with an iWay Business Services Engine (IBSE) implementation, the following port dispositions are available:

- FILE
- IBSE
- MSMQ
- JMSQ
- SOAP
- HTTP
- MQ Series

Procedure How to Create an Event Port for the File Disposition

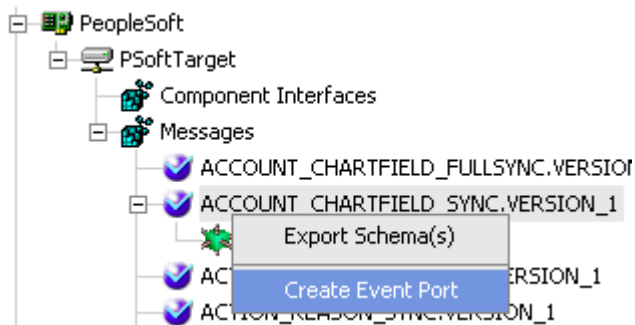
To create an event port for the File disposition using Application Explorer:

1. Select **ACCOUNT_CHARTFIELD_SYNC.VERSION_1** from the PeopleSoft Message repository.



The Event schema is created and available for viewing in the right pane.

2. Right-click the Message and select *Create Event Port*.



The Create Event Port dialog box opens.

Create Event Port

Name:

Description:

Protocol:

URL:

- a. In the Name field, type a name for the event port, for example, ACCOUNT_CHARTFIELD_SYNC_VERSION_1.
- b. In the Description field, type a brief description.
- c. From the Protocol drop-down list, select *FILE*.
- d. In the URL field, type a destination where the event data is written using the following format:

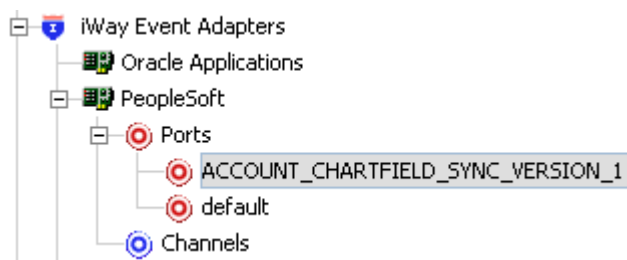
`file:///location[:errorTo=errorDest]`

The following table describes the disposition parameters.

Parameter	Description
location	The full directory path and file name to which the data is written.
errorTo	The location to which error logs are sent. Optional. A predefined port name or another disposition URL. The URL must be complete, including the protocol.

3. Click OK.

The event port you created appears under the Ports node in the left pane.



When you select the event port, a table in the right pane summarizes all the information associated with the port you created.

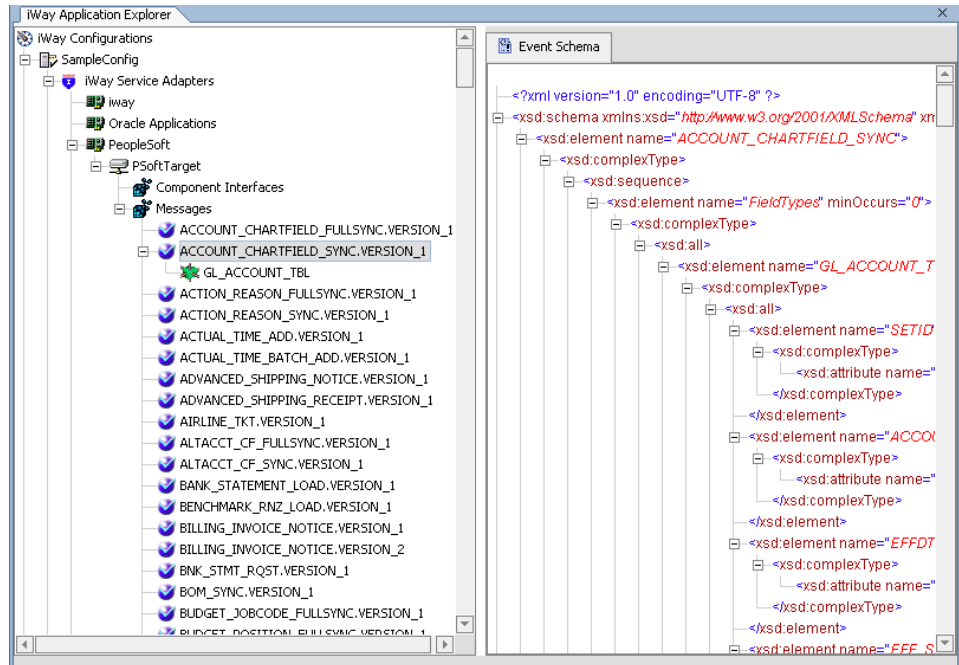
Detail	
Name	Value
Name	ACCOUNT_CHARTFIELD_SYNC_VERSION...
Description	This event is raised as notification of AC...
Disposition	ifile:///c:/temp/PSoftevent.txt;errorTo=...
Content	http://dsiwaytest.ibi.com:7001/ibse/IBS...

You are ready to associate the event port for File with a channel.

Procedure How to Create a Port for the iBSE Disposition

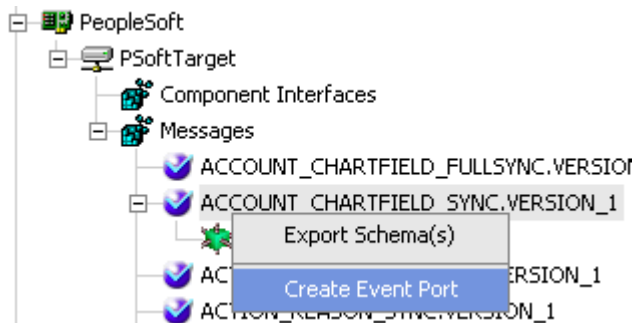
The iBSE disposition allows an event to launch an iWay Business Service Method. To create a port for an iBSE disposition using iWay Application Explorer:

1. Select *ACCOUNT_CHARTFIELD_SYNC.VERSION_1* from the PeopleSoft Message repository.



The Event schema is created and available for viewing in the right pane.

2. Right-click the Message and select *Create Event Port*.



The Create Event Port dialog box opens.

Create Event Port

Name:

Description:

Protocol:

URL:

- a. In the Name field, type a name for the event port, for example, ACCOUNT_CHARTFIELD_SYNC_VERSION_1.
- b. In the Description field, type a brief description.
- c. From the Protocol drop-down list, select *IBSE*.
- d. In the URL field, enter an iBSE destination using the following format:

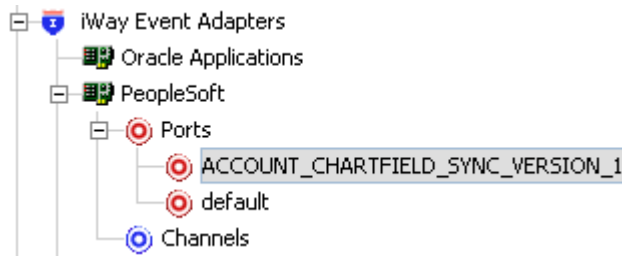
`ibse:/svcName.methName[;responseTo=respDest][;errorTo=errorDest]`

The following table describes the disposition parameters.

Parameter	Description
svcName	The name of the service created with iBSE.
methName	The name of the method created for the Web service.
respDest	The location to which responses to the Web service are posted. Optional. A predefined port name or another another disposition URL. The URL must be complete, including the protocol.
errorDest	The location to which error logs are sent. Optional. A predefined port name or another disposition URL. The URL must be complete, including the protocol.

3. Click OK.

The event port you created appears under the Ports node in the left pane.



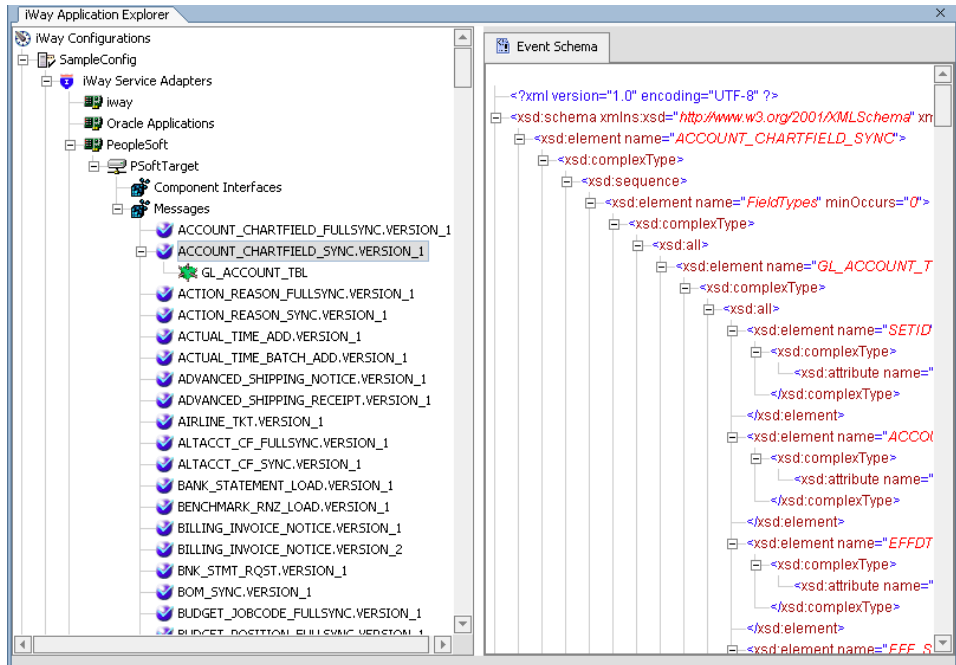
When you select the event port, a table in the right pane summarizes all the information associated with the port you created.

You are ready to associate the event port for IBSE with a channel.

Procedure **How to Create a Port for the MSMQ Disposition**

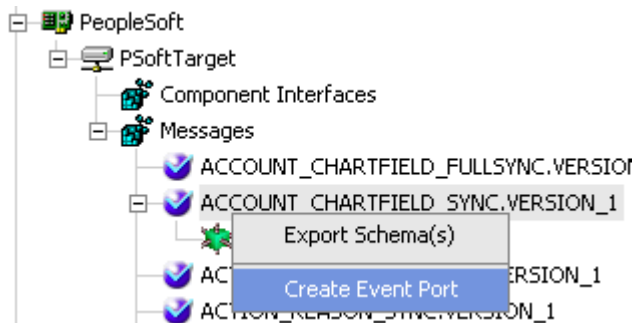
The MSMQ disposition supports public and private queues. To create a port for an MSMQ disposition using iWay Application Explorer:

1. Select *ACCOUNT_CHARTFIELD_SYNC.VERSION_1* from the PeopleSoft Message repository.



The Event schema is created and available for viewing in the right pane.

2. Right-click the Message and select *Create Event Port*.



The Create Event Port dialog box opens.

Create Event Port

Name:

Description:

Protocol:

URL:

- a. In the Name field, type a name for the event port, for example, ACCOUNT_CHARTFIELD_SYNC_VERSION_1.
- b. In the Description field, type a brief description.
- c. From the Protocol drop-down list, select *MSMQ*.
- d. In the URL field, enter an MSMQ destination using the following format:

`msmq: /host/queueType/queueName[;errorTo=errorDest]`

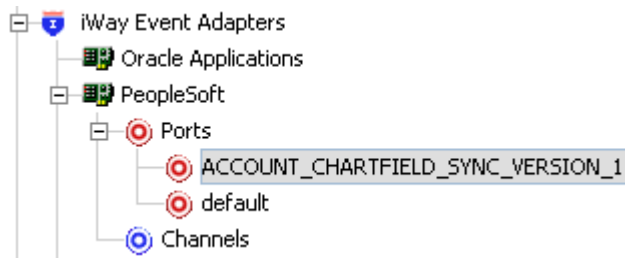
The following table defines the disposition parameters.

Parameter	Description
host	The name of the host on which the Microsoft Queuing system runs.
queueType	The type of queue. For private queues, enter Private\$. Private queues are queues that are not published in Active Directory. They appear only on the local computer that contains them. Private queues are accessible only by Message Queuing applications that recognize the full path name or format name of the queue.
queueName	The name of the queue in which messages are placed.

Parameter	Description
errorDest	The location to which error logs are sent. Optional. A predefined port name or another disposition URL. The URL must be complete, including the protocol.

3. Click OK.

The event port you created appears under the Ports node in the left pane.



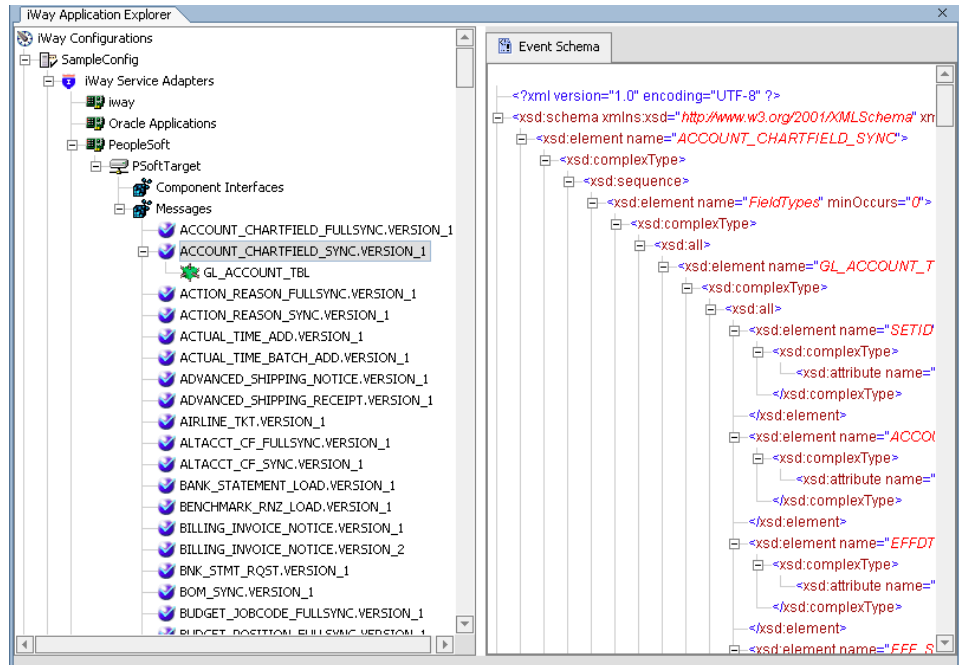
When you select the event port, a table in the right pane summarizes all the information associated with the port you created.

You are ready to associate the event port for MSMQ with a channel.

Procedure How to Create a Port for the JMS Queue Disposition

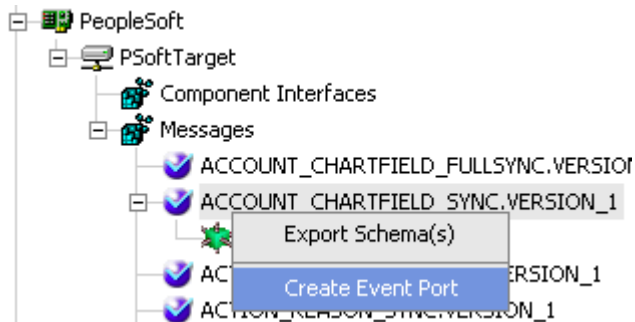
The JMS disposition enables an event to be enqueued to a JMS queue. To create a port for a JMS queue disposition using Application Explorer:

1. Select **ACCOUNT_CHARTFIELD_SYNC.VERSION_1** from the PeopleSoft Message repository.



The Event schema is created and available for viewing in the right pane.

2. Right-click the Message and select *Create Event Port*.



The Create Event Port dialog box opens.

Create Event Port

Name:

Description:

Protocol:

URL:

- a. In the Name field, type a name for the event port, for example, ACCOUNT_CHARTFIELD_SYNC_VERSION_1.
- b. In the Description field, type a brief description.
- c. From the Protocol drop-down list, select *JMSQ*.
- d. In the URL field, enter an JMSQ destination using the following format:

```
jmsq:queue@conn_factory; jndiurl=jndi_url; jndifactory=jndi_factory;
user=userID; password=pass[; errorTo=errorDest]
```

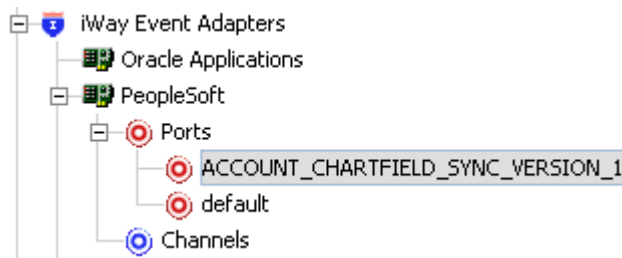
The following table describes the disposition parameters.

Parameter	Description
queue	Name of a queue to which events are emitted.
conn_factory	The connection factory, a resource which contains information about the JMS Server. The WebLogic connection factory is: <code>javax.jms.QueueConnectionFactory</code>

Parameter	Description
jndi_url	<p>The URL of the application server. For BEA WebLogic Server this is</p> <p><code>t3://host:port</code></p> <p>where:</p> <p><code>host</code></p> <p>Is the machine name where WebLogic Server is installed.</p> <p><code>port</code></p> <p>Is the port on which WebLogic server is listening. The default port if not changed at installation is 7001.</p>
jndi_factory	Is JNDI context.INITIAL_CONTEXT_FACTORY and is provided by the JNDI service provider. For WebLogic Server, the WebLogic factory is weblogic.jndi.WLInitialContextFactory.
userID	A user ID associated with this queue.
pass	The password for this user ID.
errorDest	<p>The location to which error logs are sent. Optional.</p> <p>A predefined port name or another disposition URL. The URL must be complete, including the protocol.</p>

3. Click OK.

The event port you created appears under the Ports node in the left pane.



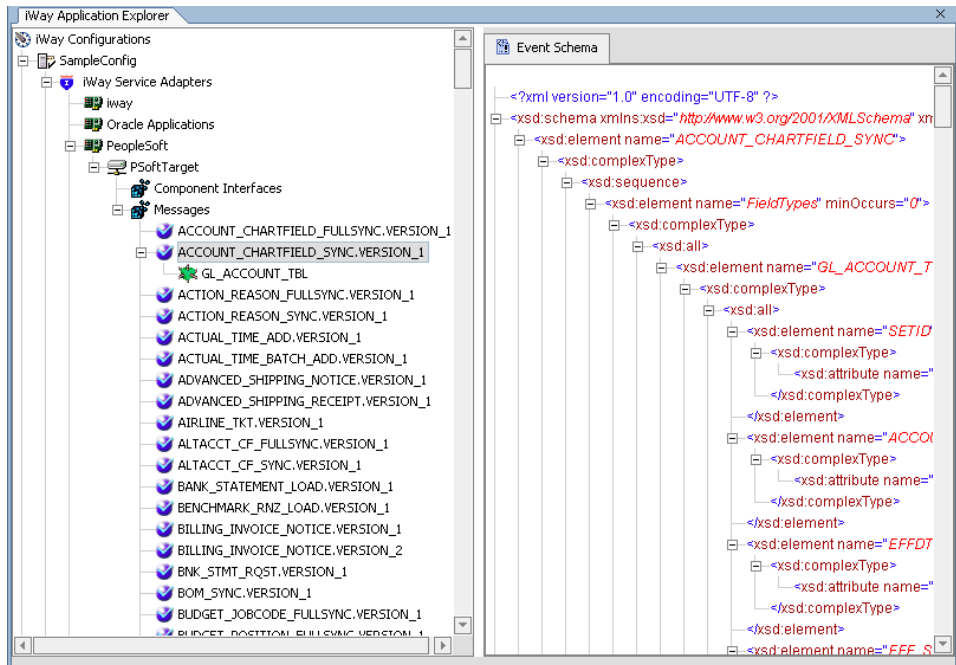
When you select the event port, a table in the right pane summarizes all the information associated with the port you created.

You are ready to associate the event port for JMSQ with a channel.

Procedure How to Create a Port for the SOAP Disposition

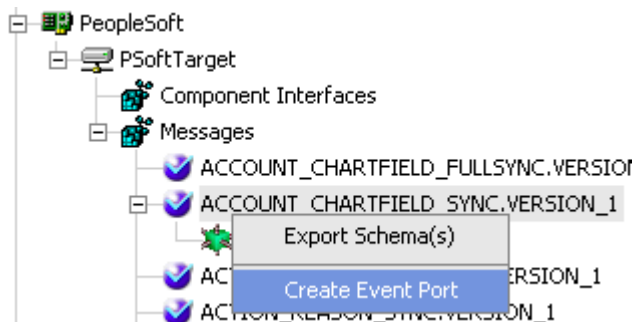
The SOAP disposition allows an event to launch a Web service specified by a WSDL file. A soapaction is optional, the default is "". To create a port for a SOAP disposition using iWay Application Explorer:

1. Select **ACCOUNT_CHARTFIELD_SYNC.VERSION_1** from the PeopleSoft Message repository.



The Event schema is created and available for viewing in the right pane.

2. Right-click the Message and select *Create Event Port*.



The Create Event Port dialog box opens.

- a. In the Name field, type a name for the event port, for example, ACCOUNT_CHARTFIELD_SYNC_VERSION_1.
- b. In the Description field, type a brief description.
- c. From the Protocol drop-down list, select SOAP.
- d. In the URL field, enter an SOAP destination using the following format:

```
soap:wsdl-url;soapaction=action[;responseTo=respDest]
[;errorTo=errorDest]
```

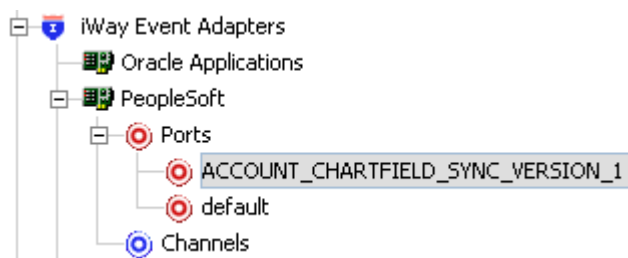
The following table describes the disposition parameters.

Parameter	Description
wsdl-url	The URL to the WSDL file that is needed to create the SOAP message.
action	The method that will be called by the disposition.
respDest	The location to which responses are posted. A predefined port name or another full URL. Optional. A predefined port name or another another disposition URL. The URL must be complete, including the protocol.

Parameter	Description
errorDest	The location to which error logs are sent. Optional. A predefined port name or another disposition URL. The URL must be complete, including the protocol.

3. Click **OK**.

The event port you created appears under the Ports node in the left pane.



