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PeopleSoft Customer Relationship Management 9.2 (through Update Image 10) Installation

February 2016

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About This Documentation

This preface discusses:

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Understanding This Documentation

This documentation is designed to direct you through a basic PeopleSoft installation. It is not a substitute for the database administration documentation provided by your relational database management system (RDBMS) vendor, the network administration documentation provided by your network vendor, or the installation and configuration documentation for additional software components that are used with PeopleSoft products.

Required updates to this installation documentation are provided in the form of "Required for Install" incidents, which are available on My Oracle Support.

Instructions for installing Oracle's PeopleSoft PeopleTools are provided in PeopleSoft PeopleTools installation guides. Application-specific installation instructions are provided in a separate document for the PeopleSoft application. For instance, if you are installing Oracle's PeopleSoft Customer Relationship Management (CRM), you need both the PeopleSoft PeopleTools installation and the additional instructions provided for installing PeopleSoft CRM.

To find the installation documentation for PeopleSoft PeopleTools or for your PeopleSoft application, go to My Oracle Support and search for the installation guide for your product and release.

Note. Before proceeding with your installation, check My Oracle Support to ensure that you have the latest version of this installation guide for the correct release of the PeopleSoft product that you are installing.

Audience

This documentation is written for the individuals responsible for installing and administering the PeopleSoft environment. This documentation assumes that you have a basic understanding of the PeopleSoft system. One of the most important components in the installation and maintenance of your PeopleSoft system is your on-site expertise.

You should be familiar with your operating environment and RDBMS and have the necessary skills to support that environment. You should also have a working knowledge of:

- SQL and SQL command syntax.
- PeopleSoft system navigation.
- PeopleSoft windows, menus, and pages, and how to modify them.
- Microsoft Windows.

Oracle recommends that you complete training, particularly the PeopleSoft Server Administration and Installation course, before performing an installation.

See Oracle University http://education.oracle.com.

Typographical Conventions

To help you locate and understand information easily, the following conventions are used in this documentation:

Convention	Description
`Monospace`	Indicates a PeopleCode program or other code, such as scripts that you run during the install. Monospace is also used for messages that you may receive during the install process.
Italics	Indicates field values, emphasis, and book-length publication titles. Italics is also used to refer to words as words or letters as letters, as in the following example: Enter the letter *O*.
Initial Caps	Field names, commands, and processes are represented as they appear on the window, menu, or page.
lower case	File or directory names are represented in lower case, unless they appear otherwise on the interface.
Menu, Page	A comma (,) between menu and page references indicates that the page exists on the menu. For example, "Select Use, Process Definitions" indicates that you can select the Process Definitions page from the Use menu.
Cross-references	Cross-references that begin with *See* refer you to additional documentation that will help you implement the task at hand. We highly recommend that you reference this documentation. Cross-references under the heading *See Also* refer you to additional documentation that has more information regarding the subject.
" " (quotation marks)	Indicate chapter titles in cross-references and words that are used differently from their intended meaning.
Note. Note text.	Text that begins with *Note.* indicates information that you should pay particular attention to as you work with your PeopleSoft system.
Important! Important note text.	A note that begins with *Important!* is crucial and includes information about what you need to do for the system to function properly.

Convention	Description
Warning! Warning text.	A note that begins with *Warning!* contains critical configuration information or implementation considerations; for example, if there is a chance of losing or corrupting data. Pay close attention to warning messages.

Products

This documentation may refer to these products and product families:

- Oracle BPEL Process Manager
- Oracle Enterprise Manager
- Oracle® Tuxedo
- Oracle® WebLogic Server
- Oracle's PeopleSoft Application Designer
- Oracle's PeopleSoft Change Assistant
- Oracle's PeopleSoft Change Impact Analyzer
- Oracle's PeopleSoft Data Mover
- Oracle's PeopleSoft Process Scheduler
- Oracle's PeopleSoft Pure Internet Architecture
- Oracle's PeopleSoft Customer Relationship Management
- Oracle's PeopleSoft Financial Management
- Oracle's PeopleSoft Human Capital Management
- Oracle's PeopleSoft Enterprise Learning Management
- Oracle's PeopleSoft Pay/Bill Management
- Oracle's PeopleSoft PeopleTools
- Oracle's PeopleSoft Enterprise Performance Management
- Oracle's PeopleSoft Interaction Hub
- Oracle's PeopleSoft Staffing Front Office
- Oracle's PeopleSoft Supply Chain Management

See http://www.oracle.com/us/products/applications/peoplesoft-enterprise/index.html for a list of PeopleSoft Enterprise products.

Related Information

Oracle provides reference information about PeopleSoft PeopleTools and your particular PeopleSoft application. The following documentation is available on My Oracle Support and on the Oracle PeopleSoft Online Help site:

- Product documentation for PeopleTools: Getting Started with PeopleTools for your release. This documentation provides a high-level introduction to PeopleSoft PeopleTools technology and usage.
- Product documentation for PeopleSoft Application Fundamentals for your PeopleSoft application and release.

This documentation provides essential information about the setup, design, and implementation of your PeopleSoft application.

To access documentation on My Oracle Support, go to https://support.oracle.com.

To access PeopleSoft Online Help (PeopleBooks), go to the Oracle PeopleSoft Online Help site:

www.peoplesoftonlinehelp.com

To install additional component software products for use with PeopleSoft products, including those products that are packaged with your PeopleSoft products, you should refer to the documentation provided with those products, as well as this documentation.

Comments and Suggestions

Your comments are important to us. We encourage you to tell us what you like, or what you would like changed about our documentation, PeopleSoft Online Help (PeopleBooks), and other Oracle reference and training materials. Please send your suggestions to:

PSOFT-Infodev_US@oracle.com

While we cannot guarantee to answer every email message, we will pay careful attention to your comments and suggestions. We are always improving our product communications for you.

Chapter 1

Installing PeopleSoft CRM 9.2 Applications

This chapter discusses:

- Using Oracle E-Delivery to Obtain Installation Files
- Installing PeopleSoft PeopleTools and Databases
- Using Fluid User Interface
- Configuring an FTP Server for Storing Attachments
- Setting Start Values for Auto-Numbered Fields
- Configuring Computer Telephony Integration
- Activating Basic Data Summary and Messaging
- Setting Up the PeopleSoft Integration Broker
- Setting Up Cybersource Credit Card Processing Connectivity for PeopleSoft Pure Internet Architecture
- Configuring Application Search Using Oracle Secure Enterprise Search

Task 1-1: Using Oracle E-Delivery to Obtain Installation Files

Before beginning the installation, you must obtain the PeopleSoft CRM 9.2 installation software by downloading the necessary zip files from the Oracle Software Delivery Cloud portal (formerly Oracle E-Delivery). Use the documentation available on Oracle Software Delivery Cloud to ensure that you obtain all of the zip files required for your environment.

See Oracle Software Delivery Cloud, http://edelivery.oracle.com.

Task 1-2: Installing PeopleSoft PeopleTools and Databases

This section discusses:

- Installing PeopleSoft PeopleTools
- Reviewing the Demo Database Sizing
- Installing Application Files to the Custom PS_APP_HOME Location

Task 1-2-1: Installing PeopleSoft PeopleTools

Install PeopleSoft PeopleTools as described in the "PeopleSoft PeopleTools 8.55 Installation Guide" for your database platform.

See PeopleSoft PeopleTools Installation Guide, for your database platform, on My Oracle Support.

PeopleSoft CRM requires that you specify a process scheduler server to be used for workflow processes. If you choose to have a dedicated workflow server, you must set one up as you complete the tasks in the PeopleSoft PeopleTools 8.55 Installation guide, "Setting Up Process Scheduler." You must specify a PeopleSoft CRM workflow server, regardless of whether you set up a dedicated server.

See *PeopleSoft CRM: Automation and Configuration Tools,* "Setting Up PeopleSoft CRM Workflow."

Note. PeopleSoft CRM applications do not use any COBOL batch processes. If PeopleSoft CRM is the only PeopleSoft product line that you are installing, you do not need to run PSRUN.MAK or compile or link any COBOL programs.

Note. PeopleSoft People Tools release 8.55 with minimum patch level 01 or higher is required at Install or Upgrade.

Note. For the additional component software that writes to PS_HOME, if you are setting up your PS_HOME as a *read-only* environment the Application Server Administrator must have read and write access to PS_HOME.

See *PeopleTools: System and Server Administration,* "Securing PS_HOME and PS_CFG_HOME"

Task 1-2-2: Reviewing the Demo Database Sizing

This table lists Demo database requirements for PeopleSoft CRM by RDBMS platform:

Platform	Approximate Database Size
DB2 LUW Non-Unicode	15.5 GB
DB2 LUW Unicode	19.5 GB
DB2 z/OS Non-Unicode	11.2 GB
DB2 z/OS Unicode	11.4 GB
Microsoft SQL Server Non-Unicode	3.6 GB
Microsoft SQL Server Unicode	3.7 GB
Oracle Non-Unicode	13 GB
Oracle Unicode	13 GB

Note. For the sake of brevity, this documentation sometimes refers to DB2 for z/OS as *DB2 z/OS,* and it sometimes refers to DB2 for Linux, UNIX, and Windows as *DB2 LUW.*

Note. For HP-UX, verify that your environment variable LC_ALL has the following setting:

american.iso88591

Task 1-2-3: Installing Application Files to the Custom PS_APP_HOME Location

You can elect to install your PeopleSoft application files into a custom location that is identified by the PS_APP_HOME environment variable.

You can continue to install applications into PS_HOME using the traditional approach, or you can install to the custom location PS_APP_HOME. Electing to continue using the traditional PS_HOME structure brings no impact to your implementation, and you can carry on the same as before. However, if you are seeking further modularity and more streamlined implementations, then installing your PeopleSoft application into a separate PS_APP_HOME location is an attractive alternative.

For more information about PS_APP_HOME and the corresponding instructions to configure and implement this option, you can refer to the following documentation that is available on My Oracle Support, the Oracle Technology Network and the PeopleSoft Online Help (PeopleBooks) web sites:

See Oracle's PeopleSoft PeopleTools 8.55 Release Notes.

See PeopleTools Installation for your database platform.

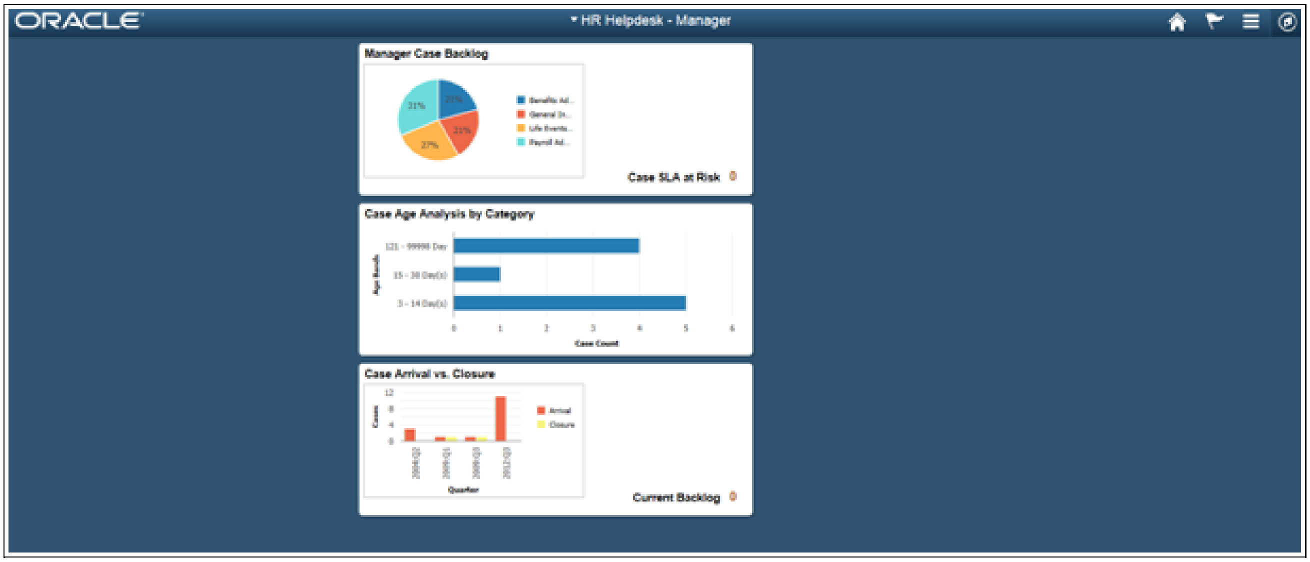
See *PeopleTools: System and Server Administration*

Note. For the purposes of this installation document, use the reference <PS_APP_HOME> as the location where the application files will reside. If you are not implementing the split location, then this variable will be equal to <PS_HOME>.

Task 1-3: Using Fluid User Interface

When you sign in to your PeopleSoft application, you may see the PeopleSoft Fluid User Interface by default. To access the menu items, as seen in the classic user interface, from the PeopleSoft Fluid User Interface:

1. On the PeopleSoft Fluid User Interface, shown in this example, select (press) the NavBar button at the top right, which looks like a compass.



PeopleSoft Fluid User Interface home page

The Navigation bar (NavBar) side page appears.

2. Select (press) Navigator.

NavBar side page

The menu structure appears.

3. Navigate to the desired item, such as Set Up CRM or PeopleTools.

Navigator side page with PeopleSoft menu items

See PeopleTools: Applications User's Guide, Working With Fluid Homepages

See PeopleTools: Fluid User Interface Developer's Guide

Task 1-4: Configuring an FTP Server for Storing Attachments

PeopleSoft CRM applications enable you to add notes and attach supporting files to many objects. The attached files are physically stored on an FTP server. In this task, you specify the application URLs used to save and retrieve file attachments.

To set the URLs for file attachments:

1. Set up an FTP server for storing the attachments.

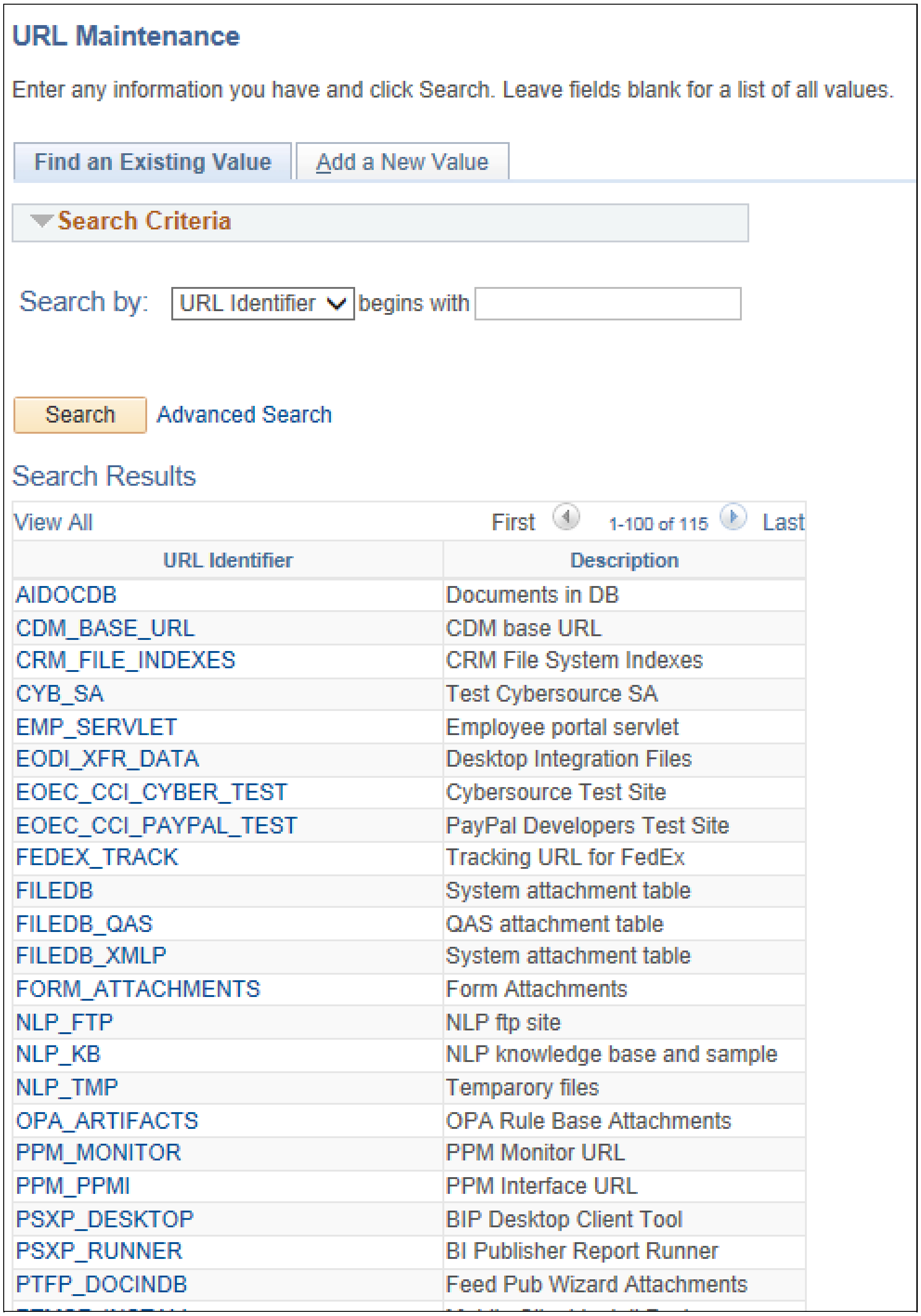
   There are no special requirements; any standard FTP server will do.

2. Log in to PeopleSoft using a user ID that gives you access to the PeopleSoft PeopleTools Utilities menu.
3. Select PeopleTools, Utilities, Administration, URLs.

   The URL Maintenance Search page appears.

4. Click the Search button to display and select from a list of URL Identifiers.

   The database includes predefined URL identifiers. Each of these identifiers represents a particular type of attachment that is available in PeopleSoft CRM. The description indicates which PeopleSoft CRM product each identifier relates to, as shown in the following example:

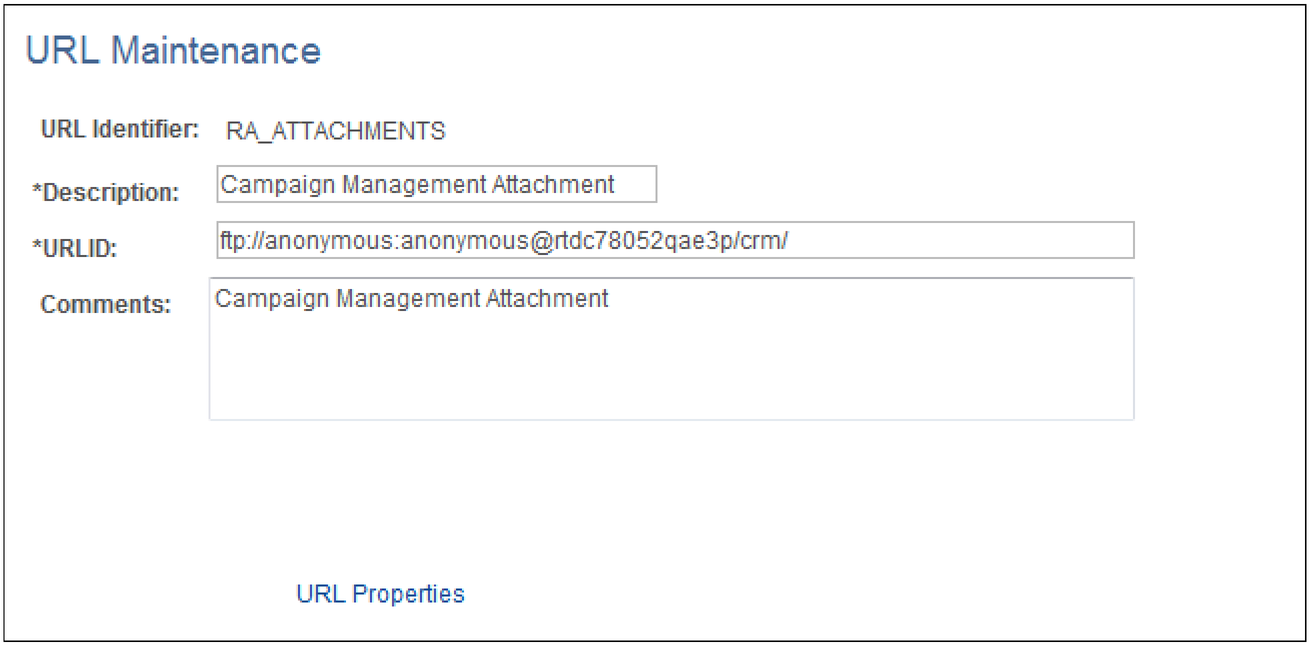


URL Maintenance Search page

Note. The URL Identifier RF_FDM_LINKS is not related to attachments. It is used in certain integration scenarios between PeopleSoft CRM and Oracle's PeopleSoft Supply Chain Management.

