Oracle® Application Server InterConnect

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Oracle Application Server InterConnect Adapter for PeopleSoft 7.5x Installation and User's Guide, 10g (9.0.4)

Part No. B10407-01

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Oracle Application Server InterConnect Adapter for PeopleSoft 7.5x Installation and User's Guide, 10g (9.0.4)

Part No. B10407-01

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Preface

This preface contains these topics:

- Intended Audience
- Documentation Accessibility
- Organization
- Related Documentation
- Conventions

Intended Audience

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

- install applications
- maintain applications

Documentation Accessibility

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Organization

This document contains:

Chapter 1, "Introduction"

This chapter describes the Oracle Application Server InterConnect Adapter for PeopleSoft 7.5 (PeopleSoft 7.5x adapter) and the hardware and software requirements.

Chapter 2, "Installation and Configuration"

This chapter describes the preinstallation, installation, and configuration steps for the PeopleSoft 7.5x adapter.

Chapter 3, "Supported PeopleSoft Interfaces"

This chapter describes the PeopleSoft 7.5x adapter and the supported interfaces.

Chapter 4, "Using the Configuration Editor"

This chapter provides information for using the PeopleSoft 7.5x adapter configuration editor.

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
- Oracle Application Server InterConnect Adapter Publishing Engine User's Guide

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```
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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 .
Italics	Italic typeface indicates book titles or emphasis.	Oracle9i Database Concepts
		Ensure that the recovery catalog and target database do <i>not</i> reside on the same disk.
UPPERCASE monospace	ASE Uppercase monospace typeface indicates ace elements supplied by the system. Such	You can specify this clause only for a NUMBER column.
(fixed-width) font	elements include parameters, privileges, datatypes, RMAN keywords, SQL keywords, SQL*Plus or utility commands.	You can back up the database by using the BACKUP command.
	packages and methods, as well as system-supplied column names, database	Query the TABLE_NAME column in the USER_ TABLES data dictionary view.
	objects and structures, usernames, and roles.	Use the DBMS_STATS.GENERATE_STATS procedure.

Convention	Meaning	Example
lowercase	 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.
<pre>monospace (fixed-width)</pre>		The password is specified in the orapwd file.
font		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
		Connect as on user
		Connect as de user.
		The JRepUtil class implements these methods.
lowercase	Lowercase italic monospace font	You can specify the <i>parallel_clause</i> .
italic monospace (fixed-width) font	represents placeholders or variables.	Run Uold_release.SQL where old_ release 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 (digits [, precision])
{}	Braces enclose two or more items, one of which is required. Do not enter the braces.	{ENABLE DISABLE}
I	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]

Convention	Meaning	Example
	Horizontal ellipsis points indicate either:	
	 That we have omitted parts of the code that are not directly related to the example 	CREATE TABLE AS subquery;
	 That you can repeat a portion of the code 	<pre>SELECT col1, col2, , coln FROM employees;</pre>
	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;
Italics	Italicized text indicates placeholders or variables for which you must supply particular values.	CONNECT SYSTEM/system_password
		DB_NAME = <i>database_name</i>
UPPERCASE	E 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;</pre>
		SELECT * FROM USER_TABLES;
		DROP TABLE hr.employees;
lowercase	case Lowercase typeface indicates programmatic elements that you supply. For example, lowercase indicates names of tables, columns, or files.	SELECT last_name, employee_id FROM
		sqlplus hr/hr
	Note: Some programmatic elements use a mixture of UPPERCASE and lowercase. Enter these elements as shown.	CREATE USER mjones IDENTIFIED BY ty3MU9;

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 (1), 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.	c:\winnt"\"system32 is the same as C:\WINNT\SYSTEM32
C:\>	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</i> <i>prompt</i> in this manual.	C:\oracle\oradata>
	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	C:\>exp scott/tiger TABLES=emp QUERY=\"WHERE job='SALESMAN' and sal<1600\" C:\>imp SYSTEM/password FROMUSER=scott TABLES=(emp, dept)
	an escape character. Refer to your Windows operating system documentation for more information on escape and special characters.	
HOME_NAME	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.	C:\> net start Oracle <i>HOME_</i> NAMETNSListener

Convention Meaning		Example	
ORACLE_HOME and ORACLE_ BASE	In releases prior to Oracle8 <i>i</i> 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:	Go to the ORACLE_BASE\ORACLE_ HOME\rdbms\admin directory.	
	 C:\orant for Windows NT 		
	 C:\orawin95 for Windows 95 		
	 C:\orawin98 for Windows 98 		
	This release complies with Optimal Flexible Architecture (OFA) guidelines. All subdirectories are not under a top level ORACLE_HOME directory. There is a top level directory called ORACLE_BASE that by default is C:\oracle. If you install Oracle9 <i>i</i> 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 ORACLE_BASE.		
	All directory path examples in this guide follow OFA conventions.		

1 Introduction

Oracle Application Server InterConnect (OracleAS InterConnect) connects to PeopleSoft through the PeopleSoft 7.5x adapter. This chapter provides an overview of the PeopleSoft 7.5x adapter.

What is PeopleSoft?

PeopleSoft supports enterprise application software. It is a system containing PeopleSoft components, with their related tables and data formats for specific tasks, for example, Human Resources or Inventory Control. The PeopleSoft 7.5x adapter supports PeopleSoft's Message Agent and Open Query. The Message Agent accesses PeopleSoft panel groups outside the PeopleSoft environment. Open Query enables third party applications to communicate with PeopleSoft through ODBC standards.

When interacting with PeopleSoft, the PeopleSoft 7.5x adapter provides a Message Server and a Query Server. However, in order for the Message Server to get a list of messages from PeopleSoft, there must be a component to perform the collection.

Before interacting with PeopleSoft, you must first upload the psosa.dat file into your PeopleSoft production environment. The psosa.dat information creates the Message component for OracleAS InterConnect in PeopleSoft. It is through this component that the OracleAS InterConnect Message Server interacts.