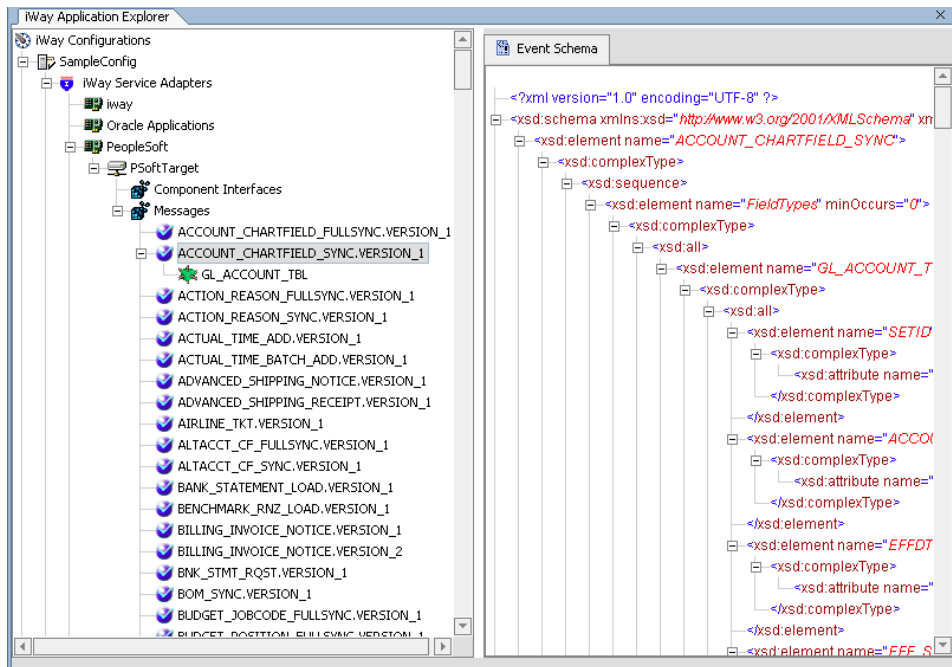
When you select the event port, a table in the right pane summarizes all the information associated with the port you created.

You are ready to associate the event port for SOAP with a channel.

Procedure How to Create a Port for the HTTP Disposition

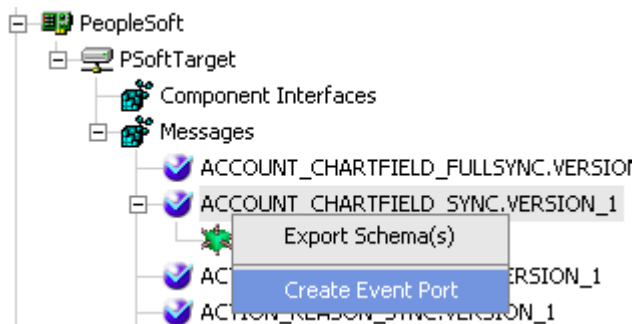
The HTTP disposition uses an HTTP URL to specify an HTTP end point to which the event document is posted.

1. Select **ACCOUNT_CHARTFIELD_SYNC.VERSION_1** from the PeopleSoft Message repository.



The Event schema is created and available for viewing in the right pane.

2. Right-click the Message and select *Create Event Port*.



The Create Event Port dialog box opens.

Create Event Port

Name:

Description:

Protocol:

URL:

- a. In the Name field, type a name for the event port, for example, ACCOUNT_CHARTFIELD_SYNC_VERSION_1.
- b. In the Description field, type a brief description.
- c. From the Protocol drop-down list, select *HTTP*.
- d. In the URL field, enter an HTTP destination using the following format:

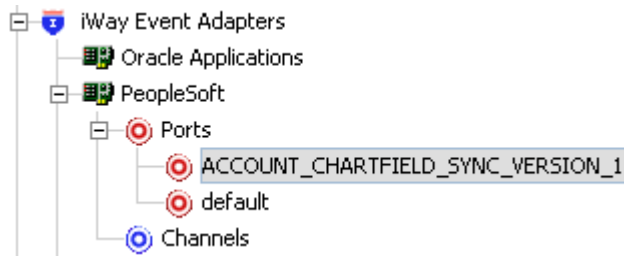
[http://url;responseTo=respDest](#)

The following table describes the disposition parameters.

Parameter	Description
url	The URL target for the post operation.
respDest	The location to which responses are posted. Optional. This can be a predefined port name or another disposition URL. The URL must be complete, including the protocol.
host	Name of the host on which the Web server resides.
port	Port number on which the Web server is listening.

3. Click OK.

The event port you created appears under the Ports node in the left pane.



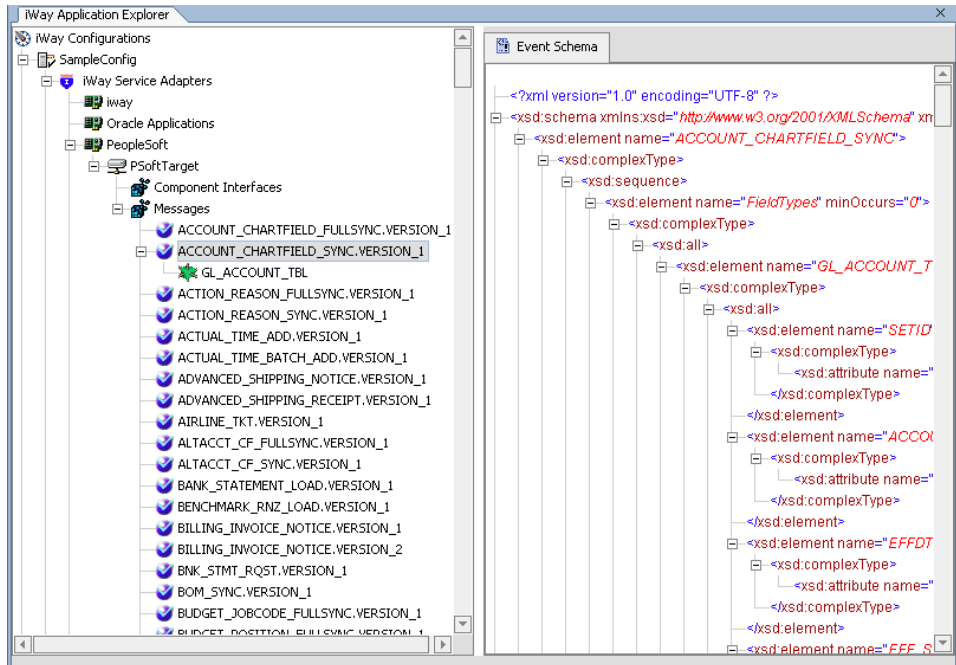
When you select the event port, a table in the right pane summarizes all the information associated with the port you created.

You are ready to associate the event port for HTTP with a channel.

Procedure **How to Create a Port for the MQ Series Disposition**

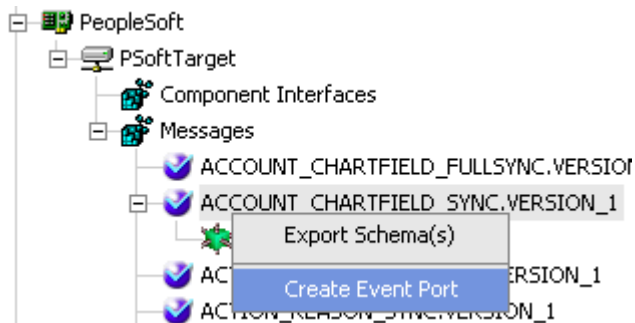
The MQ Series disposition allows an event to be enqueued to an MQ Series queue. Both queue manager and queue name may be specified. To create a port for an MQ Series disposition using iWay Application Explorer:

1. Select *ACCOUNT_CHARTFIELD_SYNC.VERSION_1* from the PeopleSoft Message repository.



The Event schema is created and available for viewing in the right pane.

2. Right-click the Message and select *Create Event Port*.



The Create Event Port dialog box opens.

Create Event Port

Name:

Description:

Protocol:

URL:

- a. In the Name field, type a name for the event port, for example, ACCOUNT_CHARTFIELD_SYNC_VERSION_1.
- b. In the Description field, type a brief description.
- c. From the Protocol drop-down list, select *MQ Series*.
- d. In the URL field, enter an MQ Series destination using the following format:

`mqseries:/qManager/qName;host=hostName;port=portNum;
channel=chanName[;errorTo=errorDest]`

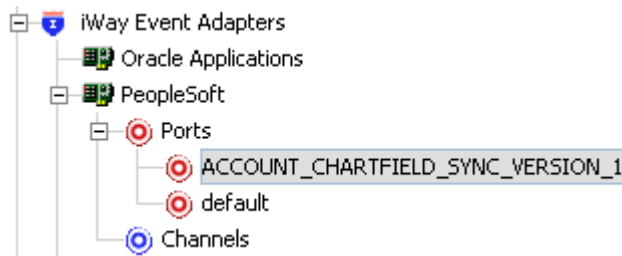
The following table describes the disposition parameters.

Parameter	Description
qManager	The name of the queue manager to which the server must connect.
qName	The name of the queue in which messages are to be paced.
hostName	The name of the host on which MQ Series resides (for the MQ client only).
portNum	The port number for connecting to an MQ Server queue manager (for the MQ client only).

Parameter	Description
chanName	The case-sensitive name of the channel that connects with the remote MQ Server queue manager (for the MQ client only). The default MQ Series channel name is SYSTEM.DEF.SVRCONN.
errorDest	The location to which error logs are sent. Optional. A predefined port name or another disposition URL. The URL must be complete, including the protocol.

3. Click OK.

The event port you created appears under the Ports node in the left pane.



When you select the event port, a table in the right pane summarizes all the information associated with the port you created.

You are ready to associate the event port for MQ Series with a channel.

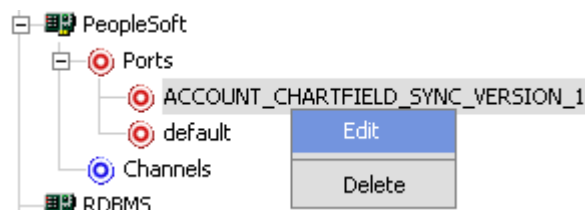
Editing or Deleting an Event Port

The following procedures describe how to edit and delete an event port using Application Explorer. To review the port settings, you select the port name. In the right pane, a table appears that summarizes the information associated with the event port you created.

Procedure How to Edit an Event Port

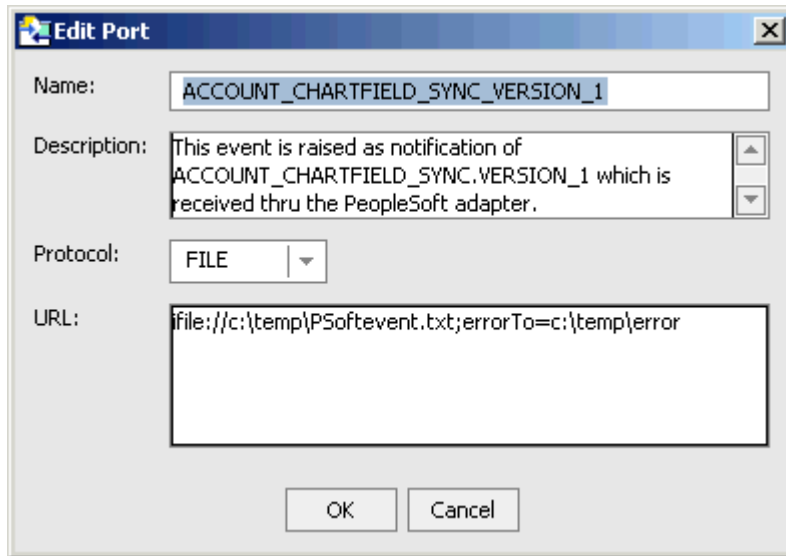
To edit an existing event port:

1. In the left pane, select the event port you want to edit.



2. Right-click the event port and select *Edit*.

The Edit Port dialog box opens.

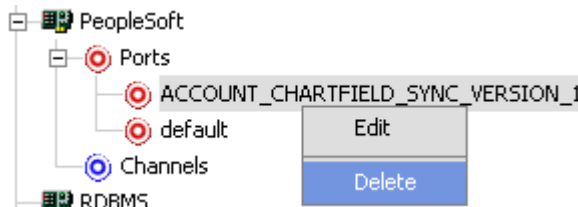


3. Make the required changes to the event port configuration and click *OK* after you are finished.

Procedure How to Delete an Event Port

To delete an existing event port:

1. In the left pane, select the event port you want to delete.



2. Right-click the event port and select *Delete*.

The event port disappears from the ports list in the left pane.

Creating a Channel

The following procedures describe how to create a channel to listen for PeopleSoft events and how to modify or delete an existing channel. All defined event ports must be associated with a channel.

Procedure How to Create a Channel

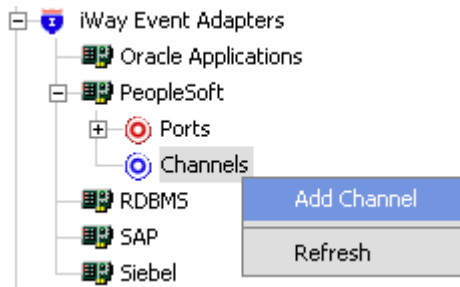
To create a channel using Application Explorer:

1. In the left pane, expand the *iWay Event Adapters* node below the configuration you created, for example, SampleConfig.

The list of adapters appears.

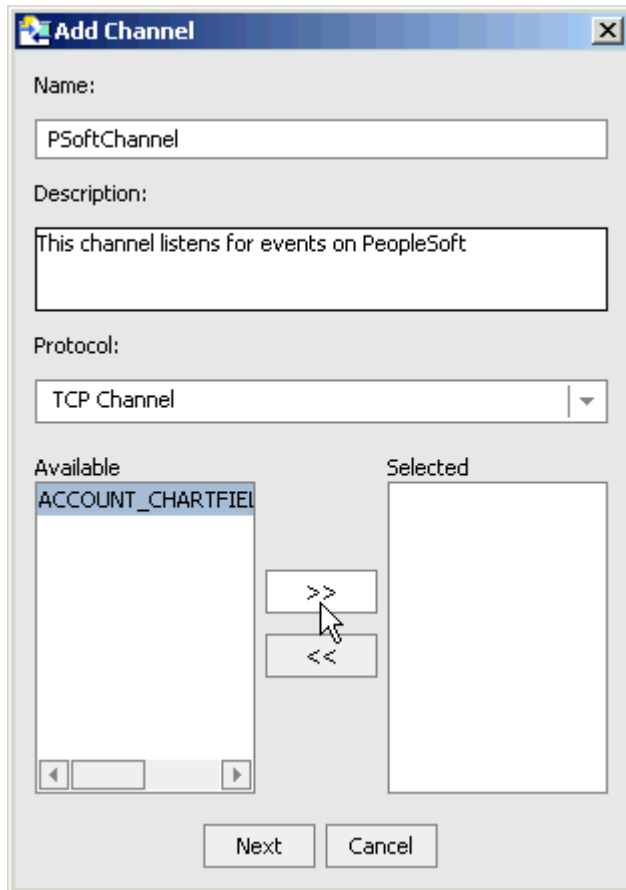
2. Expand an adapter node, for example, PeopleSoft.

The Ports and Channels nodes appear.



3. Right-click *Channels* and select Add Channel.

The Add Channel dialog box opens.

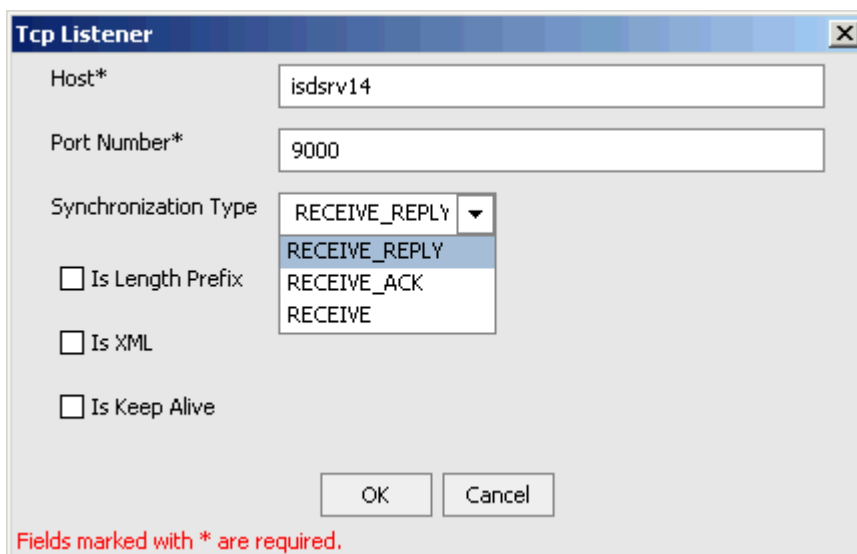


- a. In the Name field, type a name for the channel, for example, PSoftChannel.
- b. In the Description field, type a brief description.
- c. From the Protocol drop-down list, select TCP Channel or HTTP Channel. PeopleSoft supports event handling using TCP and HTTP protocols.
- d. From the list of Available event ports, transfer an event port to the selected list by clicking the double right (>>) arrow button.

Note: You can assign multiple event ports to a single channel.

4. Click Next.

The TCP Listener dialog box opens.



Tcp Listener

Host*

Port Number*

Synchronization Type RECEIVE_REPLY ▼

☐ Is Length Prefix

☐ Is XML

☐ Is Keep Alive

OK Cancel

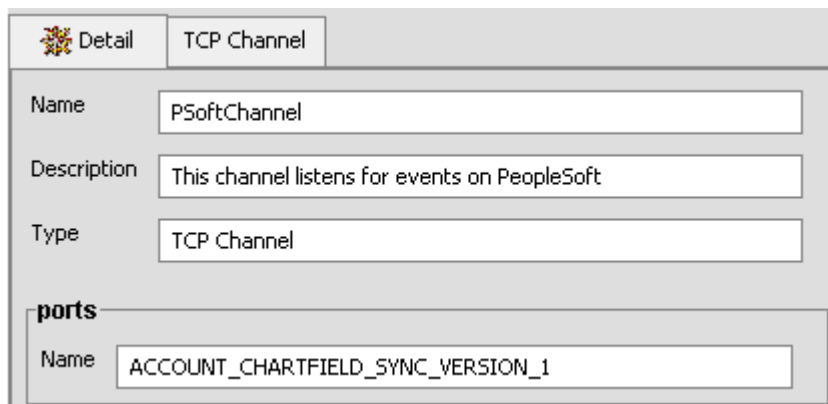
Fields marked with * are required.

5. Specify the host, port, and synchronization type for your TCP listener.
6. Click OK.

The channel you created appears below the Channels node in the left pane.



When you select the event port, a table in the right pane summarizes all the information associated with the port you created.



Detail TCP Channel

Name

Description

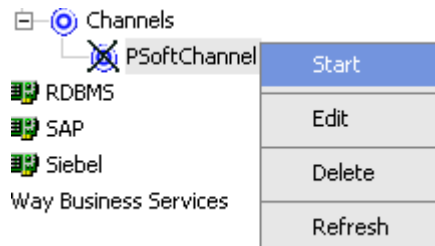
Type

ports

Name

A Ports area appears on the Details tab that lists the event port you assigned to this channel.

You are ready to start your channel to listen for events.



7. In the left pane, right-click the channel, for example, PSoftChannel, and select *Start*.
The channel you created is now active.
 - a. If you want to stop the channel at any time, right-click the channel.
 - b. Select *Stop*.

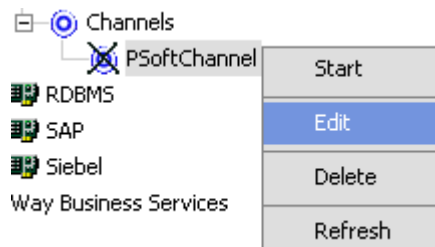
Editing or Deleting a Channel

The following procedures describe how to edit and delete a channel using Application Explorer. To review the channel settings, you select the channel name. In the right pane, a table appears that summarizes the information associated with the channel you created.

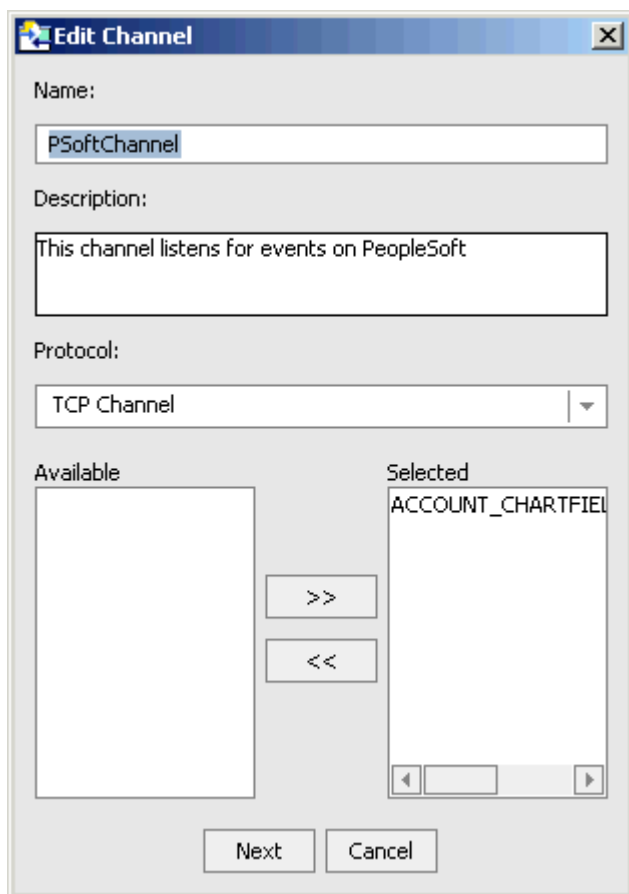
Procedure How to Edit a Channel

To edit an existing channel:

1. In the left pane, select the channel you want to edit.



2. Right-click the channel, for example, PSoftChannel, and select *Edit*.
The Edit dialog box opens.



The **Edit Channel** dialog box contains the following fields and controls:

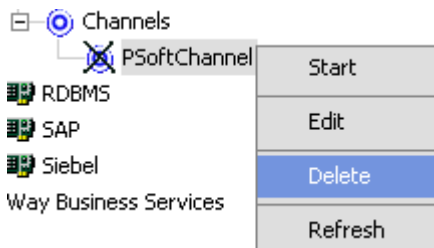
- Name:** A text field containing "PSoftChannel".
- Description:** A text area containing "This channel listens for events on PeopleSoft".
- Protocol:** A dropdown menu set to "TCP Channel".
- Available:** An empty list box on the left.
- Selected:** A list box on the right containing "ACCOUNT_CHARTFIELD".
- Navigation:** Two buttons between the lists, ">>" and "<<".
- Buttons:** "Next" and "Cancel" buttons at the bottom.

3. Make the required changes to the channel configuration and click *Next*.

Procedure How to Delete a Channel

To delete an existing channel:

1. In the left pane, select the channel you want to delete.



Creating a Channel

2. Right-click the channel, for example, PSoftChannel, and select *Delete*.
The channel disappears from the list in the left pane.

APPENDIX B

Using Component Interfaces

Topics:

- Creating a Component Interface
- Securing a Component Interface
- Testing a Component Interface

This section describes how to create new component interfaces—and how to modify existing component interfaces—for use with the iWay Adapter for PeopleSoft 8. It also describes how to apply security to those component interfaces and how to test them.

You can:

- Use component interfaces supplied by PeopleSoft with your application.

Component interfaces also are known as Enterprise Integration Points (EIP).

- Modify an existing component interface.
- Create a new component interface.

Before using your component interface you must apply security to it and test it.

After securing and testing a component interface, you must generate its API, as described in Chapter 2, *Generating Component Interface APIs*.

Note: This section is intended as a helpful supplement; it is not a substitute for PeopleSoft documentation. For complete and up-to-date information about PeopleSoft component interfaces, see the *PeopleSoft Online Library* for your PeopleSoft system.

Creating a Component Interface

You create component interfaces using the PeopleSoft Application Designer. For more information about Application Designer, see your PeopleSoft documentation.

