

Oracle® Application Server InterConnect

Adapter for PeopleSoft 8 Installation and User's Guide

10g (9.0.4)

Part No. B10419-01

August 2003

Oracle Application Server InterConnect Adapter for PeopleSoft 8 Installation and User's Guide, 10g (9.0.4)

Part No. B10419-01

Copyright © 2002, 2003 Oracle Corporation. All rights reserved.

The Programs (which include both the software and documentation) contain proprietary information of Oracle Corporation; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent and other intellectual and industrial property laws. Reverse engineering, disassembly or decompilation of the Programs, except to the extent required to obtain interoperability with other independently created software or as specified by law, is prohibited.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. Oracle Corporation does not warrant that this document is error-free. Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Oracle Corporation.

If the Programs are delivered to the U.S. Government or anyone licensing or using the programs on behalf of the U.S. Government, the following notice is applicable:

Restricted Rights Notice Programs delivered subject to the DOD FAR Supplement are "commercial computer software" and use, duplication, and disclosure of the Programs, including documentation, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement. Otherwise, Programs delivered subject to the Federal Acquisition Regulations are "restricted computer software" and use, duplication, and disclosure of the Programs shall be subject to the restrictions in FAR 52.227-19, Commercial Computer Software - Restricted Rights (June, 1987). Oracle Corporation, 500 Oracle Parkway, Redwood City, CA 94065.

The Programs are not intended for use in any nuclear, aviation, mass transit, medical, or other inherently dangerous applications. It shall be the licensee's responsibility to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of such applications if the Programs are used for such purposes, and Oracle Corporation disclaims liability for any damages caused by such use of the Programs.

Oracle is a registered trademark, and Oracle*MetaLink*, Oracle Store, Oracle*9i*, Oracle*9iAS Discoverer*, SQL*Plus, and PL/SQL are trademarks or registered trademarks of Oracle Corporation. Other names may be trademarks of their respective owners.

Contents

Send Us Your Comments	vii
Preface.....	ix
Intended Audience	x
Documentation Accessibility	x
Organization.....	x
Related Documentation	xi
Conventions.....	xii
1 Introduction	
System Requirements	1-2
PeopleSoft Component Interfaces.....	1-2
Supported PeopleSoft Version	1-2
Supported Operating Systems	1-3
2 Installation and Configuration	
Installing the PeopleSoft 8 Adapter.....	2-2
Preinstallation Tasks	2-2
Installation Tasks	2-2
Configuring the PeopleSoft 8 Adapter	2-5
Using the Application Parameter.....	2-6
Adapter.ini Initialization Parameter File Settings	2-6
Hub.ini Parameters	2-7
Real Application Clusters-specific Hub.ini Parameters	2-7

Agent Connection Parameters	2-8
PeopleSoft 8 Adapter Parameters	2-15
Starting the PeopleSoft 8 Adapter	2-16
Stopping the PeopleSoft 8 Adapter	2-17

3 Supported PeopleSoft 8 Component Interfaces

Working with OracleAS InterConnect and PeopleSoft Component Interfaces	3-2
Working with Component Interface	3-2
Exception Fields	3-2
Custom Component Interface.....	3-3
Creating an Implemented Procedure.....	3-4
Importing Attributes	3-8
Creating a Subscribed Event.....	3-10

4 Component Interface Methods

OracleAS InterConnect Component Interface Standard Methods	4-2
Create.....	4-2
Find	4-3
Get	4-4
Update	4-5
Bind.....	4-6
OracleAS InterConnect Component Interface User-Defined Methods.....	4-7
Basic Data Types.....	4-8

5 Importing the Custom Component Interface

Importing the Custom Component Interface	5-2
Creating the Component Interface	5-2
Setting Security	5-3

6 Using the Configuration Editor

Configuration Editor.....	6-2
PeopleSoft Login	6-4

Data Formats 6-6

Index

Send Us Your Comments

Oracle Application Server InterConnect Adapter for PeopleSoft 8 Installation and User's Guide, 10g (9.0.4)

Part No. B10419-01

Oracle Corporation welcomes your comments and suggestions on the quality and usefulness of this document. Your input is an important part of the information used for revision.

- Did you find any errors?
- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most?

If you find any errors or have any other suggestions for improvement, please indicate the document title and part number, and the chapter, section, and page number (if available). You can send comments to us in the following ways:

- Electronic mail: appserverdocs_us@oracle.com
- FAX: 650-506-7365 Attn: Oracle Application Server Documentation Manager
- Postal service:
Oracle Corporation
Oracle Application Server Documentation
500 Oracle Parkway, M/S 10p6
Redwood Shores, CA 94065
USA

If you would like a reply, please give your name, address, telephone number, and (optionally) electronic mail address.

If you have problems with the software, please contact your local Oracle Support Services.

Preface

This preface contains the following topics:

- [Intended Audience](#)
- [Documentation Accessibility](#)
- [Organization](#)
- [Related Documentation](#)
- [Conventions](#)

Intended Audience

This guide is intended for those who perform the following tasks:

- Install applications
- Maintain applications

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible, with good usability, to the disabled community. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Standards will continue to evolve over time, and Oracle Corporation is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For additional information, visit the Oracle Accessibility Program Web site at

<http://www.oracle.com/accessibility/>

Accessibility of Code Examples in Documentation JAWS, a Windows screen reader, may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, JAWS may not always read a line of text that consists solely of a bracket or brace.

Accessibility of Links to External Web Sites in Documentation This documentation may contain links to Web sites of other companies or organizations that Oracle Corporation does not own or control. Oracle Corporation neither evaluates nor makes any representations regarding the accessibility of these Web sites.

Organization

This document contains:

Chapter 1, "Introduction"

This chapter describes the PeopleSoft 8 adapter and the hardware and software requirements.

Chapter 2, "Installation and Configuration"

This chapter describes installation and configuration of the PeopleSoft 8 adapter

Chapter 3, "Supported PeopleSoft 8 Component Interfaces"

This chapter provides PeopleSoft-specific information for accessing PeopleSoft Component Interfaces using Oracle Application Server InterConnect (OracleAS InterConnect).

Chapter 4, "Component Interface Methods"

This chapter provides information on OracleAS InterConnect PeopleSoft 8 adapter's Component Interface standard and user-defined methods.

Chapter 5, "Importing the Custom Component Interface"

This chapter provides instructions for adding a custom Component Interface into a PeopleSoft server.

Chapter 6, "Using the Configuration Editor"

This chapter provides runtime concepts for the PeopleSoft 8 adapter.

Related Documentation

For more information, see these Oracle resources:

- *Oracle Application Server InterConnect User's Guide*
- *Oracle Application Server InterConnect Installation Guide*
- *Oracle Application Server InterConnect Adapter Configuration Editor User's Guide*

In North America, printed documentation is available for sale in the Oracle Store at

<http://oraclestore.oracle.com/>

Customers in Europe, the Middle East, and Africa (EMEA) can purchase documentation from

<http://www.oraclebookshop.com/>

Other customers can contact their Oracle representative to purchase printed documentation.

To download free release notes, installation documentation, white papers, or other collateral, please visit the Oracle Technology Network (OTN). You must register online before using OTN; registration is free and can be done at

<http://otn.oracle.com/admin/account/membership.html>

If you already have a username and password for OTN, then you can go directly to the documentation section of the OTN Web site at

<http://otn.oracle.com/docs/index.htm>

Conventions

This section describes the conventions used in the text and code examples of this documentation set. It describes:

- [Conventions in Text](#)
- [Conventions in Code Examples](#)
- [Conventions for Microsoft Windows Operating Systems](#)

Conventions in Text

We use various conventions in text to help you more quickly identify special terms. The following table describes those conventions and provides examples of their use.

Convention	Meaning	Example
Bold	Bold typeface indicates terms that are defined in the text or terms that appear in a glossary, or both.	When you specify this clause, you create an index-organized table .
<i>Italics</i>	Italic typeface indicates book titles or emphasis.	<i>Oracle9i Database Concepts</i> Ensure that the recovery catalog and target database do <i>not</i> reside on the same disk.
UPPERCASE monospace (fixed-width) font	Uppercase monospace typeface indicates elements supplied by the system. Such elements include parameters, privileges, datatypes, RMAN keywords, SQL keywords, SQL*Plus or utility commands, packages and methods, as well as system-supplied column names, database objects and structures, usernames, and roles.	You can specify this clause only for a NUMBER column. You can back up the database by using the BACKUP command. Query the TABLE_NAME column in the USER_TABLES data dictionary view. Use the DBMS_STATS.GENERATE_STATS procedure.
lowercase monospace (fixed-width) font	Lowercase monospace typeface indicates executables, filenames, directory names, and sample user-supplied elements. Such elements include computer and database names, net service names, and connect identifiers, as well as user-supplied database objects and structures, column names, packages and classes, usernames and roles, program units, and parameter values. Note: Some programmatic elements use a mixture of UPPERCASE and lowercase. Enter these elements as shown.	Enter sqlplus to open SQL*Plus. The password is specified in the orapwd file. Back up the datafiles and control files in the /disk1/oracle/dbs directory. The department_id, department_name, and location_id columns are in the hr.departments table. Set the QUERY_REWRITE_ENABLED initialization parameter to true. Connect as oe user. The JReplUtil class implements these methods.
<i>lowercase italic monospace (fixed-width) font</i>	Lowercase italic monospace font represents placeholders or variables.	You can specify the <i>parallel_clause</i> . Run <i>Uold_release</i> .SQL where <i>old_release</i> refers to the release you installed prior to upgrading.

Conventions in Code Examples

Code examples illustrate SQL, PL/SQL, SQL*Plus, or other command-line statements. They are displayed in a monospace (fixed-width) font and separated from normal text as shown in this example:

```
SELECT username FROM dba_users WHERE username = 'MIGRATE';
```

The following table describes typographic conventions used in code examples and provides examples of their use.