Using the PeopleSoft 7.5x adapter you can:

- Preview the signature of component types in a familiar format.
- Select component types to be included in a service.
- Generate the bindings for the items in the service.

System Requirements

To use the PeopleSoft 7.5x adapter, PeopleTools does not need to be installed on your machine. However, if using queries to messages, you must have access to the PeopleSoft ODBC drivers or the PeopleSoft Messaging Agent binaries. The following lists the entities you need to use queries to messages:

- Oracle recommends to install PeopleTools to effectively use the PeopleSoft 7.5x adapter. If you use Queries, you need to have the PeopleSoft ODBC driver installed.
- The Application Server Name is the name of the application server. You must have access to the PeopleSoft Messaging Agent API Libraries, either by installing PeopleTools on your development machine or setting your path to point to the PeopleSoft Messaging Agent Binaries.

See Also: Oracle Application Server InterConnect Installation Guide for hardware requirements

Supported Systems

Table 1–1 lists the systems to which the PeopleSoft 7.5x adapter connects.

Table 1–1Supported Systems

Component Support	Required Components
PeopleSoft	7.5.6

Supported Platforms

The PeopleSoft 7.5x adapter supports the following platforms:

- Windows NT 4.0 with SP 6 or above—Messaging Agent and Open Query
- Windows 2000 with SP 1 or above—Messaging Agent and Open Query
- Solaris 8—Messaging Agent only
- HP-UX, Version 11.0—Messaging Agent only

2

Installation and Configuration

The PeopleSoft 7.5x adapter, specifically the Message Server, requires a modification to the PeopleSoft panel. You must customize this panel and make it available through the OracleAS InterConnect Message Server API, psmsrv75 (for PeopleSoft 7.5.6).

This chapter discusses the following topics:

- Installing the PeopleSoft 7.5 Adapter
- Configuring PeopleSoft 7.5 Adapter
- Starting the PeopleSoft 7.5 Adapter
- Stopping the PeopleSoft 7.5 Adapter

Installing the PeopleSoft 7.5 Adapter

This section contains these topics:

- Preinstallation Tasks
- Installation Tasks
- Post Installation Tasks

Preinstallation Tasks

The PeopleSoft 7.5x 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 7.5x adapter installation:

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

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 7.5x adapter installation.

Installation Tasks

To install the PeopleSoft 7.5x adapter:

1. On the Available Product Components page of the OracleAS InterConnect installation, select PeopleSoft 7.5x adapter, then select **Next**.

Consider the following scenarios:

- If installing the PeopleSoft 7.5x adapter in an independent Oracle home, please 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 7.5x adapter in an existing Oracle home, please make sure that it is a home directory to one of the OracleAS InterConnect component. 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 mySPApp.
- **4.** Click **Next**. The installation page that displays next is based on performing this installation on UNIX or Windows:

On	Then Go to Step
UNIX	5

On	Then Go to Step
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 7.5x adapter and other selected components. The PeopleSoft 7.5x adapter is installed in the following directory:

Platform	Directory
Windows	ORACLE_HOME\oai\9.0.4\adapters\Application
UNIX	ORACLE_HOME/oai/9.0.4/adapters/Application

9. Click **Exit** at the End of Installation page to exit the PeopleSoft 7.5x adapter installation.

Post Installation Tasks

Enabling iStudio

After installing the PeopleSoft 7.5x adapter and the iStudio, complete the following post installation steps to enable iStudio working with the PeopleSoft 7.5x adapter.

See Also: Oracle Application Server InterConnect Installation Guide for information on installing iStudio along with OracleAS InterConnect Development Kit

1. Update the PATH environment variable to include the bin direction:

On Windows: ORACLE_HOME\oai\9.0.4\bin directory

On UNIX: ORACLE_HOME/oai/9.0.4/bin directory

This procedure is required for running the utilities in this directory.

2. Customize the PeopleSoft panel and make it available through the application's Message Server API. The files in the following folder are provided for this purpose:

On Windows: ORACLE_HOME\oai\9.0.4\peoplesoft

On UNIX: ORACLE_HOME/oai/9.0.4/peoplesoft

See Also:

- On Windows: readme.html in the ORACLE_ HOME\oai\9.0.4\peoplesoft directory
- On UNIX: readme.html in the ORACLE_ HOME/oai/9.0.4/peoplesoft directory
- **3.** On Windows only, set the configuration settings for the adapter using the Configuration Editor before using the PeopleSoft adapter for runtime. The Configuration Editor is a Java application and is launched by running the configeditor.bat file in the ORACLE_HOME\oai\9.0.4\config directory.

See Also: Oracle Application Server InterConnect User's Guide

Registering the License (Windows only)

Before using the PeopleSoft 7.5x adapter, or if using the browser in iStudio, you need to register the license using the license registration tool. This tool uses the following files:

- licreg.exe—Located in the ORACLE_HOME\oai\9.0.4\bin directory.
- acboai.lic—The license file located in the following directory:

ORACLE_HOME\oai\9.0.4\config

To register the license, complete the following:

 Update the PATH environment variable to include the ORACLE_ HOME\oai\9.0.4\bin directory. This is required for running the utilities in this directory.

- 2. Double click on licreg.exe to display the License Manager dialog.
- **3.** Navigate to the ORACLE_HOME\oai\9.0.4\config directory.
- 4. Select acboai.lic and click OK.

Licreg.exe silently registers the license. To verify the registration, from a command prompt, launch logdump.exe located in *ORACLE_ HOME*\oai\9.0.4\bin directory. This prints the log messages regarding license registration.

Configuring PeopleSoft 7.5 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:

On	Go to
UNIX	ORACLE_HOME/oai/9.0.4/adapters/Application
Windows	ORACLE_HOME\oai\9.0.4\adapters\Application

Table 2–1 PeopleSoft 7.5 Adapter Directory

Table 2–2 Executable Files

File	Description	
start.bat(Windows)	Takes no parameters, starts the adapter.	
start (UNIX)	Takes no parameters, starts the adapter.	
stop.bat (Windows)	Takes no parameters, stops the adapter.	
stop (UNIX)	Takes no parameters, stops the adapter.	
ignoreErrors.bat (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 ErrorCodes.ini will be ignored.	
ignoreErrors (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 ErrorCodes.ini will be ignored.	