Working With Properties

You can add properties from the records in the component view. You can delete a property in the component interface that you do not want to expose. You can rename properties by clicking the property and then clicking again until you can type a new name. If you rename a property, it can be referenced in the component interface only by the new name, not by the underlying component name.

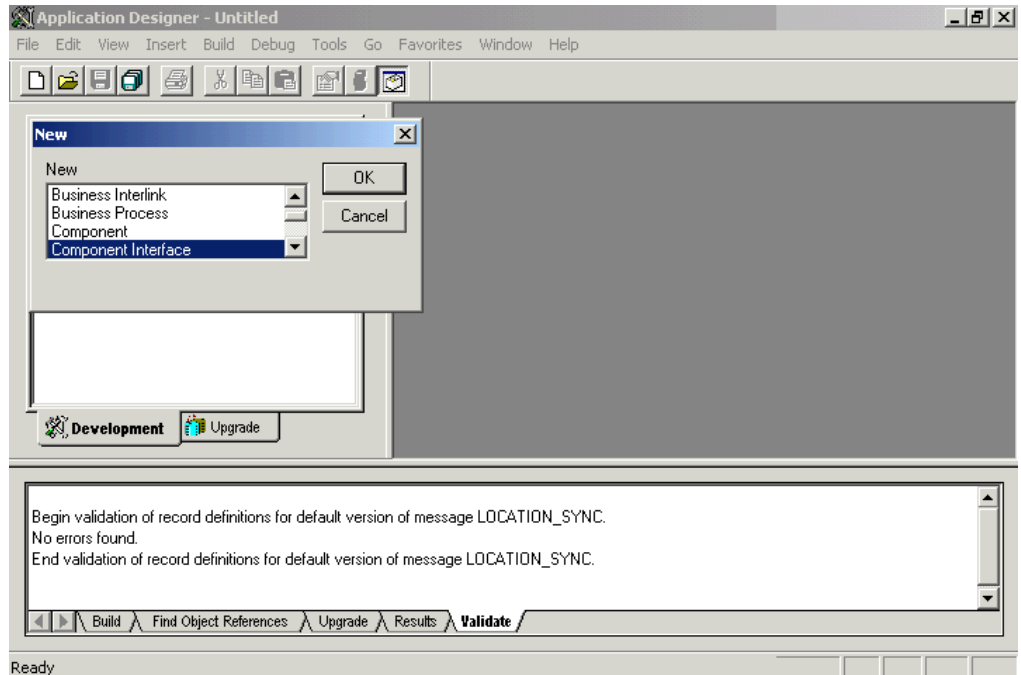
Properties may have various icons adjacent to them. For example, EMPLID has an icon indicating that it is a key field from the underlying record. NAME has an icon indicating that it is an alternate key field from the underlying record. For a complete list of property icons, see the PeopleBooks documentation.

Procedure How to Create a New Component Interface

To create a component interface:

1. Open the PeopleSoft Application Designer.
2. Select *New* from the File menu.

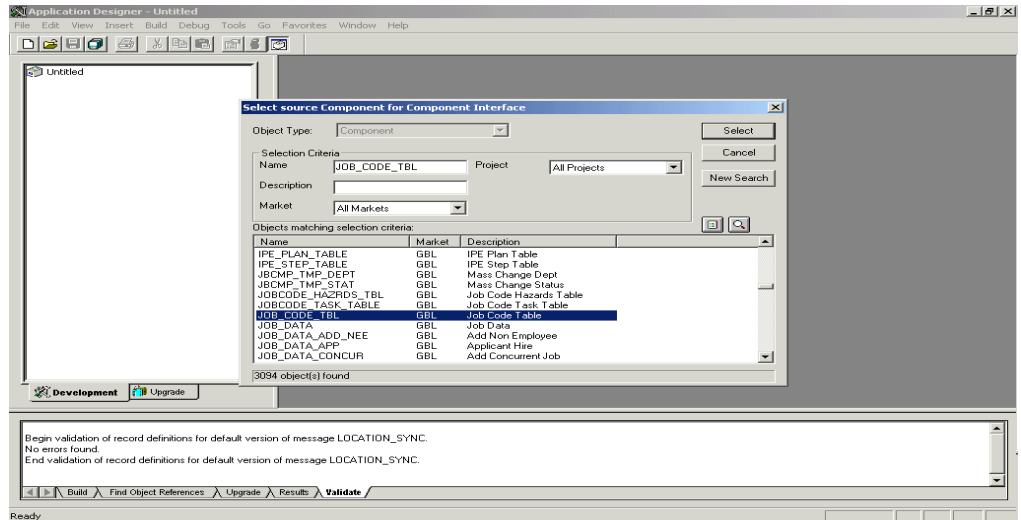
The New dialog box opens.



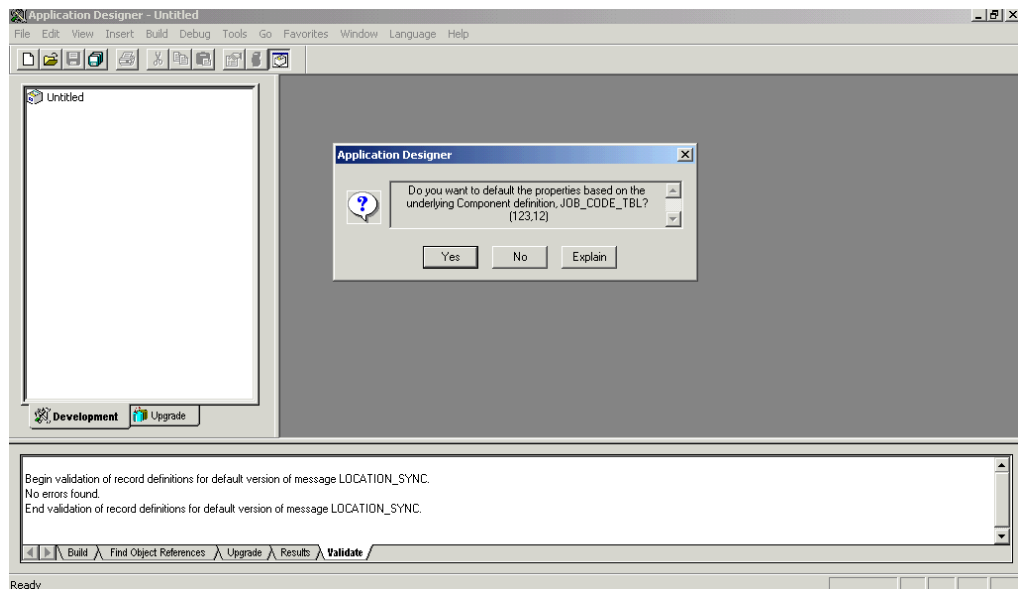
- a. Select *Component Interface*.
- b. Click *OK*.

Creating a Component Interface

The Select Source Component for Component Interface window opens.



3. Highlight the component to use as a basis for the component interface and click *Select*. The Application Designer dialog box opens.



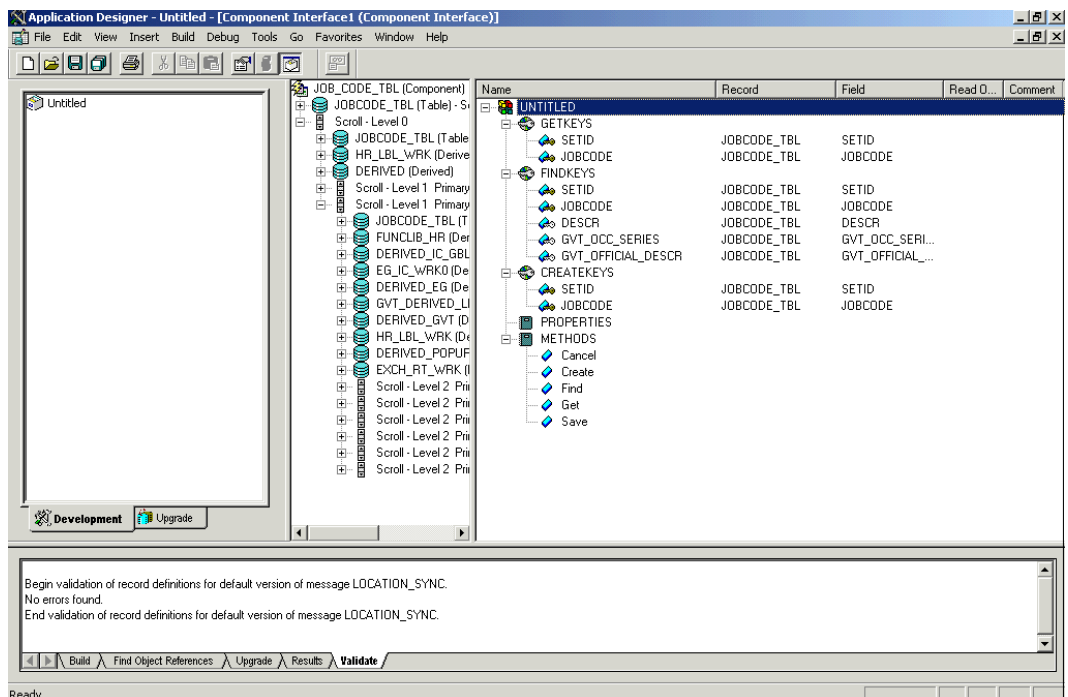
Note: If the component interface is large, expose the component properties manually.

4. Choose one of the following options:

- To create the component interface without displaying properties and to expose component properties manually, click *No*.
- a. Drag the relevant fields from the left pane to the right pane.
- b. To select various functions to perform, right-click either the right or left pane, depending on which pane is active.

For a complete list of functions, see the PeopleBooks documentation.

- To create the component interface and display the properties of the underlying component interface, click *Yes*.



Reference Standard Methods

The standard methods for the component interface are:

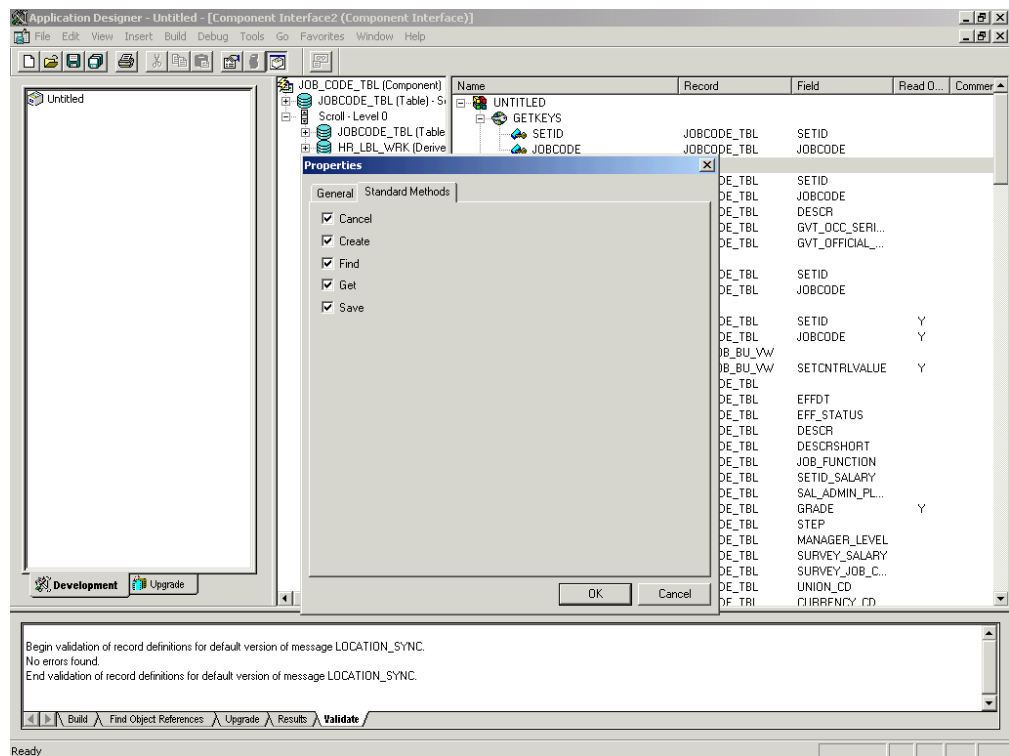
- Create
- Find
- Get
- Save

Only those methods in the underlying component are available. For example, if the underlying component does not contain Add capabilities, Create is not available.

Procedure How to View or Change Available Methods

To view or change available methods:

- 1. Open the component interface *Properties* dialog box.



- 2. Click the *Standard Methods* tab.
- 3. Select the desired methods.

Securing a Component Interface

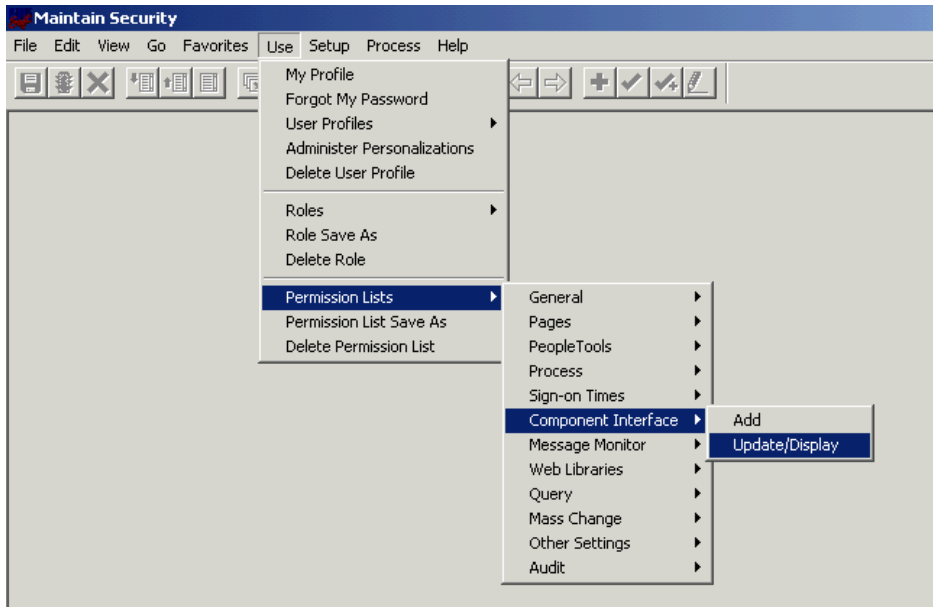
You must set up security for the component interface before you can begin testing.

Configuring Component Interface Security for PeopleSoft Version 8.1x

The following procedure describes how to configure component interface security for PeopleSoft Version 8.1 in 2- and 3-tier mode.

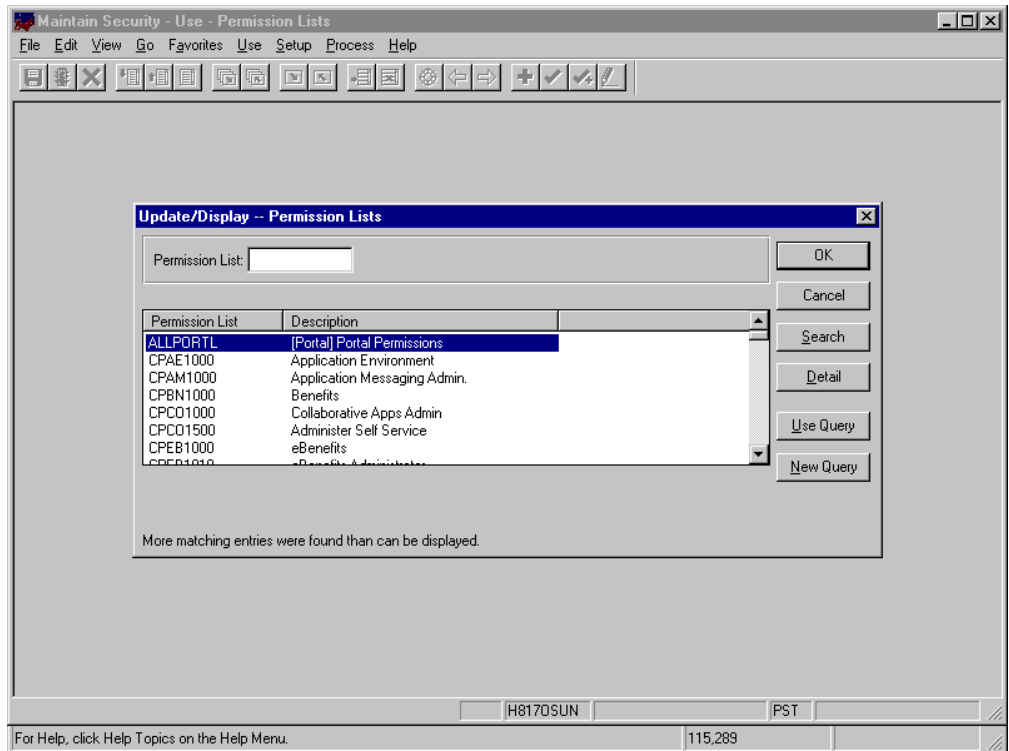
Procedure How to Configure Component Interface Security

To configure component interface security:



1. From the Use menu, select *Permission Lists*, *Component Interface*, and then click *Update/Display*.

The Permission Lists dialog box opens.

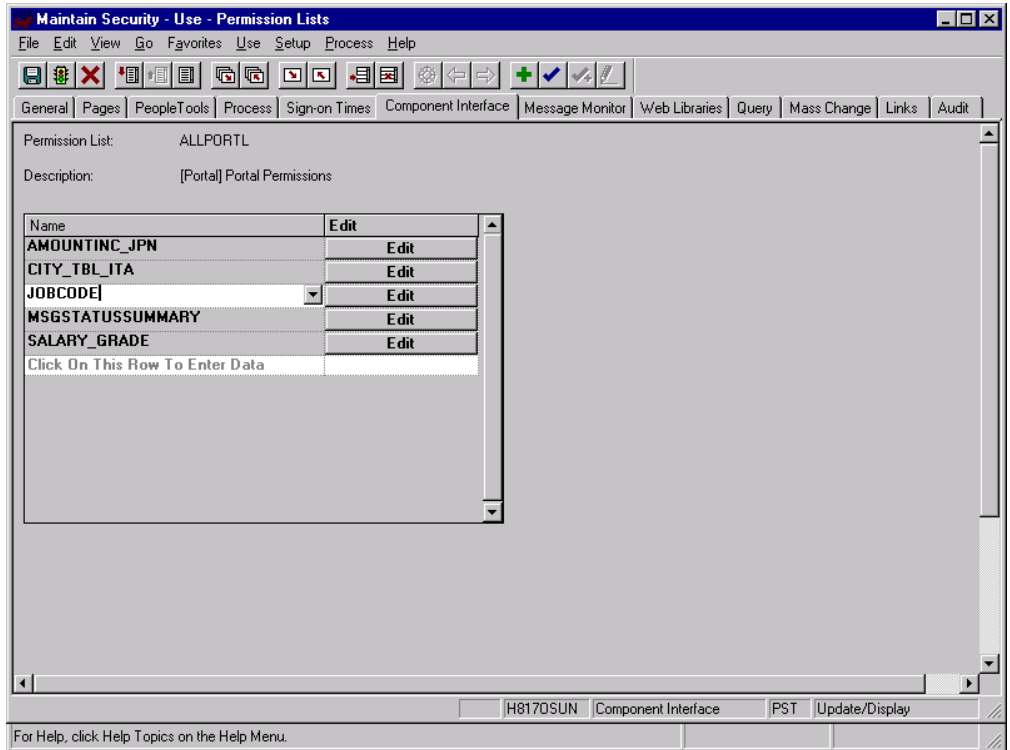


Before Security can be set, you must identify the permission list(s).

2. Select the relevant permission list and click *OK*.

For more information on permission lists, see the PeopleBooks documentation.

The following pane opens.

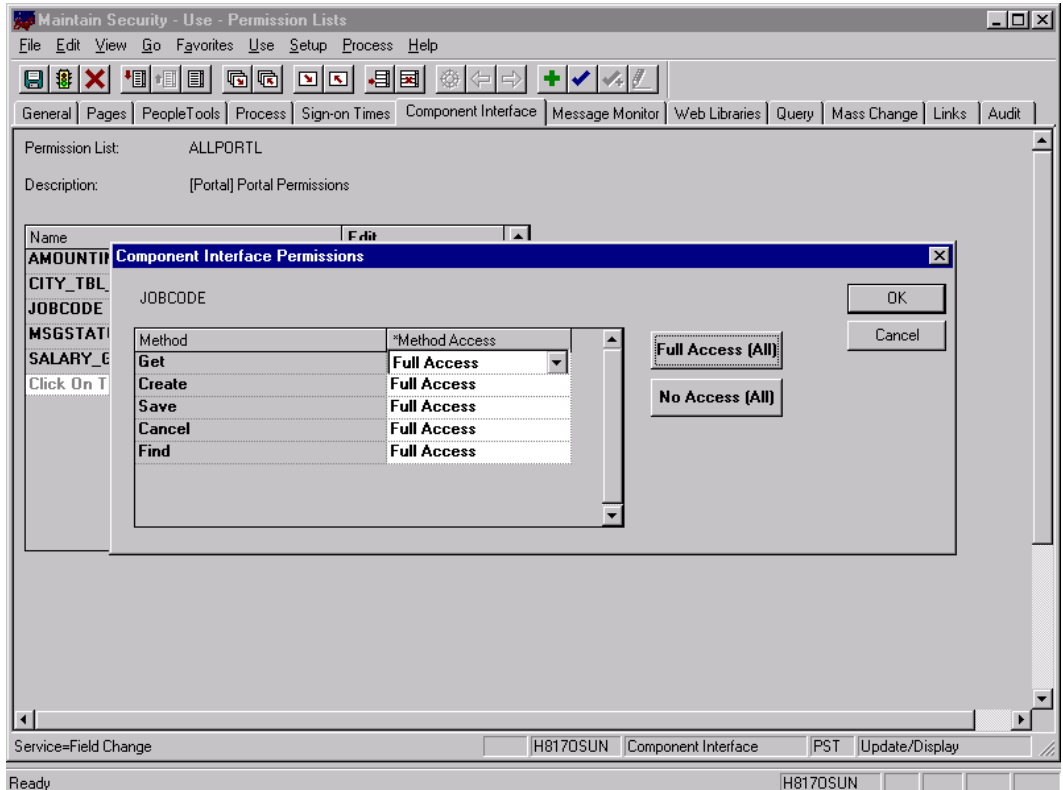


3. Insert the new component interface that you created.
4. Click *Edit*.

When you select the component interface, all available methods appear, including user-defined methods. This enables you to specify whether this particular Permission List must have Full or Partial Access.

Securing a Component Interface

In the following example, the ALLPORTL Permission List has Full Access to all methods.