Convention	Meaning	Example
[]	Brackets enclose one or more optional items. Do not enter the brackets.	DECIMAL (<i>digits</i> [, <i>precision</i>])
{ }	Braces enclose two or more items, one of which is required. Do not enter the braces.	{ENABLE DISABLE}
	A vertical bar represents a choice of two or more options within brackets or braces. Enter one of the options. Do not enter the vertical bar.	{ENABLE DISABLE} [COMPRESS NOCOMPRESS]
...	Horizontal ellipsis points indicate either: <ul style="list-style-type: none">■ That we have omitted parts of the code that are not directly related to the example■ That you can repeat a portion of the code	CREATE TABLE ... AS <i>subquery</i> ; SELECT <i>col1</i> , <i>col2</i> , ... , <i>coln</i> FROM employees;
.	Vertical ellipsis points indicate that we have omitted several lines of code not directly related to the example.	
Other notation	You must enter symbols other than brackets, braces, vertical bars, and ellipsis points as shown.	acctbal NUMBER(11,2); acct CONSTANT NUMBER(4) := 3;
<i>Italics</i>	Italicized text indicates placeholders or variables for which you must supply particular values.	CONNECT SYSTEM/ <i>system_password</i> DB_NAME = <i>database_name</i>

Convention	Meaning	Example
UPPERCASE	Uppercase typeface indicates elements supplied by the system. We show these terms in uppercase in order to distinguish them from terms you define. Unless terms appear in brackets, enter them in the order and with the spelling shown. However, because these terms are not case sensitive, you can enter them in lowercase.	<pre>SELECT last_name, employee_id FROM employees; SELECT * FROM USER_TABLES; DROP TABLE hr.employees;</pre>
lowercase	<p>Lowercase typeface indicates programmatic elements that you supply. For example, lowercase indicates names of tables, columns, or files.</p> <p>Note: Some programmatic elements use a mixture of UPPERCASE and lowercase. Enter these elements as shown.</p>	<pre>SELECT last_name, employee_id FROM employees; sqlplus hr/hr CREATE USER mjones IDENTIFIED BY ty3MU9;</pre>

Conventions for Microsoft Windows Operating Systems

The following table describes conventions for Microsoft Windows operating systems and provides examples of their use.

Convention	Meaning	Example
Choose Start >	How to start a program.	To start the Oracle Database Configuration Assistant, choose Start > Programs > Oracle - HOME_NAME > Configuration and Migration Tools > Database Configuration Assistant.
File and directory names	File and directory names are not case sensitive. The following special characters are not allowed: left angle bracket (<), right angle bracket (>), colon (:), double quotation marks ("), slash (/), pipe (), and dash (-). The special character backslash (\) is treated as an element separator, even when it appears in quotes. If the file name begins with \\, then Windows assumes it uses the Universal Naming Convention.	<pre>c:\winnt "\"system32 is the same as C:\WINNT\SYSTEM32</pre>

Convention	Meaning	Example
C:\>	<p>Represents the Windows command prompt of the current hard disk drive. The escape character in a command prompt is the caret (^). Your prompt reflects the subdirectory in which you are working. Referred to as the <i>command prompt</i> in this manual.</p> <p>The backslash (\) special character is sometimes required as an escape character for the double quotation mark (") special character at the Windows command prompt. Parentheses and the single quotation mark (') do not require an escape character. Refer to your Windows operating system documentation for more information on escape and special characters.</p>	<p>C:\oracle\oradata></p> <p>C:\>exp scott/tiger TABLES=emp QUERY=\ "WHERE job='SALESMAN' and sal<1600\"</p> <p>C:\>imp SYSTEM/<i>password</i> FROMUSER=scott TABLES=(emp, dept)</p>
HOME_NAME	<p>Represents the Oracle home name. The home name can be up to 16 alphanumeric characters. The only special character allowed in the home name is the underscore.</p>	<p>C:\> net start OracleHOME_ NAMEtnsListener</p>

Convention	Meaning	Example
<i>ORACLE_HOME</i> and <i>ORACLE_BASE</i>	<p>In releases prior to Oracle8i release 8.1.3, when you installed Oracle components, all subdirectories were located under a top level <i>ORACLE_HOME</i> directory that by default used one of the following names:</p> <ul style="list-style-type: none"> ■ C:\orawin95 for Windows 95 ■ C:\orawin98 for Windows 98 <p>This release complies with Optimal Flexible Architecture (OFA) guidelines. All subdirectories are not under a top level <i>ORACLE_HOME</i> directory. There is a top level directory called <i>ORACLE_BASE</i> that by default is C:\oracle. If you install Oracle9i release 1 (9.0.1) on a computer with no other Oracle software installed, then the default setting for the first Oracle home directory is C:\oracle\ora90. The Oracle home directory is located directly under <i>ORACLE_BASE</i>.</p> <p>All directory path examples in this guide follow OFA conventions.</p>	Go to the <i>ORACLE_BASE\ORACLE_HOME\rdms\admin</i> directory.

Introduction

This document describes how to use Oracle Application Server InterConnect (OracleAS InterConnect) Adapter for PeopleSoft 8 (PeopleSoft 8 adapter).

This chapter discusses the following topics:

- [System Requirements](#)
- [PeopleSoft Component Interfaces](#)
- [Supported PeopleSoft Version](#)
- [Supported Operating Systems](#)

System Requirements

The PeopleSoft 8 adapter has the following system requirements:

- `psjoe.jar`—To use Component Interfaces, you must have access to the PeopleSoft's Component Interface file, `psjoe.jar`, located in the `<PeopleSoft_Installation_Directory>\web\PSJOA\` directory.
 - For design time browsing of Component Interfaces, this file must be present in the `CLASSPATH` variable defined in the `istudio.bat` file.
 - For runtime use of Component Interfaces, this file must be present in the `service_classpath` variable defined in the `adapter.ini` file for Windows platforms or the `classpath` in the start script for Unix platforms.
- Before using Component Interfaces, you must import a custom Component Interface.

See Also: ["Importing the Custom Component Interface"](#) on page 5-1

PeopleSoft Component Interfaces

PeopleSoft Component Interfaces contain tables and data formats for specific tasks. The PeopleSoft software is used for tasks, such as, manufacturing, human resources, accounting, and supply chain management.

Supported PeopleSoft Version

The PeopleSoft 8 adapter connects to the PeopleSoft Component Interface, Version 8.17.02.

Note: OracleAS InterConnect can read data from the PeopleSoft server correctly. However, creating and updating PeopleSoft data containing properties with collections will fail.

Supported Operating Systems

[Table 1-1](#) lists the supported operating systems for the PeopleSoft 8 adapter.

Table 1-1 Operating System Requirements

Operating System	Version
Windows NT	Version 4.0 with service pack 6 or above
Windows 2000	With service pack 1 or above
HP-UX	11.6 (64 bit)
Sun SPARC Solaris	8 (32 bit)

Installation and Configuration

This chapter describes how to install and configure the PeopleSoft 8 adapter. It contains the following topics:

- [Installing the PeopleSoft 8 Adapter](#)
- [Configuring the PeopleSoft 8 Adapter](#)
- [Starting the PeopleSoft 8 Adapter](#)
- [Stopping the PeopleSoft 8 Adapter](#)

Installing the PeopleSoft 8 Adapter

This section contains these topics:

- [Preinstallation Tasks](#)
- [Installation Tasks](#)

Preinstallation Tasks

The PeopleSoft 8 adapter must be installed in one of the following Oracle homes:

- An existing OracleAS InterConnect Oracle home for this release
- A new Oracle home (the installer creates this for you)

Consult the following guides before proceeding with the PeopleSoft 8 adapter installation:

- *Oracle Application Server InterConnect Installation Guide*, which includes information on:
 - Oracle Universal Installer startup
 - CD-ROM mounting
 - OracleAS InterConnect installation
- *Oracle Application Server InterConnect User's Guide*, which includes information on:
 - OracleAS InterConnect software, hardware, and system requirements

Note: OracleAS InterConnect Hub is installable through the OracleAS InterConnect Hub installation type. You must install the OracleAS InterConnect Hub before proceeding with the PeopleSoft 8 adapter installation.

Installation Tasks

To install the PeopleSoft 8 adapter:

1. On the Available Product Components page of the OracleAS InterConnect installation, select PeopleSoft 8 adapter, then select **Next**.

Consider the following scenarios:

- If installing the PeopleSoft 8 adapter in an independent Oracle home, make sure that the OracleAS InterConnect Hub has been installed, not necessarily in the same Oracle home. Continue to step 2.
- If installing the PeopleSoft 8 adapter in an existing Oracle home, make sure that it is a home directory to one of the OracleAS InterConnect components. Continue to step 3.

Note: The hub database information, such as the SID, host, port, and username/password from the Hub installation, is needed for step 2.

2. If installing OracleAS InterConnect for the first time on this machine, complete the following steps to enter the hub database information:
 - a. On the Welcome page, select **Next**. The Database Configuration page displays. Enter information in the following fields:
 - * Host Name—The host name of the machine where the hub database is installed.
 - * Port Number—The TNS listener port for the hub database.
 - * Database SID—The SID for the hub database.
 - b. Click **Next**. The Database User Configuration page displays. Enter information in the following fields:
 - * User Name—The hub database user name. Make sure the OracleAS InterConnect Hub is installed. If the Hub is not installed, complete the installation and note the user name and password.
 - * Password—The password for the hub database user.
3. Click **Next**. The Adapter Configuration page displays. Enter the application to be defined or already defined in iStudio in the Application Name field. White spaces or blank spaces are not permitted. The default value is myPSFT8App.

4. Click **Next**. The installation page that displays next depends on the operating system:

On...	Then Go to Step...
UNIX	5
Windows	6

5. Enter information in the following fields on the Specify PeopleSoft and Tuxedo Install Locations page:
 - PeopleSoft Installation Path—The root directory for the PeopleSoft installation. The default is:
`/opt/PeopleSoft`
 - Tuxedo Installation Path—The root directory for the Tuxedo installation. The default is:
`/opt/tuxedo`
6. Enter the client binaries location on the Specify PeopleSoft Client Binaries Location page.
7. Click **Next**. Complete the fields for any other components selected for installation, such as other adapters. When finished, the Summary page displays.
8. Click **Install** to install the PeopleSoft 8 adapter and other selected components. The PeopleSoft 8 adapter is installed in the following directory:

Platform	Directory
Windows	<code>%ORACLE_HOME%\oai\9.0.4\adapters\Application</code>
UNIX	<code>\$ORACLE_HOME/oai/9.0.4/adapters/Application</code>

9. Click **Exit** at the End of Installation page to exit the PeopleSoft 8 adapter installation.

Configuring the PeopleSoft 8 Adapter

Table 2–2, Table 2–3, and Table 2–4 describe executable files, configuration files, and directories. These files and directories are accessible from the directory shown in Table 2–1:

Table 2–1 PeopleSoft 8 Adapter Directory

On...	Go to...
UNIX	<code>\$ORACLE_HOME/oai/9.0.4/adapters/Application</code>
Windows	<code>%ORACLE_HOME%\oai\9.0.4\adapters\Application</code>

Table 2–2 Executable Files

File	Description
<code>start.bat</code> (Windows)	Takes no parameters, starts the adapter.
<code>start</code> (UNIX)	Takes no parameters, starts the adapter.
<code>stop.bat</code> (Windows)	Takes no parameters, stops the adapter.
<code>stop</code> (UNIX)	Takes no parameters, stops the adapter.
<code>ignoreErrors.bat</code> (Windows)	If an argument is specified, then the given error code will be ignored. If no argument is specified, then all error codes specified in the <code>ErrorCodes.ini</code> will be ignored.
<code>ignoreErrors</code> (UNIX)	If an argument is specified, then the given error code will be ignored. If no argument is specified, then all error codes specified in the <code>ErrorCodes.ini</code> will be ignored.