File	Description
ErrorCodes.ini (Windows and UNIX)	Contains one error code per line.
adapter.ini (Windows and UNIX)	Consists of all the initialization parameters which the adapter reads at startup.

Table 2–3 Configuration Files

Table 2–4 Directories

File	Description	
persistence	The messages are persisted in this directory. This directory or its contents should not be edited	
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 oailog.txt file.	

Using the Application Parameter

Adapters do not have integration logic. The PeopleSoft 7.5x 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 *i*Studio under the Applications folder.

If you are using pre-packaged metadata, after importing the pre-packaged metadata into the repository, start up *i*Studio to find the corresponding application (under the Applications folder in *i*Studio) 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 7.5 Adapter Parameters

Hub.ini Parameters

The PeopleSoft 7.5x 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.

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

Table 2–5 Hub.ini Parameters

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.

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

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

Agent Connection Parameters

The PeopleSoft 7.5x 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.

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

Table 2–7 Adapter.ini Parameters

Parameter	Description	Example
agent_log_level	Specifies the amount of logging necessary. Possible values are:	agent_log_level=2
	0=errors only	
	1=status and errors	
	2=trace, status, and errors	
	The default value is 1.	
agent_ subscriber_name	The subscriber name used when this adapter registers its subscription. The possible value is a valid Oracle Advanced Queuing subscriber name and there is no default value.	agent_subscriber_ name=aqapp
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.	<pre>If application=aqapp, instance_number=2, then, agent_reply_ subscriber_ name=aqapp2</pre>
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.	<pre>If application=aqapp, instance_number=2, then agent_reply_ message_ selector=receipient_ list like '%,aqapp2,%'</pre>
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. Possible values are true or false. 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. Possible values are true or false. The default value is true.	agent_throughput_ measurement_ enabled=true

Table 2–7 Adapter.ini Parameters

Parameter	Description	Example
agent_use_ custom_hub_dtd	Specifies if a custom DTD should be used for the common view message when handing it to the hub. By default adapters use an Oracle9 <i>i</i> AS InterConnect-specific DTD for all messages sent to the hub as other Oracle9 <i>i</i> AS InterConnect adapters will be retrieving the messages from the hub and know how to interpret them. Set to true if for every message, the DTD imported for the message of the common view is to be used instead of the Oracle9 <i>i</i> AS InterConnect DTD. Only set to true if a Oracle9 <i>i</i> AS InterConnect adapter is not receiving the messages from the hub. Possible values are true or false. There is no default value.	agent_use_custom_hub_ dtd=false
agent_metadata_ caching	Specifies the metadata caching algorithm. Possible values are:	agent_metadata_ caching=demand
	 startup—Cache everything at startup. This may take a while if there are a lot of tables in the repository. 	
	 demand—Cache metadata as it is used. 	
	 none—No caching. This slows down performance. 	
	The default value is demand.	
agent_dvm_table_ caching	Specifies the DVM caching algorithm. Possible values are:	agent_dvm_table_ caching=demand
	 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. 	
	The default value is demand.	
agent_lookup_ table_caching	Specifies the lookup table caching algorithm. Possible values are:	agent_lookup_table_ caching=demand
	 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. 	
	The default value is demand.	

 Table 2–7
 Adapter.ini Parameters

Parameter	Description	Example
agent_delete_ file_cache_at_ startup	With any of the agent caching methods enabled, metadata from the repository is cached locally on the file system.	agent_delete_file_ cache_at_ startup=false
	Set this parameter to true to delete all cached metadata on startup.	
	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.	
	Possible values are true or false. The default value is false.	
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 Oracle9 <i>i</i> AS 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 Oracle9 <i>i</i> AS 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. The default value is 60000.	agent_persistence_ cleanup_ interval=60000

Table 2–7 Adapter.ini Parameters

Parameter	Description	Example
agent_ persistence_ retry_interval	Specifies how often the persistence thread should retry when it fails to push a Oracle9 <i>i</i> AS InterConnect message. Possible values are any integer greater than 5000. 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 you set the pipeline to false, 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 false, the file persistence is not used in that direction.	agent_pipeline_from_ hub=false
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	<pre>service_ classpath=D:\oracle\ ora904\oai\904\lib\ oai.jar;</pre>
	the valid classpath. There is no default value.	%JREHOME%\lib\il8n.ja r;
		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/agen t/service/AgentServic e
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

 Table 2–7
 Adapter.ini Parameters

Table 2–7 Adapter.ini Parameters

Parameter	Description	Example
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.</number></number>	service_num_vm_args=1
service_vm_ arg <number></number>	Windows only. Specifies any additional arguments to the Java VM. For example, to get line numbers in any of the stack traces, set service_vm_arg1=java.compiler=NONE. If	service_vm_ arg1=java.compiler= NONE
	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 service_ num_vm_args correctly. Possible values are any valid Java VM arguments. There is no default value.	service_vm_ arg2=oai.adapter=.aq
service_jdk_ version	Windows only. The JDK version the adapter Java VM should use. The default value is 1.3.1.	service_jdk_ version=1.3.1
service_jdk_dll	Windows only. The dll the adapter Java VM should use. The default value is jvm.dll.	service_jdk_ dll=jvm.dll
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.	corba_port_ number=14000
encoding	Character encoding for published messages. The adapter uses this parameter to generate encoding information in encoding tag of transformed Oracle9 <i>i</i> AS InterConnect message. Oracle9 <i>i</i> AS 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 Oracle9 <i>i</i> AS InterConnect message consists of characters not supported by UTF-8 and when the XMLParser is unable to handle them.	encoding=JA16SJIS

Parameter	Descr	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	nls_date_
	G	Era designator	AD	format=dd-MMM-yy
	У	Year	1996;96	Multiple date format can be specified as num nls
	М	Month in year	July;Jul;07	formats=2
	W	Week in year	27	nls_date_
	W	Week in month	2	format1=dd-MMM-yy
	D	Day in year	189	nls_date_ format2=dd/MMM/vv
	d	Day in month	10	
	F	Day of week in month	Number 2	
	Е	Day in week	Tuesday; Tue	
	а	A.M./P.M. marker	P.M.	
	Н	Hour in day (0-23)	0	
	k	Hour in day (1-24)	24	
	K	Hour in A.M/P.M. (0-1	1) 0	
	h	Hour in A.M./P.M. (1-1	12) 12	
	m	Minute in hour	30	
	S	Second in minute	55	
	S	Millisecond	978	
	Z	Time zone	Pacific	
	The de	efault date format is EEE /yyy.	MMM dd HH:mm:ss	

Table 2–7 Adapter.ini Parameters

Note: This parameter specifies date format. It is applicable for the date format only.