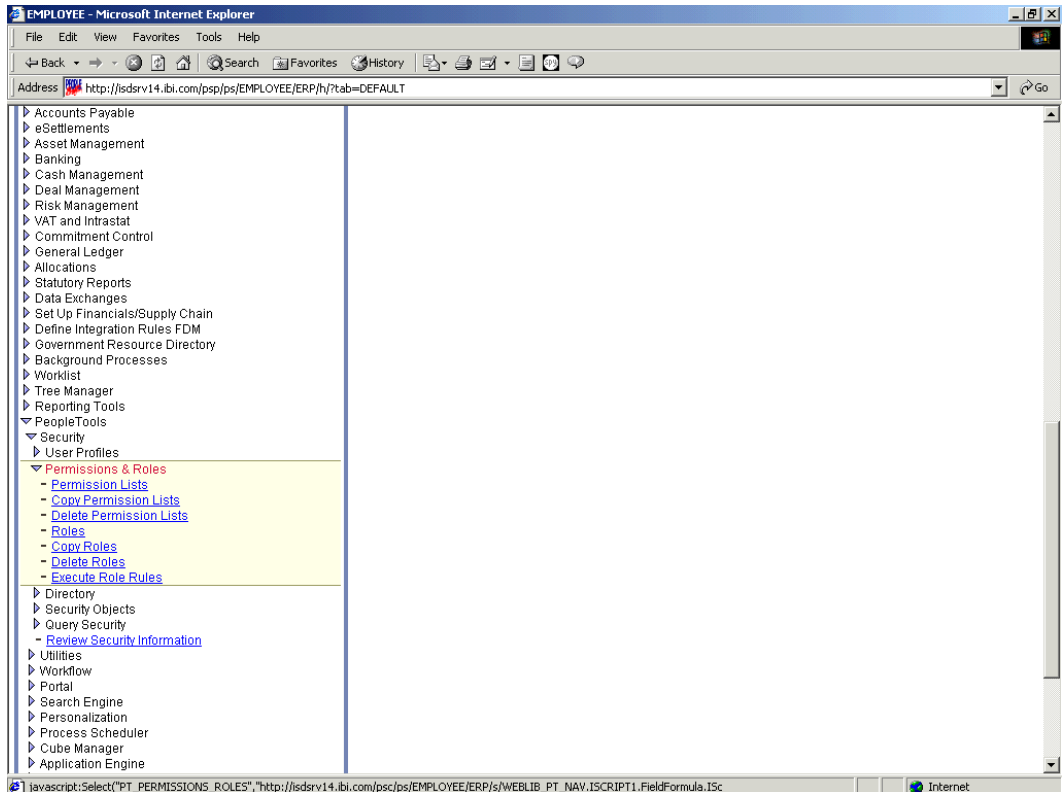
5. Select the desired level of access.
6. Click OK.

Configuring Component Interface Security for PeopleSoft Version 8.4 or Higher

The following procedure describes how to configure component interface security for PeopleSoft Version 8.4 or higher.

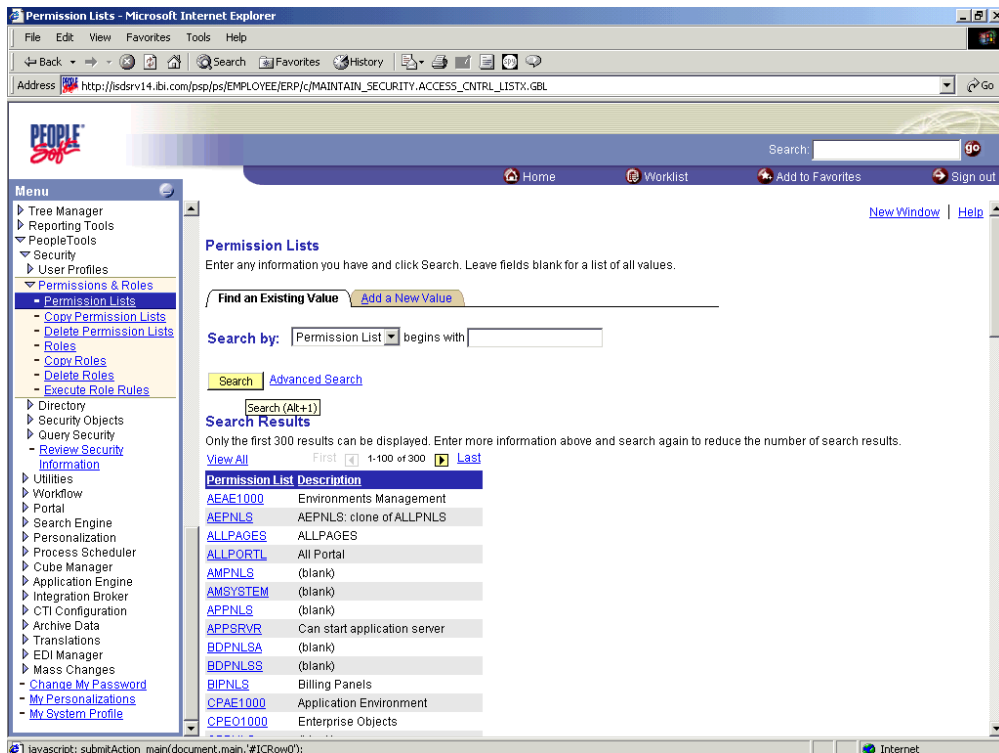
Procedure How to Configure Interface Security

To configure interface security:



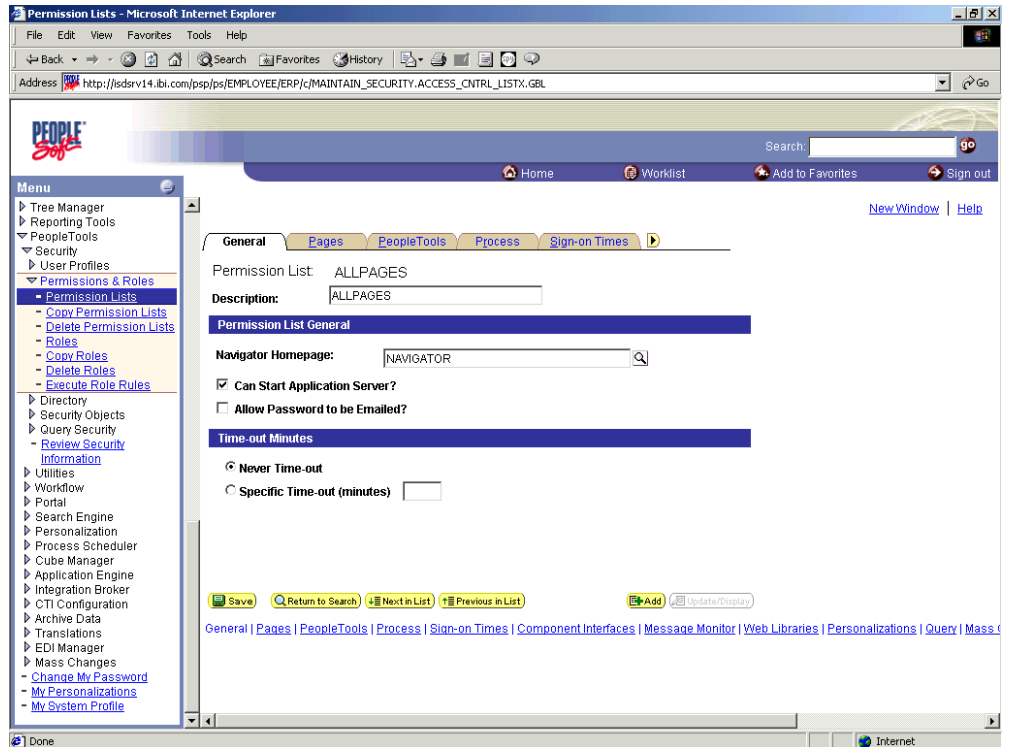
1. Expand *PeopleTools*, *Security*, *User Profiles*, and *Permissions & Roles* and then, click *Permission Lists*.
2. Click *Search*.

The Permission Lists Search pane opens.



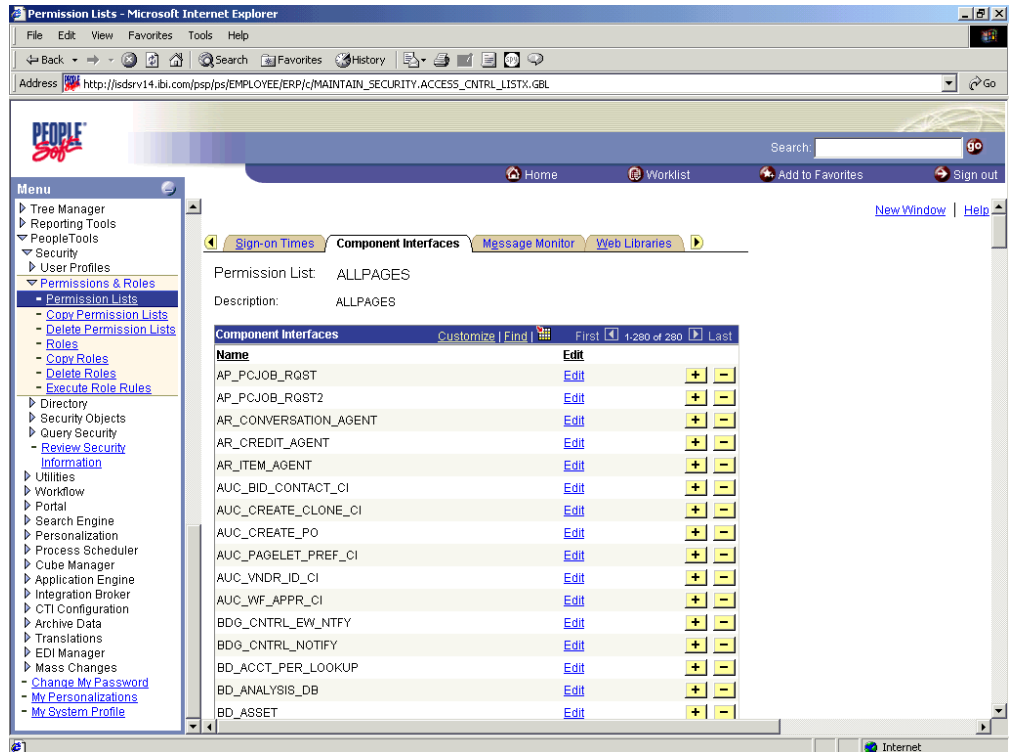
3. Select the relevant permission list.

The following opens.



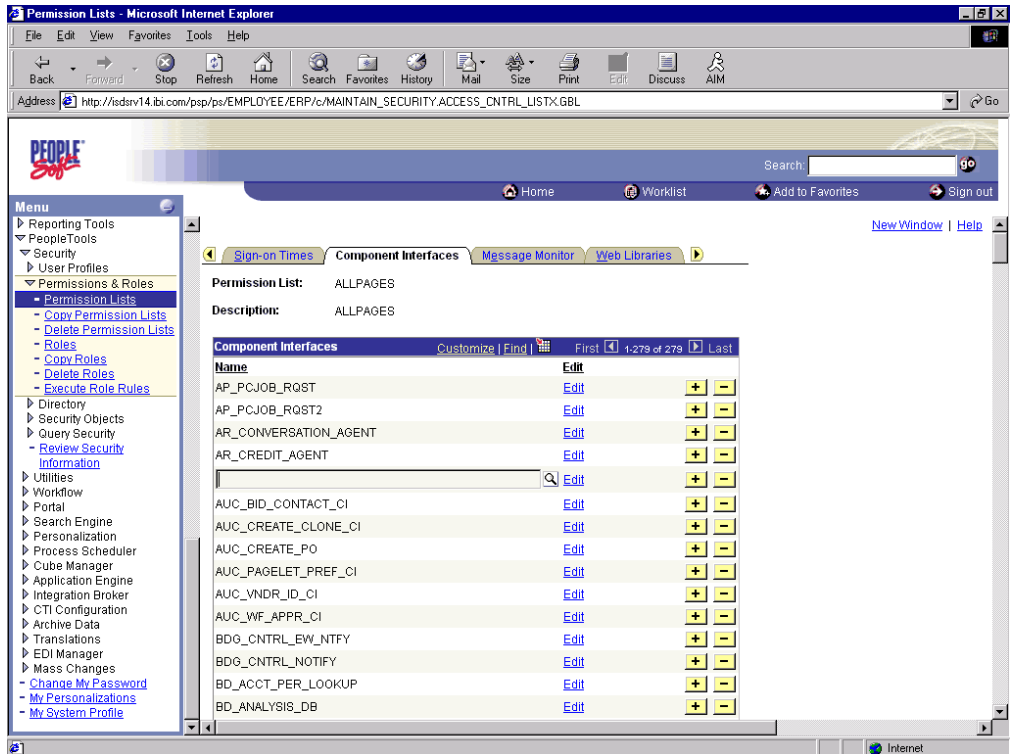
4. Click the right arrow next to the Sign-on Times tab.

The Component Interfaces tab appears.



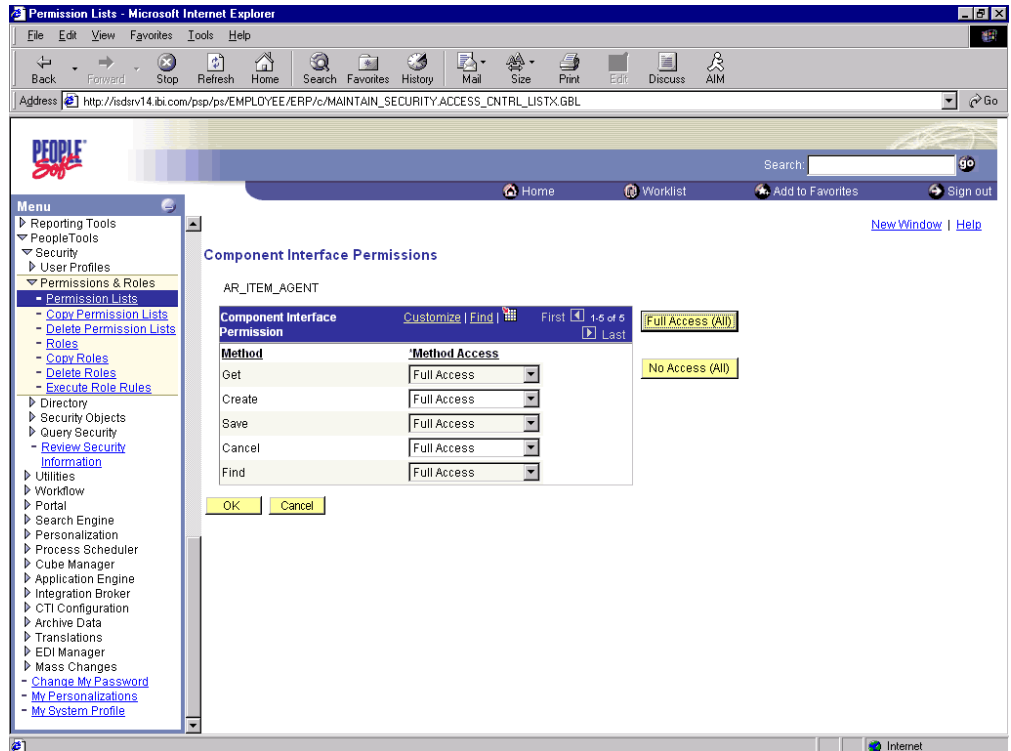
5. Click the *Component Interfaces* tab.
6. Click the + button to add a new row to the Component Interfaces list.

A field appears where you can type the component interface name.



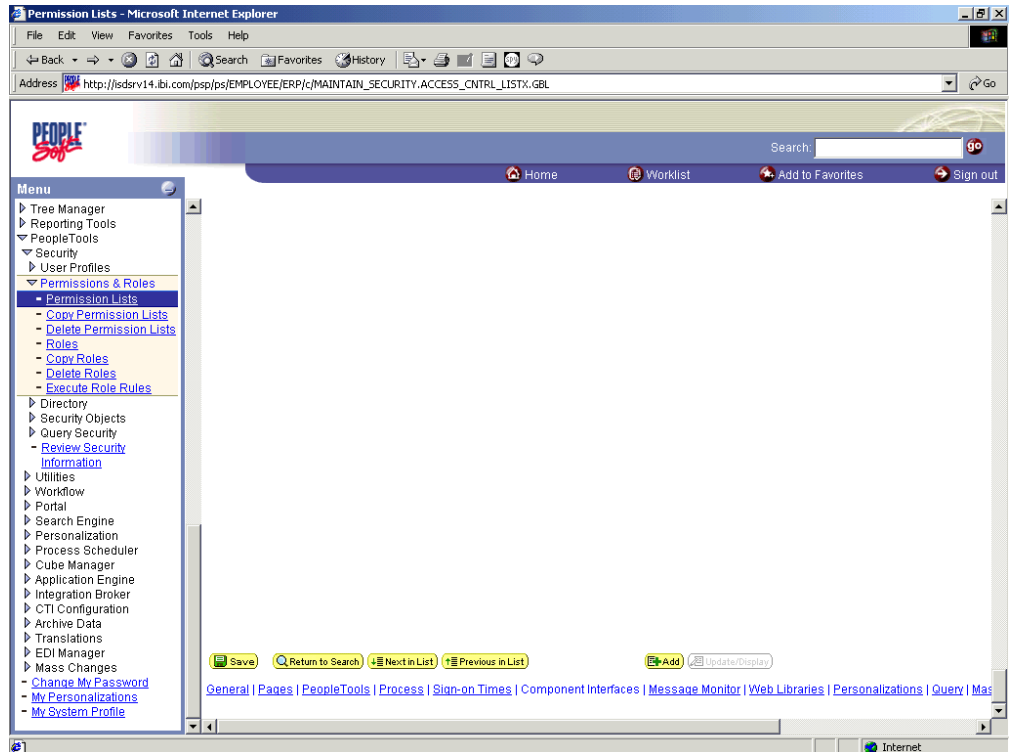
7. Type the component interface name and click *Edit*.

This example uses component interface AR_ITEM_AGENT.



8. From the drop-down lists, select the desired access level for each method.
9. Click OK.

The following pane opens.



10. Scroll down in the right pane and click **Save**.

Testing a Component Interface

The iWay Adapter for PeopleSoft 8 uses PeopleSoft metadata and component interfaces, therefore, it can accommodate new or modified component interfaces. The adapter makes no assumptions about component interfaces except that they are logical and valid. Therefore, each component interface must be tested before being used as a source for the adapter.

If changes are made to the underlying application by the user or by a PeopleSoft upgrade and the changes invalidate a component interface, the user must repair the invalid component interface before the adapter uses it.

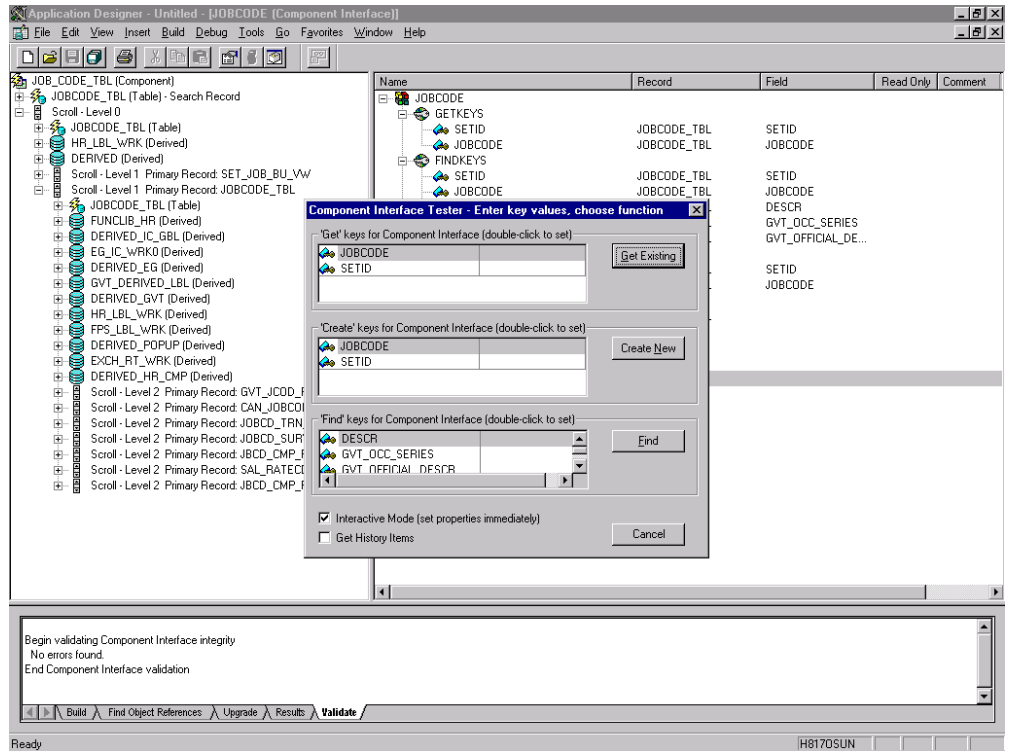
Procedure How to Test a Component Interface

To test a component interface:

1. In Application Designer, select *Test Component Interface* from the Tools menu.

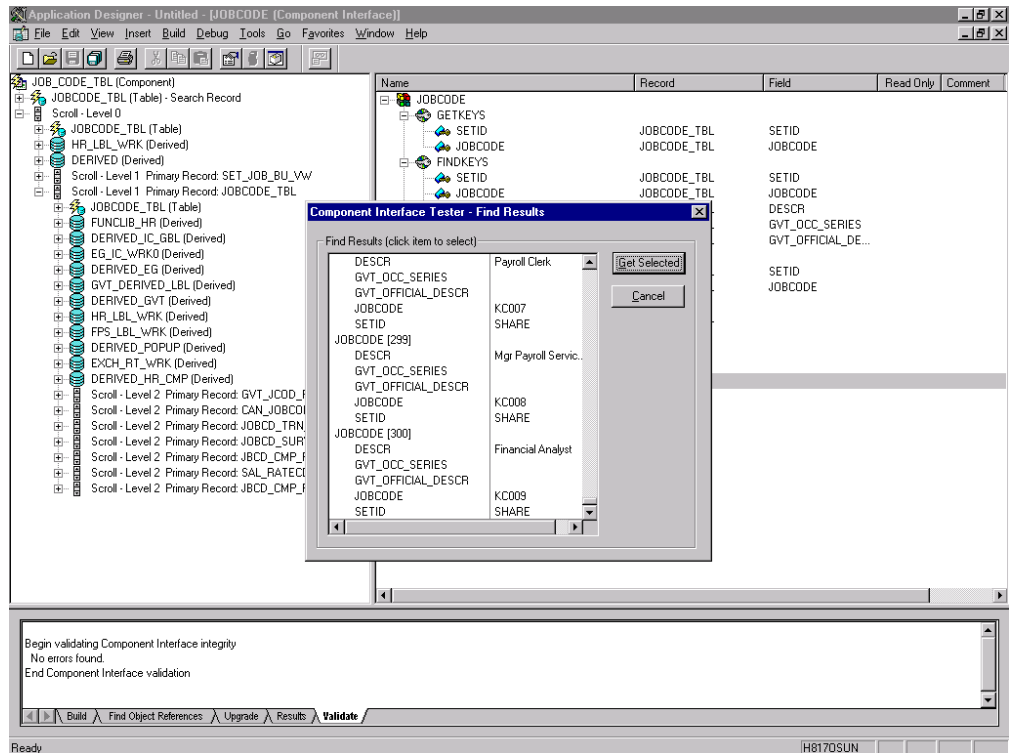
Testing a Component Interface

The Component Interface Tester dialog box opens.



2. If required, click the *Component Interface Tester* dialog box to bring it to the foreground.
3. To test the component interface, use one the following methods.
 - To test the component interface using the Find method, click *Find*.