Table 2–3 Configuration Files

File	Description
<code>ErrorCodes.ini</code> (Windows and UNIX)	Contains one error code per line.
<code>adapter.ini</code> (Windows and UNIX)	Consists of all the initialization parameters which the adapter reads at startup. Refer to Appendix A for a typical <code>adapter.ini</code> file.

Table 2–4 Directories

File	Description
persistence	The messages are persisted in this directory. You should not edit the directory or its contents.
logs	The logging of adapter activity is done in subdirectories of the log directory. Each new run of the adapter creates a new subdirectory in which logging is done in an <code>oailog.txt</code> file.

Using the Application Parameter

Adapters do not have integration logic. The PeopleSoft 8 adapter has a generic transformation engine that processes metadata from the repository as runtime instructions to do transformations. The application defines for an adapter what its capabilities are. For example, it can define what messages it can publish, what messages it can subscribe to, and what are the transformations to perform. The application parameter allows the adapter to become smart in the context of the application to which it is connected. It allows the adapter to retrieve from the repository only that metadata that is relevant to the application. The application parameter must match the corresponding application that will be defined in iStudio under the Applications folder.

If you are using pre-packaged metadata, after importing the pre-packaged metadata into the repository, start up iStudio to find the corresponding application (under the Applications folder in iStudio) to use as the application for the adapter you are installing (unless the package you are using provides directions for what the application should be).

Adapter.ini Initialization Parameter File Settings

This section contains these topics:

- [Hub.ini Parameters](#)
- [Real Application Clusters-specific Hub.ini Parameters](#)
- [Agent Connection Parameters](#)
- [PeopleSoft 8 Adapter Parameters](#)

Hub.ini Parameters

The PeopleSoft 8 adapter connects to the hub database using parameters from the `hub.ini` file located in the hub directory. The following table lists the parameter name, a description for each parameter, the possible and default values, and an example.

Table 2–5 Hub.ini Parameters

Parameter	Description	Example
<code>hub_username</code>	The name of the hub database schema (or username). The default value is <code>oaihub904</code> .	<code>hub_username=oaihub904</code>
<code>hub_password</code>	The password for the hub database user. There is no default value. You input the <code>hub_password</code> value during installation.	<code>hub_password=manager</code>
<code>hub_host</code>	The name of the machine hosting the hub database. There is no default value. You input the <code>hub_host</code> value during installation.	<code>hub_host=mpmipc</code>
<code>hub_instance</code>	The system identification number (SID) of the hub database. There is no default value. You input the <code>hub_instance</code> value during installation.	<code>hub_instance=orcl</code>
<code>hub_port</code>	The transparent network services (TNS) listener port number for the HUB database instance. There is no default value. You input the <code>hub_port</code> value during installation.	<code>hub_port=1521</code>
<code>repository_name</code>	The valid name of the repository this adapter talks to. The default value is <code>InterConnectRepository</code> .	<code>repository_name=InterConnectRepository</code>

Real Application Clusters-specific Hub.ini Parameters

When a hub is installed on a Real Application Clusters (RAC) database, parameters listed in [Table 2–6](#) represent information on additional nodes used for connection and configuration. These parameters are added on top of the default parameters which represent the primary node. In [Table 2–6](#), `x` represent the node number, which varies between 2 and the number of nodes. For example, if the Real Application Clusters setup contains 4 nodes, `x` can take a value between 2 and 4.

Table 2–6 Real Application Cluster-specific hub.ini Parameters

Parameter	Description	Example
hub_num_nodes	Number of nodes in Real Application Clusters.	hub_num_nodes=4
hub_hostx	The host where the Real Application Clusters database is installed.	hub_host2=dsunram13
hub_instancex	The instance on the respective node.	hub_instance2=orcl2
hub_portx	The port on which the listener is listening.	hub_port2=1521

Agent Connection Parameters

The PeopleSoft 8 adapter connects to the spoke application using parameters from the `adapter.ini` file. The following table lists the parameter name, description, the possible and default values, and example for each parameter.

Table 2–7 Adapter.ini Parameters

Parameter	Description	Example
application	The name of the application this adapter connects to. This must match with the name specified in iStudio during creating of metadata. Any alphanumeric string can be used. There is no default value.	application=aqapp
partition	The partition this adapter handles as specified in iStudio. Any alphanumeric string is a possible value. There is no default value.	partition=germany
instance_number	To have multiple adapter instances for the given application with the given partition, each adapter should have a unique instance number. Possible values are any integer greater than 1. There is no default value.	instance_number=1
agent_log_level	The amount of logging. Possible values are: 0=errors only 1=status and errors 2=trace, status, and errors The default value is 1.	agent_log_level=2
agent_subscriber_name	The subscriber name used when this adapter registers its subscription. The possible value is a valid Oracle Advanced Queuing subscriber name. There is no default value.	agent_subscriber_name=aqapp

Table 2-7 Adapter.ini Parameters

Parameter	Description	Example
agent_message_selector	Specifies conditions for message selection when registering its subscription with the hub. The possible value is a valid Oracle Advanced Queuing message selector string. There is no default value.	agent_message_selector=recipient_list like '%aqapp,%'
agent_reply_subscriber_name	The subscriber name used when multiple adapter instances for the given application with the given partition are used. Optional if there is only one instance running. The possible value is application name (parameter: application) concatenated with instance number (parameter: instance_number). There is no default value.	If application=aqapp, instance_number=2, then, agent_reply_subscriber_name=aqapp2
agent_reply_message_selector	Used only if multiple adapter instances for the given application with the given partition. The possible value is a string built using concatenating application name (parameter: application) with instance number (parameter: instance_number). There is no default value.	If application=aqapp, instance_number=2, then agent_reply_message_selector=receipient_list like '%,aqapp2,%'
agent_tracking_enabled	Specifies if message tracking is enabled. Set to false to turn off all tracking of messages. Set to true to track messages with tracking fields set in iStudio. The default value is true.	agent_tracking_enabled=true
agent_throughput_measurement_enabled	Specifies if throughput measurement is enabled. Set to true to turn on all throughput measurements. The default value is true.	agent_throughput_measurement_enabled=true
agent_use_custom_hub_dtd	Specifies if a custom data type definition (DTD) should be used for the common view message when handing it to the hub. By default, adapters use an OracleAS InterConnect-specific DTD for all messages sent to the hub as other OracleAS InterConnect adapters will be retrieving the messages from the hub and know how to interpret them. Set to true if you want to use the DTD import for every message of the common view. Only set to true if a OracleAS InterConnect adapter is not receiving the messages from the hub. There is no default value.	agent_use_custom_hub_dtd=false

Table 2–7 Adapter.ini Parameters

Parameter	Description	Example
agent_metadata_caching	<p>Specifies the metadata caching algorithm. Possible values are:</p> <ul style="list-style-type: none"> ■ startup—Cache everything at startup. This may take a while if there are many tables in the repository. ■ demand—Cache metadata as it is used. ■ none—No caching. This slows down performance. <p>The default value is demand.</p>	agent_metadata_caching=demand
agent_dvm_table_caching	<p>Specifies the domain value mapping (DVM) caching algorithm. Possible values are:</p> <ul style="list-style-type: none"> ■ startup—Cache all DVM tables at startup. This may take a while if there are a lot of tables in the repository. ■ demand—Cache tables as they are used. ■ none—No caching. This slows down performance. <p>The default value is demand.</p>	agent_dvm_table_caching=demand
agent_lookup_table_caching	<p>Specifies the lookup table caching algorithm. Possible values are:</p> <ul style="list-style-type: none"> ■ startup—Cache all lookup tables at startup. This may take a while if there are a lot of tables in the repository. ■ demand—Cache tables as they are used. ■ none—No caching. This slows down performance. <p>The default value is demand.</p>	agent_lookup_table_caching=demand
agent_delete_file_cache_at_startup	<p>With any of the agent caching methods enabled, metadata from the repository is cached locally on the file system.</p> <p>Set this parameter to <code>true</code> to delete all cached metadata on startup.</p> <p>Note: After changing metadata or DVM tables for this adapter in iStudio, you must delete the cache to guarantee access to the new metadata or table information.</p> <p>The default value is <code>false</code>.</p>	agent_delete_file_cache_at_startup=false

Table 2-7 Adapter.ini Parameters

Parameter	Description	Example
agent_max_ao_cache_size	Specifies the maximum number of application objects' metadata to cache. Possible values are any integer greater than 1. The default value is 200.	agent_max_ao_cache_size=200
agent_max_co_cache_size	Specifies the maximum number of common objects' metadata to cache. Possible values are any integer greater than 1. The default value is 100.	agent_max_co_cache_size=100
agent_max_message_metadata_cache_size	Specifies the maximum number of messages' metadata to cache (publish/subscribe and invoke/implement). Possible values are any integer greater than 1. The default value is 200.	agent_max_message_metadata_cache_size=200
agent_max_dvm_table_cache_size	Specifies the maximum number of DVM tables to cache. Possible values are any integer greater than 1. The default value is 200.	agent_max_dvm_table_cache_size=200
agent_max_lookup_table_cache_size	Specifies the maximum number of lookup tables to cache. Possible values are any integer greater than 1. The default value is 200.	agent_max_lookup_table_cache_size=200
agent_max_queue_size	Specifies the maximum size that internal OracleAS InterConnect message queues can grow. Possible values are any integer greater than 1. The default value is 1000.	agent_max_queue_size=1000
agent_persistence_queue_size	Specifies the maximum size that internal OracleAS InterConnect persistence queues can grow. Possible values are any integer greater than 1. The default value is 1000.	agent_persistence_queue_size=1000
agent_persistence_cleanup_interval	Specifies how often the persistence cleaner thread should run. Possible values are any integer greater than 30000 milliseconds. The default value is 60000.	agent_persistence_cleanup_interval=60000
agent_persistence_retry_interval	Specifies how often the persistence thread should retry when it fails to push a OracleAS InterConnect message. Possible values are any integer greater than 5000 milliseconds. The default value is 60000.	agent_persistence_retry_interval=60000
agent_pipeline_to_hub	Specifies how to turn on or off the pipeline for messages from the Bridge towards the hub. If set to <code>false</code> , the file persistence is not used in that direction.	agent_pipeline_to_hub=false
agent_pipeline_from_hub	Specifies how to turn on or off the pipeline for messages from the hub towards the Bridge. If you set the pipeline to <code>false</code> , the file persistence is not used in that direction.	agent_pipeline_from_hub=false