Parameter	Description	Example
nls_country	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	US
	The default Country code is US.	
	Note : This parameter specifies date format. It is applicable for the date format only.	
nls_language	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/relat ed/iso639.txt	nls_language=en
	The default language code is en.	
	Note : This parameter specifies date format. It is applicable for the date format only.	

Table 2–7 Adapter.ini Parameters

PeopleSoft 7.5 Adapter Parameters

The following table lists the parameters specific to the PeopleSoft 7.5x adapter.

Parameter	Description	Example
bridge_class	This indicates the entry class for the PeopleSoft 7.5x adapter. Do not modify this value. A possible value is com.actional.oai.Agent. There is no default value.	bridge_ class=com.actional.oai. Agent

Starting the PeopleSoft 7.5 Adapter

On UNIX, start the PeopleSoft 7.5x 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 7.5x 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

On Windows only, If you are using the PeopleSoft 7.5x adapter or your browser in iStudio, but you fail to initialize the PeopleSoft 7.5x adapter, you may not have the keys for JavaHome and RuntimeLib, or these keys do not point to the correct JDK. In this case, the iStudio browser will not display or the data from the backend system cannot be imported.

To created these keys, use the Windows regedit tool. To access the regedit tool:

- 1. Click Start and select Run.
- 2. Enter regedit and click OK.