See *PeopleSoft CRM: Integrated Field Service*," Integrating with PeopleSoft Applications."

5. For each attachment type that you plan to use, select the URL identifier and enter the FTP server URL that the application uses to access this attachment type, as shown in the following example:



URL Maintenance page - URL Identifier: RA_ATTACHMENTS page

See *PeopleTools: System and Server Administration,* "Using PeopleTools Utilities."

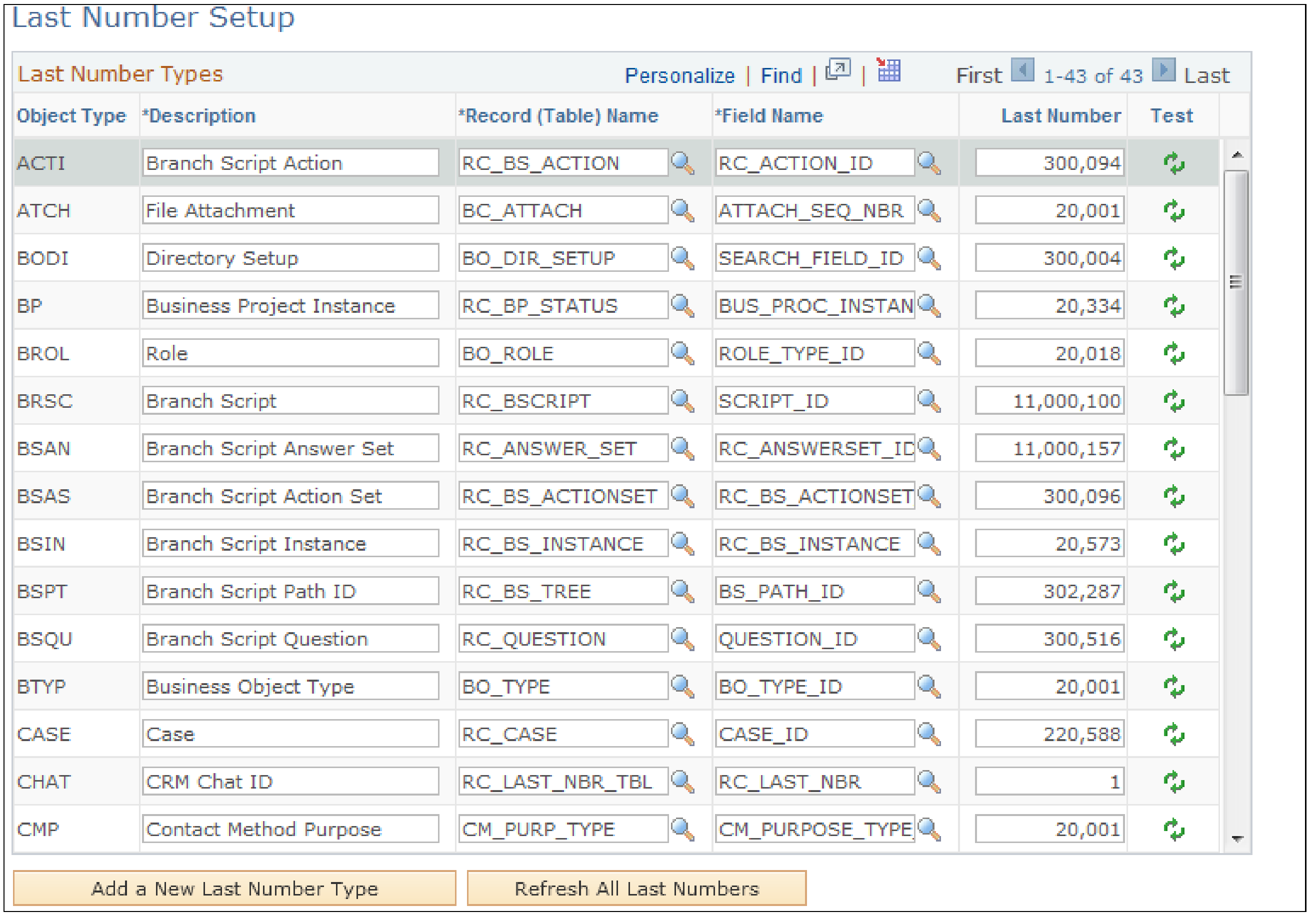
Task 1-5: Setting Start Values for Auto-Numbered Fields

Set the starting value for objects that use the Last Number Setup page (instead of the Auto-numbering page) to generate auto-numbered IDs as follows:

1. Select Set Up CRM, Common Definitions, Codes and Auto Numbering, Last Numbers.

   The Last Numbers Setup page appears.

2. Click the Refresh All Last Numbers button on the Last Number Setup page, as shown in the following example.



Last Number Setup

Last Number Types — Personalize | Find | First 1-43 of 43 Last

Object Type	*Description	*Record (Table) Name	*Field Name	Last Number	Test
ACTI	Branch Script Action	RC_BS_ACTION	RC_ACTION_ID	300,094	
ATCH	File Attachment	BC_ATTACH	ATTACH_SEQ_NBR	20,001	
BODI	Directory Setup	BO_DIR_SETUP	SEARCH_FIELD_ID	300,004	
BP	Business Project Instance	RC_BP_STATUS	BUS_PROC_INSTAN	20,334	
BROL	Role	BO_ROLE	ROLE_TYPE_ID	20,018	
BRSC	Branch Script	RC_BSCRIPT	SCRIPT_ID	11,000,100	
BSAN	Branch Script Answer Set	RC_ANSWER_SET	RC_ANSWERSET_ID	11,000,157	
BSAS	Branch Script Action Set	RC_BS_ACTIONSET	RC_BS_ACTIONSET	300,096	
BSIN	Branch Script Instance	RC_BS_INSTANCE	RC_BS_INSTANCE	20,573	
BSPT	Branch Script Path ID	RC_BS_TREE	BS_PATH_ID	302,287	
BSQU	Branch Script Question	RC_QUESTION	QUESTION_ID	300,516	
BTYP	Business Object Type	BO_TYPE	BO_TYPE_ID	20,001	
CASE	Case	RC_CASE	CASE_ID	220,588	
CHAT	CRM Chat ID	RC_LAST_NBR_TBL	RC_LAST_NBR	1	
CMP	Contact Method Purpose	CM_PURP_TYPE	CM_PURPOSE_TYPE	20,001	

Add a New Last Number Type | Refresh All Last Numbers

Last Number Setup page

You can modify the values later using the Last Number Setup page.

See *PeopleSoft CRM: Application Fundamentals,* "Setting General Options."

Task 1-6: Configuring Computer Telephony Integration

For more information on configuring computer telephony integration,

See *PeopleSoft CRM: Multichannel Applications,* "Configuring CTI, for your new release."

Task 1-7: Activating Basic Data Summary and Messaging

The messaging mechanism and basic data summary are inactive when the PeopleSoft CRM system delivers. You must activate the messaging mechanism and basic data summary to enable Oracle's PeopleSoft Online Marketing (OLM) basic profile population.

Note. This task is required if you are installing Oracle's PeopleSoft Marketing or PeopleSoft OLM applications.

See the chapter "Installing PeopleSoft Online Marketing 9.2," in this installation guide.

Task 1-8: Setting Up the PeopleSoft Integration Broker

This section discusses:

- Configuring the Gateway URL
- Setting Up the Service Configuration for Web Services
- Activating the PeopleSoft Integration Broker Domain
- Setting Default User IDs on Internal PeopleSoft Integration Broker Nodes

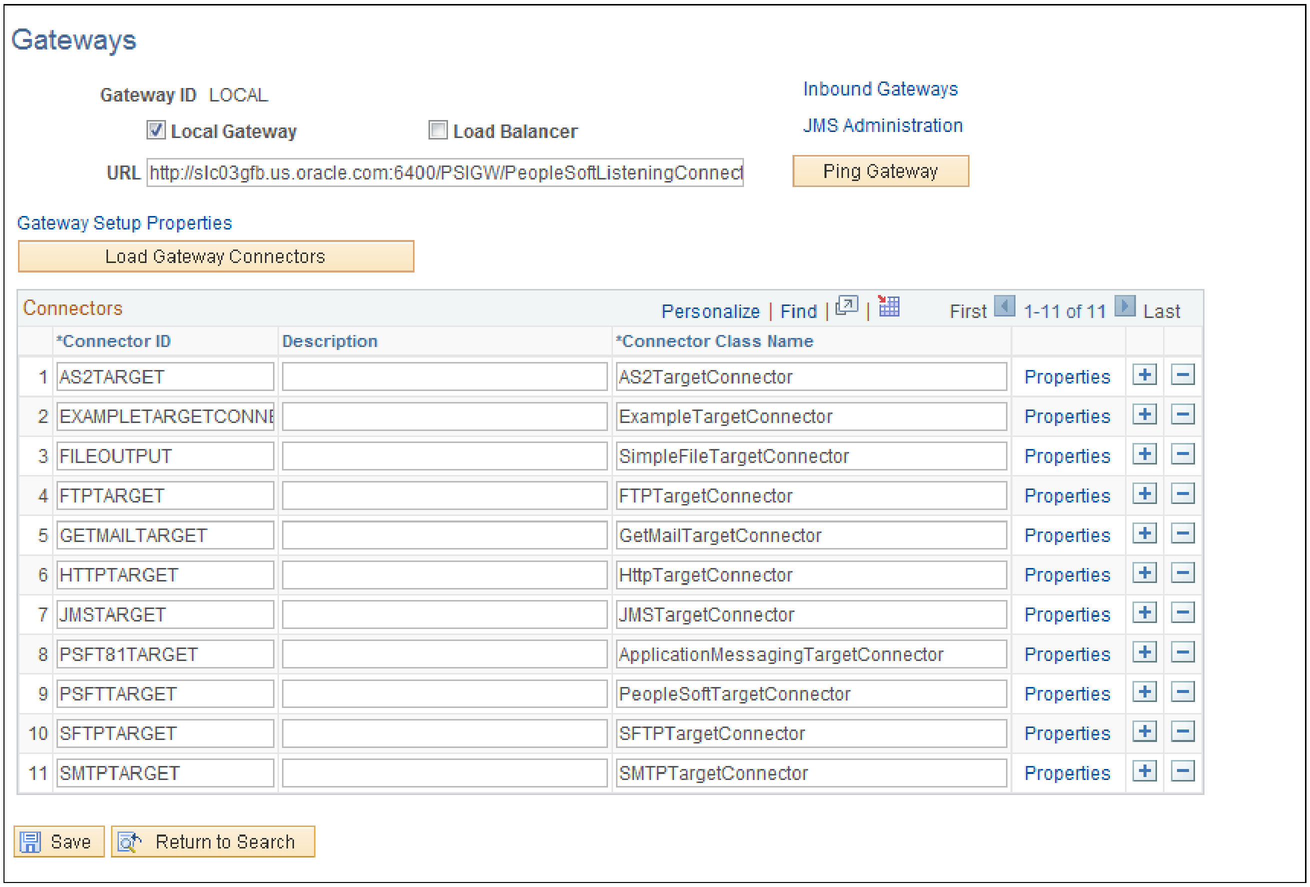
Perform the tasks in this section to enable the publishing and receiving of messaging and web services between the PeopleSoft CRM system and other PeopleSoft modules and integration partners.

Task 1-8-1: Configuring the Gateway URL

To configure the PeopleSoft Gateway URL:

1. Log in to PeopleSoft Pure Internet Architecture and select PeopleTools, Integration Broker, Configuration, Gateways and click Search.

   The Gateways page for the Local Gateway appears by default, as shown in the following example:



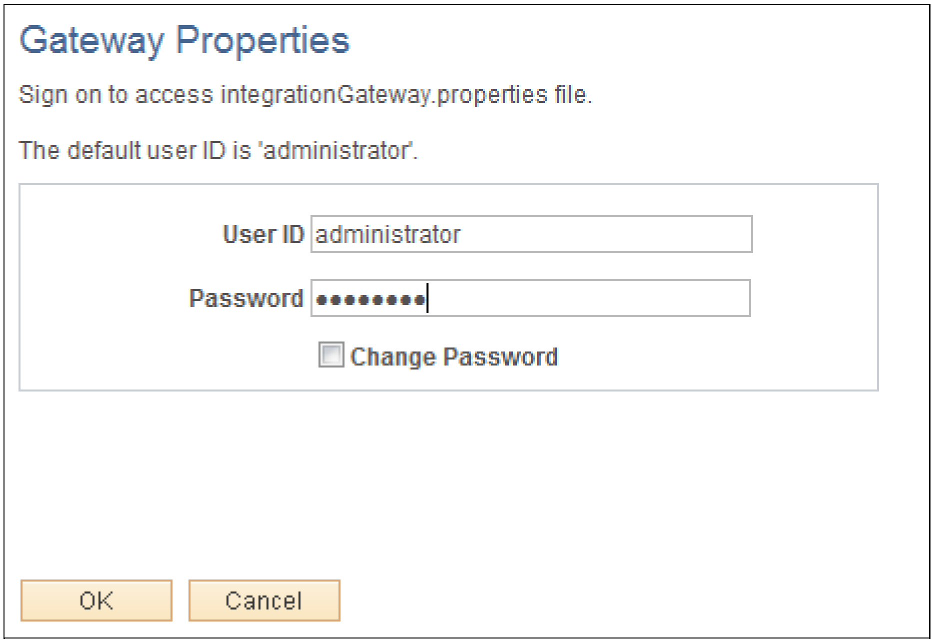
Gateways page for the Local Gateway

2. On the Gateways page for the Local Gateway, in the URL field, enter http://<IBHostname>:<port>/PSIGW/PeopleSoftListeningConnector for the local gateway URL.
3. Click the Load Gateway Connectors button.
4. Click Save.
5. Click the Ping Gateway button to verify connectivity and proper configuration. The PeopleSoft Integration Gateway page should appear in a new browser window, as shown in the example that follows. Close the window.

PeopleSoft Listening Connector

6. Click the Gateway Setup Properties link to access the Gateway Properties.

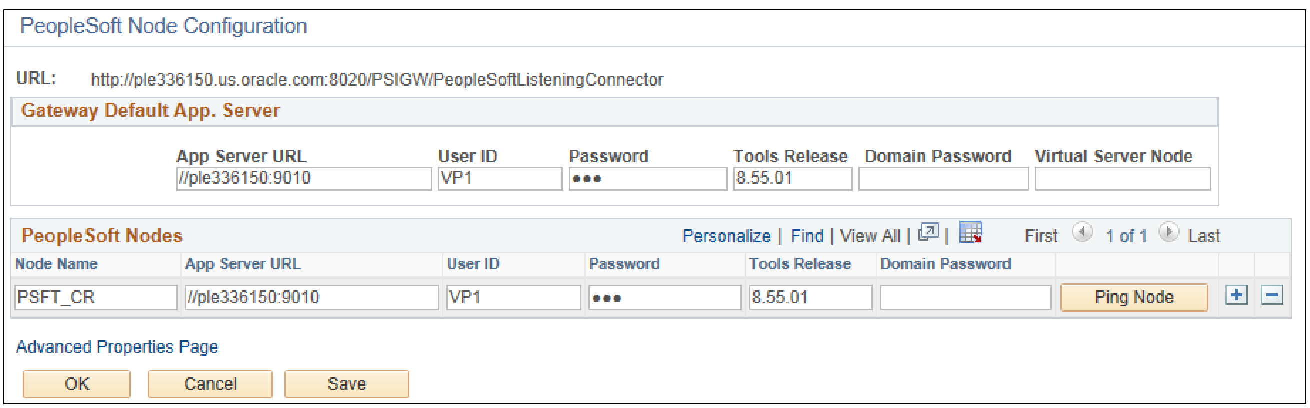
   The Gateway Properties sign on page appears, as shown in the following example:



Gateway Properties sign on page

7. On the Gateway Properties sign on page, in the User ID field, enter *administrator*, and in the Password field, enter *Password*.
8. Click OK.

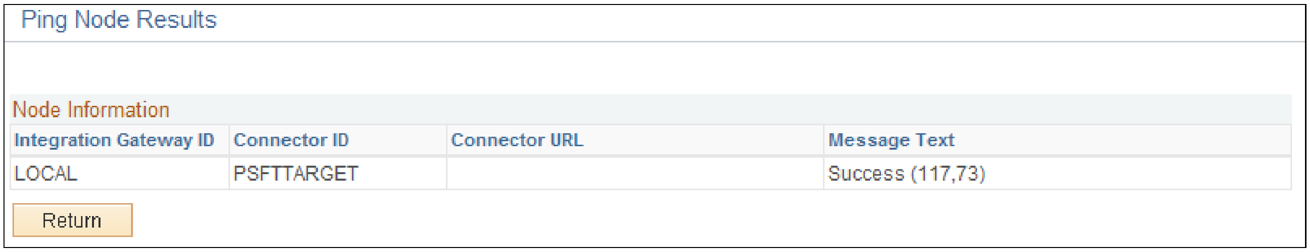
   The PeopleSoft Node Configuration page appears, as shown in the following example:



PeopleSoft Node Configuration page

9. On the PeopleSoft Node Configuration page, in the Gateway Default App. Server group box, enter values for the following fields:
   - App Server URL (Application Server name and Port).
   - User ID and Password of a Super User in your system (typically PS/PS or VP1/VP1).
   - Complete PeopleSoft People Tools version you are running. For example, 8.55.
10. In the PeopleSoft Nodes group box, in the Node Name field, enter PSFT_CR for the PeopleSoft local node. Follow the instructions in step 9 to configure the remaining fields for the local node, and then click Save.