Table 2-7 Adapter.ini Parameters

Parameter	Description	Example
service_path	Windows only. The value that the environment variable PATH should be set to. Path is set to the specified value before forking the Java VM. Typically, all directories containing all necessary DLLs should be listed here. Possible values are the valid path environment variable setting. There is no default value.	service_path=%JREHOME%\bin; D:\oracle\ora904\bin
service_classpath	The classpath used by the adapter Java VM. If a custom adapter is developed and as a result, the adapter is to be used to pick up any additional jars, add the jars to the existing set of jars being picked up. Possible values are the valid classpath. There is no default value.	service_classpath=D:\oracle\ora904\oai\904\lib\oai.jar; %JREHOME%\lib\i18n.jar; D:\oracle\ora904\jdbc\classes12.zip
service_class	The entry class for the Windows service. The possible value is oracle/oai/agent/service/AgentService. There is no default value.	service_class=oracle/oai/agent/service/AgentService
service_max_java_stack_size	Windows only. The maximum size to which the Java VM's stack can grow. Possible values are the valid Java VM maximum native stack size. The default value is the default for the Java VM.	service_max_java_stack_size=409600
service_max_native_stack_size	Windows only. The maximum size to which the Java VM's native stack can grow. Possible values are the valid Java VM maximum native stack size. The default value is the default for the Java VM.	service_max_native_size=131072
service_min_heap_size	Windows only. Specifies the minimum heap size for the adapter Java VM. Possible values are the valid Java VM heap sizes. The default value is the default Java VM heap size.	service_min_heap_size=536870912
service_max_heap_size	Windows only. Specifies the maximum heap size for the adapter Java VM. Possible values are any valid Java VM heap sizes. The default value is 536870912.	service_max_heap_size=536870912
service_num_vm_args	Windows only. The number of service_vm_arg<number> parameters specified. Possible values are the number of service_vm_arg<number> parameters. There is no default value.	service_num_vm_args=1

Table 2-7 Adapter.ini Parameters

Parameter	Description	Example
service_vm_arg<number>	Windows only. Specifies any additional arguments to the Java VM. For example, to get line numbers in any of the stack traces, set <code>service_vm_arg1=java.compiler=NONE</code> . If there is a list of arguments to specify, use multiple parameters as shown in the example by incrementing the last digit starting with 1. Be sure to set the <code>service_num_vm_args</code> correctly. Possible values are any valid Java VM arguments. There is no default value.	<code>service_vm_arg1=java.compiler=NONE</code> <code>service_vm_arg2=oai.adapter=.aq</code>
service_jdk_version	Windows only. The JDK version the adapter Java VM should use. The default value is 1.4.1.	<code>service_jdk_version=1.4.1</code>
service_jdk_dll	Windows only. The dll the adapter Java VM should use. The default value is <code>jvm.dll</code> .	<code>service_jdk_dll=jvm.dll</code>
corba_port_number	The CORBA port number on which the adapter CORBA service listens. Generally, this port is allocated dynamically. However, it can be configured to enable access across firewall.	<code>corba_port_number=14000</code>
encoding	Character encoding for published messages. The adapter uses this parameter to generate encoding information in encoding tag of transformed OracleAS InterConnect message. OracleAS InterConnect represents messages internally as an XML document. The default encoding of the XML document is UTF-8. However, this encoding can be configured using this parameter, which is typically used when the OracleAS InterConnect10 message consists of characters not supported by UTF-8 and when the <code>XMLParser</code> is unable to handle them.	<code>encoding=JA16SJIS</code>

Table 2-7 Adapter.ini Parameters

Parameter	Description	Example
nls_date_format	Format for date fields expressed as string. The following pattern letters are defined. All other characters from A to Z and from a to z are reserved.	Date format pattern dd/MMM/yyyy can represent 01/01/2003.
	Letter Date or Time	Component Examples
G	Era designator	AD
y	Year	1996; 96
M	Month in year	July; Jul; 07
w	Week in year	27
W	Week in month	2
D	Day in year	189
d	Day in month	10
F	Day of week in month	Number 2
E	Day in week	Tuesday; Tue
a	A.M./P.M. marker	P.M.
H	Hour in day (0-23)	0
k	Hour in day (1-24)	24
K	Hour in A.M./P.M. (0-11)	0
h	Hour in A.M./P.M. (1-12)	12
m	Minute in hour	30
s	Second in minute	55
S	Millisecond	978
z	Time zone	Pacific
	The default date format is EEE MMM dd HH:mm:ss zzz yyyy.	
	Note: This parameter specifies date format. It is applicable for the date format only.	

Table 2-7 Adapter.ini Parameters

Parameter	Description	Example
nls_country	<p>This parameter is a valid ISO Country Code. These upper-case and two-letter codes are defined by ISO-3166. You can find a full list of these codes at a Web site, such as, http://www.chemie.fu-berlin.de/diverse/doc/ISO_3166.html</p> <p>The default Country code is US.</p> <p>Note: This parameter specifies date format. It is applicable for the date format only.</p>	US
nls_language	<p>This parameter is a valid ISO Language Code. These lower-case and two-letter codes are defined by ISO-639. You can find a full list of these codes at a Web site, such as, http://www.ics.uci.edu/pub/ietf/http/related/iso639.txt</p> <p>The default language code is en.</p> <p>Note: This parameter specifies date format. It is applicable for the date format only.</p>	nls_language=en

PeopleSoft 8 Adapter Parameters

The following table lists the parameters specific to the PeopleSoft 8 adapter.

Parameter	Description	Example
bridge_class	This indicates the entry class for the PeopleSoft 8 adapter. Do not modify this value. There is no default value.	bridge_class=com.actional.oai.Agent

Starting the PeopleSoft 8 Adapter

On UNIX, start the PeopleSoft 8 adapter using the `start` script in the following directory:

```
$ORACLE_HOME/oai/9.0.4/adapters/Application
```

Type **start**, then press **Enter**.

On Windows, start the adapter from the Services window available from the Start menu.

1. Access the Services window from the Start menu:

On...	Choose...
Windows NT	Start > Settings > Control Panel > Services
Windows 2000	Start > Settings > Control Panel > Administrative Tools > Services

The Services window displays.

2. Select the *OracleHomeOracleASInterConnectAdapter-Application* service.
3. Start the service based on your operating system:

On...	Choose...
Windows NT	Choose Start.
Windows 2000	Right click the service and choose Start from the menu that displays.

The PeopleSoft 8 adapter, in turn, automatically starts the publishing engine, a tool for notifying foreign applications of additions, deletions, or updates to the native application (in this case, PeopleSoft objects and databases).

See Also: *Oracle Application Server InterConnect Adapter Publishing Engine User's Guide*

Stopping the PeopleSoft 8 Adapter

On UNIX, stop the PeopleSoft 8 adapter using the `stop` script in the following directory:

```
$ORACLE_HOME/oai/9.0.4/adapters/Application
```

Type **stop**, then press **Enter**.

On Windows, stop the adapter from the Services window available from the Start menu.

1. Access the Services window from the Start menu:

On...	Choose...
Windows NT	Start > Settings > Control Panel > Services
Windows 2000	Start > Settings > Control Panel > Administrative Tools > Services

The Services window displays.

2. Select the *OracleHomeOracleASInterConnectAdapter-Application* service.
3. Stop the service based on your operating system:

On...	Choose...
Windows NT	Choose Stop.
Windows 2000	Right click the service and choose Stop from the menu that displays.

You may verify the stop status by viewing the `oailog.txt` files in the appropriate time stamped subdirectory of the `log` directory within the adapter directory.

Supported PeopleSoft 8 Component Interfaces

This chapter provides PeopleSoft-specific information for accessing PeopleSoft Component Interfaces using OracleAS InterConnect. This chapter discusses the following topics:

- [Working with OracleAS InterConnect and PeopleSoft Component Interfaces](#)
- [Working with Component Interface](#)
- [Exception Fields](#)
- [Custom Component Interface](#)
- [Creating a Subscribed Event](#)

Working with OracleAS InterConnect and PeopleSoft Component Interfaces

OracleAS InterConnect provides a complete framework for e-Business application integration. PeopleSoft users often configure PeopleSoft to employ OracleAS InterConnect connectivity.

Working with Component Interface

When invoking a method on a Component Interface, the following warning message may display:

```
java.lang.NullPointerException: PSProperties not loaded from file
```

This message indicates the `pstools.properties` file cannot be found in the CLASSPATH. For PeopleSoft 8 adapter to include this file, update the `service_classpath` parameter in `adapter.ini` file.

See Also: You can find more information on this error in your PeopleSoft Customer Support Web site. The resolution ID for this issue is 703269.

Exception Fields

If an error occurs during a call, the exception field contains a detailed description of the error. You can then propagate this error string to the calling application.

For example, if a client application tries to add a record to the PeopleSoft server and the record with the same primary key already exists, a non-retryable error occurs. The exception field contains the exception data, which can then be propagated back to the client application.

Custom Component Interface

A Component Interface declares the set of methods and properties that a Component Interface supports, but it does not implement the behavior or properties. The OracleAS InterConnect PeopleSoft 8 adapter provides five standard methods for Component Interfaces:

- Bind
- Create
- Find
- Get
- Update

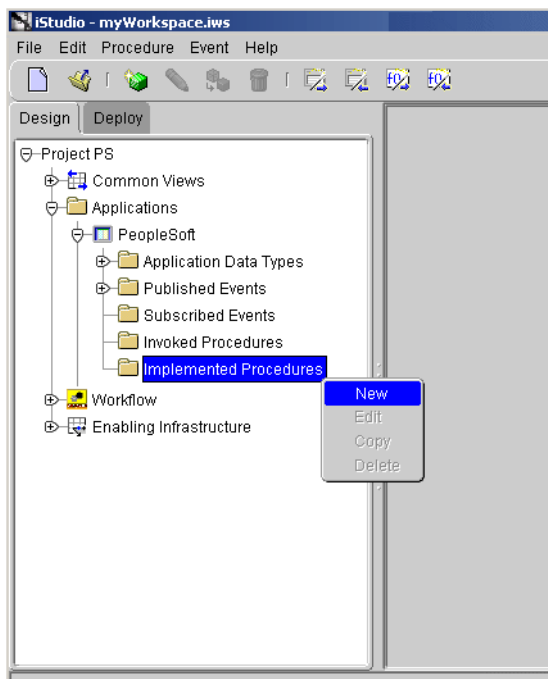
Before using Component Interfaces you must upload a custom Component Interface.