The following example displays the values for these keys when the PeopleSoft 7.5x adapter is installed under the C:\Oracle\Ora90 directory:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\JavaSoft\Java Runtime Environment]
[HKEY_LOCAL_MACHINE\SOFTWARE\JavaSoft\Java Runtime Environment\1.3]
"CurrentVersion"="1.3"
[HKEY_LOCAL_MACHINE\SOFTWARE\JavaSoft\Java Runtime Environment\1.3]
"JavaHome"="c:\\oracle\\ora90\\jdk\\jre"
"MicroVersion"="1"
"RuntimeLib"="C:\\Oracle\\Ora90\\jdk\\jre\\bin\\hotspot"
```

Stopping the PeopleSoft 7.5 Adapter

On UNIX, stop the PeopleSoft 7.5x 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 Interfaces

This chapter provides information specific to PeopleSoft. The following topics are discussed:

- Working with Oracle and PeopleSoft
- Importing the OracleAS InterConnect Project into PeopleSoft
- Creating a New Operator Class and Assigning Permission
- Exception Fields
- Message Agent
- Open Query
- Creating an Implemented Procedure
- Creating a Subscribed Event
- Creating a Published Event

Working with Oracle and PeopleSoft

OracleAS InterConnect provides a complete framework for e-Business application integration across Application to Application, Active Server Pages (Microsoft), and Business to Business domains. PeopleSoft users often configure PeopleSoft to employ OracleAS InterConnect connectivity. For this reason, a PeopleSoft 7.5x adapter can be installed with your PeopleSoft component.

Importing the OracleAS InterConnect Project into PeopleSoft

To use PeopleSoft, you must import the OracleAS InterConnect PeopleSoft message definition project. You can import the message definition project into your PeopleSoft environment.

To automatically import the project, you must have an existing Source Database and a Target Database. The Source Database is the *.dat file supplied with OracleAS InterConnect, containing the current objects that you want to copy to another database. The Target Database is the database where you want to copy your objects.

See Also:

- Chapter 3, "Supported PeopleSoft Interfaces"
- "Exception Fields" on page 3-13
- "Creating a New Operator Class and Assigning Permission" on page 3-11

Regardless of how you create the project, you must create a class of operators and assign permissions.

To import the OracleAS InterConnect project you will need:

- Application Update Database.
- Peoplesoft's Data Mover—Databases inside PeopleSoft are separate entities.
 The Data Mover transfers data from one database to another inside PeopleSoft.
- The following Connection types:
 - Source and Target Databases require a two- or three-tier connection type.
 - Data Mover requires a two-tier connection type.

Automatically Import the OracleAS InterConnect Project

The goal of this section is to place the objects from a source database into a project. This involves the following:

 Importing the psosa.DAT file from the install_ directory\OAI\9.0.4\PeopleSoft directory into the Application Update Database using Data Mover.

Note: Application Update Database is for the Message Agent only.

- Copying items from the Application Update Database to the production database.
- Verifying that the new imported items exist.

The Project Name specified is used throughout the moving process.

Step 1 Import *.DAT to the Application Update Database using the Data Mover

- Copy the install_directory\OAI\9.0.4\PeopleSoft\psosa.DAT file to the c:\Temp directory or to the directory defined by the TEMP Environment Variable setting.
- 2. Select Start > Programs > Peoplesoft > Data Mover.

The PeopleSoft Signon dialog displays.

Figure 3–1 PeopleSoft Signon

PeopleSoft Si	gnon		×				
PEOPLE	PeopleTools 7.56 Copyright (c) 1988-1999 PeopleSoft, Inc. All rights reserved.						
Enter Sig	gnon Information E	Below:					
Connect	ion <u>T</u> ype:	Microsoft SQL Server	•				
Databas	e Name:	ГРТОМО					
<u>Operator</u>	ID:	PTDMO					
<u>P</u> asswor	d:	жжжж					
	OK	Set Password	el				

- 3. Enter information in the following fields:
 - Connection Type—A two-tier Connection Type. For example, select Microsoft SQL server from the dropdown select list.
 - Database Name—The name of the Application Update Database. The Application Update Database is a temporary holding area, comprising a development table with empty cells.

See Also: *The PeopleSoft Installation and Administration Guide* if you do not have an Application Update Database

- Operator ID—The database operator ID.
- Password—The database password.
- 4. Click OK.
- 5. Select File > Open and access the Aurefrsh.dms located in the /Scripts directory to refresh the Application Update Database.
- 6. Select File > Run Script to execute the refresh.
- 7. Select File > Open and access the Auimport.dms located in the /Scripts directory to import your project into the Application Update Database.
- **8.** Select **Edit > Replace**.

The Replace dialog displays.

Figure 3–2 Replace Dialog

Replace	? ×
Find what: AU9999999	Eind Next
Reglace with: VESample	<u>R</u> eplace
	Replace <u>A</u> ll
Match case	Cancel

- **9.** Enter information in the following fields:
 - Find What—Enter AU9999999.
 - Replace With—Enter your project name, for example *YourProjectName*.
- 10. Click Replace All.

- 11. Select File > Run Script to execute the import.
- **12.** Close the **Data Mover**.

Step 2 Copy Project to the Target Database

The following steps copy the business process definition and the activity definition from the Application Update Database to the target database.

- 1. Log on to the PeopleSoft Application Designer.
- 2. Select File > Open.
- 3. Enter your project name, YourProjectName, in the Selection Criteria Name field.
- 4. Click Select.
- 5. Select Tools > Upgrade > Copy.
- 6. Enter the Database Name, Operator ID, and Password for the target database.
- 7. Click OK.

Verify that the Source database, Target database, and Object Types are correct.

Figure 3–3 Copy Dialog

Сору			×
PeopleTools Release:	7.56	Object <u>T</u> ype(s):	_
Database Name:	AUD	Panel Menu	<u>С</u> ору
Application Release:	N/A	Panel Group Business Process	Cancel
Target			
Database Name:	HRDMO		
Application Release:	Core 7.51.00.000		Select All
🔽 Reset Done Flags	🔽 Copy Non-base Languages	Export Project	

- 8. Check the Export Project box to copy the project to the database.
- 9. Click Copy to complete the copy process.
- **10.** Exit the PeopleSoft application.

Step 3 Verify the Objects Exist

To verify the object exists, you must first log on to PeopleSoft.

- 1. Select Start > Programs > Peoplesoft > Application Designer.
- **2.** Select a three-tier connection type from the dropdown menu. For example, select Application Server.

Figure 3–4 PeopleSoft Signon

PeopleSoft Si	ignon	X							
PEOPle	PeopleTools 7.56 Copyright (c) 1988-1999 PeopleSoft, Inc. All rights reserved.								
Enter Sig	gnon Information B	elow:							
Connect	ion <u>T</u> ype:	Application Server							
Applicati	on Server Name	EA-SUN01							
<u>O</u> perator	r ID:	PTDMO							
<u>P</u> asswor	·d:	жиния							
	ОК	Set Password Cancel							