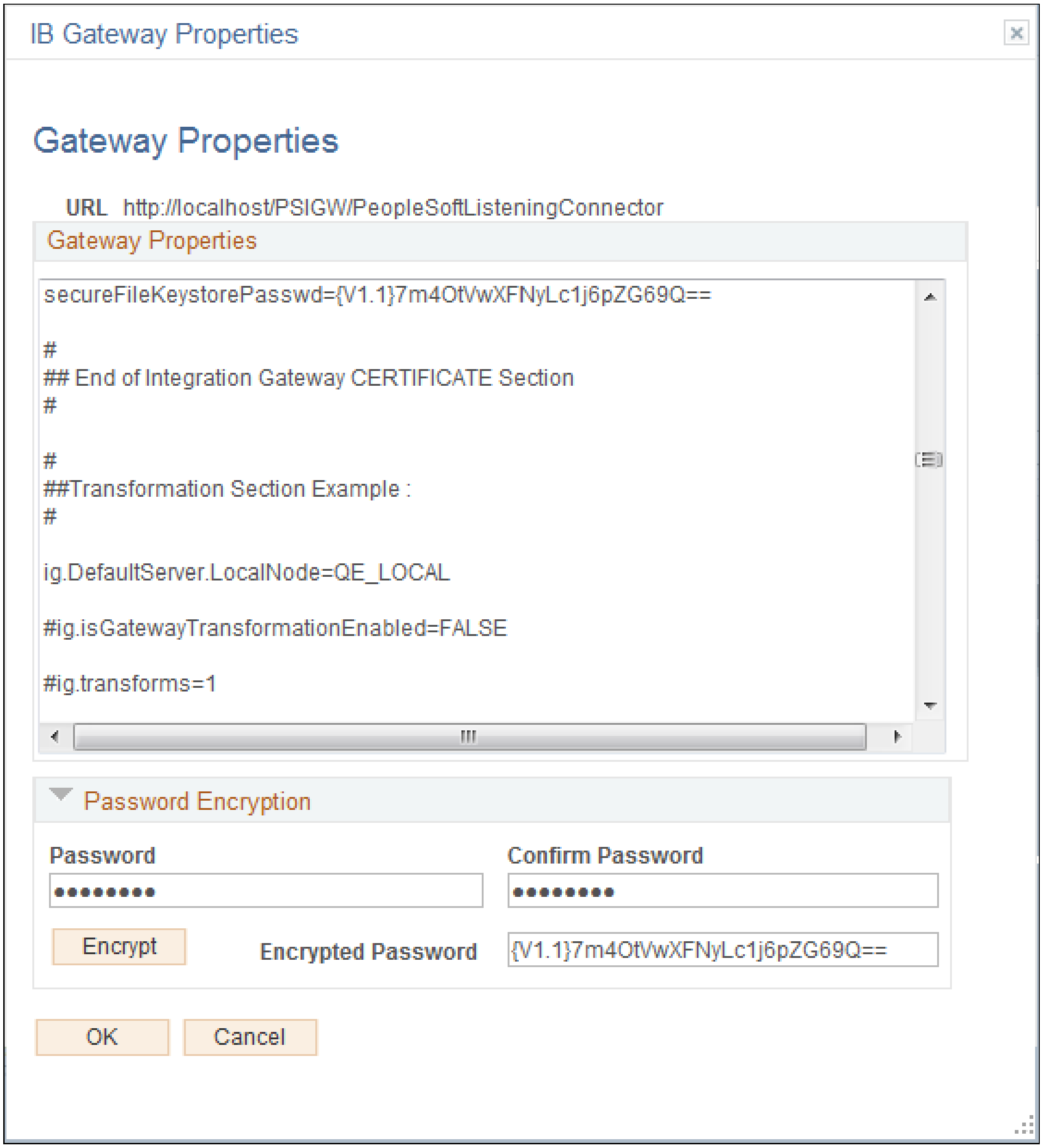
11. Click the Ping Node button on the Local Node and verify that it returns a response of Success, as shown in the following example:



Ping Node Results page

12. Click the Return button to return to the PeopleSoft Node Configuration page.
13. Verify that the SecureFileKeyStorePasswd is correct and encrypted:
    a. Log in to PeopleSoft Pure Internet Architecture. Select PeopleTools, Integration Broker, Configuration, Gateways.
    b. Click the Gateway Setup properties link and log in.
    c. Click the Advanced Properties Page link.

d. Use the Password Encryption Utility to encrypt the password. click the arrow to expand the Password Encryption Utility section, as shown in the following example:



Gateway Properties page showing the Password Encryption Utility

e. Add the secure file keystore as follows:

In the Password field, enter password.

In the Confirm Password field, enter password.

Click the Encrypt button to encrypt the password

f. After you encrypt the password, on the Gateway Properties page, edit the following lines to update the secureFileKeystorePasswd with your integration gateway properties password information:

The default value is password

```
#secureFileKeystorePath=<fileLocation>
```



```
#secureFileKeystorePasswd=<password>
#change your ps_home directory
secureFileKeystorePath= ps_home/webserv/peoplesoft/keystore/pskey
secureFileKeystorePasswd={V1.1}7m4OtVwXFNyLc1j6pZG69Q==
```

Where {V1.1}7m4OtVwXFNyLc1j6pZG69Q== is password encrypted. If you are not using the default value password, your encrypted value will be different.

g. Click OK.

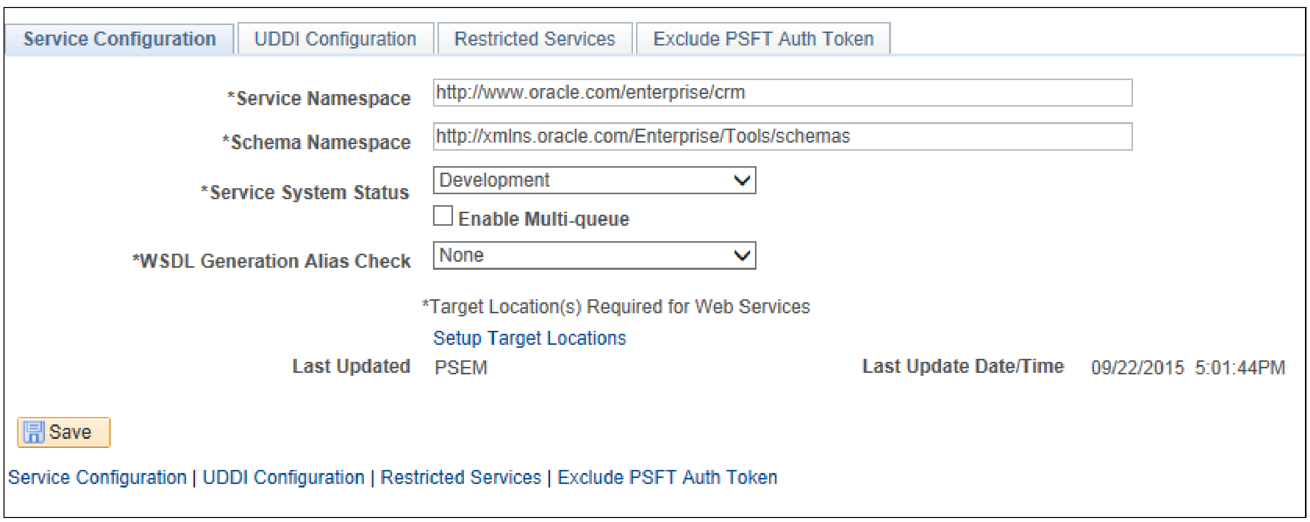
h. Click Save.

Task 1-8-2: Setting Up the Service Configuration for Web Services

To set up the service configuration for web services:

1. Select Select PeopleTools, Integration Broker, Configuration, Service Configuration.

   The Service Configuration page appears, as shown in the following example:



Service Configuration page

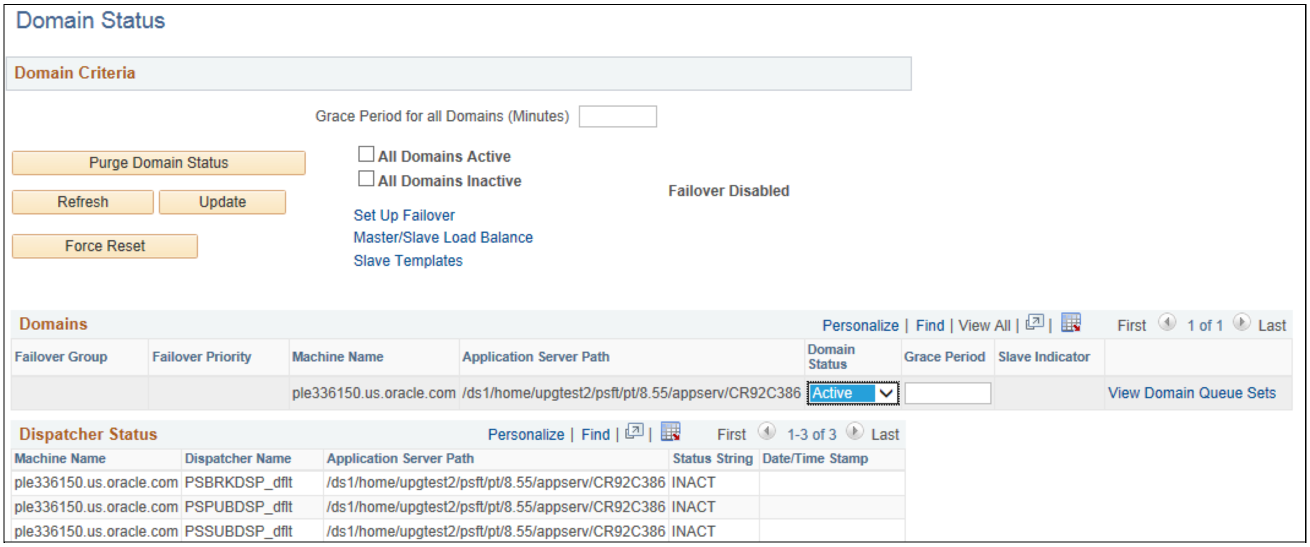
2. In the Service Namespace field, enter *http://www.oracle.com/enterprise/crm.*
3. In the Schema Namespace field, enter *http://xmlns.oracle.com/Enterprise/Tools/schemas.*
4. Click the Setup Target Locations hyperlink.
5. Complete the Target Location URL, by replacing the <*machine:port*> tokens with your Gateway name and port. If the system prompts you to update UDDI servers, click Yes.
6. Click Save.

Task 1-8-3: Activating the PeopleSoft Integration Broker Domain

To activate the PeopleSoft Integration Broker domain:

1. Select PeopleTools, Integration Broker, Service Operations Monitor, Administration, Domain Status.
2. In the Domains group box, do the following:
   - Locate the row that lists the machine where the domain that you want to activate resides.
   - In the Domain Status field, select Active from the drop-down list box.

3. Click the Update button.



Domain Status page

Task 1-8-4: Setting Default User IDs on Internal PeopleSoft Integration Broker Nodes

The PeopleSoft system uses the default user ID on the internal PeopleSoft Integration Broker nodes to determine the level of security access allowed to inbound service requests that are received by the PeopleSoft Integration Broker. If an inbound service requests attempts to access a service operation or component interface that the default user ID does not have privileges for, the service request will be denied.

Note. It is important that the default user ID has security privileges to all web services that you intend to use. One way to easily accomplish this is to select a default user ID with *AllPages* and *All Webservices* access, often referred to as a *SuperUser.* Typical examples are *PS/PS* or *VP1/VP1.*

---

1. Select PeopleTools, Integration Broker, Integration Setup, Nodes.
2. Search for and open the *ANONYMOUS* node. Update the Default User ID field to a valid user ID that has the appropriate level of security privileges.
3. Click Save.
4. Search for and open the *PSFT_WEB_SERVICE* node. Update the Default User ID field to a valid user ID that has the appropriate level of security privileges.
5. Click Save.
6. Restart your web server and application server and clear the cache.

Task 1-9: Setting Up Cybersource Credit Card Processing Connectivity for PeopleSoft Pure Internet Architecture

This section discusses:

- Setting Up and Configuring the Webserver

- Modifying the Proxy Server Setting
- Updating Gateway Properties
- Defining Installation Options
- Creating the Secure Acceptance Web/Mobile (SAWM) Java Class
- Setting Up the Cybersource PSFT_CYB Node
- Updating the Transform Program
- Setting Up the Payment URL
- Setting Up the Payment Processor
- Testing Connectivity

Perform the tasks in this section to set up and test connectivity with Cybersource for credit card processing.

Cybersource is used as a sample vendor to provide a walkthrough on setting up this integration but there are other vendors who can provide this service. No charge evaluation accounts for preliminary testing are also available. A service account with Cybersource is required to complete this procedure.

For details on creating and activating a service account see the link below.

See http://www.cybersource.com/.

Task 1-9-1: Setting Up and Configuring the Webserver

Understanding Setting Up and Configuring the Webserver

To set up the webserver for Cybersource connectivity for PeopleSoft Pure Internet Architecture:

Copy the SSL certificate that Cybersource provides when you sign up for their service into the webserver Keystore directory. The procedure for doing this varies, depending on whether you are using Oracle WebLogic or IBM WebSphere, and where your webserver is running – Microsoft Windows or UNIX. Choose the appropriate section from the following:

Downloading SSL certificates from Cybersource

Follow the procedures below to download the certificates from Cybersource.

There are 3 certificates that need to be downloaded:

- Entrust.net Secure Server Certification Authority
- Entrust Root Certification Authority
- Entrust Certification Authority - L1M and ics2wstest.ic3.com certificate

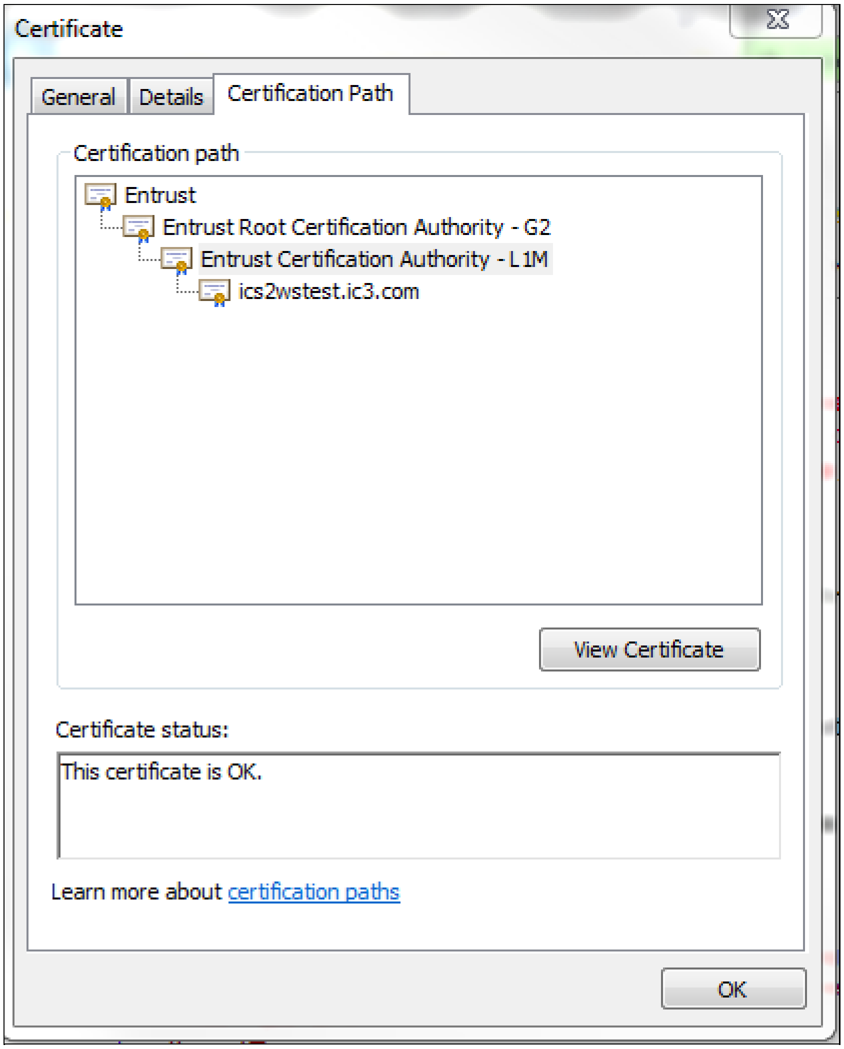
To download and save the root certificate (Entrust):

1. Go to https://ics2wstest.ic3.com/commerce/1.x/transactionProcessor/
2. Click on CyberSourceTransaction_1.82.wsdl link
3. Select File, Properties, Certificates, Certification Path.
4. Select Entrust, View Certificate, Details, Copy to File.
5. Click Next.
6. Click Next.
7. Enter the filename.

Example: *Entrust.cer*

8. Click Next.
9. Click Finish.

Note. You will use this name when copying the certificate to your keystore.



Root certificates – Entrust

To download and save the second certificate (Entrust Root Certification Authority):

1. Go to https://ics2wstest.ic3.com/commerce/1.x/transactionProcessor/
2. Click on CyberSourceTransaction_1.82.wsdl link
3. Select File, Properties, Certificates, Certification Path.
4. Select Entrust Root Certification Authority, View Certificate, Details, Copy to File.
5. Click Next.
6. Click Next.
7. Enter the filename.

   Example: *Entrust Root Certification Authority.cer*

8. Click Next.
9. Click Finish.

   Note. You will use this name when copying the certificate to your keystore.

To download and save the last certificate (Entrust Certification Authority - L1M):

1. Go to https://ics2wstest.ic3.com/commerce/1.x/transactionProcessor/
2. Click on CyberSourceTransaction_1.82.wsdl link
3. Select File, Properties, Certificates, Certification Path.
4. Select Entrust Certification Authority - L1M, View Certificate, Details, Copy to File.
5. Click Next.
6. Click Next.
7. Enter the filename.

   Example: *Entrust Certification Authority - L1M.cer*
8. Click Next.
9. Click Finish.

   Note. You will use this name when copying the certificate to your keystore.

Setting Up an Oracle WebLogic Server on Microsoft Windows

Use these instructions if you are using an Oracle WebLogic Server on Microsoft Windows. These instructions set up the webserver for Cybersource SOAP connectivity for PeopleSoft Pure Internet Architecture.

To set up the webserver:

1. Copy the SSL certificate to the webserver keystore directory starting with the root *Entrust.cer* certificate.

   The keystore directory is located at: <*PS_CFG_HOME*>\webserv\<*DOMAIN_NAME*>\piaconfig\keystore
2. Open a CMD (command) prompt and navigate to the keystore directory.

   ```
   <PS_CFG_HOME>\webserv\<DOMAIN_NAME>\piaconfig\keystore
   ```
3. Enter this command:

   ```
   <PS_HOME>\jre\bin\keytool -keystore pskey -import -alias Entrust -file
   <PS_CFG_HOME>\webserv\<DOMAIN_NAME>\ piaconfig\keystore\Entrust.cer
   ```
4. When the system prompts you for the keystore password, enter *password.*
5. Enter *yes* to trust the certificate.
6. Repeat steps 3 through 5 for the remaining 3 certificates, replacing Entrust with the names for each.

Setting Up an Oracle WebLogic Server on UNIX

Use these instructions if you are using an Oracle WebLogic Server on UNIX. These instructions set up the webserver for Cybersource SOAP connectivity for PeopleSoft Pure Internet Architecture.

To set up the webserver:

1. Copy the SSL Certificate to the webserver keystore directory.

The keystore directory is located at: <*PS_CFG_HOME*>/webserv/<*DOMAIN_NAME*>/piaconfig/keystore

2. From a UNIX prompt, navigate to the keystore directory.

```
<PS_CFG_HOME>/webserv/<DOMAIN_NAME>/piaconfig/keystore
```

3. Enter this command:

```
<PS_HOME>/jre/bin/keytool -keystore pskey -import -alias Entrust -file
<PS_CFG_HOME>/webserv/<DOMAIN_NAME>/piaconfig/keystore/Entrust.cer
```

4. When the system prompts you for the keystore password, enter *password.*
5. Enter *yes* to trust the certificate.
6. Repeat steps 3 through 5 for the remaining 3 certificates, replacing Entrust with the names for each.

Setting Up an IBM WebSphere Server on Microsoft Windows

Use these instructions if you are using an IBM WebSphere Server on Microsoft Windows. These instructions set up the webserver for Cybersource SOAP connectivity for PeopleSoft Pure Internet Architecture.

To set up the webserver:

1. Copy the SSL certificate to the webserver keystore directory.

   The keystore directory is located at:

```
<PS_CFG_HOME>\webserv\<DOMAIN_NAME>\piaconfig\keystore
```

2. Open a CMD (command) prompt and navigate to the keystore directory.

```
<PS_CFG_HOME>\webserv\<DOMAIN_NAME>\piaconfig\keystore
```

3. Enter this command:

```
<PS_HOME>\jre\bin\keytool -keystore pskey -import -alias Entrust -file
<PS_CFG_HOME>\webserv\<DOMAIN_NAME>\ piaconfig\keystore\Entrust.cer
```

4. When the system prompts you for the keystore password, enter *password.*
5. Enter *yes* to trust the certificate.
6. Repeat steps 3 through 5 for the remaining 3 certificates, replacing Entrust with the names for each.

Setting Up an IBM WebSphere Server on UNIX

Use these instructions if you are using an IBM WebSphere Server on UNIX. These instructions set up the webserver for Cybersource SOAP connectivity for PeopleSoft Pure Internet Architecture.

To set up the webserver:

1. Copy the SSL certificate to the webserver keystore directory.

   The keystore directory is located at:

```
<PS_CFG_HOME>/webserv/<DOMAIN_NAME>/piaconfig/keystore
```

2. From a UNIX prompt, navigate to the keystore directory.

```
<PS_CFG_HOME>/webserv/<DOMAIN_NAME>/piaconfig/keystore
```

3. Enter this command:

```
<PS_HOME>/jre/bin/keytool -keystore pskey -import -alias Entrust -file
<PS_CFG_HOME>/webserv/<DOMAIN_NAME>/piaconfig/keystore/Entrust.cer
```

4. When the system prompts you for the keystore password, enter *password.*
5. Enter *yes* to trust the certificate.
6. Repeat steps 3 through 5 for the remaining 3 certificates, replacing Entrust with the names for each.