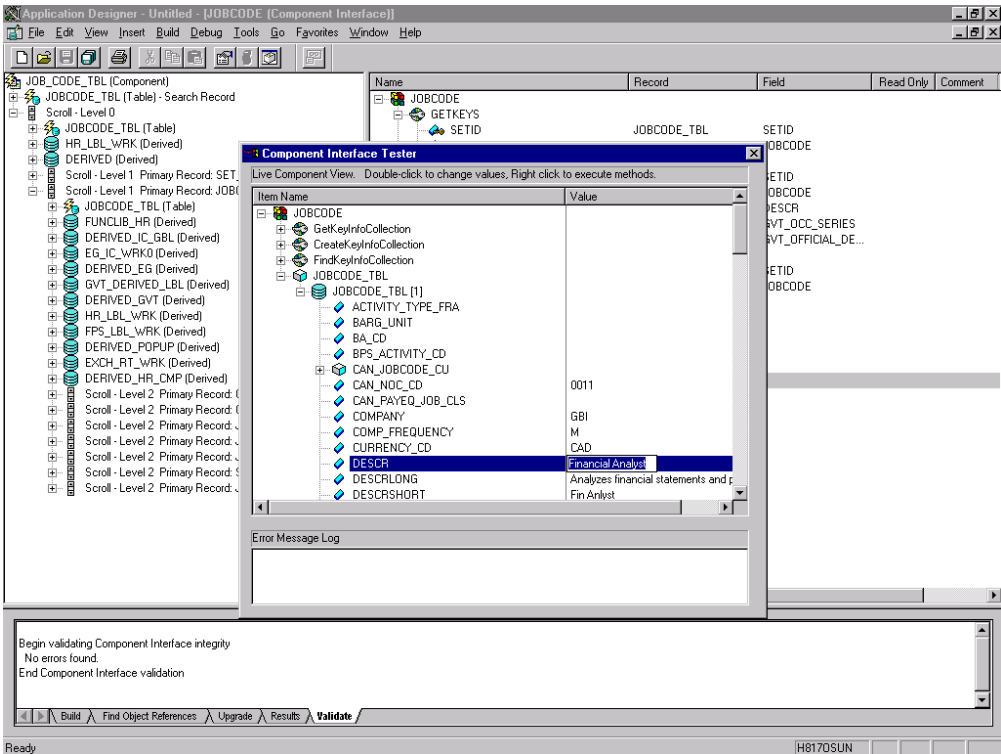
The Component Interface Tester - Find Results dialog box opens, displaying all of the possible entries for the underlying component. If there are more than 300 entries, a message appears.



- In the left pane of the Find Results dialog box, select a field.
- To display the relevant data for that particular field, click *Get Selected*.

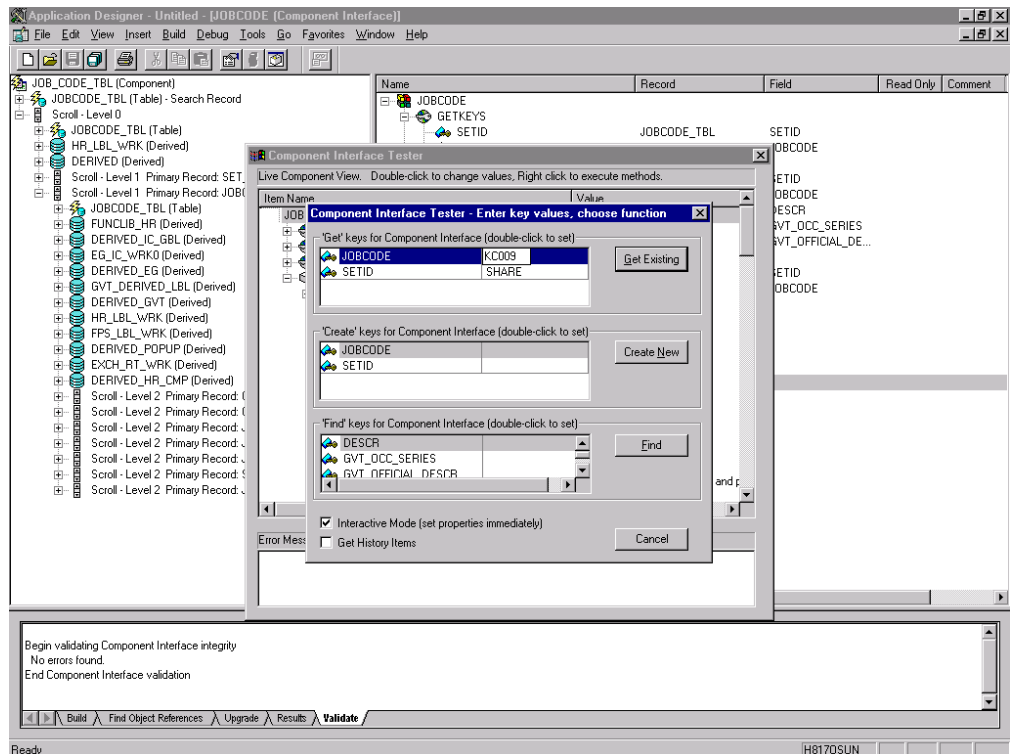
Testing a Component Interface

The following opens.



If the security settings permit, you can change the values in the individual fields.

The following dialog box opens.

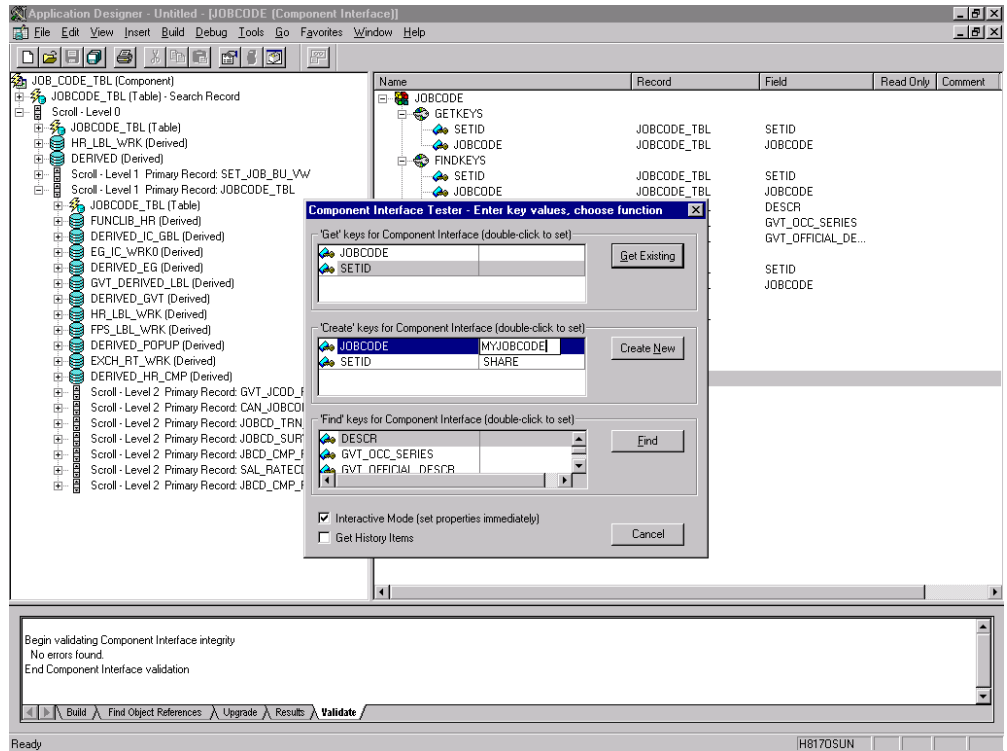


- To test the component interface using the Get method:
 - a. Enter the existing key(s).
 - b. Click *Get Existing*.

This returns the exposed properties for the key that you entered.

You can change values if Update access was specified.

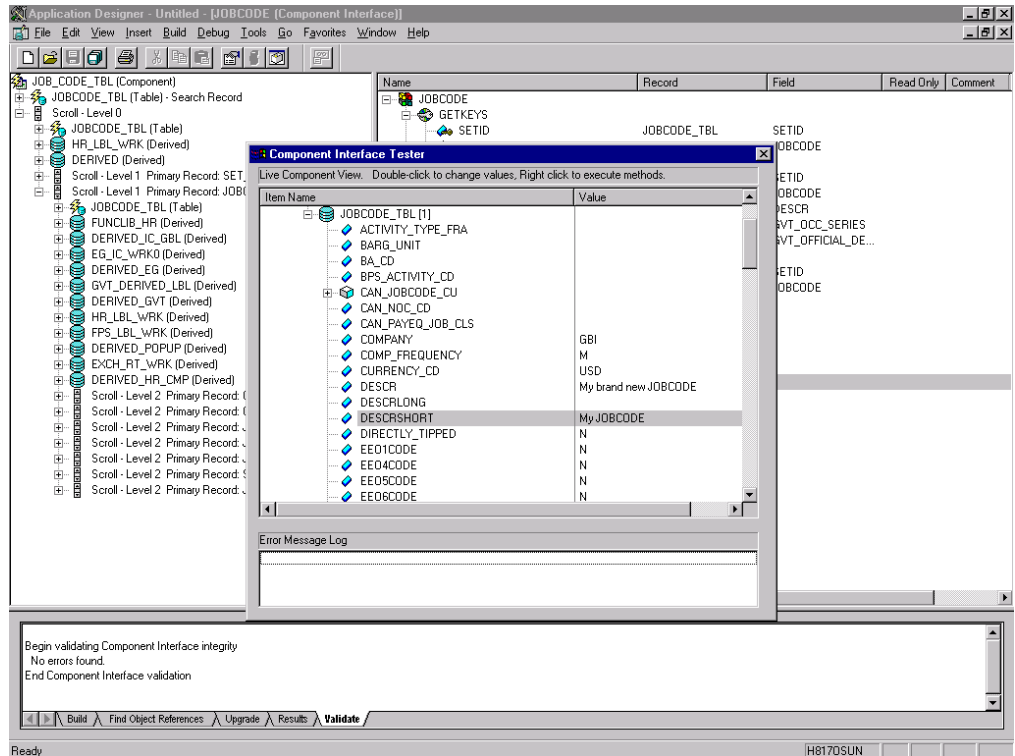
Alternatively, you can test using the Create method.



- To test the component interface using the Create method:
 - a. Enter all required key values.
 - b. Click *Create New*.

When you enter valid values in 'Create' keys, a pane that displays the JOBCODE data opens after the Table name is expanded with default data in place.

You can change fields at this point.



Changes are validated against the component's underlying business logic.

- c. After you finish making changes, right-click the top item in the pane.
4. To save your changes, click the *Save* icon.

The keys used to create the record can be used with the Get method for viewing data.

Testing a Component Interface

The data that was added can be viewed in the PeopleSoft Component as shown in the following example.

Manage Human Resources (GBL) - Setup - Job Code Table

File Edit View Go Favorites Setup Setup Lcl Process Proc Lcl Inquire Report Rpt Lcl Help

Job Code Profile | Evaluation Criteria | Salary Survey | Default Compensation | Non-Base Compensation

SetID: SHARE Job Code: MYJOBC [Business Units that use this SetId](#)

Job Code Profile

*Effective Date: 10/11/2002 *Status: Active

*Job Title: My brand new JOBCODE

Short Job Title: My JOBCODE

Job Description:

Job Function Code:

Job Family:

*Manager Level: Other

*Standard Hours: 40.00 Standard Work Period: Weekly

Workers' Comp Code:

*Comp Freq: Monthly

Regular/Temporary:

☐ Medical Checkup Required

Union Code:

Singapore:

Festive Advance Pay Program:

Canada:

National Occupational Classif:

Pay Equity Job Class:

☐ Seasonal

BPS Activity:

Stats-Can Acad Teaching Survey:

*Report Flag: Not Applicable

Duties:

IH8170SUN Job Code Profile PST Update/Display

The Effective Date is one of the default values.

You have finished testing the component interface. Before using the component interface, you must generate its API. For more information, see Chapter 2, *Generating Component Interface APIs*.

APPENDIX C

Using PeopleSoft 8 Integration Broker

Topics:

- PeopleSoft Integration Broker
- Configuring Integration Broker in PeopleSoft 8.4
- Configuring Application Messaging in PeopleSoft Release 8.1
- Viewing the PeopleCode for a Message
- Testing the Integration Broker
- Using Outbound Synchronous Messages

This section discusses how to configure and test PeopleSoft Integration Broker (release 8.4) and PeopleSoft Application Messaging (release 8.1) using a PeopleSoft-supplied File Output interface.

In PeopleSoft release 8.1, the messaging architecture is called Application Messaging and includes Application Messaging Gateway. In release 8.4, the messaging architecture is called Integration Broker, which includes Integration Gateway. When discussing release-generic issues, this section uses release 8.4 terminology. When discussing release-specific issues, it uses release-specific terminology.

Note: This section is intended as a supplement for the iWay Adapter user and is not a substitute for PeopleSoft documentation. For more complete and up-to-date information on PeopleSoft Messaging and Integration Broker, see the *PeopleSoft Online Library* for your PeopleSoft system.

PeopleSoft Integration Broker

PeopleSoft Integration Broker provides a mechanism for communicating with the outside world using XML files. Communication can take place between different PeopleSoft applications or between PeopleSoft and third-party systems.

To subscribe to data, third-party applications can accept and process XML messages posted by PeopleSoft using the available PeopleSoft connectors or by adding a custom built connector to the Integration Gateway. This topic primarily covers publishing outbound asynchronous messages from a PeopleSoft system to a third-party application using the delivered File Output connector. For information on outbound synchronous messages, see *Using Outbound Synchronous Messages* on page C-29.

To send a message, you must properly configure various internal structures and processes. The following descriptions are generally release-generic. Detailed differences between releases 8.1 and 8.4 are discussed in other topics.

- **Message.** A Message is a container for the data that goes into the XML. It contains basic structural information, such as records and fields. The Message must be in an Active status to send the XML file.
- **Message Channel.** The Message Channel is a mechanism for structuring records into logical groupings. Each Message can belong to only one Message Channel. The Message Channel must be in an Active (Run) status for the Message to be delivered.

In release 8.1, the Message Channel also provides preliminary routing instructions; you can specify which Message Nodes handle the message. Each Message Channel can route messages to multiple Message Nodes.

- **Message Node.** Message node functionality changed from 8.1 to 8.4:

In release 8.1, the primary function of the Message Node is to specify which Gateway receives the messages.

In release 8.4, much of the “intelligence” that was built into the Message Channel moved to the Message Node. This provides additional flexibility over release 8.1. You can specify which messages the Message Node can handle. In addition, the Gateway Connector is bound to the Message Node. Each Message Node can route messages to only one Connector.

- **Integration Gateway.** The Integration Gateway is a program that runs on the PeopleSoft Web Server. It is the physical hub between PeopleSoft and the third-party system.

- **Target Connector/Handler.** Connectors are Java programs that run under the control of the Integration Gateway and control the final output destination of the XML file. PeopleSoft release 8.4 comes with several connectors including HTTP, FTP, SMTP, JMS, POP3, and a Simple File connector that places the file in a directory on the Web Server. This section discusses the Simple File connector.
- **PeopleCode.** PeopleCode is the programming tool provided with PeopleTools that enables you to create complex application functionality. A message can only be initiated using specific PeopleCode instructions. This code is typically triggered by an application event, such as creating a new database entry through an online panel or through a batch job.

Most of the examples in this section use the LOCATION_SYNC message, which is a PeopleSoft Enterprise Integration Point (EIP) and is supplied with most PeopleSoft applications. If LOCATION_SYNC is not part of your package, you may use any supplied message.

Configuring Integration Broker in PeopleSoft 8.4

You can configure PeopleSoft 8.4 to send an asynchronous outbound message to the File Output connector:

To configure application messaging in PeopleSoft 8.4:

1. Ensure that the message is active and is routed to the proper Message Channel.
2. Configure the Message Channel.
3. Configure the IntegrationGateway.properties file to communicate with your PeopleSoft 8.4 application.
4. Configure the Integration Gateway and File Output connector.
5. Create and configure a new Gateway node.

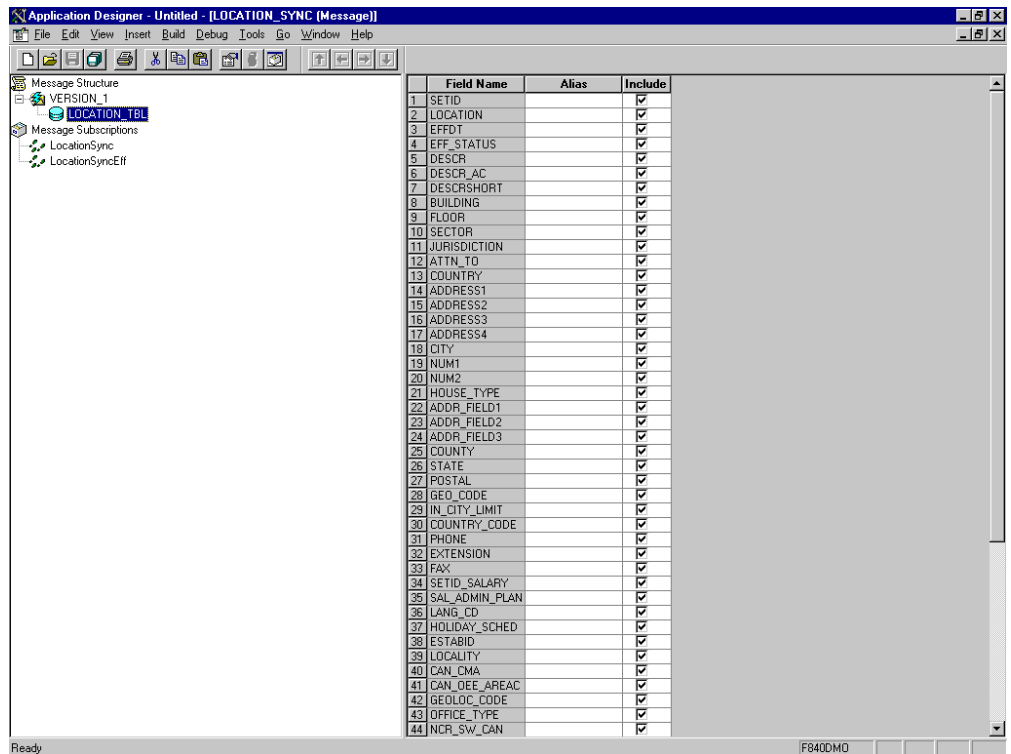
These tasks are described in detail in the following procedures.

Procedure How to Ensure the Message Is Active and Is Routed Correctly

To ensure that the message is active and is routed to the proper Message Channel:

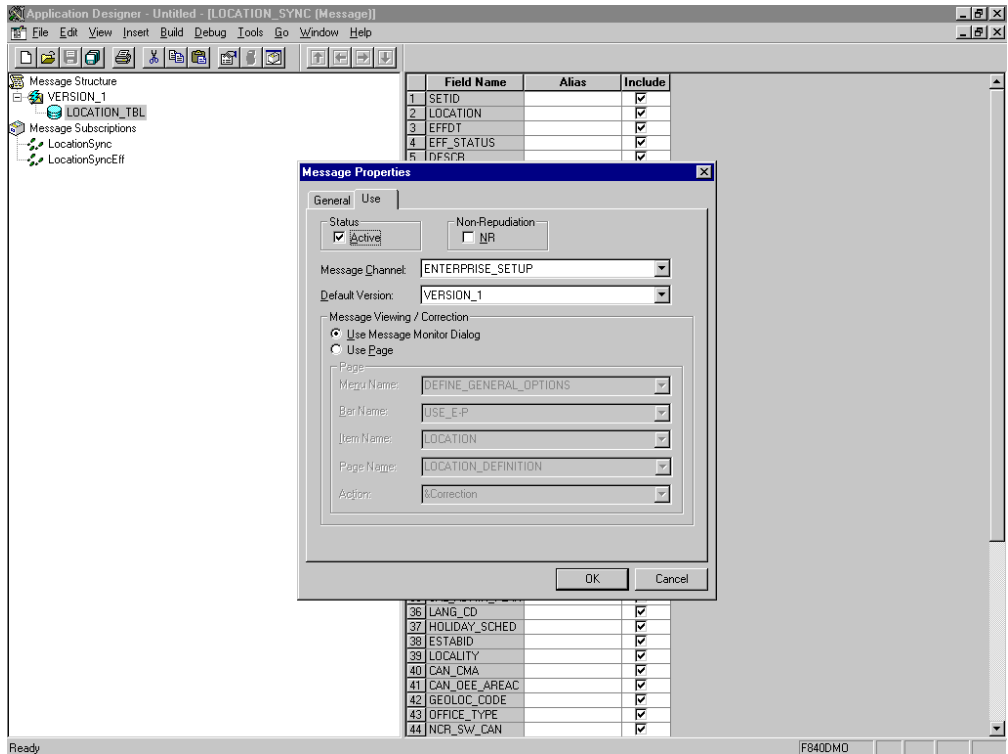
1. Open Application Designer.
2. On the File menu, point to *Open*, click *Message*, and then open the *LOCATION_SYNC* message.

3. To view the fields that are included in the Message, highlight *LOCATION_TBL*.



4. Right-click *LOCATION_TBL* and select *Properties*.

The Message Properties dialog box opens.



- a. Select the *Use* tab.
- b. Ensure the *Active* check box is selected.

The message is routed to the Message Channel, ENTERPRISE_SETUP, and the default message version is VERSION_1 (messages can have multiple versions).

5. Click OK.
6. Save the message.

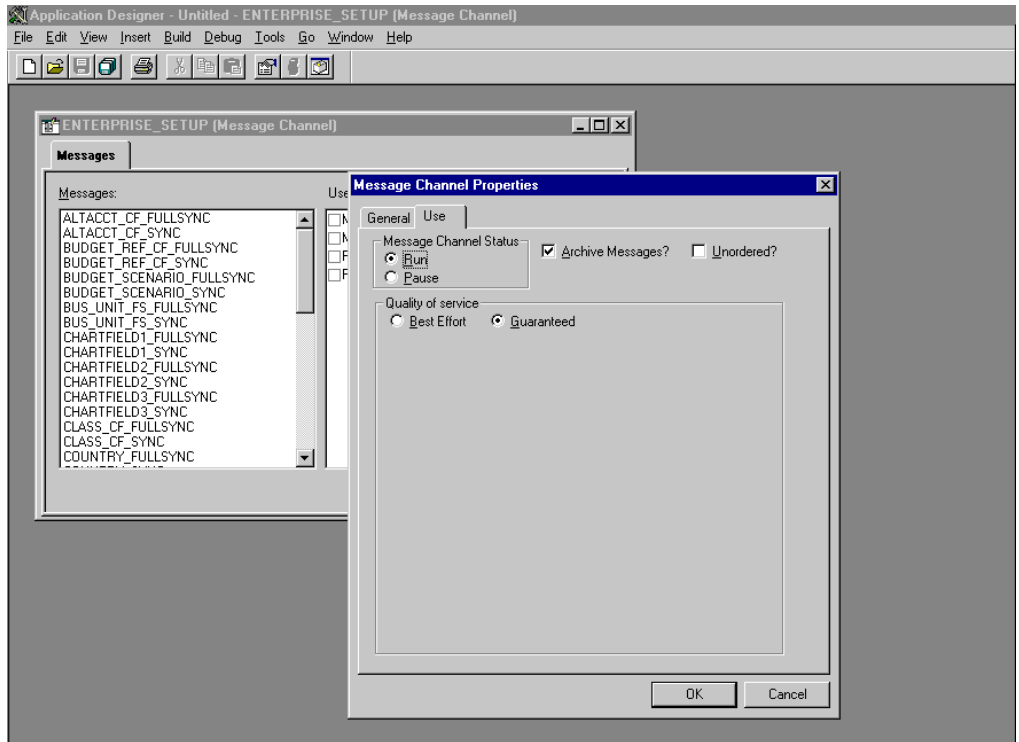
You have finished ensuring that the message is active and is routed correctly.