- **3.** Select **File > Open**.
- 4. Select the **Project Object Type**.
- 5. Enter the object name, *YourProjectName*, and click **Select**.

You have successfully imported the objects into your target database. The Business Process Object and its related object, Activity, are now in the target database.

Manually Create the OracleAS InterConnect Project for 7.5.6

The following steps guide you through manually creating the OracleAS InterConnect project for 7.5.6.

Step 1 Create a Project

- Select File > New > Project to create a project on the PeopleSoft Application Designer.
- 2. Select File > New > Panel to create a panel.
- 3. Select Insert > Grid to add a grid to the panel.

Select the grid by clicking on it and placing it on the panel. Click and hold the mouse. Drag the mouse to increase the size the grid then release the mouse after finishing your resize of the grid.

- **4.** Press **Ctrl+F** or right-click **Panel Field Properties** to open the grid properties dialog.
- **5.** Select the **General** tab.
- 6. Enter PSMSGAGTDEFN in the Main Record input field.
- 7. Select the **Columns** tab and click **Add**.
- 8. Select Edit Box as the column type and click OK.
- **9.** Enter **ACTIVITYNAME** in the Field Name input field.
- **10.** Select the **Label** tab.
- 11. Enter Activity in the Text input field and click OK.
- 12. Click Add.
- **13.** Select **Edit Box** as the column type and click **OK**.
- 14. Enter INPUTNAME in the Field Name input field.
- **15.** Select the **Label** tab.
- **16.** Enter **Message** and click **OK**.
- **17.** Click **Add**.
- **18.** Select **Long Edit Box** as the column type and click **OK**.
- **19.** Enter **DESCRLONG** in the Field Name input field.
- **20.** Select the **Label** tab.
- **21.** Enter **Description** in the Text input field.
- 22. Click OK twice.
- **23.** Resize the grid and grid columns.

- **24.** Select **File > Save** to save the panel.
- **25.** Specify a panel name, for example, PSOSA_MESSAGENAMES, and click **OK**.

Step 2 Insert the Current Object into a Project

- 1. Close the panel dialog.
- 2. Select File > New > Panel Group to create a Panel Group.
- **3.** Select **Insert > Panel** into the new group.
- 4. Enter the name of the panel just saved, for example, PSOSA_MESSAGENAMES in the Name input field and click Insert.
- 5. Close the dialog box.
- 6. Press Alt+Enter while the panel group's dialog is active.
- **7.** Select the **Use** panel.
- 8. Specify PSMSGAGTDEFN as the search record.
- 9. Check only Update/Display.
- 10. Click OK.
- **11.** Select **File > Save** to save the Panel Group.
- **12.** Specify a panel group name, for example, PSOSA_MESSAGENAMES and click OK.
- **13.** Select Insert > Current Object into Project.
- **14.** Close the Panel Group dialog.

Step 3 Create a Menu

- 1. Select File > New > Menu.
- 2. Click OK Standard Menu.
- **3.** Double-click the rectangle between Favorites and Language.
- 4. Enter values into the Name and Label text areas for the Bar Item, for example, USE and Use, and click OK.
- 5. Double-click the rectangle below the new menu item Use.
- 6. Enter values into the Name and Label text areas for the Bar Item, for example, GETMESSAGENAMES and Get Message Names and click Select.

- 7. Enter the name of the Panel Group, for example, PSOSA_MESSAGENAMES, in the input field labeled Name and click **Select**.
- 8. Click OK.
- 9. Press Alt+Enter.
- **10.** Select the **Use** tab.
- **11.** Specify a menu label, for example, the PeopleSoft 7.5x adapter.
- **12.** Check **Menu Installed**.
- **13.** Click **OK**.

Step 4 Save the Menu

- 1. Select File > Save.
- 2. Specify a menu name, for example, PSOSA_MNU and click OK.
- 3. Select Insert > Current Object into Project.
- **4.** Close the Menu dialog.

Step 5 Create a Business Process

- 1. Select File > New > Business Process.
- **2.** Click **Activity** on the palette (the icon with foot prints) and clicking on the Business Process dialog to add an activity.
- 3. Click **OK** in the Activity Choices dialog.
- 4. Right-click **Activity** and enter **ObjectAdapter** as the activity name.
- 5. Click OK.
- 6. Double click Activity.
- **7.** Click **Other app** (the icon with a opened door) and on the Business Process dialog to add a message.

Step 6 Create the Message Definition

- **1.** Right-click the **Message** icon.
- 2. Enter GetMessageNames as the name of the message.
- 3. Enter a short description to display in the browser.
- 4. Click Attributes.

- 5. Select the new menu (PSOSA_MNU), the bar name (USE), the item name (GETMESSAGSNAMES), the action name, (&Update/Display), and the search record name (PSMSGAGTDEFN).
- 6. Click OK.
- 7. Click Level Mapping....
- 8. Check the Output all occurrences.
- 9. Click OK.
- 10. Click Field Mapping....
- 11. Click Add.
- **12.** Specify **ACTIVITYNAME** (case sensitive) as the field name.
- 13. Select **PSMSGAGTDEFN** value in the Record list.
- 14. Select the ACTIVITYNAME value in the Field list.
- **15.** Select **Output in the Map When** combo box and click **OK**.
- 16. Click Add.
- **17.** Specify **INPUTNAME** (case sensitive) as the field name.
- **18.** Select **PSMSGAGTDEFN** value in the Record list.
- **19.** Select the **INPUTNAME** value in the Field list.
- **20.** Select **Output in the Map When** combo box and click **OK**.
- 21. Click Add.
- **22.** Specify **DESCRIPTION** (case sensitive) as the field name.
- 23. Select PSMSGAGTDEFN value in the Record list.
- 24. Select the DESCRLONG in the Field list.
- 25. Select Output in the Map When combo box.
- **26.** Click **OK** three times to return to the main menu.
- **27.** Select **File > Save** to save the Business Process.
- 28. Specify a business process name, for example, PSOSA_BP.
- 29. Click OK.
- **30.** Select **Insert > Current Object into Project**.

- 31. Close the Business Process dialog.
- 32. Select File > Save Project to save the project.
- **33.** Specify a project name, for example, PSOSA_PRJ.

See Also: "Creating a New Operator Class and Assigning Permission" on page 3-11 for instructions on creating a class of operators and assigning permissions

Creating a New Operator Class and Assigning Permission

Regardless of how you import the OracleAS InterConnect Message Agent Project, either automatically or manually, you must give access to the new menu and panel by creating a class of operators and assigning permission. You then assign the new class with the permissions to the PeopleSoft 7.5x adapter operator. The following steps describe this process.

Step 1 Create a Class of Operators

1. Select Go > PeopleTools > Security Administrator.

A new PeopleSoft dialog displays.

- 2. Select File > New to create a new class of operator.
- 3. Select Class Of Operators as the value of the Security Definition Type combo.
- 4. Select Insert > Menu Name.
- 5. Select the new menu, *NewMenuName*, and click **OK**.

The Select Menu Items dialog displays.

- 6. Click Select All, then click OK.
- Select File > Save and specify a name, for example, PSOSA_OP.