Task 1-9-2: Modifying the Proxy Server Setting

This section discusses:

- Configuring setEnv.cmd on Microsoft Windows for Oracle WebLogic
- Configuring setEnv.sh on UNIX for Oracle WebLogic
- Configuring Proxy for WebSphere

Configuring setEnv.cmd on Microsoft Windows for Oracle WebLogic

Complete the instructions in this step to configure seteEnv.cmd on Microsoft Windows for Oracle WebLogic.

If the installation will be running behind a Proxy Server, modify the following proxy server settings in the *setEnv.cmd* file that is located at:

For Oracle WebLogic: <*PS_CFG_HOME*>\webserv\<*DOMAIN_NAME*>\bin

```
SET ENABLE_HTTP_PROXY=true
SET HTTP_PROXY_HTTPHOST=<YOUR_PROXY_SERVER>
SET HTTP_PROXY_HTTPPORT=<PROXY_PORT>
SET HTTP_PROXY_HTTPSHOST=<YOUR_PROXY_SERVER>
SET HTTP_PROXY_HTTPSPORT=<PROXY_PORT>
```

Configuring setEnv.sh on UNIX for Oracle WebLogic

Complete the instructions in this step to configure setenv.cmd on Microsoft Windows and setenv.shfile on UNIX.

If the installation will be running behind a Proxy Server, modify the following proxy server settings in the *setEnv.sh* file that is located at:

For Oracle WebLogic: <*PS_CFG_HOME*>/webserv/<*DOMAIN_NAME*>/bin

```
export ENABLE_HTTP_PROXY=true
export HTTP_PROXY_HTTPHOST=<YOUR_PROXY_SERVER>
export HTTP_PROXY_HTTPPORT=<PROXY_PORT>
export HTTP_PROXY_HTTPSHOST=<YOUR_PROXY_SERVER>
export HTTP_PROXY_HTTPPORT=<PROXY_PORT>
```

Configuring Proxy for WebSphere

Complete the instructions in this step to configure the proxy for WebSphere.

To configure the proxy for websphere:

1. Open WebSphere Administration console at http://<*machine-name*>:<*adminport*>/ibm/console and login.
2. Expand Servers, Server Types, WebSphere Application Servers, Server, Java and Process Management, Process Definition, Java Virtual Machine and Custom Properties.
3. Click on New Key.
4. Click on Value Pair and the following new pairs.

   Key=http.proxyHost, Value=<forward proxy hostname>

   Key=http.proxyPort, Value=<forward proxy HTTP port>

   Key=https.proxyHost, Value=<forward proxy hostname>

   Key=https.proxyPort, Value=<forward proxy HTTPS port>
5. Save the configuration changes and logout.
6. Restart WebSphere.

Note. The instructions are same for Unix and Windows.

Task 1-9-3: Updating Gateway Properties

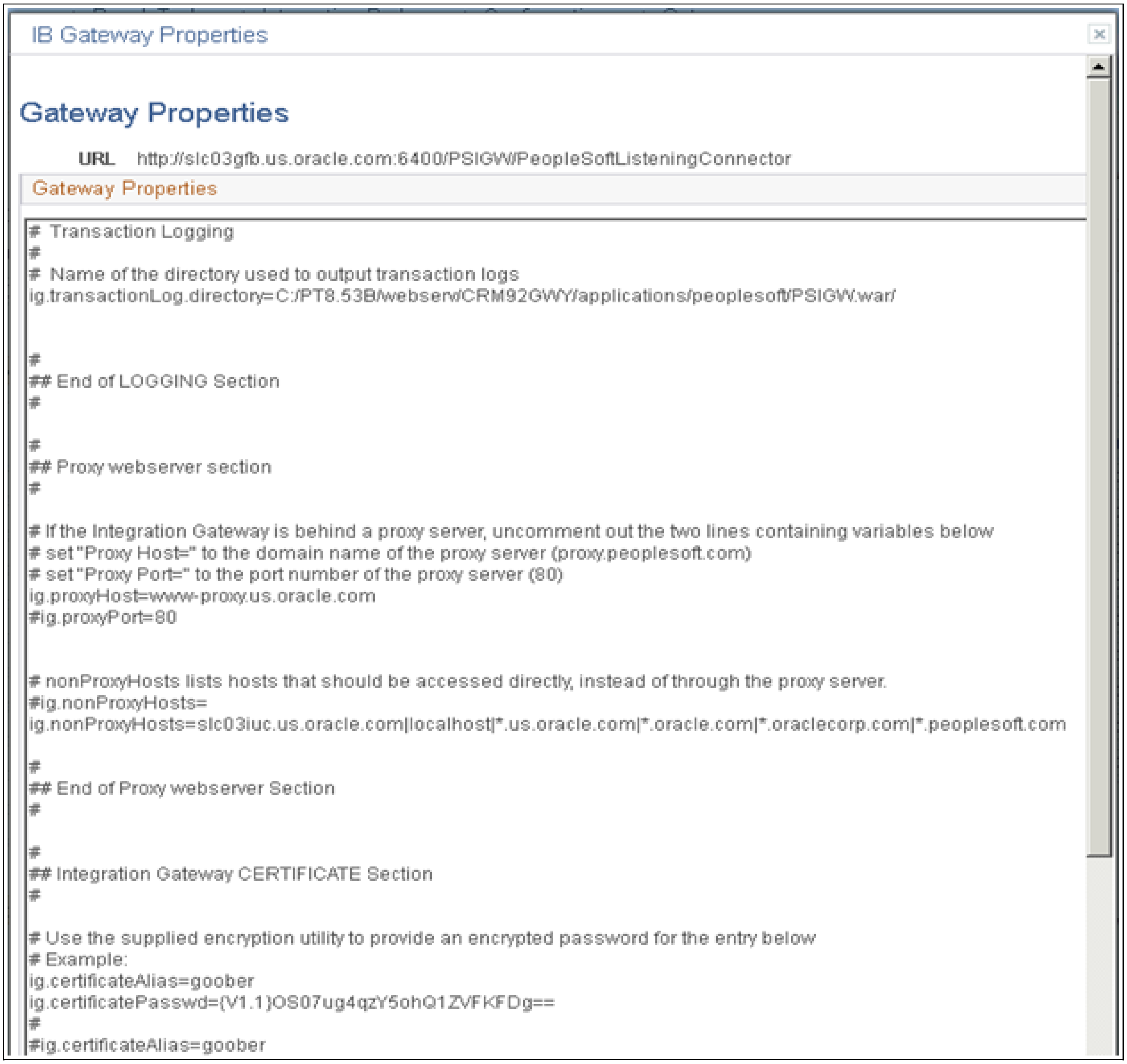
Complete this step to update gateway properties. Add proxy settings and ensure that the *SecureFileKeyStorePasswd* is correct and encrypted as outlined in the procedure below.

To update gateway properties:

1. Log in to PeopleSoft Internet Pure Architecture. Select PeopleTools, Integration Broker, Configuration, Quick Configuration.
2. Click the Advanced Gateway Setup link on the Integration Broker Quick Configuration page to access the Gateways page.
3. Click the Gateway Setup properties link and log in.

4. Click the Advanced Properties Page link.

   The Gateway Properties page appears, as shown in the following example:



Gateway Properties page

5. If the installation will be running behind a proxy server, on the Gateway Properties page, edit the following lines by entering your proxy servers and port information:

```
## Proxy webserver section

# If the Integration Gateway is behind a proxy server, uncomment out⇒
 the two⇒
 lines containing variables below

# set "Proxy Host=" to the domain name of the proxy server ⇒
(proxy.peoplesoft.com)
```



```
# set "Proxy Port=" to the port number of the proxy server (80)

ig.proxyHost=<YOUR_PROXY_SERVER>

ig.proxyPort=<PROXY_PORT>
```

6. Use the Password Encryption Utility to encrypt the password:
7. In the Gateway Properties page, edit the following lines to update the *secureFileKeystorePasswd* with your integration gateway properties password information:

   The default value is *password.*

```
#secureFileKeystorePath=<fileLocation>
#secureFileKeystorePasswd=<password>
secureFileKeystorePath=ps_home/webserv/peoplesoft/keystore/pskey
secureFileKeystorePasswd={V1.1}7m4OtVwXFNyLc1j6pZG69Q==
```

   Where {V1.1}7m4OtVwXFNyLc1j6pZG69Q== is password encrypted. If you are not using the default value password, your encrypted value will be different.
8. Click OK.
9. Click Save.

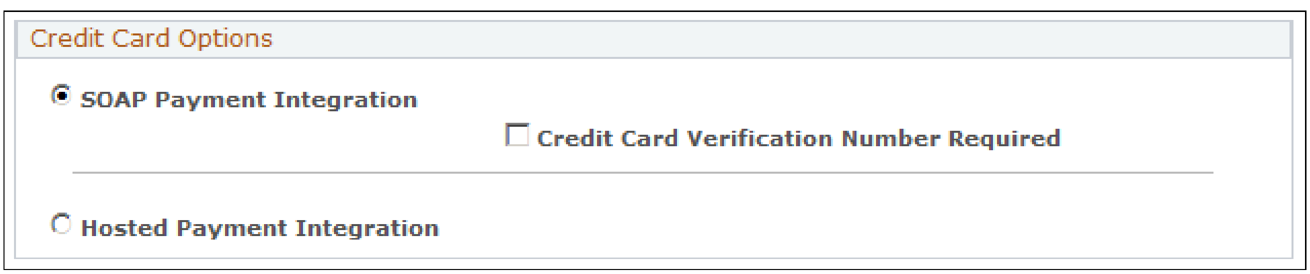
Task 1-9-4: Defining Installation Options

PeopleSoft CRM now offers the ability to select whether credit card data will be stored internally within the CRM database or stored externally with a third party vendor. Electing to store the data externally is known as Hosting.

To define your Cybersource installation options:

1. Select Setup CRM, Install, Installation Options.

   The Installation Options page appears, as shown in the following example:



Example of Installation Options - Credit Card Options page

2. If your installation will be using internal storage where the credit card data is encrypted and stored within your CRM database then leave the default setting of SOAP Payment Integration.
3. If you require the verification number (the 3-digit security number located on the back of a credit card) to be entered during each transaction select the Card Verification Number Required check box.
4. If your installation will be using hosted storage, where card data is stored with a third party vendor, then select Hosted Payment Integration.

   The page layout and user interface at the various CRM credit card transaction points will be different depending on which option is selected and they are therefore mutually exclusive. SOAP Payment Integration is the delivered default. Switching to Hosted Payment Integration is a permanent decision and the entry fields will be disabled upon save.

Task 1-9-5: Creating the Secure Acceptance Web/Mobile (SAWM) Java Class

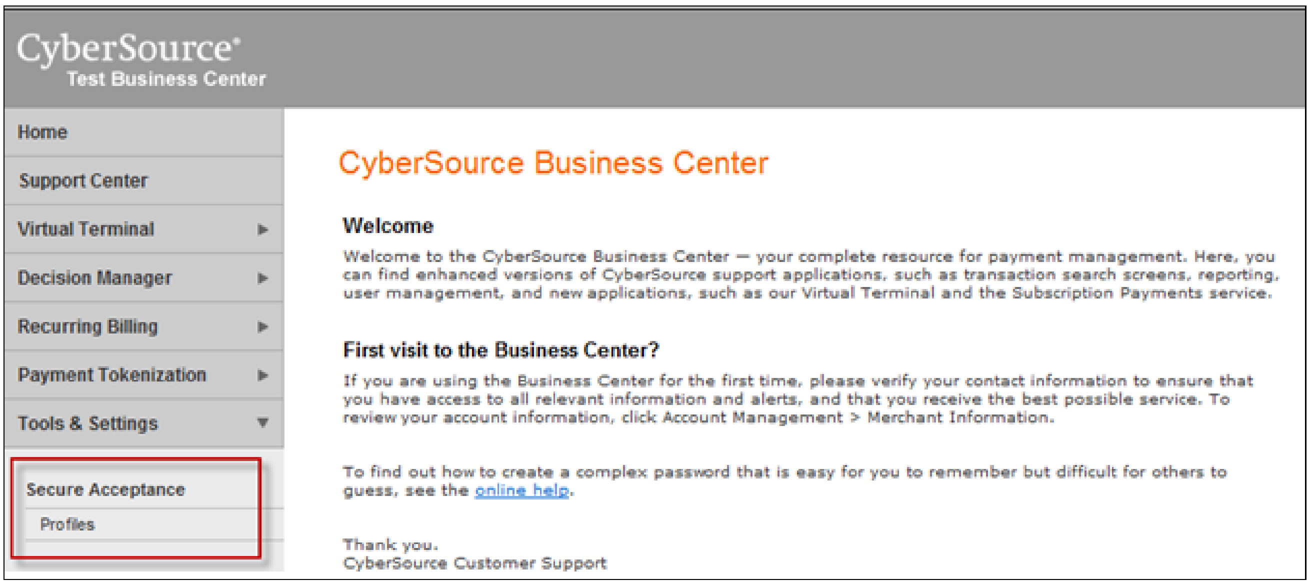
You must complete this section if you use the Hosted Payment Processing. Ensure that you have requested CyberSource to enable SAWM Profiles for your service account.

The SAWM java class, is a mechanism that creates and verifies signatures of the request and replies between PeopleSoft Pure Internet Architecture and CyberSource card entry interface.

To create your SAWM java class:

1. Enable Secure Acceptance on your CyberSource Merchant ID (MID).

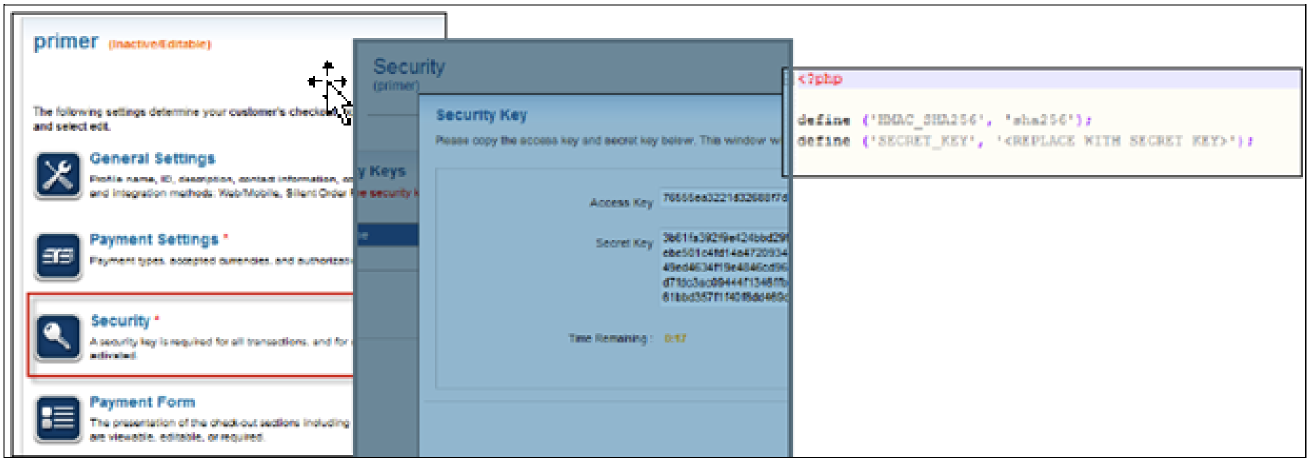
Note. If your CyberSource MID is not already enabled for Secure Acceptance, please contact CyberSource Customer Support to have it enabled in test and production.



CyberSource Business Center: Secure Acceptance

2. Select Tools & Settings, Secure Acceptance, Profiles and Security.

3. Copy Secret Key.



Security Key page

4. Create a new java file named CSA.java in your java editor and paste in the java code below and paste the SECRET_KEY = ""; (inside quotes), copied in step 3.

```
import sun.misc.BASE64Encoder;
import javax.crypto.Mac;
import javax.crypto.spec.SecretKeySpec;
import java.security.InvalidKeyException;
import java.security.NoSuchAlgorithmException;
import java.io.UnsupportedEncodingException;
import java.util.ArrayList;
import java.util.Iterator;
import java.text.SimpleDateFormat;
import java.util.Date;
import java.util.TimeZone;
import java.util.UUID;
import java.util.Enumeration;
import java.util.HashMap;
import java.util.Map;

public class CSA {

    private static final String HMAC_SHA256 = "HmacSHA256";
    private static final String SECRET_KEY = {replace with secret key⇒
 value downloaded from business center}
    public String oSignature;

  public String signature(HashMap params) throws InvalidKeyException,⇒
 NoSuchAlgorithmException, UnsupportedEncodingException {
        return sign(buildDataToSign(params), SECRET_KEY);
 }

    private String sign(HashMap params) throws InvalidKeyException, No⇒
SuchAlgorithmException, UnsupportedEncodingException {
  oSignature = sign(buildDataToSign(params), SECRET_KEY);
        return sign(buildDataToSign(params), SECRET_KEY);
```

```
    }

    private String sign(String data, String secretKey) throws Invalid⇒
KeyException, NoSuchAlgorithmException, UnsupportedEncodingException {
        SecretKeySpec secretKeySpec = new SecretKeySpec(secretKey.get⇒
Bytes(), HMAC_SHA256);
        Mac mac = Mac.getInstance(HMAC_SHA256);
        mac.init(secretKeySpec);
        byte[] rawHmac = mac.doFinal(data.getBytes("UTF-8"));
        BASE64Encoder encoder = new BASE64Encoder();
        return encoder.encodeBuffer(rawHmac).replace("\n", "");
    }

    private String buildDataToSign(HashMap params) {
        String[] signedFieldNames = String.valueOf(params.get("signed_⇒
field_names")).split(",");
        ArrayList<String> dataToSign = new ArrayList<String>();
        for (String signedFieldName : signedFieldNames) {
            dataToSign.add(signedFieldName + "=" + String.valueOf⇒
(params.get(signedFieldName)));
        }
        return commaSeparate(dataToSign);
    }
    private String commaSeparate(ArrayList<String> dataToSign) {
        StringBuilder csv = new StringBuilder();
        for (Iterator<String> it = dataToSign.iterator(); it.hasNext();⇒
 ) {
            csv.append(it.next());
            if (it.hasNext()) {
                csv.append(",");
            }
        }
        return csv.toString();
    }
    public String getUTCDateTime() {
        SimpleDateFormat sdf = new SimpleDateFormat("yyyy-MM-dd'T'HH:mm:⇒
ss'Z'");
        sdf.setTimeZone(TimeZone.getTimeZone("UTC"));
        return sdf.format(new Date());
    }
    public UUID getRandomUUID() {
  UUID trxUID = UUID.randomUUID();
 return trxUID;
    }
}
```

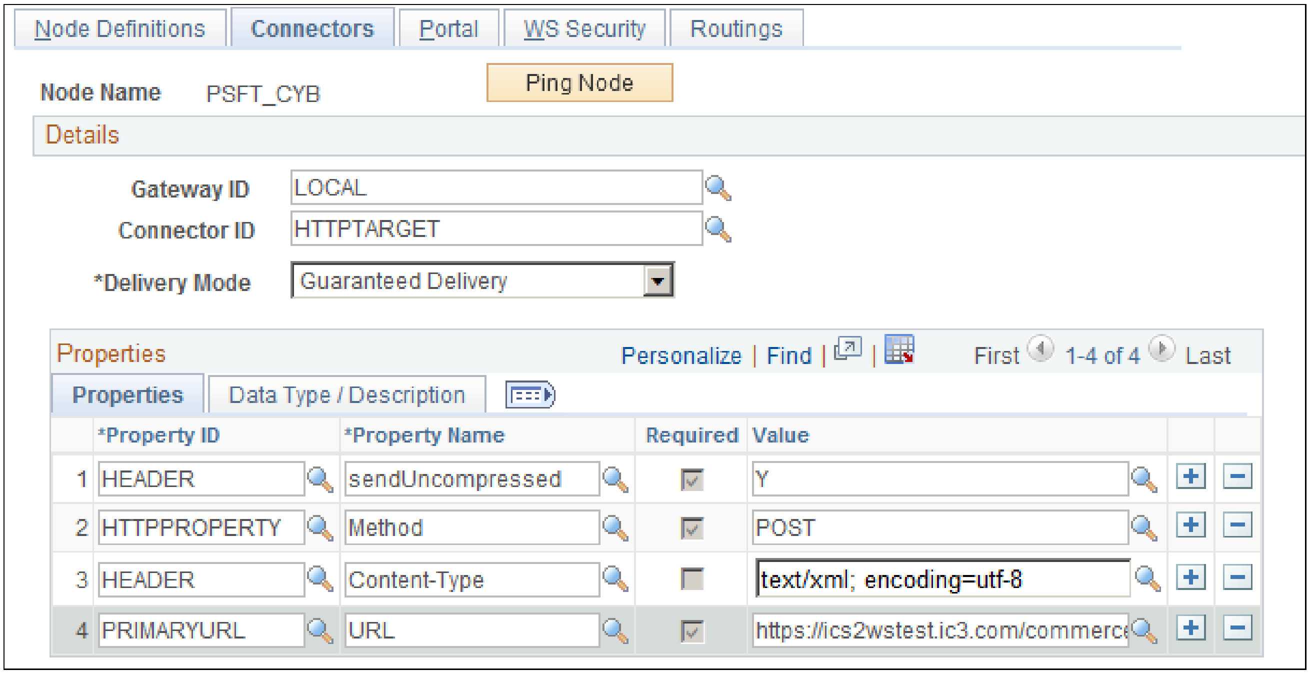
5. Using your java editor, compile CSA.java to create the CSA.class.
6. Copy the CSA.class into,
   - <*PS_APP_HOME*>/appserv/classes, if you are using UNIX.
   - <*PS_APP_HOME*>/class, if you are using Windows.