Procedure **How to Configure the Message Channel**

To configure the Message Channel:

1. From the File menu, point to *Open* and click *Message Channel*.
2. To open the ENTERPRISE_SETUP Message Channel, select ENTERPRISE_SETUP.
3. Right-click ENTERPRISE_SETUP and select *Properties*.

The Message Channel Properties dialog box opens.



- a. Select the *Use* tab.
- b. Ensure that the Message Channel status is set to *Run*.
4. Click *OK*.
5. Save the Message Channel.

You have finished configuring the Message Channel.

Procedure How to Configure the IntegrationGateway.properties File

To configure the IntegrationGateway.properties file:

- If your Web server is WebLogic, the file resides in
`c:\bea\wlserver6.1\config\peoplesoft\applications\PSIGW\Web-inf\`
- If your Web server is WebSphere, the file resides in
`c:\websphere\AppServer\installedApps\peoplesoft\PSIGW\Web-inf\`

1. Open the IntegrationGateway.properties file using the editor of your choice.
2. Find the section of the file that specifies the JOLT connect string setting for the default application server. This is usually near line 75, and looks similar to the following:

```
## JOLT connect string setting for optional Default Application
Server. Do NOT specify a NODENAME.
#
# Example:
#ig.isc.serverURL=//MYSERVER:9000
#ig.isc.userid=MYUSERID
#ig.isc.password=MYPASSWORD
#ig.isc.toolsRel=8.40
```

3. Uncomment (or copy and uncomment) the four lines that specify the connection.
4. Enter the appropriate information.

In the following example, the tools release is 8.40.09:

```
ig.isc.serverURL=//isdsv14:9000
ig.isc.userid=VP1
ig.isc.password=VP1
ig.isc.toolsRel=8.40.09
```

The PeopleSoft tools release must be precise to the last decimal.

Note: With release 8.42, the password must be stored in an encrypted format. PeopleSoft provides a script called PSCipher.bat (PSCipher.sh on Unix) to accomplish encryption. Typically, this script is located in the path of the IntegrationGateway.properties file. Follow the instructions supplied by PeopleSoft to run this script.

You have finished configuring the IntegrationGateway.properties file.

Procedure How to Configure the Integration Gateway and the File Output Connector

To configure the Integration Gateway and the File Output Connector:

1. In a Web browser, open your PeopleSoft 8.4 application in 4-tier mode.
2. In the Menu pane, expand *PeopleTools*, *Integration Broker*, and then, click *Gateways*.
3. Open the *LOCAL Gateway ID* and enter the following Gateway URL:

```
machine-name/PSIGW/PeopleSoftListeningConnector
```

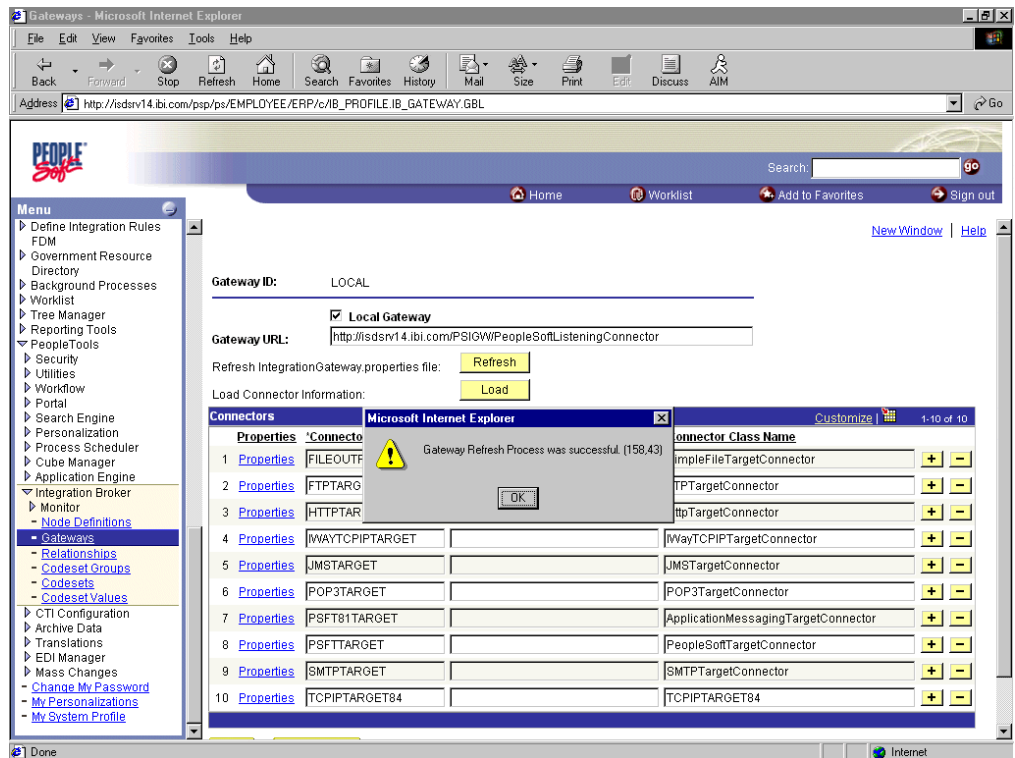
where:

```
machine-name
```

Is the URL of your PeopleSoft Web Server.

4. Click *Refresh*.

A message appears stating the outcome of the refresh process.

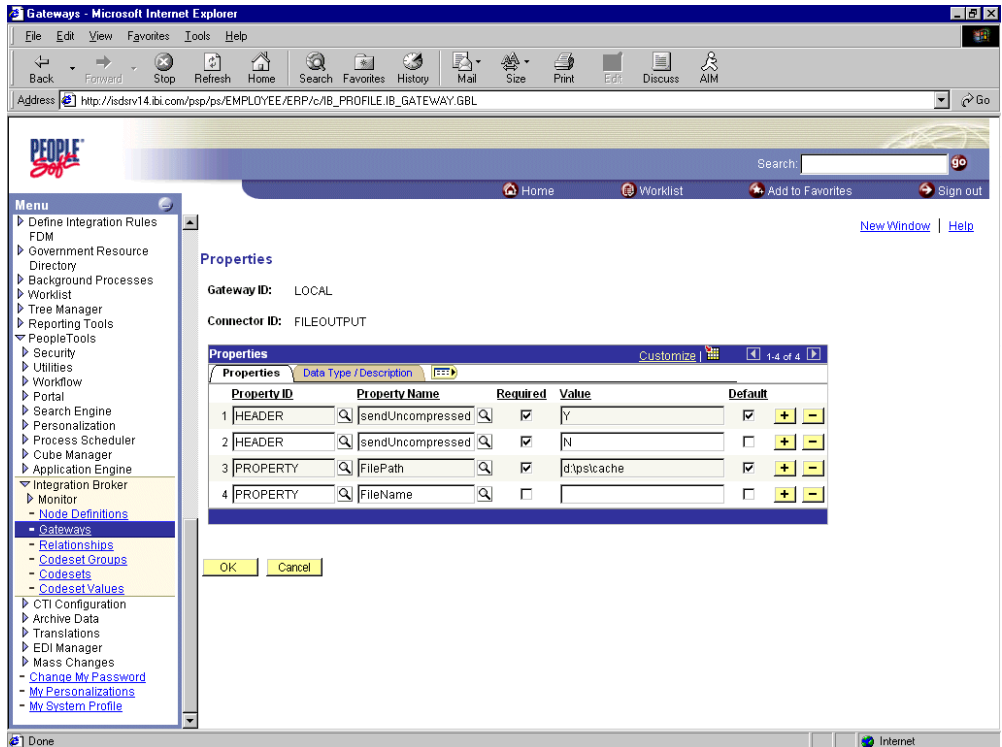


- a. Click OK.
- b. Scroll down and click Save.

You must click Save before continuing.

5. Click the *Properties* link for the FILEOUTPUT Connector ID.
The Properties window for the FILEOUTPUT Connector opens.
6. Accept or overwrite the default values.

In the following figure, the FilePath PROPERTY from the c:\temp default was changed to d:\ps\cache.



7. To return to the Gateway window, click **OK**.

8. Scroll down and click **Save**.

You have finished configuring the Integration Gateway and the File Output Connector.

Procedure How to Create and Configure a New Gateway Node

To create and configure a new Gateway Node:

1. In the Menu pane, expand *PeopleTools*, *Integration Broker*, and then, click *Node Definitions*.
2. Select the *Add a New Value* tab.
3. In the Node Name field, type a node name.

It is recommended that you name your first (trial) message node EXTERNAL. After successfully configuring and sending messages using this node, you can create additional message nodes with names appropriate for your application.

4. Click **Add**.

The Node Info tab becomes available.

The screenshot shows the 'Node Definitions' page in a Microsoft Internet Explorer browser. The address bar displays the URL: http://fedsv14.tbi.com/psp/ps/EMPLOYEE/ERP/c/IB_PROFILE_IB_NODE.GBL. The page has a top navigation bar with links for Home, Worklist, Add to Favorites, and Sign out. A search bar is also present. On the left, a 'Menu' pane lists various system components, with 'Node Definitions' highlighted under the 'Integration Broker' section. The main content area is titled 'Node Info' and contains the following fields and options:

- Node Name:** EXTERNAL
- Description:** Extmal Node for Testing
- Company ID:** (empty field)
- Node Type:** External (selected from a drop-down list)
- Routing Type:** Implicit (selected from a drop-down list)
- Authentication Option:** None (selected from a drop-down list)
- Active Node:** ☒ (checked)
- Local Node:** ☐ (unchecked)
- Default Local Node:** ☐ (unchecked)
- Non-Repudiation:** ☐ (unchecked)
- Hub Node:** (empty field with a search icon)
- Master Node:** (empty field with a search icon)
- Image Name:** (empty field with a search icon)
- Code Set Group Name:** (empty field with a search icon)

At the bottom of the form, there is a 'Save' button and a breadcrumb trail: [Node Info](#) | [Contact / Notes](#) | [Properties](#) | [Connectors](#) | [Transactions](#) | [Portal Content](#).

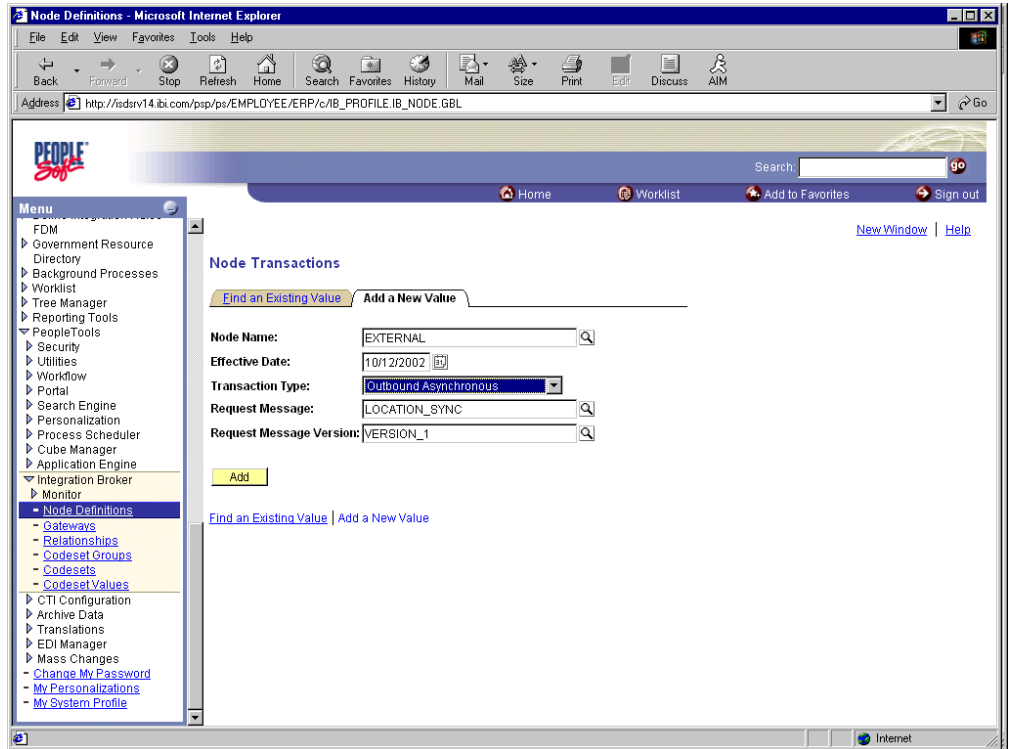
- In the Description field, type an appropriate description.
- From the Node Type drop-down list, select *EXTERNAL*.
- From the Routing Type drop-down list, select *Implicit*.

5. Select the *Connectors* tab to make it available.

The screenshot shows the 'Node Definitions' page in a Microsoft Internet Explorer browser. The address bar shows the URL: http://isdsv14.1bi.com/ps/ps/EMPLOYEE/ERP/c/IB_PROFILE_IB_NODE_GBL. The page has a top navigation bar with 'Home', 'Worklist', 'Add to Favorites', and 'Sign out' links. A search bar is also present. On the left, a 'Menu' sidebar lists various system components, with 'Integration Broker' and 'Monitor' expanded. The 'Node Definitions' section is highlighted, showing sub-items like 'Gateways', 'Relationships', 'Codeset Groups', 'Codesets', and 'Codeset Values'. The main content area has several tabs: 'Node Info', 'Contact / Notes', 'Properties', 'Connectors' (which is selected), 'Transactions', and 'Portal Content'. Under the 'Connectors' tab, the 'Node Name' is 'EXTERNAL'. The 'Gateway ID' is set to 'LOCAL' and the 'Connector ID' is set to 'FILEOUTPUT'. Below this, a 'Properties' section is visible, showing a table with two rows: '1 | HEADER' with 'sendUncompress' and 'Y', and '2 | PROPERTY' with 'FilePath' and 'd:\ps\cache'. At the bottom of the main content area, there is a 'Save' button and a breadcrumb trail: 'Node Info | Contact / Notes | Properties | Connectors | Transactions | Portal Content'.

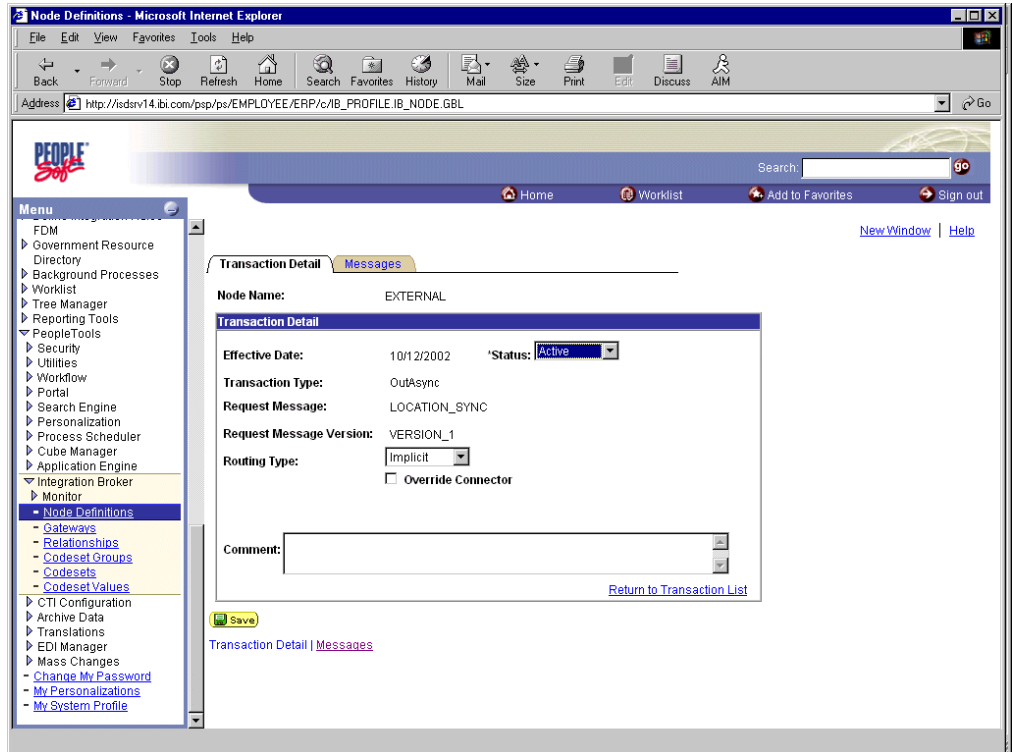
- a. Specify *LOCAL* for the Gateway ID.
 - b. Specify *FILEOUTPUT* for the Connector ID.
 - c. Accept or overwrite the default Gateway property values.
6. Click *Save*.
 7. To specify the transactions to route messages to your node, select the *Transactions* tab.
 8. Click *Add Transaction*.

The Node Transactions pane opens.



- a. From the Transaction Type drop-down list, select *Outbound Asynchronous*.
 - b. In the Request Message field, specify *LOCATION_SYNC*.
 - c. In the Request Message Version field, specify *VERSION_1*.
9. Click *Add*.

The Transaction Detail pane opens.



- a. Verify that the Routing Type is *Implicit*.
- b. Click **Save**.
- c. Click the *Return to Transaction List* link.
- d. To ensure that your data entry is not lost, click **Save** again.

You have finished creating and configuring the new Gateway Node.

10. Continue with the instructions in *Viewing the PeopleCode for a Message* on page C-26.

Configuring Application Messaging in PeopleSoft Release 8.1

You can configure PeopleSoft 8.1 to send an asynchronous outbound message to the Simple File Handler.

To configure application messaging in PeopleSoft 8.1:

1. Create and configure a new Message Node.
2. Ensure the message is active and is routed to the proper Message Channel.

3. Configure the Message Channel.
4. Configure the Simple File Handler in the Gateway.

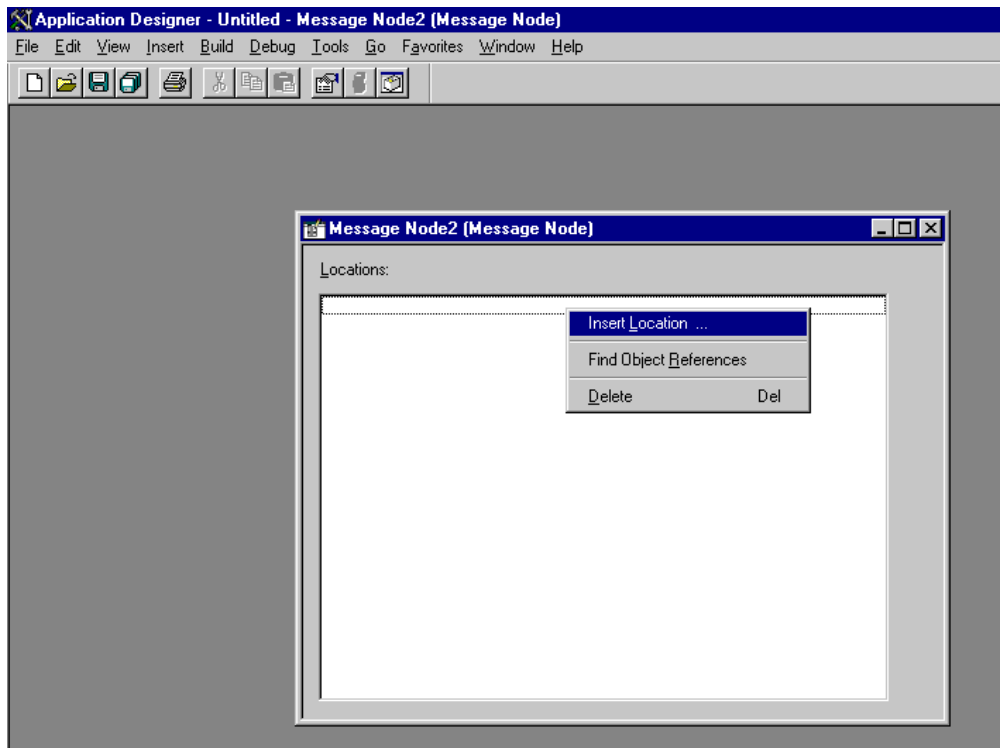
These tasks are described in detail in the following procedures.

Procedure How to Create and Configure a New Message Node

To create and configure a new Message Node:

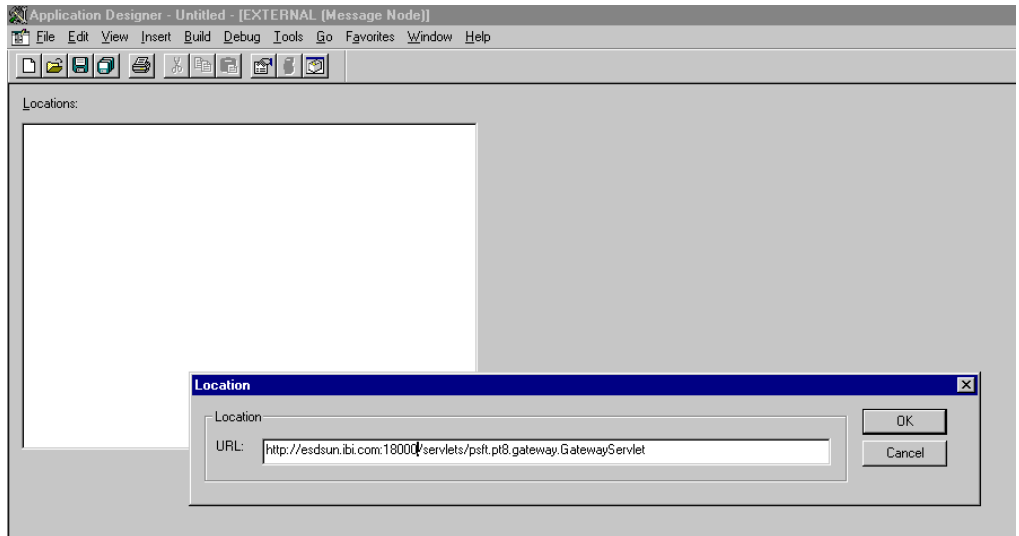
1. Select *New* from the File menu and click *Message Node*.

A Message Node window opens.



2. Right-click anywhere inside the white space and select *Insert Location*.

The Location URL box opens.



3. Type the following URL for the PeopleSoft Application Gateway (handler directory):

machine-name:port/servlets/psft.pt8.gateway.GatewayServlet

where

machine-name

Is the URL of your PeopleSoft Web server.