 This saves the class of operators under the name of PSOSA_OP.
- 8. Click OK and close the dialog.

Step 2 Assign the Permissions of the Class to the New Operator

- 1. Select File > Open.
- 2. Select an operator.
- 3. Click the Classes icon.

- 4. Select Insert > Class.
- 5. Select the new class of operators, for example, PSOSA_OP.
- 6. Click OK.
- 7. Close the dialog and select Yes when prompted to save your changes.

Step 3 Test the New Setup

- 1. Run the Application designer and sign on as the operator with permission to access the panel.
- 2. Select Go.

A new dialog displays.

3. Select Use > Get Message Names.

The new panel displays the list of messages defined in your Peoplesoft database.

Additional Information

The following is additional information for the PeopleSoft 7.5x adapter pre-installation tasks.

 Building or Altering Tables and Administering Menu Security—If you copied tables to your target database, then you will need to either Build or Alter the tables depending on which tables were copied.

See Also: PeopleBooks: Development Tools/Application Designer/Building SQL Objects

 Building or Altering Tables and Administering Menu Security—You may need to administer security to objects that were copied to your target database, such as menu items.

See Also: PeopleBooks: Administration Tools/Security/Security Administrator

Exception Fields

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

For example, setup PeopleSoft on one side, an OracleAS InterConnect hub in the middle, and a Web front end on the other side. If the Web front end tries to add a record to the PeopleSoft side and a record with the same primary key already exists in PeopleSoft, a non-retryable error occurs. The exception field contains the exception data can then be propagated back to the Web front end.

Example 3–1 Exception Message:

Message Agent

Using the PeopleSoft Message Agent, PeopleSoft panel groups can be accessed outside the PeopleSoft environment. Each panel in a PeopleSoft panel group is used to enter and retrieve data. Access to PeopleSoft panels is gained through a set of Application Programming Interfaces (APIs) together with a message definition. A message definition creates the mapping between fields in the message definition and fields on a PeopleSoft panel. This is the way PeopleSoft programs are exposed. The PeopleSoft 7.5x adapter acts as the client message agent program, which allows you to access and call all message agent definitions within a PeopleSoft application server. The PeopleSoft 7.5x adapter communicates with the Message Agent Server when a client sends an inbound call via the adapter.

Open Query

Open Query allows you to call queries that exist on the PeopleSoft application server through the standard ODBC interface. The iStudio browser allows you to graphically explore all Open Query definitions on an application server with the Component Selector. This simplifies the process of invoking the queries by exposing them as objects with a single execute method.

Creating an Implemented Procedure

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

Figure 3–5 Creating an Implemented Procedure



The Implement Wizard—Select a Procedure dialog displays.

Implement Wizard - Select a Pi	rocedure	×
	Application PeopleSoft Message Type PeopleSoft Select a Procedure Customer AddCustomer Undet Customer	
	DeleteCustomer QueryCustomer UpdateCustomerStatus	
Cancel	(≤ Back <u>Next ≫</u> (Eir	nish

Figure 3–6 Implement Wizard - Select a Procedure

3. Select a procedure and click Next.

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

See Also: "Importing Attributes" on page 3-17

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

	Object Name (PeopleSoft:/	/lodify Fields /Queries/AC	B_NEW_AC	CT/Execute	2
	Name	Type	OwnerN	Array	Default	
¢ þ	Sequence_Number	Double			NULL	IN
1 1 1	⊕Result	Queries_A0	ACTN/V1		NULL	OUT
	exception	String			NULL	OUT
	<u></u>	Import	Add Dolo	to Clear		

Figure 3–7 Implement Wizard - Define Application View

4. Click Next.

The Define Mapping Arguments dialog displays.

Implement Wizard - Define M	apping:IN Arguments		X
	Summary		New Edit Delete Clear
Cancel		≪ <u>B</u> ack <u>N</u> ext ≫	Einish

Figure 3–8 Implement Wizard - Define Mapping: IN Arguments

- 5. Click New.
- 6. 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 displays.

Figure 3–9 PeopleSoft Login

Oracle iStudio - myWorkspace.i	ws
Data Source Dialog	PeopleSoft PeopleTools
Application Server Name	EPDMO
Operator ID	VP1
Password	***
People Soft version	7.5x -
OK C	Cancel

- 2. Enter information in the following fields:
 - Data Source Dialog—Automatically populated by the PeopleSoft 7.5x adapter when accessed through the iStudio wizards.
 - Application Server Name—A valid application server name.
 - Operator ID—A valid operator ID.
 - Password—A valid password.

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

3. Click OK.

The Component Selector dialog displays.

- Component Selector X 😓 Messages - Message Agent adapter Retrieve_Contracts_Expiring - Retrieve Contracts Expiring ⊕-ACB_Pub_Engine ⊕−Actional_Test ⊕−AddDept ⊕-Adhoc_Import_from_nVision ⊕-Analyze_ERS_Errors ⊕-Analyze_Matching_Errors ⊕-Auto_Bank_Acct_Reconciliation ⊕-Auto_Inbound_Deal_Confirmation ⊕–Bank_Statement_Arrived ⊕-BCT_WF_NOTIFY ⊕-BCTP_COMPLETIONS ⊕-BCTP_INV_PICKING ⊕-BCTP_MISC_ISSUE B-BCTP_PRODUCTION_PICKING ⊕−BCTP_PUTAWAY ⊕-BCTP_RECEIPT ⊕-BCTP_SHIPMISC ⊕-BCTP_TRANSFER ⊕-BD_PHASE_DATA BD_TOKEN_AGENTS Aill Interface ΟK Cancel Actiona
- Figure 3–10 Component Selector

- 4. Expand the Message Agent adapter folder.
- 5. Double-click a message to expand the tree.
- 6. Select a component and click OK.

The selected component and its attributes display on the Define Application View dialog.

Note: When publishing an event, the Component Selector displays the Events folder. Select an Event to import and click **OK**.

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 3–11 Creating a Subscribed Event



The Subscribe Wizard—Select an Event dialog displays.



Figure 3–12 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 displays.

Subscribe Wizard - Define A	pplication View	Modify	/ Fields		×
	Object Name				
	Attributes				
	Name	Type	Owner/Ver	Array	Default
		Import Add	Delete	ear	
				C	Cross Reference
Cancel				Next >	Einish

Figure 3–13 Subscribe Wizard - Define Application View

5. Click Import and select PeopleSoft.

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

See Also: "Importing Attributes" on page 3-17

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

~	Object Name 3/	Modif DBAG_Contra	y Fields	/Retrieve_Co	ontracts_Expiring
	Name	Type	Owner/Ver	Array	Default
· 223.	Contract	String			NULL
	SetID	String			NULL
	Vendor	String			NULL
	Contract_Expiry_Date	Date			NULL
	Buyer	String			NULL
		mport] Add	Delete Cla	ear	
				C	ross Reference

Figure 3–14 Subscribe Wizard - Define Application View

6. Click Next.

The Define Mapping dialog displays.

7. Click New to define mappings and click Finish.

Creating a Published Event