Task 1-9-6: Setting Up the Cybersource PSFT_CYB Node

To set up the Cybersource PSFT_CYB node:

1. Select PeopleTools, Integration Broker, Integration Setup, Nodes.

2. Open the Cybersource additional component (third-party) node PSFT_CYB. Select the Connectors tab to access the Connectors page, as shown in the following example:



Connectors page

Enter the following values as shown in this example:

a. In the Gateway ID field, enter *Local*.

b. In the Connector ID field, enter *HTTPTARGET*.

c. In the Property ID field 1, enter *HEADER*.

d. In the Property Name field 1, enter *Content-Type*.

e. In the Property Value field 1, enter *text/xml; encoding=utf-8*

f. In the Property ID field 2, enter *HEADER*.

g. In the Property Name field 2, enter *sendUncompressed*.

h. In the Property Value field 2, enter *Y*.

i. In the Property ID field 3, enter *HTTPPROPERTY*.

j. In the Property Name field 3, enter *Method*.

k. In the Property Value field 3, enter *POST*.

l. In the Property ID field 4, enter *PRIMARYURL*.

m. In the Property Name field 4, enter *URL*.

n. In the Property Value field 4, enter: *https://ics2wstest.ic3.com/commerce/1.x/transactionProcessor*.

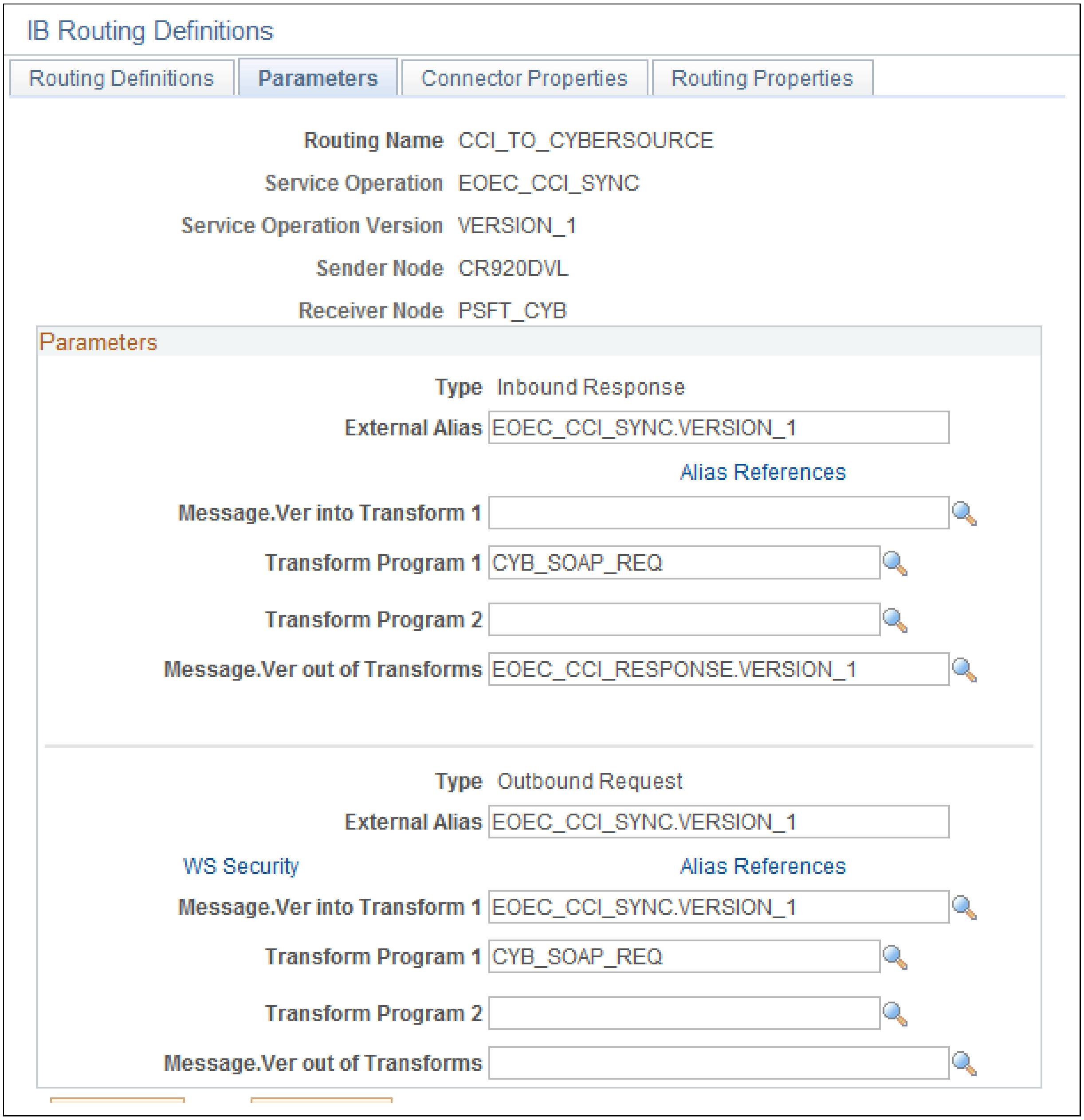
   This is the Cybersource testing server URL. Your production server URL will be different. Both URLs are also available on the Cybersource website.

o. Click Save.

3. Click the Ping Node button.

   If you do not receive a successful message, verify that your Proxy settings are entered on the webserver.

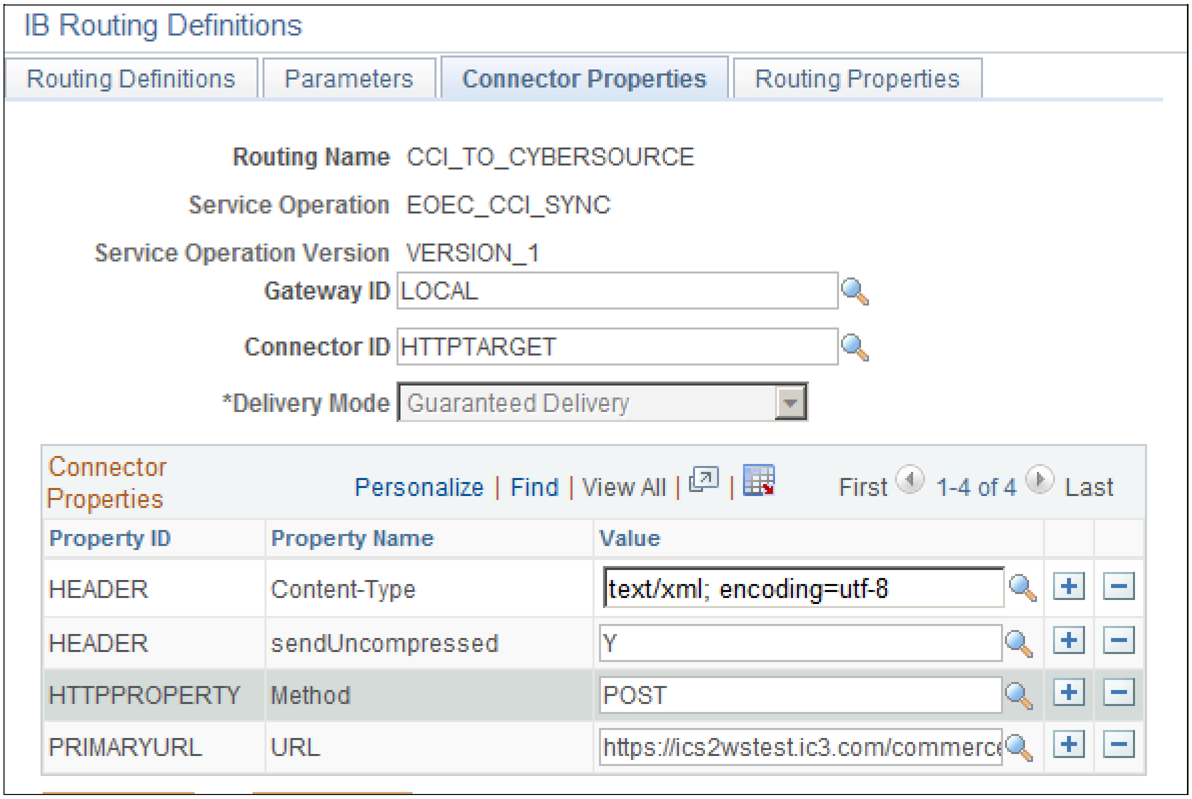
4. Select the Routings Tab to access the Routings page and open the Routing Definition for CCI_TO_CYBERSOURCE, as shown in the following example:



Routings Parameters page

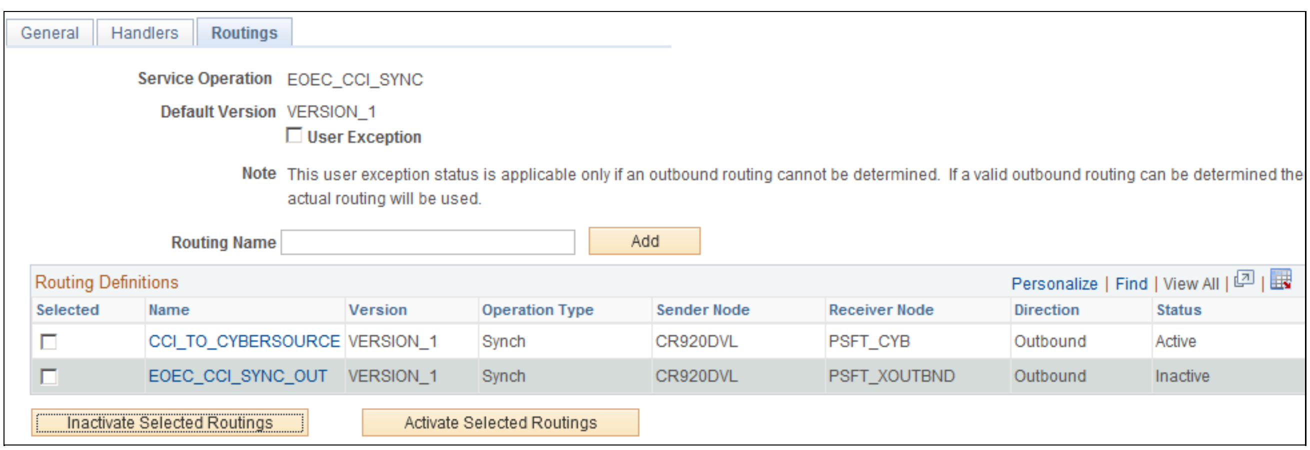
Verify that the Parameters tab is set up with the Transform programs as shown in this example.

5. Click the Connector Properties tab, make sure that the properties match those you set on the Node in step 2.



Routings Connector Properties page

6. Select PeopleTools, Integration Broker, Integration Setup, Service Operations.
7. Open the Service Operation Definition for EOEC_CCI_SYNC and ensure that the Active check box is selected.
8. Select the Routings tab to access the Routings page, as shown in the following example:



Routings page

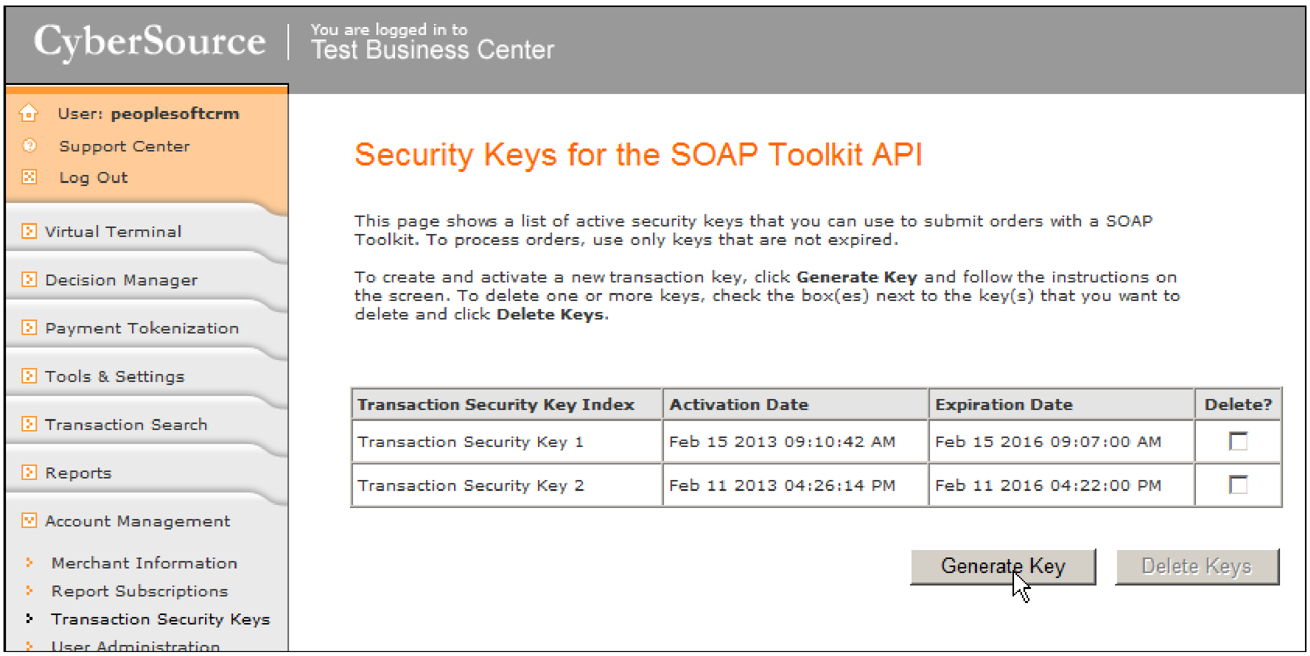
9. Ensure that only the CCI_TO_CYBERSOURCE routing is set to a Status of *Active.*
10. Click the Handlers tab and ensure that the handler Status drop-down is set to *Active.*
11. Click Save.

Task 1-9-7: Updating the Transform Program

A transform program is used to convert PeopleSoft XML into the correct format for the Cybersource authorization service request. PeopleSoft delivers a sample transformation program, CYB_SOAP_REQ, for this purpose. You must update this program with your Cybersource service account ID and encryption key.

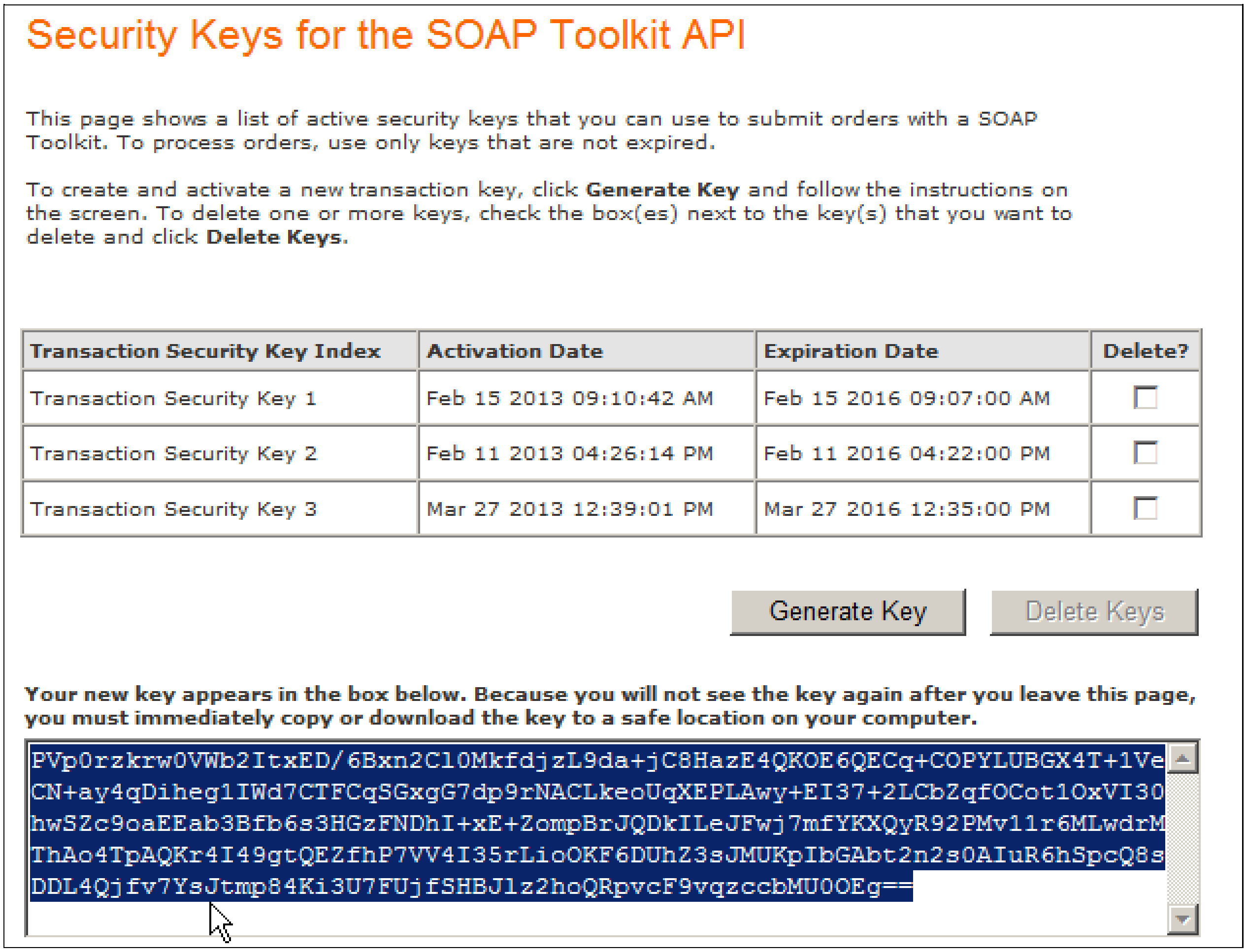
To update the Transform program:

1. Log into your Cybersource Business Center account and select Account Management, Transaction Security Keys. Click the Security Keys for the SOAP Toolkit API link.
2. Click the Generate Key.