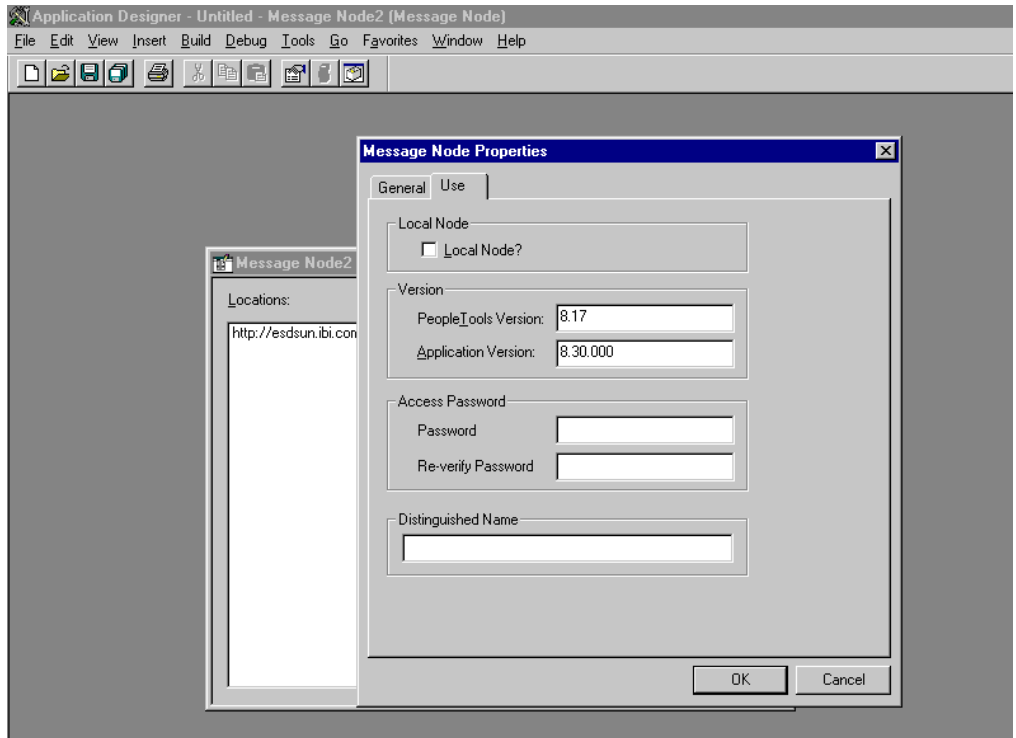
port

Is the socket on which the server is listening.

The characters you type after *machine-name* must be case-sensitive.

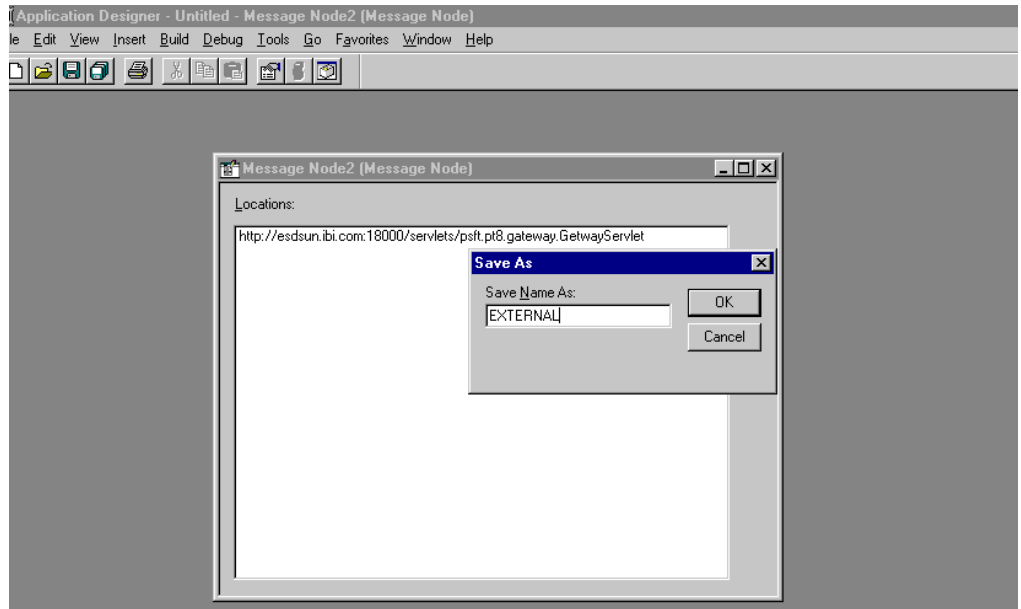
4. Click OK.

5. Invoke the *Message Node Properties* dialog box.



- a. Select the *Use* tab.
 - b. In the text boxes, type the PeopleTools and Application Version numbers.
6. Click OK.

7. Invoke the *Save As* dialog box.



8. To save the Message Node, click *OK*.

It is recommended that you name your first (trial) message node *EXTERNAL*. After successfully configuring and sending messages using this node, you can create additional message nodes with names appropriate for your application.

If you intend to migrate this message node to a different PeopleSoft environment (for example, from Test to QA), you can create a PeopleSoft Project and insert the Message Node into the Project.

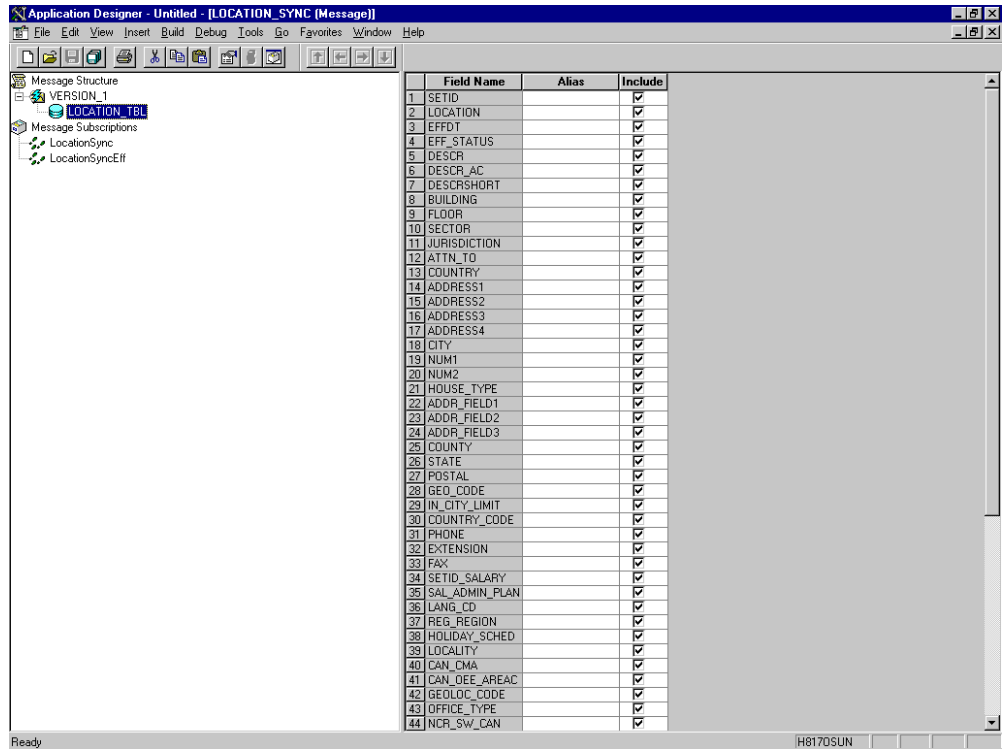
You have finished creating and configuring the message node.

Procedure How to Ensure That the Message Is Active and Is Routed Correctly

To ensure that the message is active and is routed to the proper message channel:

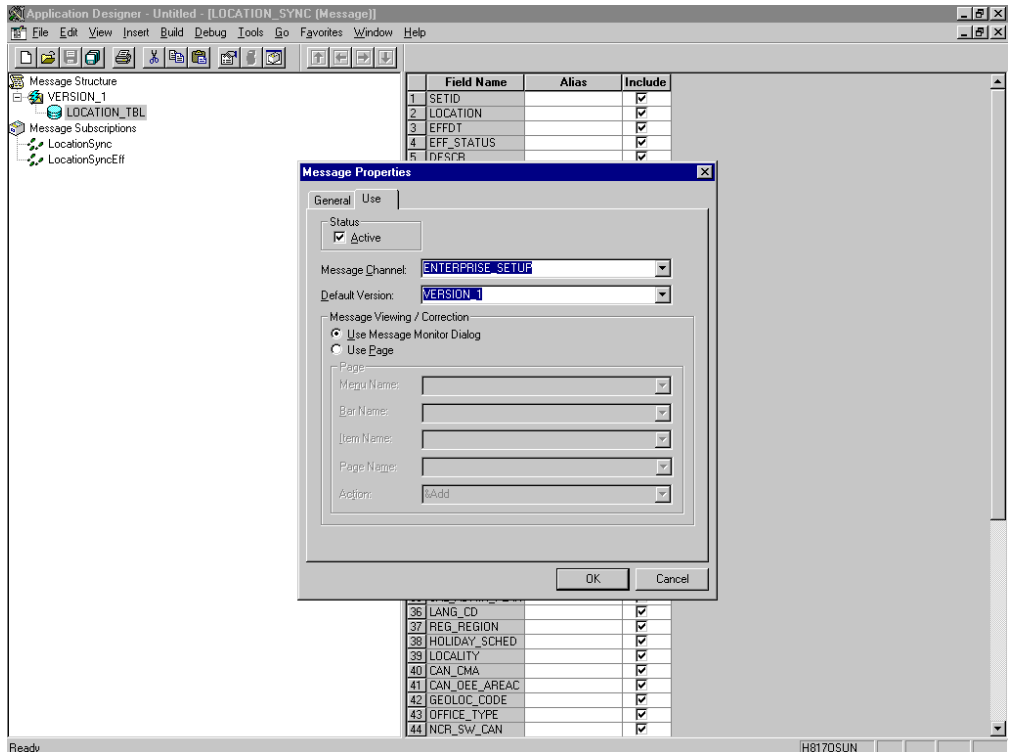
1. Open Application Designer.
2. On the File menu, point to *Open*, click *Message*, and open the *LOCATION_SYNC* message.

3. To view the fields that are included in the message, highlight *LOCATION_TBL*.



4. Right-click *LOCATION_TBL* and select *Properties*.

The Message Properties dialog box opens.



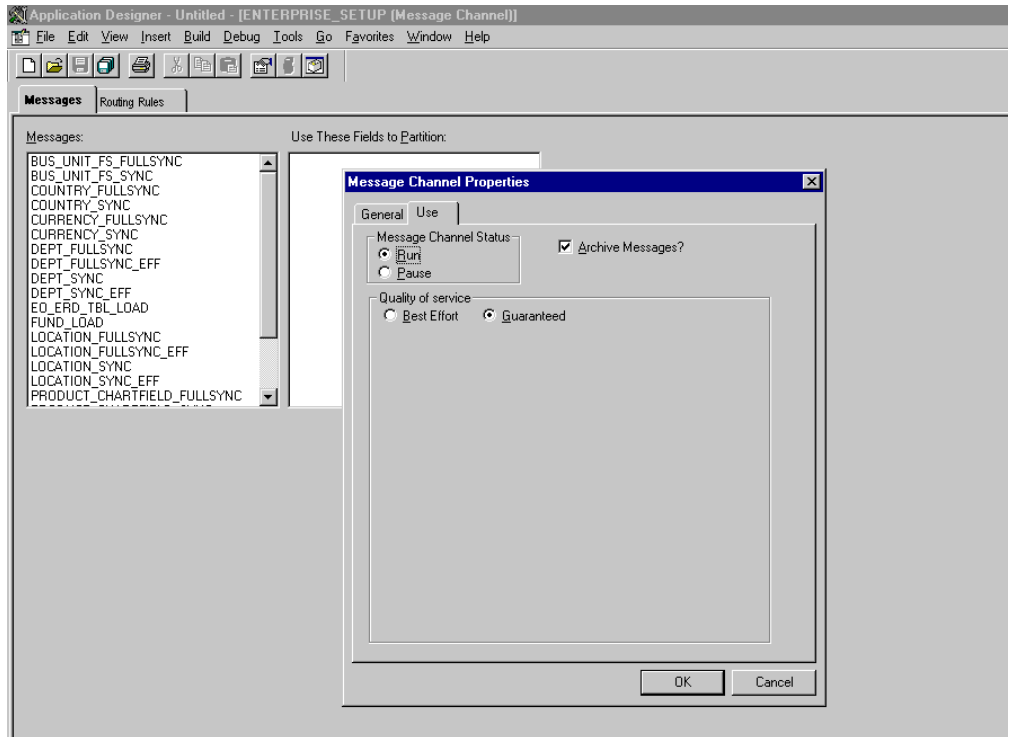
- a. Select the *Use* tab.
- b. Ensure the *Status* check box is selected, which indicates that the message is active.
- c. From the Message Channel drop-down list, select *ENTERPRISE_SETUP*.
- d. From the Default Version drop-down list, select *VERSION_1* (messages can have multiple versions).
5. Click *OK*.
6. Save the message.

Procedure How to Configure the Message Channel

To configure the Message Channel:

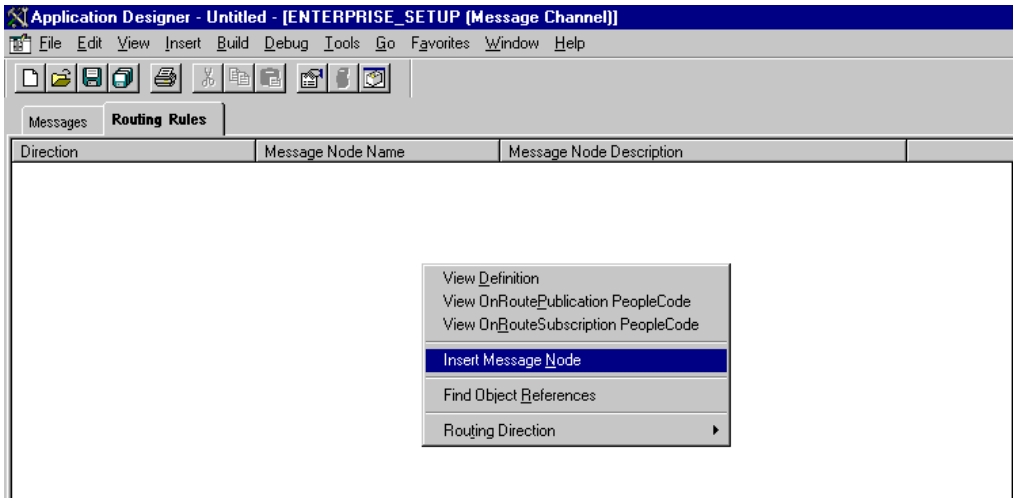
1. Open the *ENTERPRISE_SETUP* Message Channel.
2. Right-click *ENTERPRISE_SETUP* and select *Properties*.

The Message Channel Properties dialog box opens.



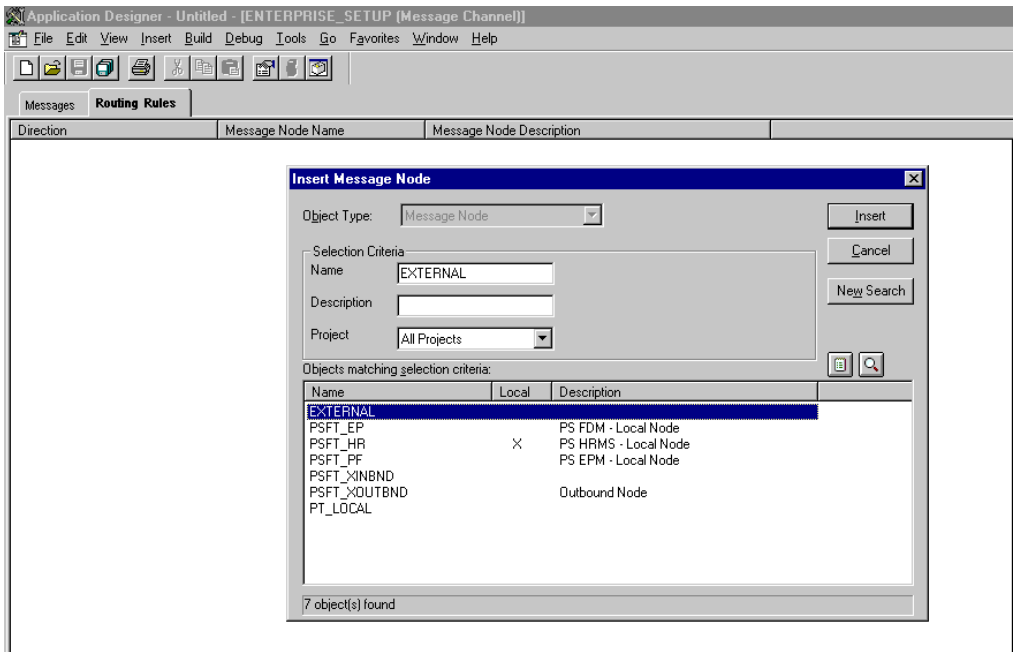
- a. Select the *Use* tab.
 - b. Ensure that Message Channel status is set to *Run*.
 - c. Click *OK*.
3. From the left pane, select the *Routing Rules* tab.

The pane is blank.



4. Right-click the pane and select *Insert Message Node*.

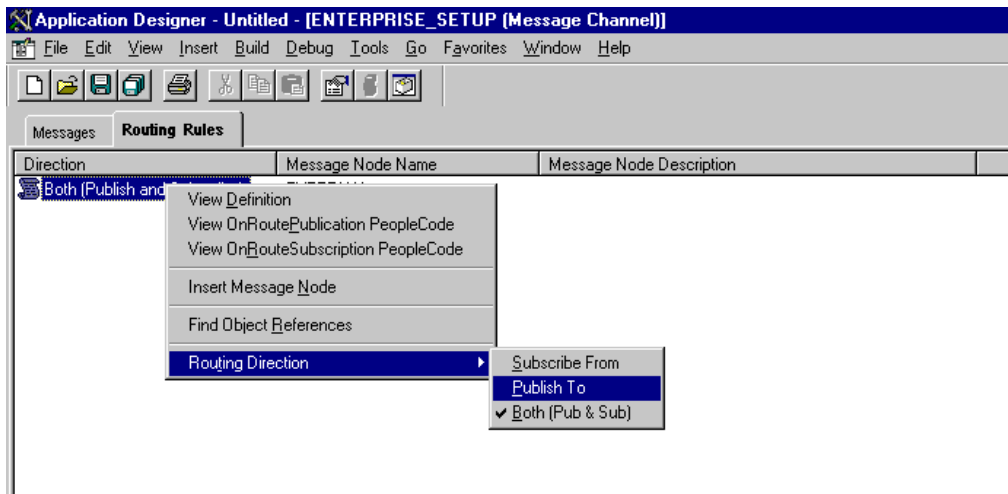
The Insert Message Node dialog box opens.



- a. Select the message node, for example, EXTERNAL, that you created in *How to Create and Configure a New Message Node* on page C-14.

- b. Click *Insert*.
5. Click *Cancel*.

Information appears on the Routing Rules tab.



- a. Right-click the message node and point to Routing Direction.
- b. From the Routing Direction menu, select *Publish To*.
6. Save the Message Channel, and if you require it, place it in your Project.

You have finished configuring the Message Channel.

Procedure How to Configure the Simple File Handler in the Gateway

To configure the Simple File Handler in the Gateway:

1. In a Web browser, launch the PeopleSoft 8.1 configuration servlet interface (also known as the server gateway) by entering the following URL:

`machine-name:port/servlets/gateway.administration`

where:

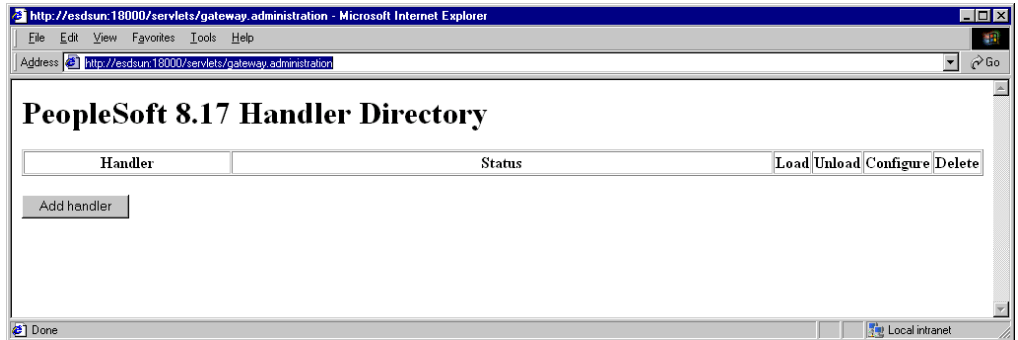
`machine-name`

Is the name of the application server where PeopleSoft is hosted.

`port`

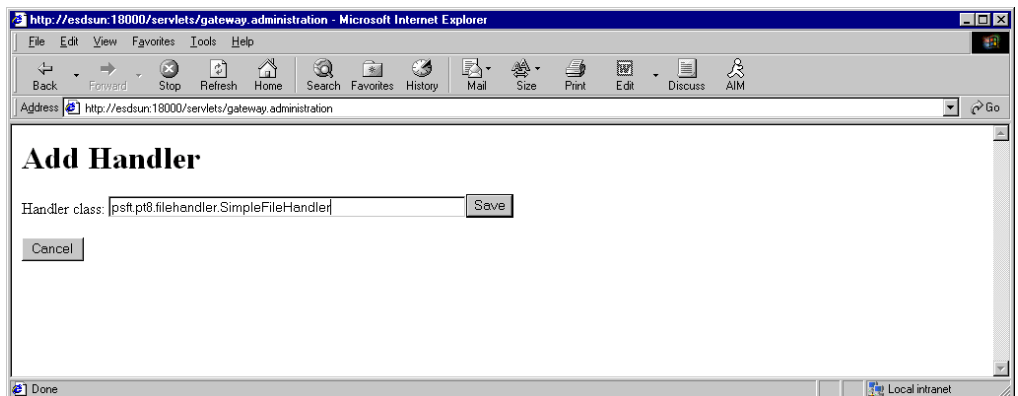
Is the port number on which the application server is listening.

The Handler Directory window opens.



2. Click *Add handler*.

The Add Handler window opens.



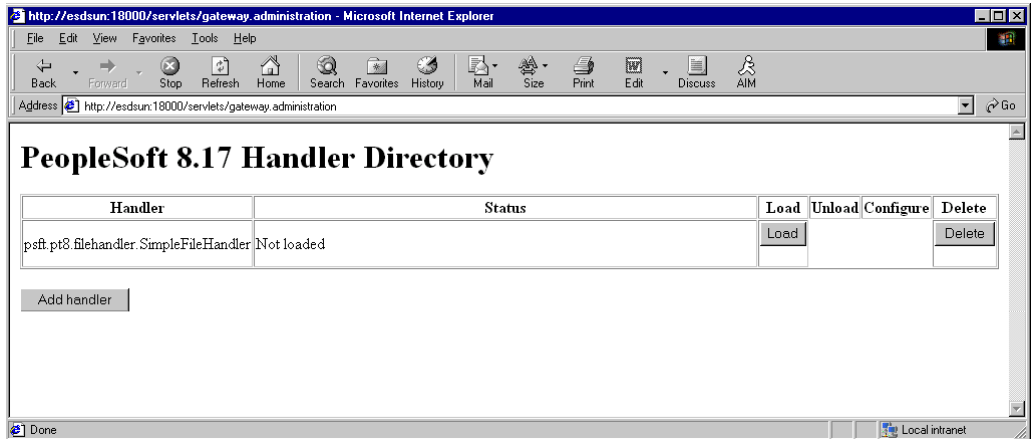
3. Type the full name of the Simple File Handler class:

`psft.pt8.filehandler.SimpleFileHandler`

Note: The name is case-sensitive.

4. Click *Save*.

The Handler Directory window opens.