To publish an event from PeopleSoft, there is a configuration step that must be completed. You need to define a published event in the publishing database for the PeopleSoft 7.5x adapter. These definitions can be created using the pubmgr tool.

See Also: Oracle Application Server InterConnect Adapter Publishing Engine

To publish an event using iStudio:

Figure 3–15 Creating a Published Event

1. Right-click **Published Events** under the PeopleSoft folder and click **New**.

Oracle iStudio - myWorkspace.iws File Edit Procedure Event Help 🗋 🚳 i 🦦 🔪 🐘 📲 i 🔂 搅 📆 Design Deploy -Project PeopleSoft 😓 🔠 Common Views



The Publish Wizard—Select an Event dialog displays.

Publish Wizard - Select an Event				×
	Application <u>PeopleSoft</u> Message Type <u>PeopleSoft</u> Select an Event			
	 DeleteCustomer QueryCustomer UpdateCustomerStatus 			
Cancel		< Back	Next≫	Einish

Figure 3–16 Publish Wizard - Select an Event

2. Select an event and click Next.

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

See Also: "Importing Attributes" on page 3-17

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

Publish Wizard - Define Applica	t ion View Object Name	Put	Modify blishing:#Bank/	Fields NewAcct		· · · · · · · · · · · · · · · · · · ·
	Attributes Name ⊕ Result		Type Queries_ACE	Owner/Ver USERS/V1	Array 2	Default NULL
Cancel	Event Map	În	nport Add	Delete Cla	ar	Tracking Fields

Figure 3–17 Publish Wizard - Define Application View

3. Click Next.

The Define Mappings dialog displays.

4. Click New to define mappings and click Finish.

4

Using the Configuration Editor

This chapter describes how to use the Configuration Editor to configure the PeopleSoft 7.5x adapter. The Configuration Editor is only used at runtime. The following topics are discussed:

- Configuration Editor
- PeopleSoft Login
- PeopleSoft Scalability
- 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 the *Oracle Application Server InterConnect Configuration Editor User's Guide* for more information on the Master Key.

Configuration Editor

To configure settings for the PeopleSoft 7.5x 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. This may be needed, for example, if you want to run two instances of the PeopleSoft 7.5x adapter on the same machine. You may want to have two instances of the same type of adapter if these instances need to connect to different backend 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, whenever it runs.

- 4. Click Profile.
- 5. Select Set As Default from the Profile dropdown menu.

6. Select your new profile.



Figure 4–1 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 identify both the ODBC driver and the Application driver as the PeopleSoft Service Provider supports both queries and message.



Figure 4–2 Login Panel

Table 4–1	Login Panel	Configuration	Settings
-----------	-------------	---------------	----------

Login Panel Fields	Fi€	eld Description	
Data Source Name	Th exa	This works in a two-tier mode and is used for queries, for example, Microsoft SQL Server.	
	Ins	ert the ODBC driver:	
	1.	Select the Control Panel > ODBC Data Source and make sure that a PeopleSoft Data Source is available and that the PeopleSoft Data Source points to the correct data.	
	2.	Open the database by double-clicking the data source to view the DataBase Name. Insert the Data Source Name from the Control Panel dialog into this text area.	

Login Panel Fields	Field Description	
Application Server Name	This works in a two-tier mode and is used for queries, such as Microsoft SQL Server.	
	Insert the ODBC driver:	
	1. Select Control Panel > ODBC Data Source and make sure that a PeopleSoft Data Source is available and make sure that the PeopleSoft Data Source points to the correct data.	
	2. Open the database by double-clicking the data source to view the DataBase Name. Insert the Data Source Name from the Control Panel dialog into this text area.	
	On a Unix systems, the form is machine_name:port_ number. For example, People2:7000.	
Operator ID	Insert the identification used to access the PeopleSoft application.	
Password	Enter the PeopleSoft password. The Password is only editable under specific user-defined profiles.	
PeopleSoft Version	Select the version of the PeopleSoft application.	

 Table 4–1
 Login Panel Configuration Settings(Cont.)

PeopleSoft Scalability

The PeopleSoft setup predetermines the total number of servers. This tab determines how servers are to be used with the PeopleSoft 7.5x adapter and the server process idle time-out.

Figure 4–3 Scalability Panel

Configuration Settings Editor			_ 🗆 ×
<u>File</u> <u>Profile</u>			
O Global Settings			
Profile New Profile			
Categories CCCS FTP FTP Stack PeopleSoft Cogin Scalability Use Global Settings Message Agent Se Open Query Servers Data Formats SAPR/3	Maximum Number of Servers Reclaiming Interval	5	minutes
Message Agent Servers	×		

Table 4–2 Scalability Panel Configuration Settings

PeopleSoft Scalability Panel Fields	Field Description
Message Agent Servers	Maximum Number of Servers—The setting defaults to one server. The maximum number is determined by the PeopleSoft system. The adapter's API—psmsrv75 (for PeopleSoft 7.5.x) is the Message Agent Server providing PeopleSoft libraries with scalability. As PeopleSoft libraries are not multi-threaded, scalability can only be achieved by having several processes.
	Reclaiming Interval—The default setting is 5 minutes. After a set period of time of no activity, a server process is stopped to be re-used by another process. It is important that this setting not be too low—making allowances for the connection time to a PeopleSoft system.

PeopleSoft Scalability Panel Fields	Field Description
Open Query Servers	Maximum Number of Servers—The setting defaults to one server. The maximum number is determined by the PeopleSoft system. The adapter's psqrysrv (PeopleSoft 7.5.x) is the Query Server providing PeopleSoft libraries with scalability. As PeopleSoft libraries are not multi-threaded, scalability can only be achieved by having several processes.
	Reclaiming Interval—The default setting is 5 minutes. After a set period of time of no activity, a server process is stopped to be re-used by another process. It is important that this setting not be too low—making allowances for the connection time to a PeopleSoft system.

Table 4–2 Scalability Panel Configuration Settings(Cont.)

Data Formats

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

Figure 4–4 Data Format Panel

Configuration Settings Editor				_ 🗆 ×
<u>File</u> Profile				
O Global Settings				
Profile New Profile	•			
Categories	000000	Date	MM/DD/YY	
FTP	ananan.	Time	hh:mm:ss.	
PeopleSoft	000000	DateTime	YYY hh:mn	
	000000			
Data Formats	1000000			
	000000			
	1000000			
	100			
Provides conversion informatio	n for d	ate and time s	trings used in me	ssages.

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/YYY hh:mm:ssAA, where AA is either AM or PM.

 Table 4–3
 Data Format Panel Configuration Settings

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