Cybersource Business Center account

3. Copy the key that is generated in the text box.



Security Keys for the SOAP Toolkit API

4. Log into Application Designer and open Application Package *RB_CYBERSOURCE*. Double-click on Transform to open the PeopleCode and do the following.
   - Replace the Your Cybersource Account ID Goes Here text with your actual ID.
   - Replace the Your Encryption Key Goes Here text with the Key generated in step 2.
   - Save the PeopleCode.

Task 1-9-8: Setting Up the Payment URL

To submit post requests to Cybersource,

1. Select Peopletools, Utilities, Administration and URL
2. Select *CYB_SA* which will be populated with cybersource test endpoint. Update it with the production url in production environment.

Task 1-9-9: Setting Up the Payment Processor

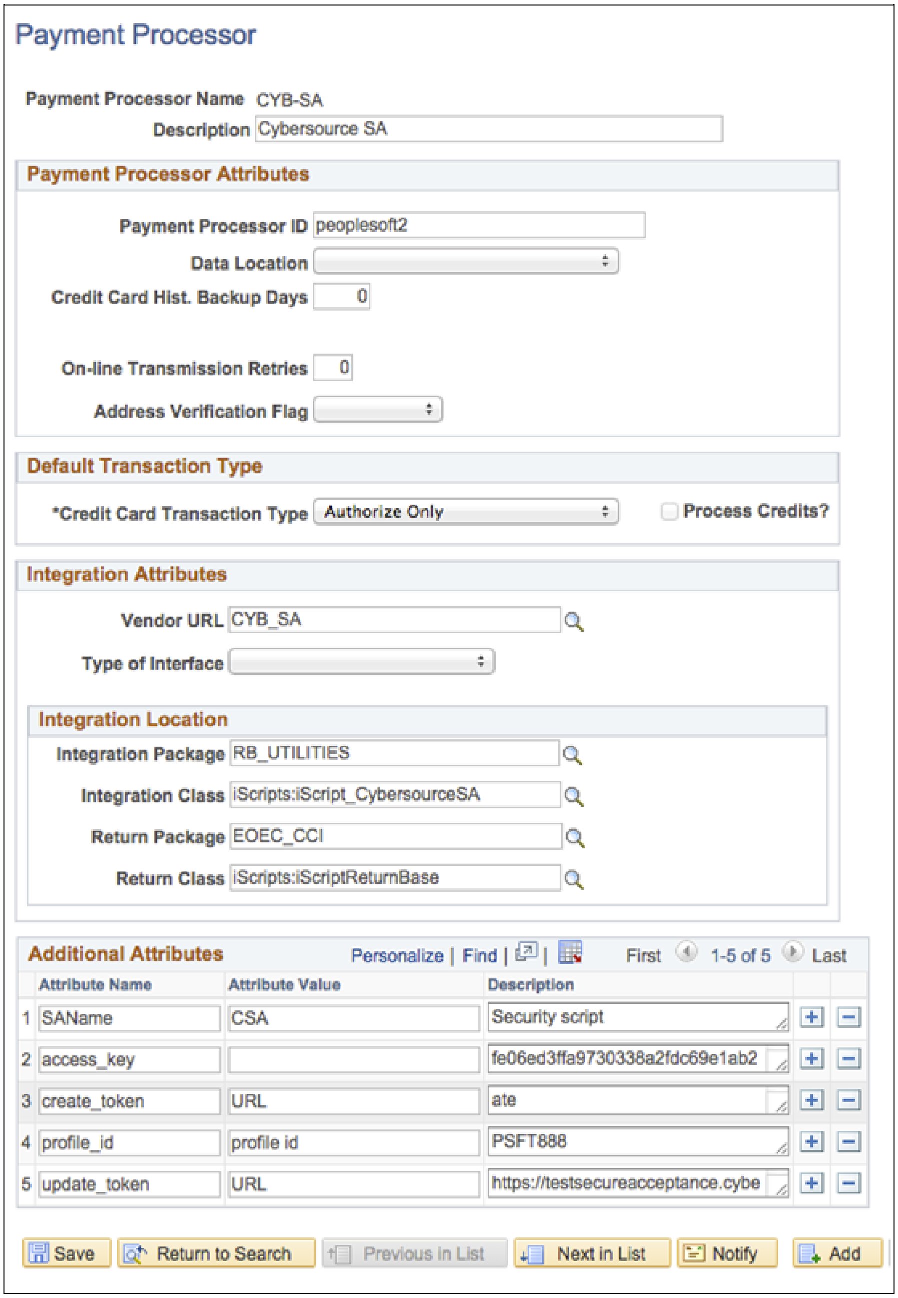
The Payment Processor definition is used to configure properties and options for the vendor you are using to perform your card authorizations. It is possible to have more than one Payment Processor if, for example, you need to use a different vendor for each Business Unit.

PeopleSoft delivers a sample Payment Processor definition called CYB-SA that you may use for this setup, or you may create your own.

To set up the Payment Processor:

1. Select Enterprise Components, Component Configurations, Credit Card Interface, Payment Processor.

2. Click Search and select *CYB-SA* as shown in the following example:



Payment Processor page

- In the Payment Processor ID field, enter your Account ID that you set up with Cybersource.
- In the Credit Card Transaction Type field, enter Authorize Only.

3. In the Additional Attributes grid,

- Modify Attribute Value CSA, if you have saved the java file in any other name other than CSA.java.
- Update access_key description field with value from your Cybersource account.
- Update the Create_token and Update_token values with production urls from cybersource in your production environment.

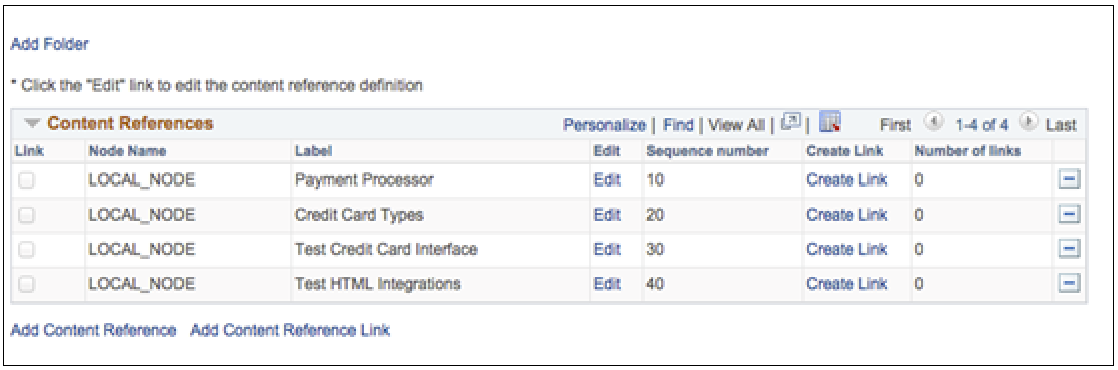
Task 1-9-10: Testing Connectivity

Complete the steps below to test Cybersource connectivity.

Note. Peoplesoft has delivered a page test HTML Integration to test Cybersource connectivity. But this page will be hidden from portal navigation. You have to enable it.

To test Cybersource connectivity:

1. Select PeopleTools, Portal, Structure and Content, Enterprise Components, Component Configurations, Credit Card Interface, to enable the Test HTML Integrations.
2. Click Edit on *Test HTML Integrations.*


Add Folder

* Click the "Edit" link to edit the content reference definition

Content References — Personalize | Find | View All | First 1-4 of 4 Last

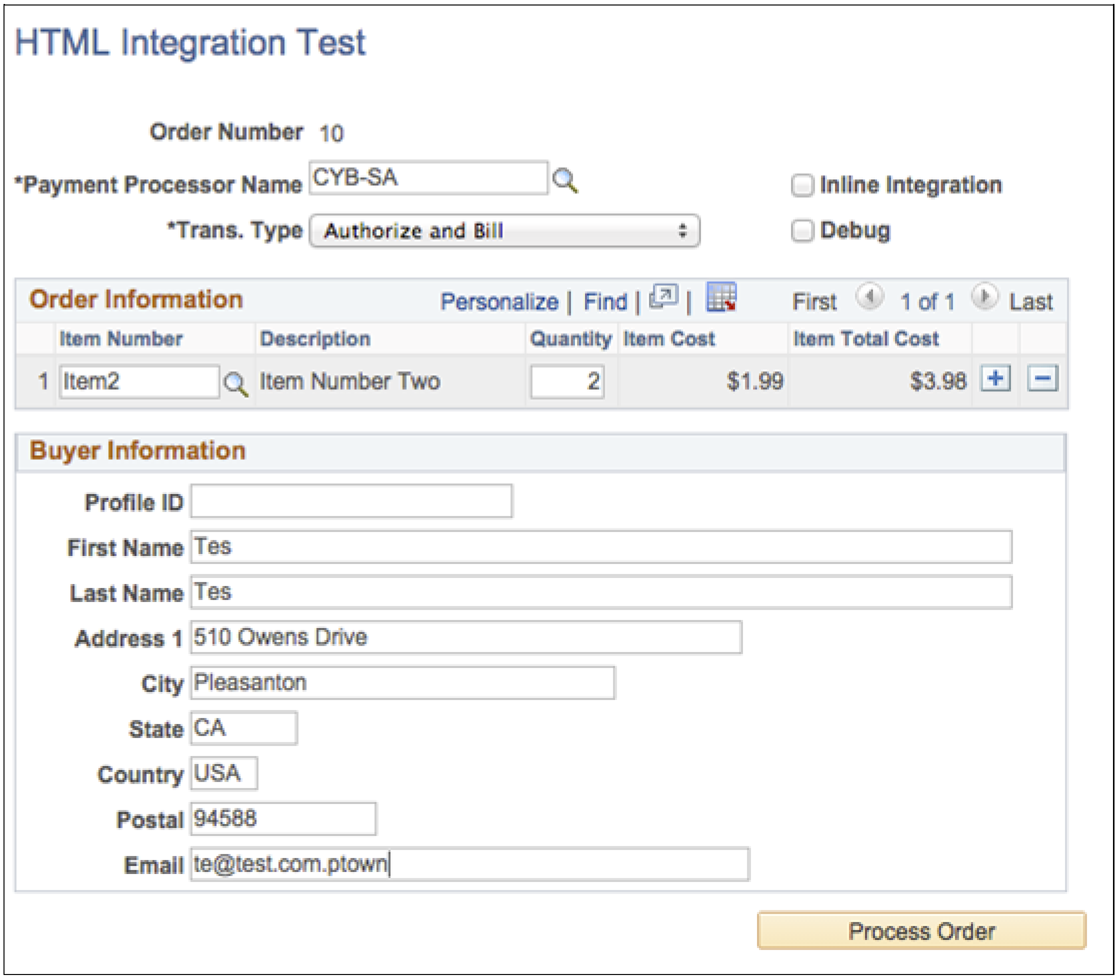
Link	Node Name	Label	Edit	Sequence number	Create Link	Number of links
	LOCAL_NODE	Payment Processor	Edit	10	Create Link	0
	LOCAL_NODE	Credit Card Types	Edit	20	Create Link	0
	LOCAL_NODE	Test Credit Card Interface	Edit	30	Create Link	0
	LOCAL_NODE	Test HTML Integrations	Edit	40	Create Link	0

Add Content Reference Add Content Reference Link

Credit Card Interface page

3. Uncheck Hide from portal navigation check box.
4. Click Save.
5. Select Enterprise Components, Component Configurations, Credit Card Interface and Test HTML Integrations.

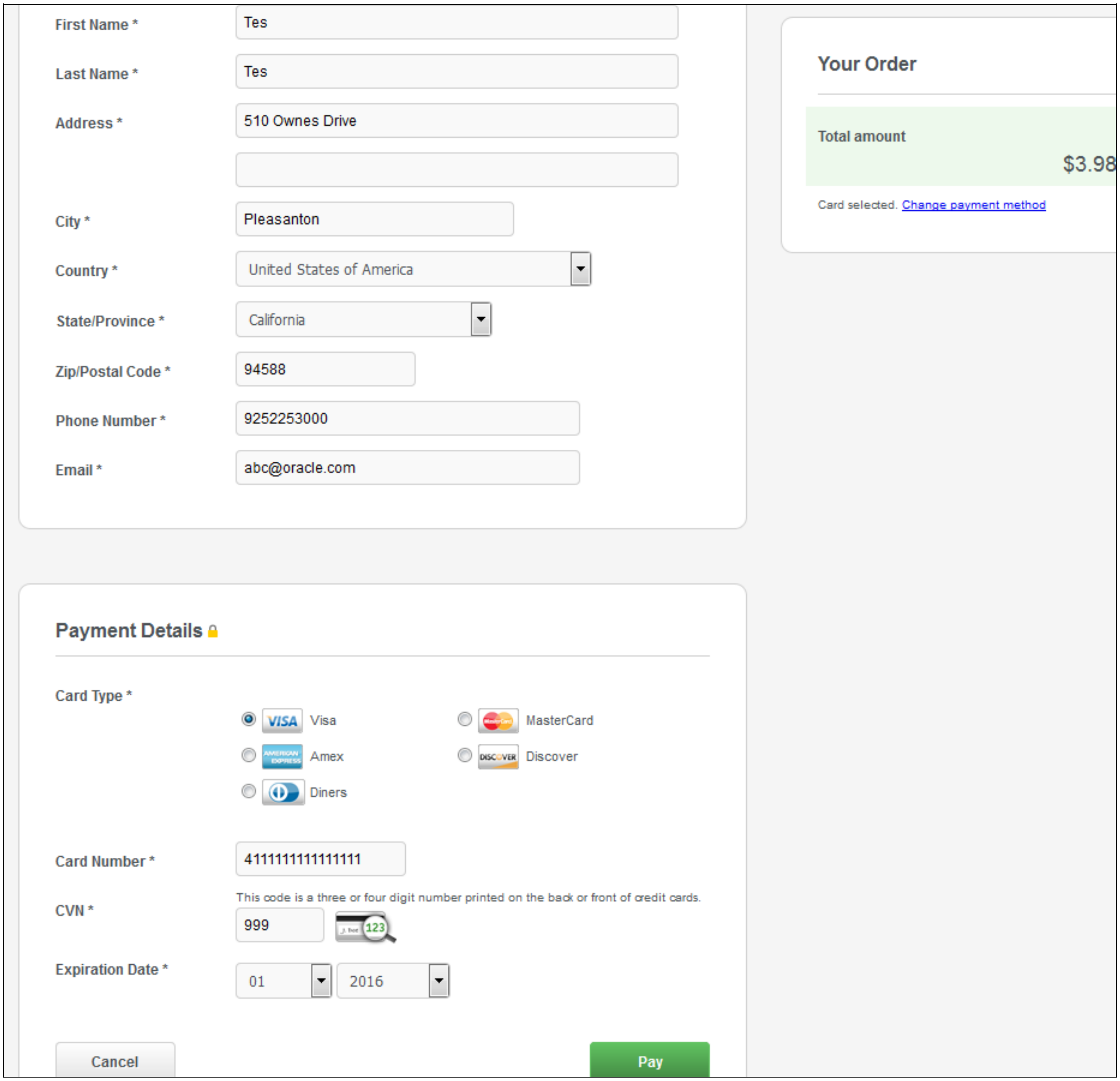
6. Add Order Number.



HTML Integration Test page

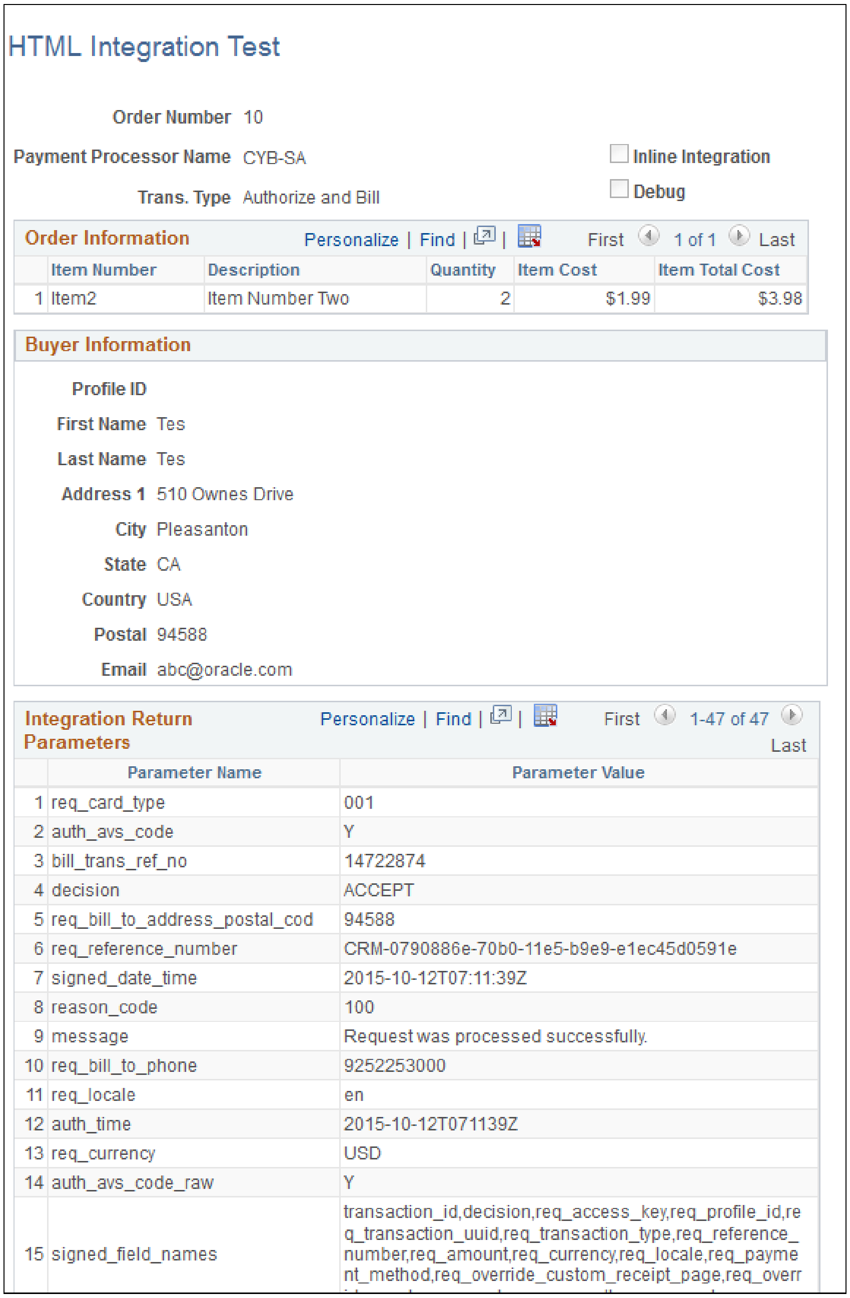
7. Select *CYB-SA* as the Payment Processor Name and add the rest of the values as show in the screenshot.
8. Click the Process Order button to transfer to the Cybersource SAWM site.

9. Enter Payment Details.



Payment Details page

10. Click Pay and the user will be transferred back to the HTML integration test page. The grid displays all return fields and values.



HTML Integration Test page

Task 1-10: Configuring Application Search Using Oracle Secure Enterprise Search

This section discusses:

- Understanding Application Search Using Oracle Secure Enterprise Search

- Enabling the Global Search box in Application Search Header
- Deploying and Indexing the Searches that Oracle Delivers

Task 1-10-1: Understanding Application Search Using Oracle Secure Enterprise Search

PeopleSoft Search Framework is a PeopleTools owned indexed search technology that relies on the Oracle Secure Enterprise Search (SES) engine by way of PeopleSoft Integration Broker. PeopleSoft Integration Broker provides the interface between PeopleSoft Search Framework and the Oracle SES engine to deploy the search definitions, build the indexes, and return the search results.

Important! Before installing Oracle's Secure Enterprise Search (SES) we highly recommend that you review our deployment and sizing recommendations provided in "Oracle Secure Enterprise Search Deployment Considerations for PeopleSoft 9.2" (Document ID: 1684035.1) found on My Oracle Support. This article provides information regarding the essential hardware for SES and information to help ensure capacity for peak concurrent usage of your PeopleSoft 9.2 environment. Failing to follow these recommendations can impact the performance and stability of your PeopleSoft 9.2 environment.

Note. You should *only* perform these steps if you have completed the tasks discussed in the PeopleTools Installation, "Configuring Integration Between PeopleSoft PeopleTools and Oracle SES," for your new release.