See Also: ["Importing the Custom Component Interface"](#) on page 5-1

Creating an Implemented Procedure

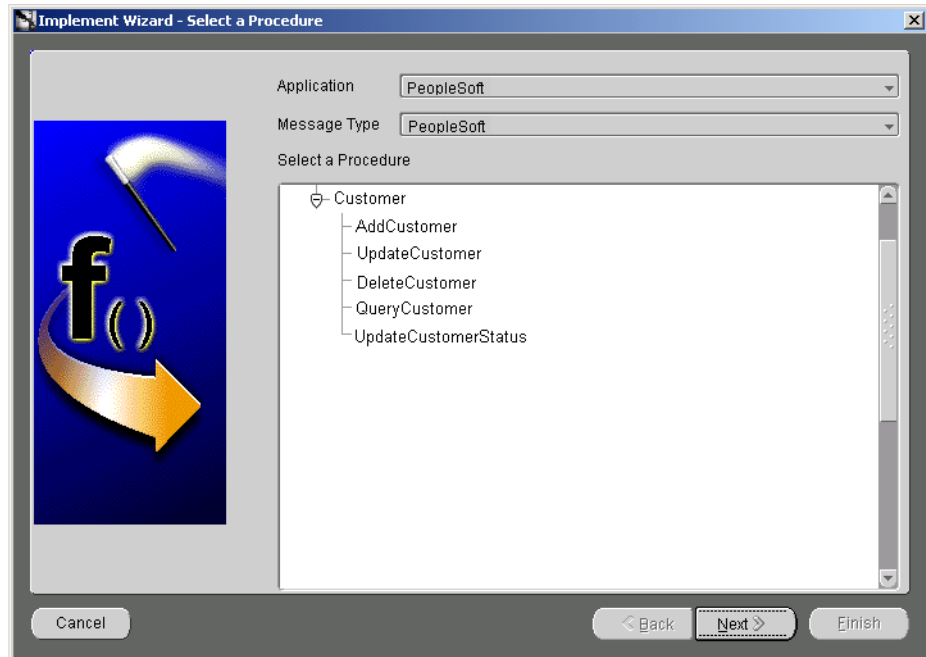
1. Start iStudio.
2. Right-click **Implemented Procedures** and select **New** under the Applications folder.

Figure 3–1 *Creating an Implemented Procedure*



The Implement Wizard—Select a Procedure dialog box is displayed.

Figure 3–2 Implement Wizard - Select a Procedure



3. Select a procedure and click **Next**.

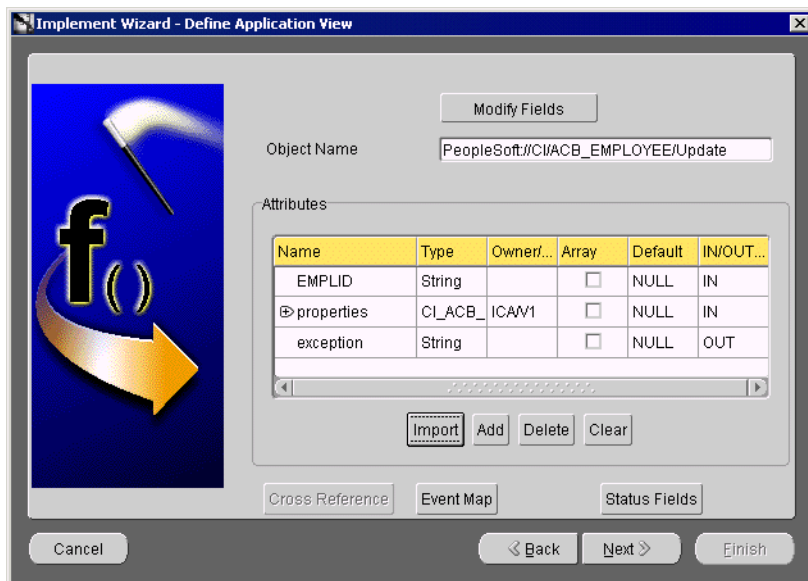
The Define Application View dialog box is displayed. Use this dialog to import attributes from PeopleSoft. To import attributes, you must log in to PeopleSoft.

See Also: "[Importing Attributes](#)" on page 3-8

After logging in to PeopleSoft and importing attributes, the Define Application View dialog box is populated with the selected components.

4. Click **Next** in the Define Application View screen.

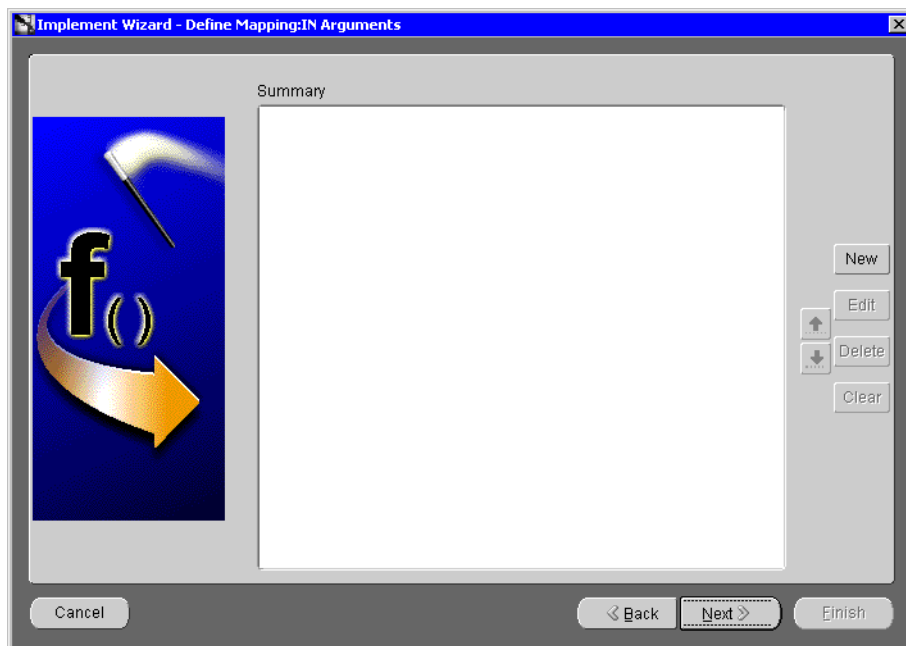
Figure 3–3 Implement Wizard - Define Application View



5. Click **Next**.

The Define Mappings Arguments dialog box is displayed.

Figure 3–4 Implement Wizard - Define Mapping:IN Arguments



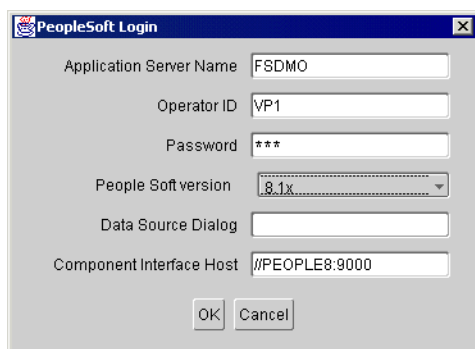
6. Click **New**.
7. Define the mappings and click **Finish**.

Importing Attributes

To import attributes from PeopleSoft:

1. Click **Import** and select **PeopleSoft** on the Define Application View dialog.
The PeopleSoft Login dialog box is displayed.

Figure 3–5 PeopleSoft Login



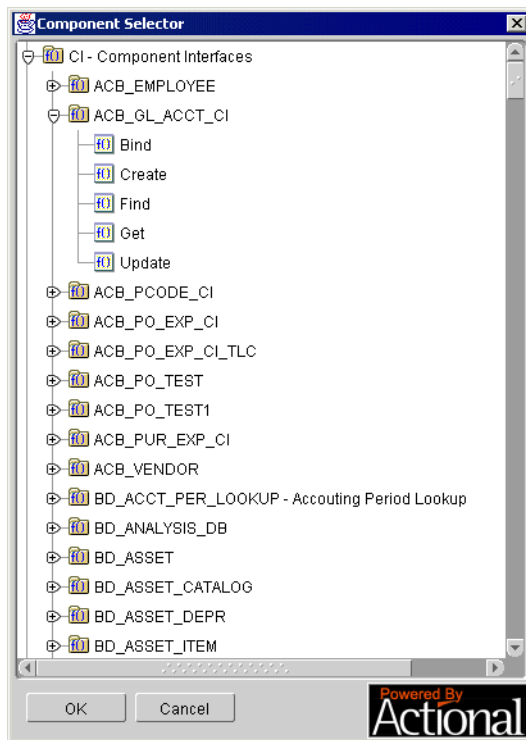
2. Enter information in the following fields:
 - **Application Server Name**—Enter a valid application server name.
 - **Operator ID**—Enter a valid operator ID.
 - **Password**—Enter a valid password.

Note: If you do not have a valid ID and password, contact your PeopleSoft administrator.

- **PeopleSoft Version**—Select 8.1x from the dropdown list.
This disables the Data Source Dialog and enables the Component Interface Host.
- **Component Interface Host**—Enter the host name and port number of the machine hosting the Component Interfaces, for example, //PEOPLE8:9000.

3. Click **OK**.
The Component Selector is displayed.
4. Expand the **Component Interfaces** folder.

Figure 3–6 Component Selector



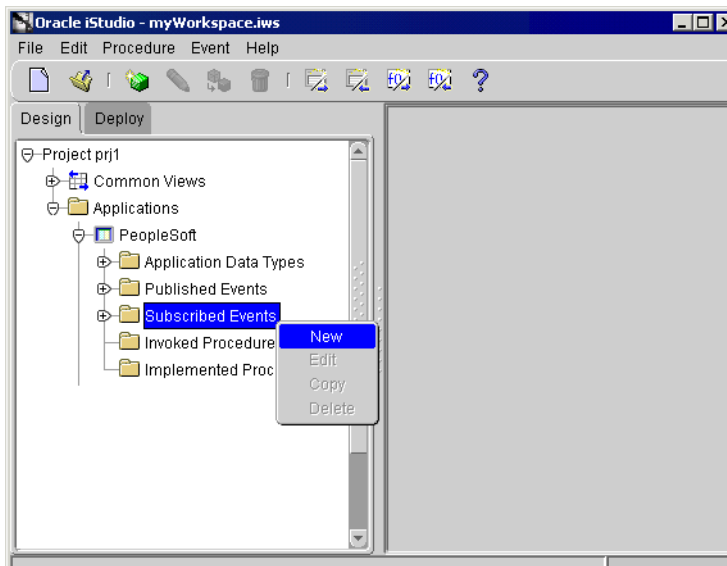
5. Double-click a method to expand the tree and select a method.
6. Click **OK**.
The selected method and its attributes display on the **Define Applications View** dialog.