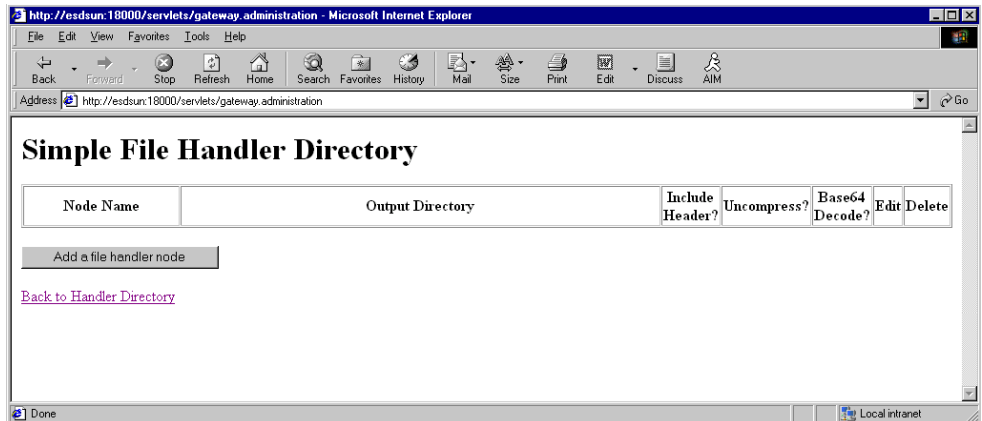


5. To load the handler, click *Load*.

After the handler loads, "Loaded successfully" appears in the Status column.

6. Click *Configure*.

The Simple File Handler Directory window opens.



7. Click *Add a file handler node*.

The Add File Handler window opens.

Node Name	Output Directory	Include Header?	Base64 Decode?	Uncompress?
EXTERNAL	/tmp	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Save

Cancel

- a. In the Node Name field, type the name of the Message Node, for example, EXTERNAL, that you created in *How to Create and Configure a New Message Node* on page C-14.
 - b. Select an output directory appropriate for your server environment.
The example illustrated in the previous figure runs under UNIX. The default directory under Windows NT is c:\\temp\\file. (The double slashes may not be required for your environment.)
 - c. Select the desired output file properties.
- 8.** Click *Save*.

You have finished configuring the Simple File Handler.

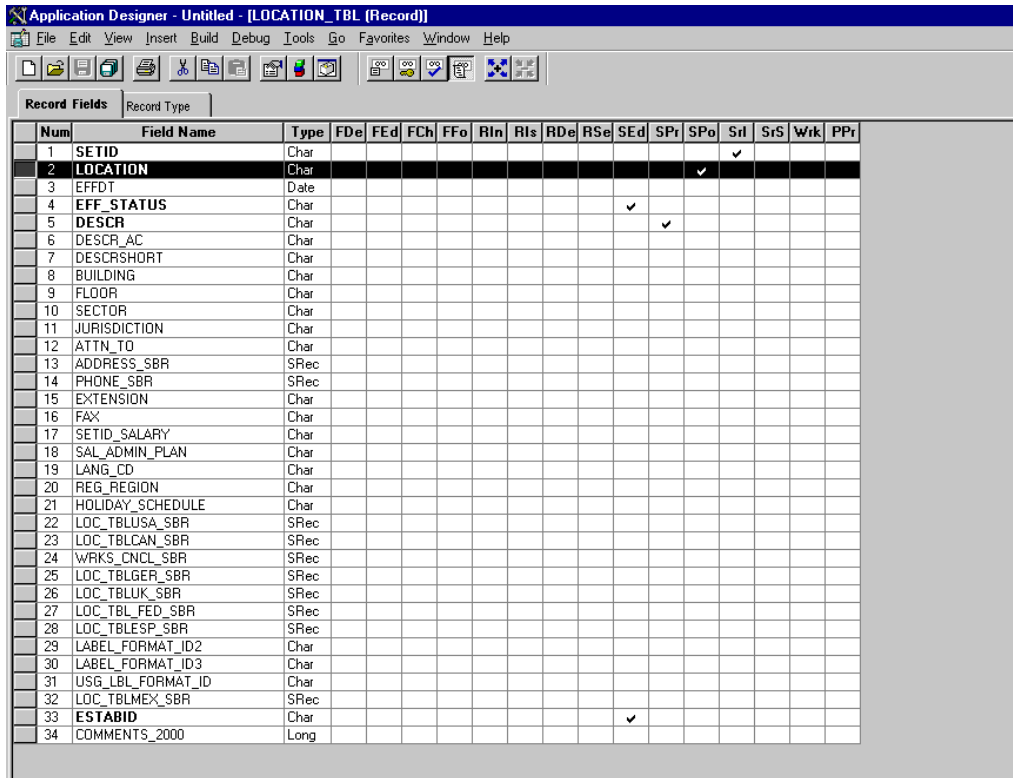
Viewing the PeopleCode for a Message

Messages are initiated by the PeopleCode that is attached to a record. Usually, this record is one of the records associated with the message itself.

Procedure How to View the PeopleCode for a Message

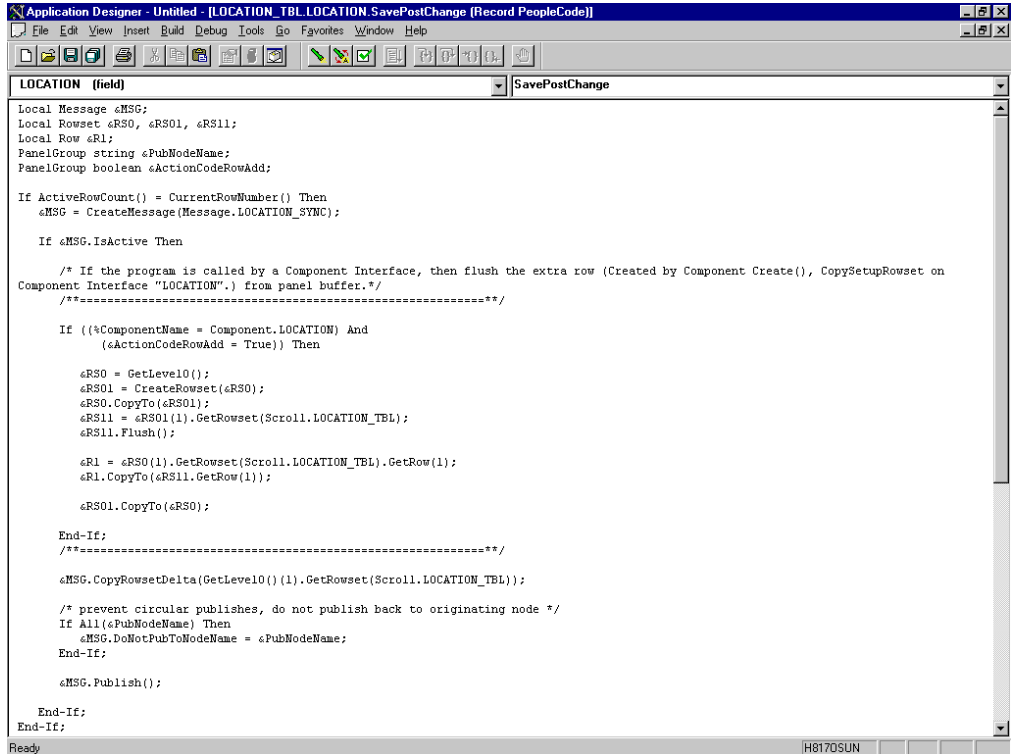
To view the PeopleCode for a message:

1. Open Application Designer.



2. On the Record Fields tab, select the *LOCATION_TBL* record.
3. Select the PeopleCode display option.
4. Select the *Save Post Change (SPo)* box for the *LOCATION* field.

The following window displays the PeopleCode that initiates a LOCATION_SYNC message.



For more information about PeopleCode, consult your PeopleSoft Online Library.

You have finished viewing the PeopleCode for a message. You can now test Integration Broker (in PeopleSoft 8.4) or Application Messaging (in PeopleSoft 8.1).

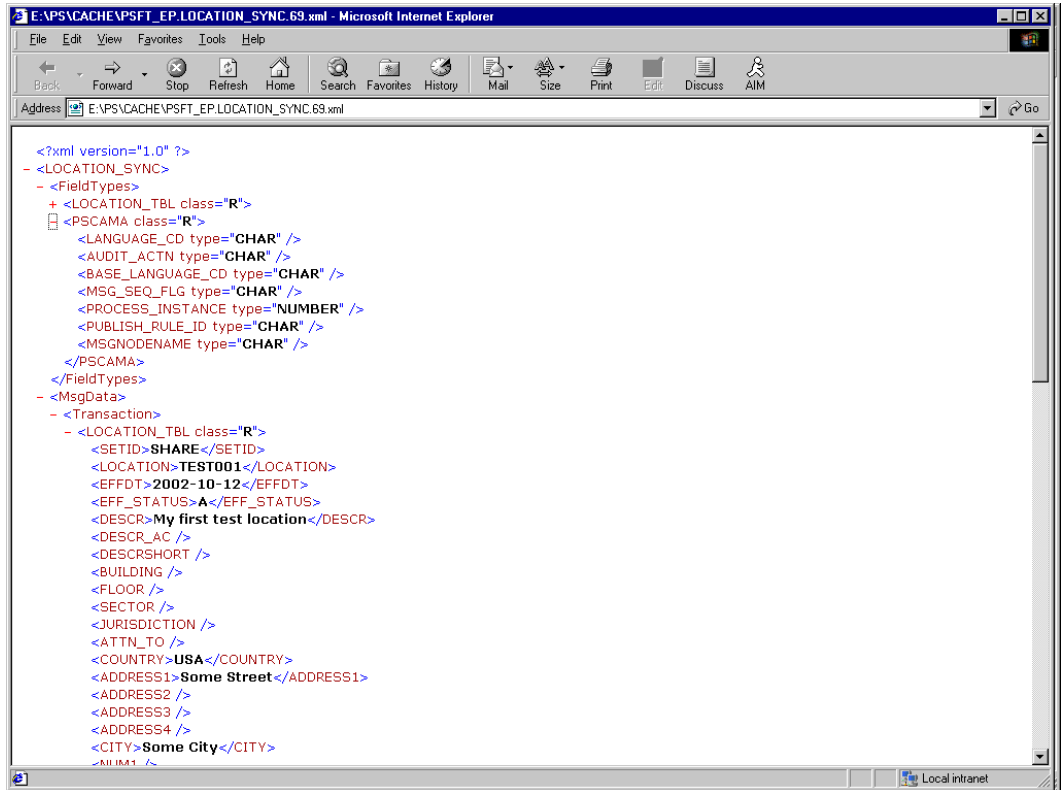
Testing the Integration Broker

To test the Integration Broker by generating a message, you can navigate to the Location Transaction window and add, update, or delete a location entry in your application. Depending on your application, the way you navigate varies.

The following example illustrates a Financials 8.4 application where a new location with a SetID of SHARE and a Location Code of TEST001 was added.

The screenshot shows a web browser window titled "Location - Microsoft Internet Explorer" displaying the PeopleSoft "Location Definition" form. The browser's address bar shows the URL: `http://isdsv14.ibi.com/ps/ps/EMPLOYEE/ERP/c/DEFINE_GENERAL_OPTIONS.LOCATION_TBL.GBL`. The PeopleSoft logo is in the top left corner. A search bar is in the top right. Below the logo is a "Menu" sidebar with a tree view containing items like "Location", "Country", "Country Statistics", "Division Area Code", "Fax Location", "Location", "Region Codes", "Region Type Codes", "State", "Market Rates", "Notes", "Position Accounting", "Process Partition ID", "Sales and Use Tax", "Shipping and Receiving", "Team Members", "Units of Measure", "User Preferences", "VAT and Intrastat", "Workflow", "Xml Schema", "Product Related", "Utilities", "Define Integration Rules", "FDM", "Government Resource", "Directory", "Background Processes", "Worklist", "Tree Manager", "Reporting Tools", "PeopleTools", "Change My Password", and "My Personalizations". The main content area has tabs for "Location Definition" and "Location Detail". The "Location Definition" tab is active, showing a form for "SetID: SHARE Location Code: TEST001". The form includes fields for "Eff Date" (10/12/2002), "Active" status, "Descr" (My first test location), "Country" (USA/United States), "Prefix", "Address 1" (Some Street), "Phone", "Address 2", "Ext", "Address 3", "Fax", "City" (Some City), "In City Limit" checkbox, "County", "Postal", "State" (NY), "Jurisdiction", "Building #", "Floor #", and "Sector". At the bottom of the form are buttons for "Save", "Notify", "Add", "Update/Display", "Include History", and "Correct History". A status bar at the very bottom indicates "Internet".

The following figure shows a portion of the XML output.



Note: The name of the file is PSFT_EP.LOCATION_SYNC.69.xml, which is the concatenation of PSFT_EP (the local Publishing Node), the name of the message, and the number of the Publication ID.

If you cannot send a message successfully, PeopleSoft provides a set of tools for monitoring the progress of your messages. In release 8.1, you use a tool called the Application Messaging Monitor. In release 8.4, you use the Monitor Menu in the Integration Broker.

For a complete description on how to isolate and resolve problems with your messaging environment, consult your PeopleSoft Online Library. If you are still unable to send your XML file, the PeopleSoft Customer Connection can help solve your problem.

Using Outbound Synchronous Messages

Starting with PeopleTools 8.4, you can send outbound synchronous messages. From a high-level point of view, the primary difference between outbound synchronous and asynchronous is that with outbound asynchronous, the transaction is completed whether or not the message is actually sent or received.

For synchronous outbound messages:

- The transaction must wait for a response from the external system before continuing.
- The transaction must process the response message.
- The external system must ensure that the response message is correctly formatted.

The iWay Adapter for PeopleSoft 8 can work with PeopleSoft outbound synchronous messages. Outbound synchronous messages involve additional configuration steps, both within PeopleSoft and in BEA WebLogic Server. This topic briefly describes the configuration requirements within PeopleSoft.

Notes: The instructions in this topic build upon the instructions for outbound asynchronous messages. It is strongly recommended that you familiarize yourself with outbound asynchronous messaging before attempting outbound synchronous. For more information on outbound asynchronous messages, see *Configuring Integration Broker in PeopleSoft 8.4* on page C-3.

Ensure that both outbound and inbound messages are created and active. PeopleSoft provides template examples called IB_INST_VER_SYNC_MSG and IB_INST_VER_RESP_MSG. For information on examining these messages, see *How to Ensure the Message Is Active and Is Routed Correctly* on page C-3.

Configuring Outbound Synchronous Messages

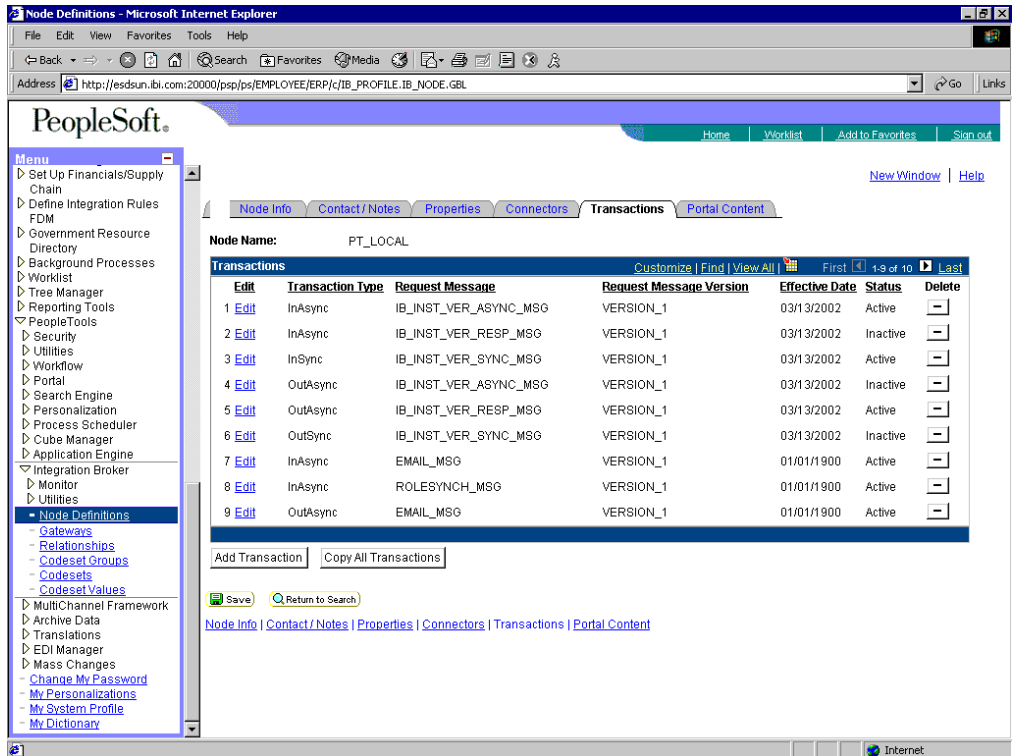
You can use an existing node, or you can create a new node to configure outbound synchronous messages. For information on creating and configuring a node, see *How to Create and Configure a New Gateway Node* on page C-9. In either case, you must set up your outbound synchronous transaction.

The following example uses a node and transaction delivered by PeopleSoft. However, this example is for illustrative purposes only and does not actually work as delivered without additional steps. As of Financials release 8.42, there are no preconfigured outbound synchronous transactions that you can use for testing purposes.

Example **Configuring an Outbound Synchronous Message**

1. Navigate to the *Node Definitions* page and open up the *PT_LOCAL* node.
2. Click the *Transactions* tab.

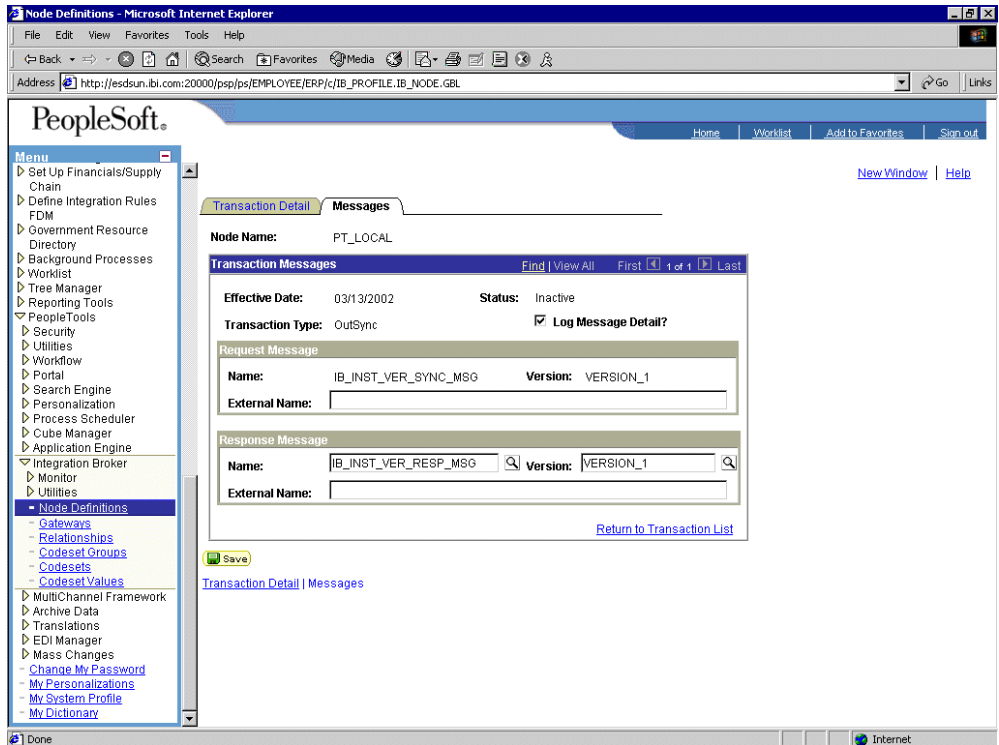
The Transactions pane opens.



One outbound synchronous message, IB_INST_VER_SYNC_MSG, appears in the Transaction Type list.

3. Click the *Edit* link in the IB_INST_VER_SYNC_MSG row.

The following pane opens.



4. Click the *Messages* tab.

Both request and response messages appear. The target system must ensure that the response message follows the format of the request message. As the target system is your BEA WebLogic Server, you must transform the XML that is sent and returned from your final destination.

Note: You must use the PeopleSoft-supplied HTTP target connector when you are working with synchronous outbound messages. You cannot use the TCPIP84TARGET connector for outbound synchronous messages.

Viewing the PeopleCode for a Synchronous Message

The sample PeopleCode in the following example is for a synchronous outbound message. It differs from asynchronous outbound in that it must handle a response message.

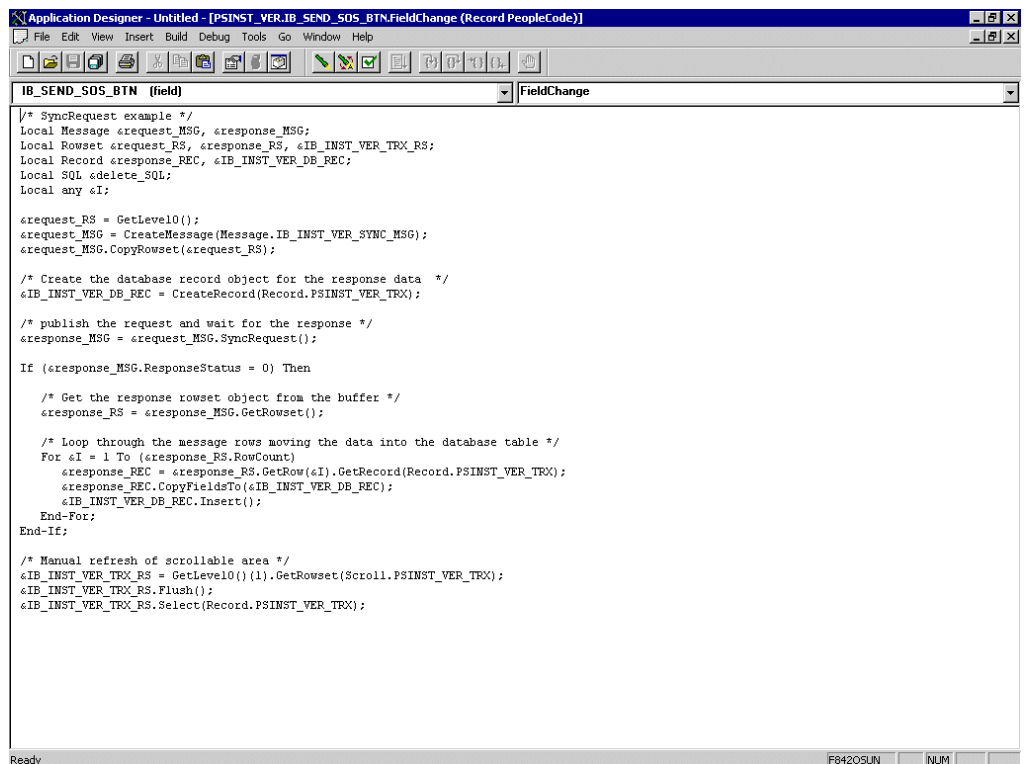
Example Viewing the PeopleCode for a Financials Synchronous Outbound Message

The following sample code is supplied with the Financials application and is associated with the two messages IB_INST_VER_SYNC_MSG and IB_INST_VER_RESP_MSG.

To view the code:

1. From Application Explorer, open the *PSINST_VER* record.
2. Select the *PeopleCode* display option.
3. Select the *Field Change (FCh)* box for the IB_SEND_SOS_BTN field.

The following window opens.



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