See PeopleSoft PeopleTools Installation, "Configuring Integration Between PeopleSoft PeopleTools and Oracle SES", for your database platform.

For Oracle Secure Enterprise Search configuration for PeopleSoft:

See *PeopleTools: PeopleSoft Search Technology*

Task 1-10-2: Enabling the Global Search box in Application Search Header

Complete the steps below to enable the global search box in the application search header.

To enable the Global Search box in the header:

1. Select PeopleTools, Portal, General Settings.
2. In the Chart Navigation Object Name field, enter *PT_PORTAL_DEFAULT_CHART_NAV*.
3. For the Display Global Search in Header option, select *YES*.
4. Click Save.

Task 1-10-3: Deploying and Indexing the Searches that Oracle Delivers

Oracle delivers PeopleSoft CRM search modules for which predefined Application and Search Page keyword searches are provided.

Note. Before you deploy the search definitions, you must verify that the roles are assigned to the call back user (PSAPPS).

To verify that the necessary roles are assigned to the call back user (PSAPPS),

1. Select PeopleTools, Security, User Profiles, User Profiles.
2. On the User Profiles page, select the Roles tab.
3. Verify that the following roles are assigned to the call back user (PSAPPS):

- Search Query Administrator
- Search Server
- Search Administrator

The following table lists the PeopleSoft CRM search modules for which predefined *Application* and *Search* Page keyword searches are provided:

Search	Search Type	Search Definition Name
Cases	Application Search	CR_GBL_CASE
Solutions	Application Search	CR_GBL_SOLUTION
Frequently-Asked-Questions (FAQ)	Application Search	CR_GBL_FAQ
Troubleshooting Guides	Application Search	CR_GBL_TG_SCRIPT
Person	Application Search	CR_RD_PERSON
Company	Application Search	CR_RD_COMPANY
Constituent	Application Search	CR_RD_CONSTITUENTS
Solution Search	Component Search	CR_CO_SOLUTION

For each of the Search definitions that Oracle delivers, you need to complete the following tasks:

1. Deploy – Select PeopleTools, Search Framework, Search Administration.

   In the Search Administration activity guide, expand the Administration section, and select Deploy/Delete Object.

2. Index the Search Definitions – Run the process by selecting PeopleTools, Search Framework, Search Administration.

   In the Search Administration activity guide, expand the Administration section, and select Schedule Search Index.

Note. The search category *Solutions* and *Cases* CR_GBL_KNOWLEDGE_BASE must be deployed separately.

Chapter 2

Installing PeopleSoft Correspondence Management

This chapter discusses:

- Understanding PeopleSoft Correspondence Management
- Identifying and Configuring FTP Servers
- Copying RTF and Text Template to the FTP Server
- Registering the FTP Servers
- Installing Additional Component Software — Xpdf
- Configuring User Selected Font for XMLP
- Reviewing PeopleSoft Correspondence Management
- Registering Microsoft Window Printers (Optional)
- Defining the CLASSPATH for Sun Java Mail Files

Understanding PeopleSoft Correspondence Management

This chapter provides instructions for installing the additional component applications required for PeopleSoft Correspondence Management functionality within Oracle's PeopleSoft CRM applications. Perform the following installation-related tasks to leverage these features provided by PeopleSoft Correspondence Management:

- The generation of Microsoft Word documents using templates.
- The conversion of Microsoft Word and text files into PDF documents.
- The printing of documents using network printers.

Note. Oracle recommends that you consult the PeopleSoft CRM 9.2 Product-to-PeopleSoft Online Help (PeopleBooks) Index found on My Oracle Support, to determine which PeopleSoft Online Help (PeopleBooks) you should include in your installation for the PeopleSoft CRM products that you are implementing.

See Also

PeopleSoft CRM: Automation and Configuration Tools,

Task 2-1: Identifying and Configuring FTP Servers

The FTP servers are used to physically store correspondence templates and finished documents. These servers are used to store other PeopleSoft Correspondence Management-related documents as well, such as intermediary XML files created by the PeopleSoft Correspondence Management-specific processes.

You can store the templates and the generated documents either in a single FTP server or place them on separate FTP servers. You also have the option to place these files in different folders.

You can use the FTP server that is intended for storing PeopleSoft CRM attachments for storing correspondence-related documents. The number of documents, their size, and the file management, play a role in determining the need for having one or more FTP servers exclusively reserved for PeopleSoft Correspondence Management.

After identifying the server and the folders where the documents will be stored, the locations of these servers must be specified in the form of URLs.

The PeopleSoft Correspondence Management functionality works with five types of documents:

- Correspondence templates.
- Templates personalized by the agents for a specific correspondence request.
- Intermediary XML files created by PeopleSoft Correspondence Management-related processes.
- Merged documents.
- Attachments.

If all of these document types are stored under a single folder on a FTP server, you only have to create a single URL in the procedure that follows. If these documents are stored under different folders on either a single or multiple FTP servers, then you must create a URL for each of these unique locations.

To create the URLs to access PeopleSoft Correspondence Management related documents:

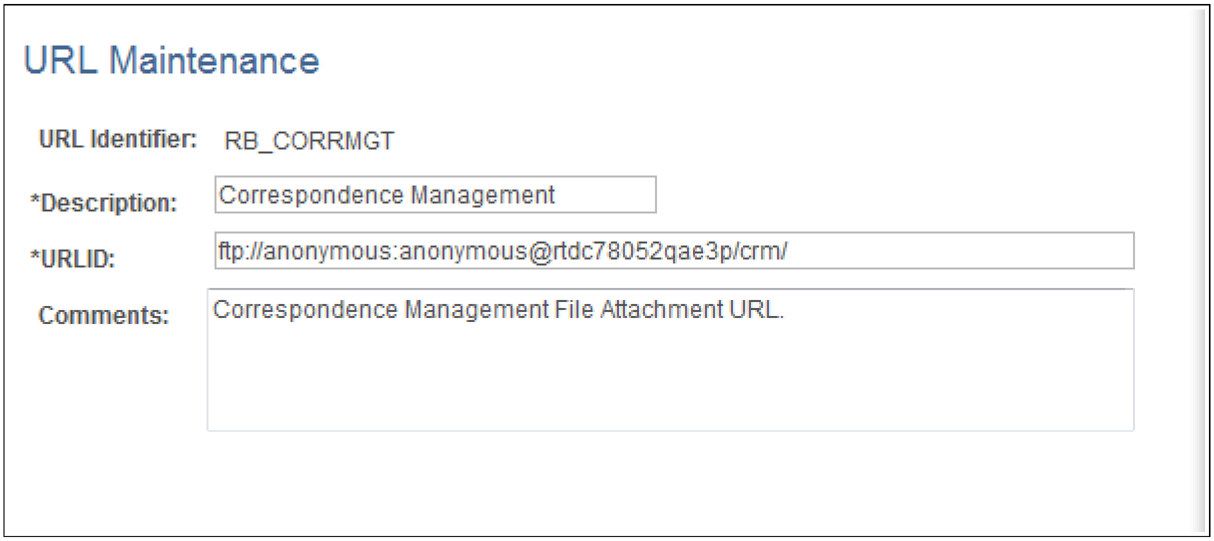
1. Set up one or more FTP servers to store the PeopleSoft Correspondence Management-related documents.

   Note. There are no special requirements—any standard FTP server will do.

2. Log in to PeopleSoft with a user ID that gives you access to the PeopleSoft PeopleTools Utilities menu.
3. Select PeopleTools, Utilities, Administration, URLs.

4. For each unique location that you plan to use, create a URL identifier and enter the URL for the FTP server that the application will use to access this type of document.

   For example, the delivered RB_CORRMGT URL definition, as shown in the following example:



URL Maintenance page

See *PeopleTools: System and Server Administration,* "Using PeopleTools Utilities."

Task 2-2: Copying RTF and Text Template to the FTP Server

New PeopleSoft Correspondence Management customers will need to upload templates that have associated *.rtf document files to the FTP server. To do this, you must upload the *.rtf file to the applicable template and save the template. This causes the PeopleSoft Correspondence Management system to upload the *.rtf file and the auto-generated *.xsl file to the FTP server defined in your RB_CORRMGT URL definition.

To upload templates to the FTP server:

1. Select Setup CRM, Common Definitions, Correspondence, Template.
2. Open an existing template.
3. Click the Replace button in the grid.
4. Select your *.rtf file.
5. Save the template.

Existing PeopleSoft Correspondence Management customers, if they have *.doc files associated with their templates, will need to replace their *.doc files with *.rtf files. In the new PeopleSoft Correspondence Management infrastructure, *.doc files and templates are not supported. All *.doc files must be converted to *.rtf files and uploaded to the FTP server.

To convert older *.doc files to *.rtf files:

Note. Perform this task only if you are upgrading from PeopleSoft CRM 8.9 to PeopleSoft CRM 9.2 or you have older formatted templates (.doc and .txt). PeopleSoft Correspondence Management only supports Rich Text (.rtf) and plain text (.txt) formatted templates. You can use Microsoft Word to open, convert, and then upload the new .rtf templates to the FTP server.

---

1. Using Microsoft Word, open each of your existing templates (*.doc files, these files may be located in

$PS_CFG_HOME/appserv/CorrespondenceManagement/templates) and click the Replace button to re-save them as *.rtf files.

You can keep the same name, just change the format of the file.

2. After the *.rtf file is created, open the corresponding .rtf template, upload the *new* *.rtf file to the FTP server, and then delete the old *.doc file from the template grid.
3. Save the .rtf Template.

   This uploads the *.rtf file to the FTP server and auto-generates the associated *.xsl file.

Task 2-3: Registering the FTP Servers

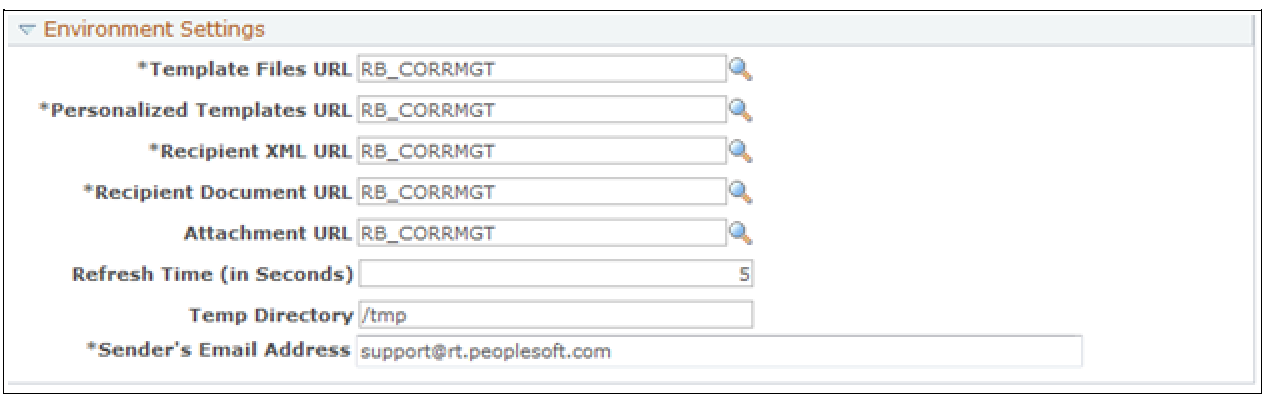
This process allows the customer to specify which URL the PeopleSoft Correspondence Management system needs to access the various types of documents. URL identifiers can be assigned to the following categories:

- Template files
- Personalized templates
- Recipient XML
- Recipient document
- Attachment

To register the FTP server for the PeopleSoft Correspondence Management system:

1. Select PeopleTools, Utilities, Administration, URLs to define the URL.

   The system data for the URL is RB_CORRMGT. If required, modify the URL to point to your FTP.
2. Select Set Up CRM, Common Definitions, Correspondence, Install Options to configure the PeopleSoft Correspondence Management system installation.
3. Enter the values for the environment settings, as shown in the following example:



Environment Settings page

- In the Template File URL field, enter *RB_CORRMGT*.
- In the Personalized Templates URL field, enter *RB_CORRMGT*.
- In the Recipient XML URL field, enter *RB_CORRMGT*.
- In the Recipient Document URL field, enter *RB_CORRMGT*.
- In the Attachment URL field, enter *RB_CORRMGT*.

You can have unique values for each of the URL files. To do this, you must create more URL definitions to point to the different FTP servers. Then add those URL definitions as the values for each of the URL file fields.

See Also

PeopleSoft CRM: Automation and Configuration Tools, "Defining Settings for Template-Based Correspondence."

Task 2-4: Installing Additional Component Software — Xpdf

Xpdf is free software obtained through the internet and is used for printing PeopleSoft Correspondence Management documents. You can reference either PeopleSoft Online Help (PeopleBooks) or the Foolabs official website for information on how to obtain this software.

When you have obtained the software, you can install it anywhere on the application server machine. You will update a configuration file to point to the Xpdf executable file. This configuration file is called *cm.properties* and is located at: <*PS_APP_HOME*>\Appserv\CorrespondenceManagement\config\cm.properties

The following is an example of a PeopleSoft Correspondence Management configuration file that shows *cm.logFolder* and *pdf2ps.command* as the values of concern:

```
cm.properties *
###############################################################################
# Correspondence Management Configuration File                                #
###############################################################################


########## Log4j Configuration - Start ##########

 cm.logFolder = d:/peopletools/cm/log/

 log4j.rootCategory=DEBUG, A2

 # Available levels are DEBUG, INFO, WARN, ERROR, FATAL

 log4j.appender.A2=org.apache.log4j.DailyRollingFileAppender

 log4j.appender.A2.datePattern='.'yyyy-MM-dd

 log4j.appender.A2.append=true

 log4j.appender.A2.layout=org.apache.log4j.PatternLayout

 log4j.appender.A2.layout.ConversionPattern=%-5p %d{ISO8601} [%c] - %m%n

########## Log4j Configuration - End ##########



########## PDF to PS Conversion Command - Start ##########

 pdf2ps.command = cmd /c d:/xpdf-3.00pl3-win32/pdftops.exe -paper match

########## PDF to PS Conversion Command - End ##########
```

PeopleSoft CM properties

- cm.logFolder

Replace d:/pt<release number>/cm/log/ with the path of your choice to put all log files relating to PeopleSoft Correspondence Management runtime data. For each CM transaction, a log file is generated here with the CM id as the identifier.

- pdf2ps.command

  Replace d:/xpdf-3.00pl3-win32/pdftops.exe with the path to your XPDF executable file that you just installed.

Note. This is applicable only for windows based installation, for non-windows based installation, replace or remove cmd /c.

Note. You can install the XPDF software parser from the Foolabs official website.

Task 2-5: Configuring User Selected Font for XMLP

In this tasks, you will modify the <*PS_APP_HOME*>\appserv\CorrespondenceManagement\config\xdo.cfg

1. Remove these two lines:

```
<!-- Font setting for convert OF to PDF
-->
```

2. List all user desired fonts as the child node of <fonts>, as in the following example:

```
<font family="Arial Narrow" style="normal" weight="normal">
      <truetype path="C:/WINDOWS/Fonts/ARIALN.TTF" />
     </font>
```

3. Replace the font ARIALN.TTF to user desired one.

```
<config version="1.0.0" xmlns="http://xmlns.oracle.com/oxp/config/">
   <properties>
      <fonts>
     <font family="Arial Narrow" style="normal" weight="normal">
      <truetype path="C:/WINDOWS/Fonts/ARIALN.TTF" />
     </font>
     <font family="Garamond" style="normal" weight="normal">
      <truetype path="C:/WINDOWS/Fonts/GARA.ttf" />
     </font>
     </fonts>
</properties>
</config>
```

Task 2-6: Reviewing PeopleSoft Correspondence Management

There are two sections on the Install Options page (Setup CRM, Common Definitions, Correspondence, Install Options) that are relevant to functionality. These sections are populated by default and should not be changed. The sections are:

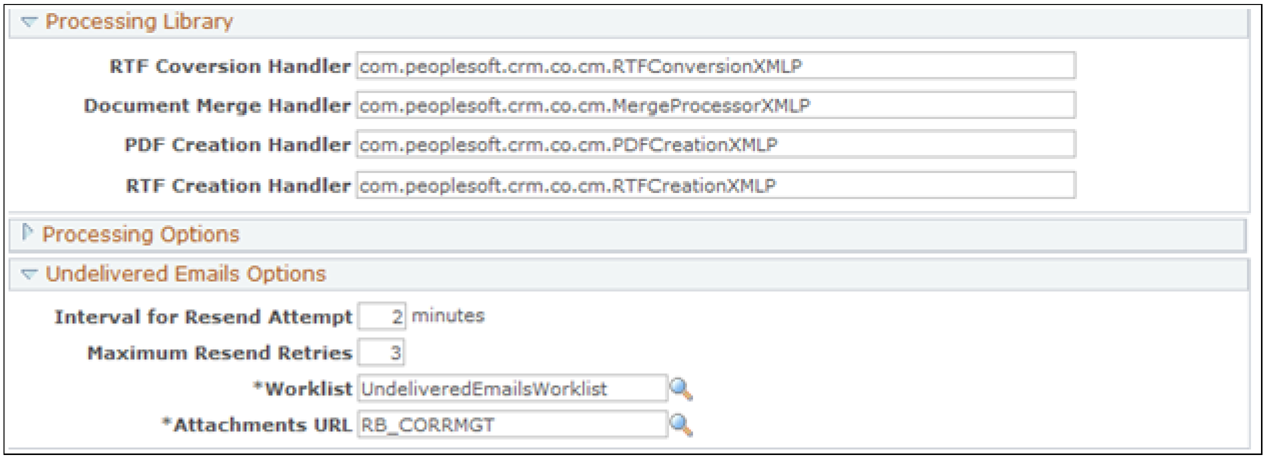
- Processing Library—This section defines the location to the Java files used for PeopleSoft Correspondence Management.

  These files are predelivered.

- Undelivered Emails Options—This section defines the work list used for emails that are undeliverable.

  When an Email fails to be delivered, PeopleSoft Correspondence Management attempts to resend the email. If the next attempt fails, a notification is sent to the work list to notify the administrator that a problem exists that requires investigation.

  The following example shows the Processing Library page options defined with the predelivered files:



Processing Library page

Task 2-7: Registering Microsoft Window Printers (Optional)

This installation task is optional, but must be done if you want to print PeopleSoft Correspondence Documents.

By associating printers with your server definitions, you create a list of printers that are available for selection in the Create Correspondence page. The user's printer selection then determines where the delivery process runs.

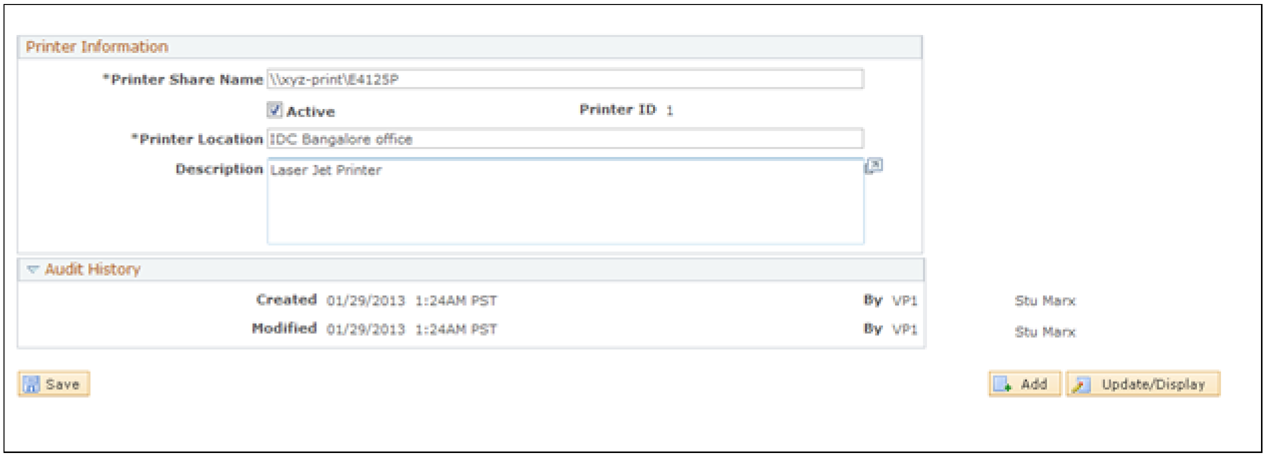
To support printing in geographically dispersed locations, it is most efficient to define the Process Scheduler servers that run the Print Delivery job in each location, and then associate to the printers with the nearest Process Scheduler server. You can set up servers that are used only for the printing process.