Creating a Subscribed Event

To create a subscribed event in iStudio:

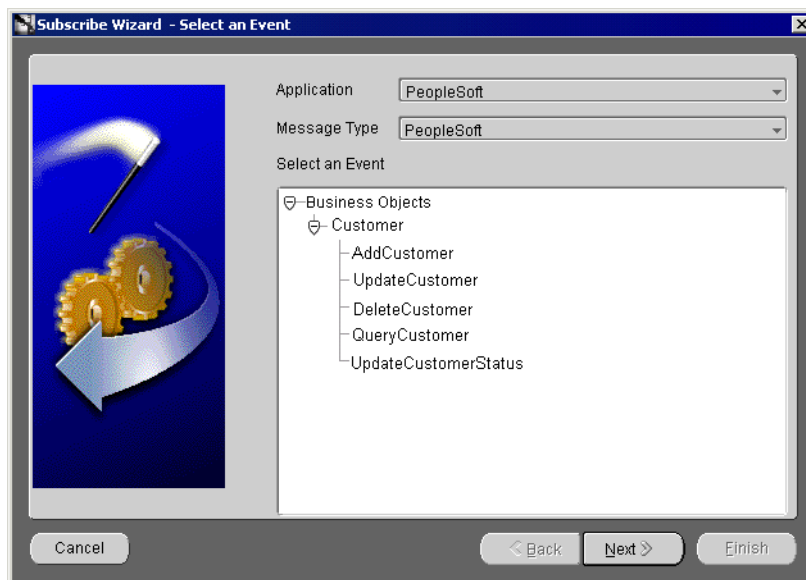
1. Start iStudio.
2. Right-click **Subscribed Event** and select **New** under the Applications folder.

Figure 3–7 *Creating a Subscribed Event*



The Subscribe Wizard—Select an Event dialog box is displayed.

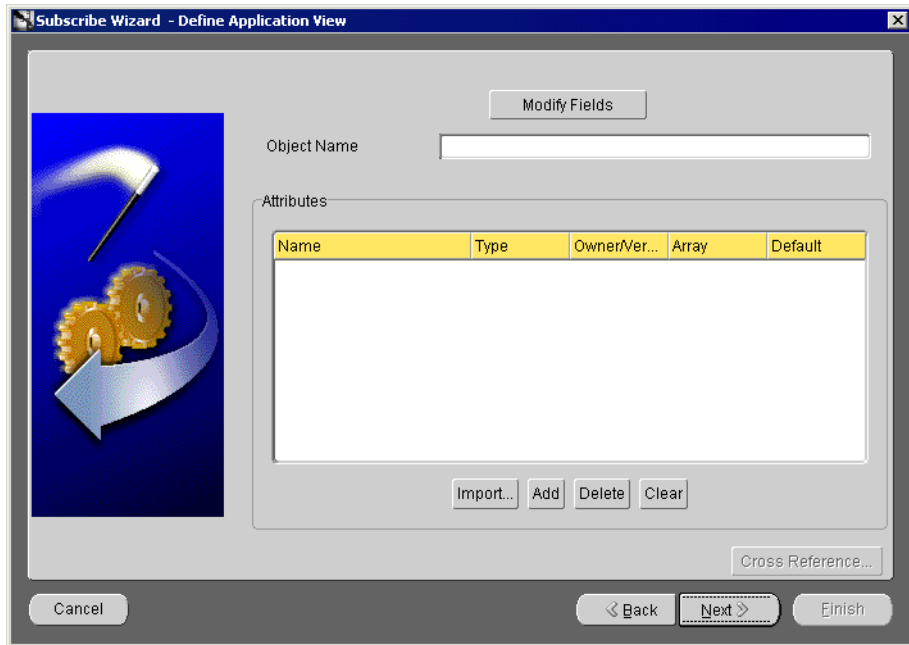
Figure 3–8 *Subscribe Wizard - Select an Event*



3. Select the Application and Message Type from the dropdown menus.
4. Select an **Event** and click **Next**.

The Define Application View dialog box is displayed.

Figure 3–9 *Subscribe Wizard - Define Application View*



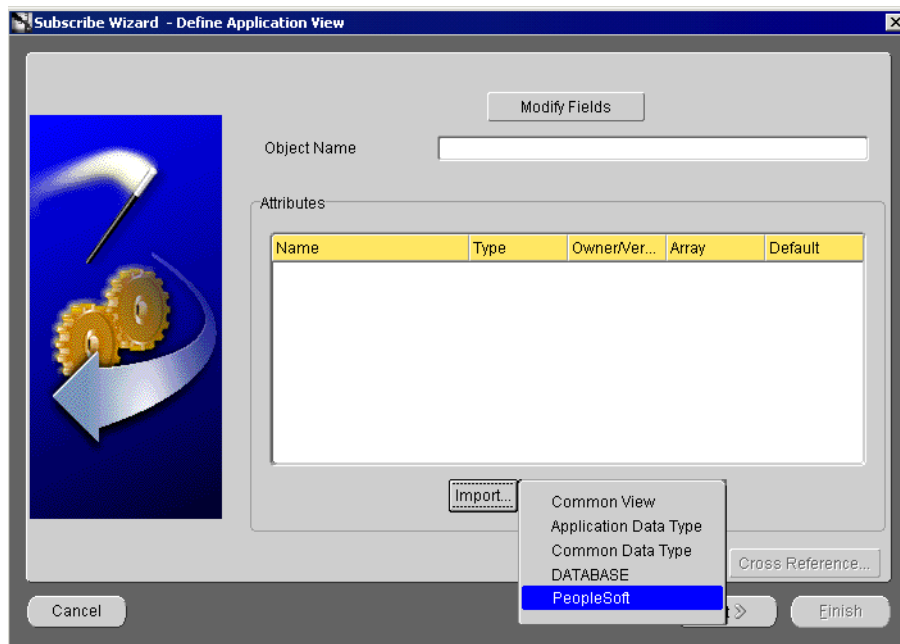
5. Click **Import** and select **PeopleSoft**.

The Define Application View dialog box is displayed. Use this dialog to import attributes from PeopleSoft. To import attributes, you must log in to PeopleSoft.

See Also: ["Importing Attributes"](#) on page 3-8

After logging in to PeopleSoft and importing attributes, the Define Application View dialog box is populated with the selected components.

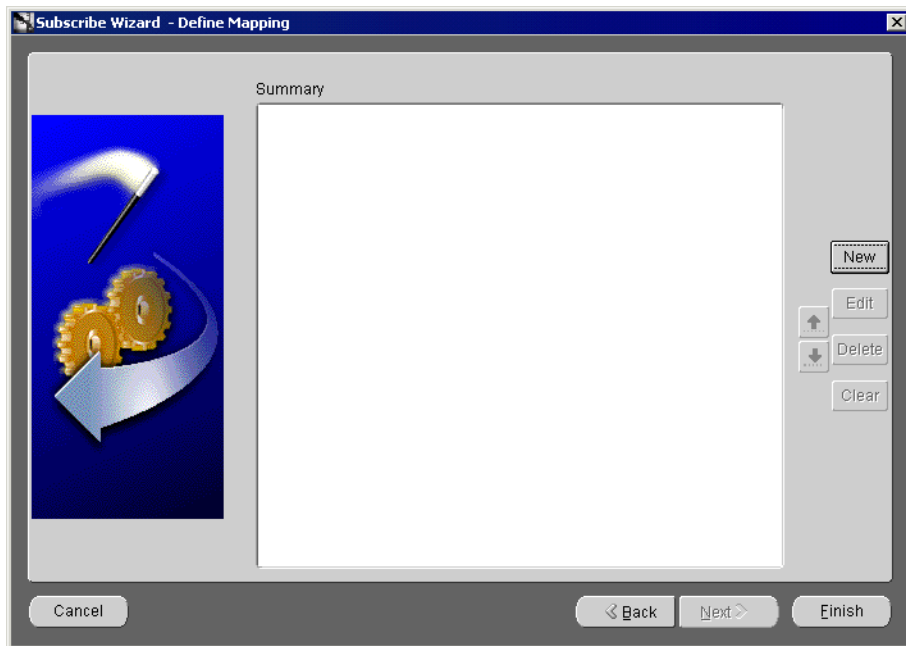
Figure 3–10 *Subscribe Wizard - Define Application View*



6. Click Next.

The Define Mapping dialog box is displayed.

Figure 3–11 *Subscribe Wizard - Define Mapping*



7. Click **New** to define mappings and click **Finish**.

Component Interface Methods

This chapter provides information on OracleAS InterConnect PeopleSoft 8 adapter's Component Interface standard and user-defined methods. This chapter discusses the following topics:

- [OracleAS InterConnect Component Interface Standard Methods](#)
- [OracleAS InterConnect Component Interface User-Defined Methods](#)
- [Basic Data Types](#)

OracleAS InterConnect Component Interface Standard Methods

OracleAS InterConnect provides five standard methods for Component Interfaces:

- [Create](#)
- [Find](#)
- [Get](#)
- [Update](#)
- [Bind](#)

Create

Use the `Create` method to create a new record using a set of unique keys and specified properties.

Syntax

```
Create (key1, key2, ... keyn, properties)
```

where:

- `key` (in/out parameter)—The individual key parameters (`key1`, `key2`, . . . `keyn`) must be supplied. This set of keys must not exist in the server database, that is, they must be unique. These keys correspond to the set of `Create Keys` as defined for the particular Component Interface.
- `properties` (structure)—Contains a complete structure of the Component Interface's properties, which is inserted into the record created with the specified keys.

Description

In some situations, it is common practice to call `Create()` without a set of explicit keys, but the `Create` function returns them. This behavior is supported with PeopleCode that is triggered on the server. For example, to create a Purchase Order, the client may not know what the next available PO number is. By specifying `NEXT` as the PO number key, the call triggers PeopleCode, which determines the next available PO number. This information must be returned to the calling client, via the in/out key parameters.

For this mechanism to work, the key must also be a property at level 0. Otherwise, the original key is returned.

Note: OracleAS InterConnect's `Create()` method is provided if PeopleSoft's `Create` and `Save` functions in the Component Interface are enabled.

Find

Use the `Find` method to return a list of keys that satisfy the supplied partial search keys. If the Component Interface has only one instance, which means there is no key, then the `Find()` function will not be generated

See Also: The `Get()` function on page 4-4

Syntax

`Find (partialKey, keyList)`

where:

- `partialKey` (structure)—Where the individual keys are optional.
- `keyList` (output parameter)—A list of keys that matches the `partialKey`.

These keys correspond to the set of `Find Keys` as defined for the particular Component Interface.

Description

When specifying the partial keys, it is possible to use the same wildcard search available from the PeopleSoft internal `Find()` function. For example, the partial `ACCOUNT` key of "11" returns all `ACCOUNT` keys that start with "11", whereas "%40" returns all `ACCOUNT` keys that contain "40" anywhere within the key. A partial key "_4_4" returns all `ACCOUNT` keys with the character "4" in the second and fourth positions.

OracleAS InterConnect's `Find()` method is provided if PeopleSoft's `Find` function in the Component Interface is enabled and `Get` keys are available.

Note: With the current implementation of the PeopleSoft Server, if more than 300 items match the search criteria, the call will fail. This is a restriction of the PeopleSoft server.

Get

Use the `Get` method to retrieve properties based on the input key parameters (`key1`, `key2`, ... `keyn`). The output parameter is a structure containing the properties of the record that matches the key parameters. If the Component Interface has only one instance (that is, there is no key) then the `Get` function does not contain any key parameter

See Also: The `Find()` function on page 4-3

Syntax

```
Get (key1, key2, ... keyn, properties)
```

```
Get (key1, key2, ... keyn, getHistoryItems, properties)
```

where:

- All the key parameters must be supplied. This set of keys must exist in the server database, otherwise an error will occur. These keys correspond to the set of `Get Keys` as defined for the particular Component Interface.
- `properties` (structure)—Contains a complete structure of the Component Interface's properties, which is returned upon completion of the call.

Description

If the properties of the Component Interface contain effective dated items below level 0 (that is, a key field with a name of `EFFDT`), the `getHistoryItems` additional parameter is required. This parameter is of type `Boolean`. If it is set to `True` then all effective dated items are returned as a sequence (which could be embedded in any level). These include all past effective dated items, the current effective dated item, as well as all future effective dated items. If the `getHistoryItems` parameter is set to `False`, only the current and all future effective dated items are returned. If subsequent calls to update on the same instance are to be made, then `getHistoryItems` should be set to `False`.

See Also: The `Update()` method on page 4-5

If the Component Interface does not have any key, as in the case where only one instance can exist, then the `Get()` method will have the form:

```
Get(properties)
```

See Also: PeopleSoft documentation for more information on effective dated items

Note: OracleAS InterConnect's `Get ()` method is provided if PeopleSoft's `Get` function in the Component Interface is enabled.

Update

Use the `Update` method to update properties based on the input key parameters (`key1`, `key2`, ... `keyn`).

Syntax

```
Update (key1, key2, ... keyn, properties)
```

where:

- All the key parameters must be supplied. This set of keys must exist in the server database, else an error will occur. These keys correspond to the set of `Get Keys` as defined for the particular Component Interface.
- `properties` (structure)—Contains a complete structure of the Component Interface's properties, which replaces the existing properties in the database.

Description

When calling this function, the properties of the record corresponding to the keys are replaced by the `properties` input parameter. All collections with the original records are deleted and replaced by those in the input parameter. The sizes of these collections do not have to match, as the procedure within `Update` is to delete all existing collection items and then insert the given ones.

If the properties of the Component Interface contain effective dated items, then the `properties` parameter must contain all future effective dated items, as the original list is replaced. This provides the mechanism for adding and deleting future effective dated items. However, if the properties also contain past effected items, an error is returned, as past effective dated can not be modified. If the current effective dated item is also included, it is ignored. This permits the client to call `Get ()` with the `getHistoryItems` parameter set to `False`, modify any future effected items or add new future effective dated items, and then pass the structure as the parameter for the `Update ()` function.

If the Component Interface does not have any key, as in the case where only one instance can exist, then the `Update ()` method will have the form:

```
Update(properties)
```

Note: OracleAS InterConnect's `Update()` method is provided if PeopleSoft's `Get` and `Save` functions in the Component Interface are enabled.

Bind

Use the `Bind` method to bind a Component Interface object to a specific credential.

Syntax

```
Bind (host, user, password)
```

Description

The `Bind` method permits the client to use an explicit credential to access a given Component Interface object. It returns a *bind* object which has the associated credential. For example:

```
Myobject = new myCIObject  
Set MyBindObject = Myobject.Bind(myHost, me, myPassword)  
MyBindObject.Get(key, properties)
```

The access of the returned object and its methods are based on the credential as specified by the `Bind` method. This function allows for multiple credentials from a single client, for different objects.

If a Component Interface object is invoked without calling `Bind()` first, the credential used is the one specified in the profile.

OracleAS InterConnect Component Interface User-Defined Methods

OracleAS InterConnect supports user-defined methods in Component Interfaces. The signatures are of the form:

```
myRet=myCI.myMethod(parameter1, parameter2, ...)
```

where:

- `parameter1, parameter2`—Input parameters
- `myRet`—The return value

The parameters can only be input parameters to the method. Only one value can be returned from the method as the return parameter.

The Component Interface that contains user-defined methods must have the PeopleSoft's `Find` and `Get` functions enabled.

Basic Data Types

[Table 4–1](#) describes how PeopleSoft basic data types map to OracleAS InterConnect types.

Table 4–1 Basic Types

PeopleSoft Basic Types	Interconnect Types
Char(<n>)	String
Long(<n>)	String
Nbr(<n>, 0)	Integer, Double, String
Sign(<n>, 0)	Integer, Double, String
Collection	Array
Component Interface Properties	Complex structures
Time	Date
Date	Date
Date Time	Date

[Table 4–2](#) identifies the range of four basic types.

Table 4–2 Range of Basic Types

Data Type	Range
Char(<n>)	Any string of <n> characters. <n> is between 1 and 254.
Long(<n>)	Any string of <n> characters. <n> is between 0 and 64000. Long(0) is an unbounded string.
Nbr(<n>, <d>)	Unsigned value with <n> digits before the "." and <d> after. Nbr(3.2) has a range of 0 to 999.99. The maximum precision for this type is always the precision of a java float.
Sign(<n>, <d>)	Signed value with <n> digits before the "." and <d> after. Sign(3.2) has a range of -999.99 to 999.99. The maximum precision for this type is always the precision of a java float.

Importing the Custom Component Interface

This chapter provides information for importing the custom Component Interface. This chapter discusses the following topic:

- [Importing the Custom Component Interface](#)

Importing the Custom Component Interface

To utilize the PeopleSoft 8 adapter, a modification to the PeopleSoft server is required. The custom component, `GET_CI_INFO`, must be imported into PeopleSoft. Once the custom Component Interface is imported, Component Interfaces can be browsed within PeopleSoft. This task is only required on the initial setup to use OracleAS InterConnect.

The following instructions explain how to manually import the custom Component Interface, which will allow you to browse Component Interfaces within PeopleSoft 8.

Creating the Component Interface

The following steps provide a brief overview from a PeopleSoft application.

See Also: PeopleSoft on-line help for complete instructions

From the Application Designer:

1. Select **Start->Programs->Peoplesoft->Application Designer**.

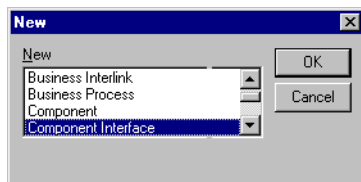
2. Select a 3-tier Connection Type and click **OK**.

For example, select **Application Server** from the drop down list.

3. Select **File->New** in the Application Designer.

The New dialog box is displayed.

Figure 5–1 *Selecting a Component Interface*



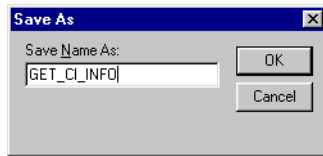
4. Select **Component Interface** and click **OK**.

5. Click **Select** in the Select dialog.

A list of Component Interfaces is displayed.

6. Select any simple component, for example, `SIMPLECALENDAR` and click **Select**.
The custom methods to be installed do not use any properties of the Component Interface.
A component is loaded into the screen.
7. Select **File->Save As**.
8. Type `GET_CI_INFO` in the **Save Name As** field and click **OK**.

Figure 5–2 Entering a Component Name



9. Right-click any method of your new Component Interface.
A popup menu appears.
10. Select **View PeopleCode**.
A text editor window is displayed.
11. Access the `<install_directory>\config\PeopleSoft\` directory and copy the contents of `get_ci_info.pc` into the text editor window.
12. Select **File->Save** to save the new Component Interface, `GET_CI_INFO`.

Setting Security

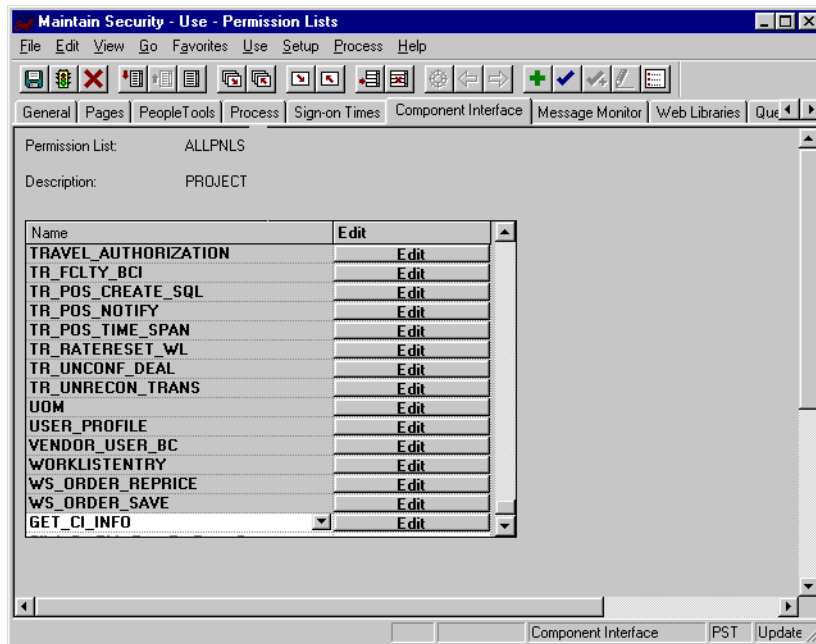
After importing the custom `GET_CI_INFO` PeopleSoft Component Interface on PeopleSoft, set the security settings for the `GetCINamespace`, `GetDetails`, and `GetCollections` methods for OracleAS InterConnect.

In the Application Designer:

1. Select **Go->PeopleTools->Maintain Security**.
The Maintain Security dialog box is displayed.
2. Select **Use->Permission Lists->Component Interface->Update/Display**.
The Update/Display — Permission Lists dialog box is displayed.

3. Type an applicable permission list item in the **Permission List** text box, for example, **ALLPNLS**, and click **OK**.
To retrieve a list of possible permission lists, click **OK**.
4. Scroll down the list of Component Interfaces until you find the following line:
Click On This Row To Enter Data.
5. Select this row and type GET_CI_INFO to add a new Component Interface in the Maintain Security - Use - Permission Lists dialog.

Figure 5–3 Component Interface Permission List



6. Select **Edit** from the menu.
A dialog box containing the permissions for this Component Interface is displayed.
7. Click **Full Access (All)** to set **Full Access** to all methods.
8. Click **OK** to exit the Designer.

The PeopleSoft server is set up. You can now browse PeopleSoft containing Component Interfaces.

Using the Configuration Editor

This chapter describes how to use the Configuration Editor to configure the PeopleSoft 8 adapter to use Component Interfaces. The Configuration Editor is only used at runtime. This chapter discusses the following topics:

- [Configuration Editor](#)
- [PeopleSoft Login](#)
- [Data Formats](#)

Note: Profiles and Deployment are sensitive to the Master Key setting. If using a shared machine, before accessing the Configuration Editor, ensure the Master Key is set to either that of User1 or create a new Master Key for your profiles. Refer to *Oracle Application Server InterConnect Adapter Configuration Editor User's Guide*, "Using the Master Key Setting Tool" for more information on the Master Key.

Configuration Editor

To configure settings for the PeopleSoft 8 adapter you must access the PeopleSoft Configuration Editor as follows:

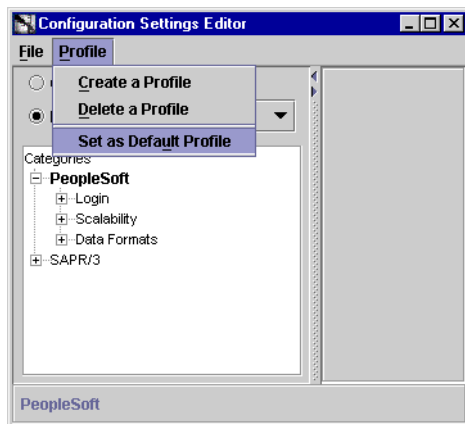
1. Change directories to the installation directory using a command prompt.
2. Type `configeditor` and press **Enter**.

The Configuration Editor displays.

3. Select **PeopleSoft** to edit the PeopleSoft configuration settings for your profile.

Note: Under some circumstances you may wish to run your adapter under a profile other than iStudio. For example, running the adapter under a different profile is required if you run two instances of the PeopleSoft 8 adapter on the same machine. You can have two instances of the same type of adapter if these instances connect to different back-end system installations. To accomplish this, create a new profile using the configuration editor and enter the settings for this new profile. The name of the new profile should be the same as the name of the application. For example, if your application is called `APP2`, create a profile called `APP2`. Now `APP2` uses the settings in the profile called `APP2`, whenever it runs.

4. Click **Profile**.
5. Select **Set As Default** from the Profile drop down menu.
6. Select your new profile.

Figure 6–1 Configuration Settings Editor

7. Click OK.
8. Select **File > Exit** to exit the Configuration Editor after completing the setup.

PeopleSoft Login

The Login branch is only available for user-defined profiles and provides connection information to a PeopleSoft system. You must specify the Application Server Name, Operator ID, and the Password.

Figure 6–2 Login Panel

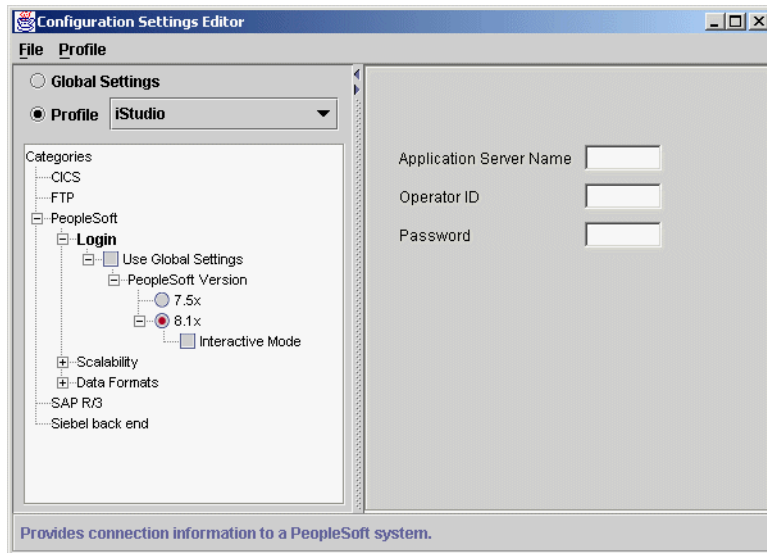


Table 6–1 Login Panel Configuration Settings

Login Panel Fields	Field Description
Application Server Name	This field is not required for Component Interfaces.
Operator ID	Insert the identification you use to access the PeopleSoft application.
Password	Enter your PeopleSoft password. The Password is only editable under specific user-defined profiles.
PeopleSoft Version	Select the version of your PeopleSoft application in the tree view.

Once the PeopleSoft version is selected, the following page displays in the right panel.

Figure 6–3 Login Screen - Component Interface

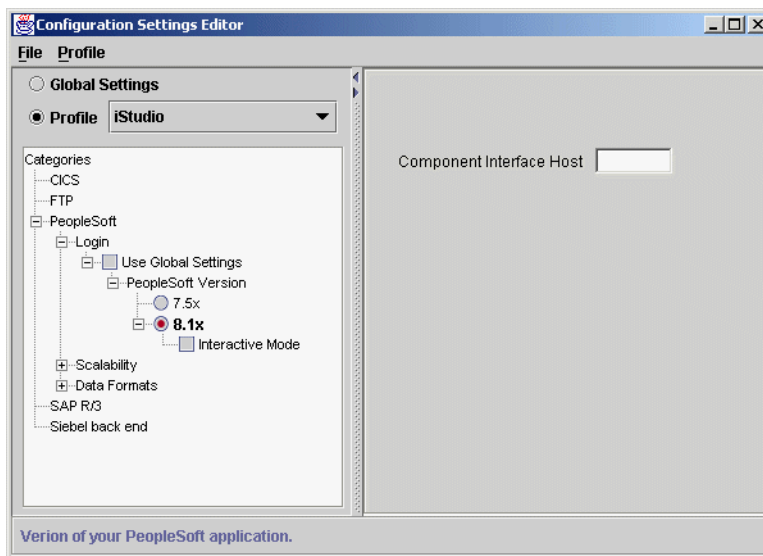


Table 6–2 Login Panel Component Interface Configuration Settings

Login Panel Fields	Fields Descriptions
Component Interface Host	Set the URL path to the PeopleSoft 8 application, // <host> : : <port>. For example, //PeopleSoft8 : : 9000. This field specifies the host and port on which the PeopleSoft server is waiting for incoming requests.
Interactive Mode	In a production environment, the checkbox must remain unchecked. This parameter is useful for debugging when developing or testing. It enables the PeopleSoft Server to return better exception messages when Component Interface access fails.

Note: PeopleSoft scalability only applies to PeopleSoft 7.5

Data Formats

The Data Formats page provides conversion information for date and time strings used in messages. This page is for those applications requiring a date, for example, Automation applications. The information is determined by the PeopleSoft system.

Figure 6–4 Data Format Panel

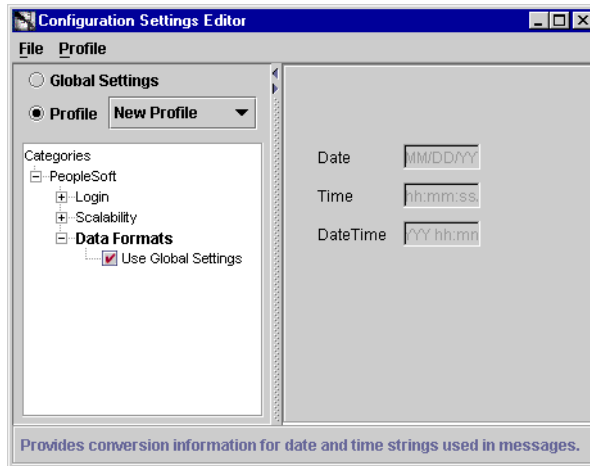


Table 6–3 Data Format Panel Configuration Settings

Data format Panel Fields	Field Description
Date	The format is MM/DD/YYYY.
Time	The format is hh:mm:ssAA where AA is either AM or PM.
Date Time	The format is MM/DD/YY hh:mm:ssAA where AA is either AM or PM.

Index

A

application parameter, 2-6
attributes
 importing, 3-8

C

configuration, 2-5
 advanced queuing adapter parameters, 2-15
 agent connection parameters, 2-8
 hub.ini, 2-7
 ini file settings, 2-6
create
 subscribed event, 3-10
Creating
 procedure, 3-4

D

Data, 6-6
Data Formats, 6-6
data formats, 6-6
Data Source Name, 6-5
date format, 6-6
date time format, 6-6

E

event
 create subscribed, 3-10

F

Format
 Data, 6-6
 Date, 6-6
 Date Time, 6-6
 Time, 6-6

I

import
 attributes, 3-8
installation
 tasks, 2-2

L

login, 6-4

P

Password, 6-4
peoplesoft 8 adapter
 starting, 3-2
platforms
 supported, 1-3
preinstallation
 tasks, 2-2

R

Real Application Clusters
 hub.ini parameters, 2-7

S

start the adapter, 2-16
stop the adapter, 2-17
system requirements, 1-2

T

time format, 6-6

W

Working with PeopleSoft, 3-2