Note. The association is between the printer and the Process Scheduler server control where the Print Delivery job runs. Therefore, the machine that the Process Scheduler server is on must have this printer driver installed.

To register printers:

1. Select Set Up CRM, Common Definitions, Correspondence, Printer Registration.

2. Specify the printer and any location information to inform users where to get the printed document, as shown in the following example:



Printer Information page

3. Save the page.

Note. Ensure that the printers listed on this page are mapped to the Process Scheduler server machine and can print for that machine.

Task 2-8: Defining the CLASSPATH for Sun Java Mail Files

The final step ensures that the correct Sun Java Mail class files are used. The class files are located in a JAR file called *mail.jar,* located in the <*PS_HOME*>/class directory. This directory contains many JAR files, some also include Sun Java Mail class files. The other releases of Sun Java Mail may not be correct. You must ensure that the correct Sun Java Mail class files in mail.jar are used at runtime.

To do this, you must update the CLASSPATH in the Application server and Process Scheduler server configuration files to load the mail.jar file first.

- Application Server configuration file

  Found in <*PS_CFG_HOME*>/appserv/[domain name]/psappsrv.cfg

- Process Scheduler Server configuration file

  Found in <*PS_CFG_HOME*>/appserv/prcs/[domain name]/psprcs.cfg

In both of these configuration files, you will see a section in the [PSTOOLS] for setting the CLASSPATH:

```
;To add directories or jar files to CLASSPATH for the jvm loaded via JNI,
unco ;and set it equal to the list of elements you would like to use. ;The
classpath elements need to be seperated using the path seperator specific
;For Example: Add to CLASSPATH=/usr/class:/home/user/class ;Add to
CLASSPATH=
```

This should be updated to read:

```
;To add directories or jar files to CLASSPATH for the jvm loaded via JNI,
unco ;and set it equal to the list of elements you would like to use. ;The
classpath elements need to be seperated using the path seperator specific
;For Example: Add to CLASSPATH=/usr/class:/home/user/class Add to
CLASSPATH=<PS_HOME>/class/mail.jar;
```


where <*PS_HOME*> is substituted with the physical drive location (Example: c:\PT<current PeopleTools release number>)

Note. You must restart the servers after making the change.

Note. On UNIX, mail.jar files are available in <*PS_HOME*>/appserv/classes.

Chapter 3

Installing PeopleSoft Online Marketing 9.2

This chapter discusses:

- Understanding PeopleSoft Online Marketing Setup
- Prerequisites
- Configuring PeopleSoft OLM System Parameters
- Setting Up the FTP Server URL for File Upload
- Setting the PS_FILEDIR Environment Variable
- Setting Up Web Profile to Bypass the Sign-In Page
- Assigning PeopleSoft OLM Self-Service Permissions
- Setting Up PeopleSoft OLM Integration Points
- Installing the DES on the Oracle WebLogic Server
- Installing the DES on an IBM WebSphere Server
- Retrieving and Installing JDBC Drivers
- CyberSource Credit Card Integration Configuration (Optional)
- Setting Up Single Sign-On (Optional)
- Testing the DES Installation
- Testing the Email Server
- Adding Standalone Dialog Servers (Optional)
- Installing Adobe Graphic Dialog Flow Designer
- Setting Up Profiles
- Tuning the System (Optional)

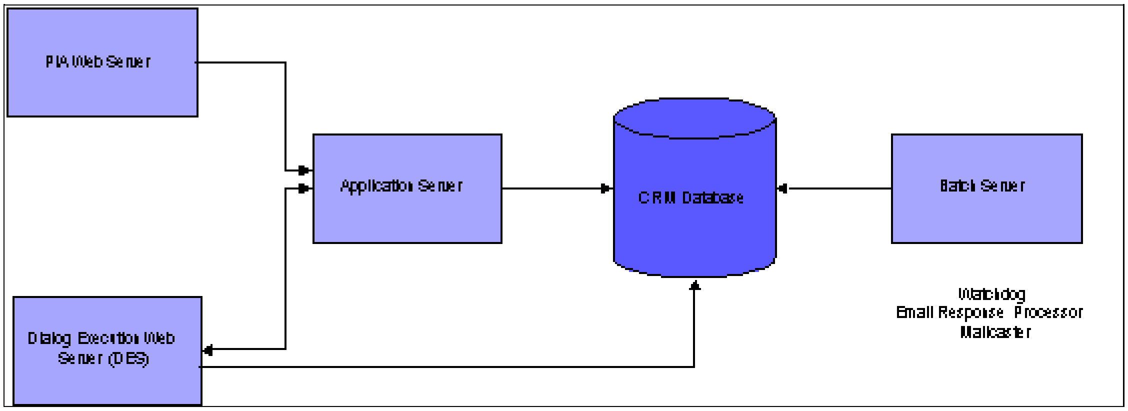
Understanding PeopleSoft Online Marketing Setup

This chapter provides instructions for the installation and set up of Oracle's PeopleSoft CRM Online Marketing (OLM) server and related components.

Note. Oracle recommends that you consult the PeopleSoft CRM 9.2 Product-to-PeopleSoft Online Help (PeopleBooks) Index that can be found on My Oracle Support, to determine which PeopleSoft Online Help (PeopleBooks) you should include in your installation for the PeopleSoft CRM products that you are implementing.

Note. If you are running Oracle, ensure that your client connectivity, database and JDBC versions match. For example, if your database is on 11.2.0.3, ensure that your client connectivity matches the database version, as well as the JDBC version. PeopleSoft OLM does not support mixed versions.

The following diagram shows the PeopleSoft CRM OLM architecture:



PeopleSoft OLM architecture

The overall process for installing the PeopleSoft CRM OLM server and related components includes the steps that we outline here.

To install the PeopleSoft CRM OLM system:

1. Install the database (such as Oracle 11g).

   Note. If you are running DB2 LUW from HP-UX and you are going to install a non-Unicode CRM database, verify that your environment variable *LANG* in the HP-UX system has a character set of *iso88591*; for example, *en_US.iso88591.* Otherwise, the JDBC connection error "Encoding not supported!" will occur in OLM components. Before you create the database, you must change the HP-UX default code page from Roman 8 to the character set that you plan to use for the database; that is, export LANG=en_US.iso88591.

2. Install and configure the PeopleSoft CRM 9.2 database and software (PeopleSoft PeopleTools, Oracle Tuxedo, and so on).
3. Install an additional component SMTP-compliant email server; for example, L-Soft LSMTP or IronPort.

   Note. Oracle does not provide this software; you must purchase it separately.

4. Install PeopleSoft OLM components.

   For example: Dialog Execution Server, Mailcaster, Email Response Processor.

See Appendix: "Reviewing Tablespaces and Parameters"

Prerequisites

Before you begin the PeopleSoft CRM OLM installation, ensure that these requirements are met:

- You have the PeopleSoft CRM 9.2 CD.
- Your PeopleSoft CRM environment is fully functional, with the PeopleSoft Application Server, Oracle Tuxedo, and at least one Tuxedo Batch Server installed.
- Oracle's PeopleSoft Pure Internet Architecture web server is installed.

- The JOLT publish/subscribe servers are configured for your application server.
- The Process Scheduler server is installed.
- The Dialog administrator *Dialog Administrator* and Process Scheduler administrator *ProcessSchedulerAdmin* roles are assigned to your Administrator user ID.
- You have the correct configuration and kernel settings on UNIX.

Note. Before you make the following changes, check with your UNIX system administrator and hardware vendor, to ensure that these recommendations are compatible with your system.

Note. If customers do not setup the PS_CFG_Home environment variable, the JavaApps folder will be created under user profile folder.

For example, in windows, C:\Users\TESTUSR\Psft\pt\8.55\ JavaApps

In unix, /Root/PSADMN2/ Psft\pt\8.55\ JavaApps

If the customer setup the *PS_CFG_Home* environment variable, then the JavaApps folder will be created under the *PS_CFG_Home* environment variable.

The kernel file /etc/system should be configured with the following values for file descriptors:

```
* set soft limit on file descriptors
set rlim_fd_cur=1024
* set hard limit on file descriptors
set rlim_fd_max=4096
```

PeopleSoft OLM does not run on all hardware and software platforms that PeopleSoft PeopleTools supports. You must ensure that you have compatible hardware and software by reviewing the PeopleSoft CRM 9.2 Hardware and Software Requirements guide, available on My Oracle Support.

See Also

Installing the DES on the Oracle WebLogic Server

Installing the DES on an IBM WebSphere Server

PeopleSoft CRM: Hardware and Software Requirements, for your current release.

Task 3-1: Configuring PeopleSoft OLM System Parameters

This task describes the parameters that the Dialog Execution Server (DES) and Mailcaster use. You must set the following parameters before you install the PeopleSoft OLM servers.

Note. The parameters that WatchDog and E-mail Response Processors use are discussed in the *PeopleSoft Online Marketing 9.2 Online Help (PeopleBooks).*

To set parameter values:

Select Set Up CRM, Product Related, Online Marketing, Settings.

Note. If a parameter does not appear on the Dialog Execution Server Settings page, click the Add button to add the parameter. Some entries list as *PSCipher encrypted.* Use the encryption utility at the bottom of the Dialog Execution Server Settings page to encrypt these values.

This table lists the he parameters that are used to control OLM:

Name	Description
ConnectId	The database user name; for example, EMDBO.
ConnectPswd	The database users password (PSCipher encrypted); for example, {V1.1}uVbXmAaEgLA=
bulkMailerDropDedup	Specifies whether to drop the Dedup table after the mail job has completed successfully. The default is *True.*
cgiProgramPath	Specifies the path of the web server `gx.cgi` program. The default is *DCS.* Also, used by PeopleSoft OLM to tell the Campaign Server to clear cache, and to generate the Dialog Link Report. To ensure that the path information is read correctly at startup, you should set this value in the configuration files, rather than using the Settings feature in the OnlineMarketing Client. The default value is */DCS/*
companyBasicsProfileName	For internal use only. The default value is *Companies.*
contactBasicsCompanySysIdElementName	For internal use only. The default value is *Company ID.*
contactBasicsProfileName	For internal use only. The default value is *People.*
dbServerURL	The JDBC connection URL. This value contains information about the database server, port (when applicable), and database instance. The format of the URL is also dependent on the JDBC driver. The available formats are as follows: For MSSQL, use `jdbc:sqlserver://server:port;DatabaseName=dbInstance;sql70=true;charset=Cp1252` For Oracle, use `jdbc:oracle:thin:@server:port:dbInstance` For DB2LUW, use `jdbc:db2://server:port/dbInstance:driverType=4;fullyMaterializeLobData=true;fullyMaterializeInputStreams=true;progressiveStreaming=2;progresssiveLocators=2;`
dbVendor	The value depends on the RDBMS. Enter *DB2LUW*, *ORACLE*, or *MSSQL.*
dedupIndexSpace	dedupIndexSpace—The value depends on the RDBMS. For MSSQL set to *[DEFAULT],* For Oracle set to *RYWORK*, or For DB2LUW set to *RYWORKIDX.*

Name	Description
dedupTableDeferredSegmentCreationbyDefault	Default is *Yes*. For database Oracle 11.1 and below - *Yes* For database Oracle 11.2 and above - *No* For DB2LUW – *Yes* For MSSQL – *Yes*
dedupTableSpace	The value depends on the RDBMS. For MSSQL set to *[DEFAULT],* for Oracle set to *RYWORK*, or for DB2LUW set to *RYWORK.*
defaultDateFormat	Default Date format with values such as *DD/MM/YYYY.*
defaultTimeFormat	Specifies the Default Time format. Possible values are *HH:MM* or *HH:MMAM/PM.*
defaultURLBase	The URL for the Dialog web server, including the DES HTTP/HTTPS port number. The format is *http://www.foo.com:82*
doNotEMailDefault	Specifies the default value to be stored in the people profile (in the Do not email field) when a new contact record is added. If it is *true*, then new contacts will not be contacted through bulk E-mail. If it is *false* (the default), then contacts can be contacted. This default value can be overridden by the dialog process or respondent input.
doNotEMailProfileElementName	For internal use only. The default value is *Do Not Email.*
emailAddressProfileElementName	Specifies the name of the Email Address profile field in the Individuals.People profile. The default value is *E-mail.*
extensionTimeout	Specifies the extension execution timeout. The default value is *45.*
isDESMultiInstance	Indicates that the DES has multiple instances. The default value is *false.*
jdbcDriver	The class name of the JDBC driver that you use. This should be one of the following: For MSSQL, enter *com.microsoft.sqlserver.jdbc.SQLServerDriver.* For Oracle, enter *oracle.jdbc.driver.OracleDriver.* For DB2LUW, enter *com.ibm.db2.jcc.DB2Driver.*

Name	Description
jmsProvider	Specifies the vendors of web server software. Possible values are: *BEA-WLS* or *IBM-WAS* For Oracle weblogic Server - *BEA-WLS* For IBM websphere server - *IBM-WAS*
jmsProviderUrl	JMS Provider URL. The default value is *t3://<hostname>:<port>*
jmsUser	JMS User. The default value is *System.*
jmsUserPassword	JMS User Password. By default value it is blank.
localHostName	Specifies the host name of the machine where Mailcaster is running and is used to communicate with the SMTP mail servers. The default value is *localHostName.*
maxBulkMailMessagesPerHour	Specifies the number of E-mails each Mailcaster sends per hour when PeopleSoft OLMcomponents share a mail server with other users. This enables you to limit the number of E-mails each Mailcaster sends per hour. For example, if you have 3 Mailcasters and you set this parameter to 100, each Mailcaster will send out a maximum of 100 messages per hour for a total maximum of 300. The default setting is *0,* which means NO limit.
maxPooledGenericThreads	Specifies the maximum number of Generic Threads that are used by Scheduler and Broadcaster. The default setting is *10.*
maxThreads	Specifies the maximum size of the Live Extension pool. The default setting is *10.*
orgRoleTypeIdProfileElementName	Specifies the name of the organization role type profile element in base language. The default value is *Organization Role Type.*
pollingInterval	Specifies in minutes the frequency with which the Mailcaster checks the mail job queue. The default setting is *1.*
psAppHome	The PeopleSoft CRM 92 CD installed path: For windows *C:\PS_APP_HOME* For Unix */root/ PS_APP_HOME*
psAppServerURL	The host and port of Oracle Tuxedo. The format is *//appserv.foo.com:9000*

Name	**Description**
psHome	The PeopleTools installed path: For windows, *C:\PS_HOME* For Unix, */root/ PS_HOME*
psIBLocalNode	The local node of PeopleSoft Integration Broker. For example, *PSFT_CR*
psIBLocalNodePassword	The PeopleSoft Integration Broker password (PSCipher encrypted) For example, *{V1.1}as8D8vePbsY=*
psOperatorId	Specifies the PeopleSoft user ID. Select a user ID with the PeopleSoft Administrator role, such as the OLM user. For example, *VP1*.
psOperatorPassword	Specifies the PeopleSoft user password (PSCipher encrypted). For example, *{V1.1}Wsh6z0LM+4E=*
psPIAServerURL	Specifies the PeopleSoft CRMPIA Server URL. For example , *http:// <PIA web server:port>*
psPIAServerWebsiteName	Specifies the PeopleSoft CRMPIA server website name; for example , *peoplesoft.*
psToolsRel	The PeopleSoft PeopleTools version of Oracle Tuxedo. The format is 8.55. After every PeopleSoft PeopleTools release or PeopleSoft PeopleTools patch upgrade, you must update this variable. For example , 8.55.
rmiPort	Specifies the port on which RMI can be contacted. The default is *1099.*
roleTypeIdProfileElementName	Specifies the name of the individual role type profile element in base language. The default value is *Role Type.*
schedulerCheckRunningEventsMins	The default value is *10.*
signatureLength	Specifies the length of the signature in bits, from 0 to 48 (0 = no signature). The default length is *48.*
smallAudienceThreshold	Specifies a threshold number of contacts in an audience. Below this number, PeopleSoft OLM uses a small Mailcaster to send E-mail. The default is *100.*

Name	Description
smtpServerNames	The mailcaster uses the mail servers (semicolon separated), including the port numbers and thread counts. The number of sent mail threads must be at least 1, and no larger than 500. The default if none is specified is 1, and if a number greater than 500 is specified, 500 is used. The default port number is *25*. The format is *mail1.foo.com:25:threads=5;mail2.foo.com:25:threads=5*.

You can set parameters directly in the configuration file for the specific component. Parameters that you save in these locations have the following precedence:

- The highest precedence are the configuration files (DES.config, MCR.config, ERP.config and WDG.config). PeopleSoft OLM always uses the values set in the configuration files.

  Example: DES.Config File

```
#*******************************************************************# #
Confidentiality Information: # # # # This module contains confidential
and proprietary information # # of Oracle; it is not to be copied,
reproduced, or # # transmitted in any form, by any means, in whole or in
part, # # nor is it to be used for any purpose other than that for # #
which it is expressly provided under the applicable license # #
agreement. # # # # Copyright (c) 2006 Oracle. All Rights Reserved. #
#*******************************************************************# #
Title: DES.config # Description: Configuration file for Dialog Execution
Server
#********************************************************************
dbVendor=ORACLE dbServer=server dbPort=port dbInstance=dbInstance
ConnectId=connectid ConnectPswd={V1.1}Rf42LOLHrdyOdIZaZ2z5ow==
```

```
# The above parameters are all that is needed to make a database⇒
connection
# and the other configuration parameters can then be obtained from⇒
settings.
# If you wish to override the default value for only this process, then⇒
you
# can include the variable here.
#
# If you wish to use a different JDBC driver than the ones supported,⇒
you
# should set the jdbcDriver and dbServerURL variables on your own.
# Below are examples for the currently supported drivers.
#
# You may override the above by setting the following manually
# jdbcDriver=
# The default values for jdbc driver are as follow:
#    MSSQL=com.microsoft.sqlserver.jdbc.SQLServerDriver
#    ORACLE=oracle.jdbc.driver.OracleDriver
#    DB2LUW=com.ibm.db2.jcc.DB2Driver
#
# dbServerURL=
# The default format is:
```

```
 #        For MSSQL, if the db port is 0 in the dbServerURL, please⇒
 check and use the correct port# or remove the 0 from the url, default⇒
 port will be used.
 #    MSSQL=jdbc:sqlserver://server:1521;DatabaseName=dbInstance;sql70=⇒
true;charset=Cp1252
 #    ORACLE=jdbc:oracle:thin:@server:1521:dbInstance
 #    DB2LUW=jdbc:db2://server:1521/dbInstance
 #
 # The following control how the Database Connection Pool works.
 # The default (min=1 & max=20) is too low for web use.
 transactionPoolMinSize=10
 transactionPoolMaxSize=100
```

Note. After the successful installation of PsMpWebAppDeployInstall, the *DES.config* file is created under the *ps_cfg_home\webserv\<OLMdomain>\DES.*

By default, the *DES.config* file includes the following parameters:

dbVendor, dbServer, dbPort, dbInstance, ConnectId, ConnectPswd

The following parameters must be added manually.

PsAppServerURL, psIBLocalNode, psIBLocalNodePassword, psToolsRel, dbServerURL, jdbcDriver, defaultURLBase, dedupTableDeferredSegmentCreationbyDefault

---

- The lowest precedence is the Dialog Execution Server Settings page. Values that you define on the Dialog Execution Server Settings page are overridden by values set in the other locations.

The advantage of using the Dialog Execution Server Settings page is that these settings are used globally. This provides easier system maintenance. Use configuration files only for the database connection values.

Task 3-2: Setting Up the FTP Server URL for File Upload

The File Upload feature of PeopleSoft CRM OLM requires an FTP server. You must specify the URL for the FTP server in the PeopleSoft CRM system.

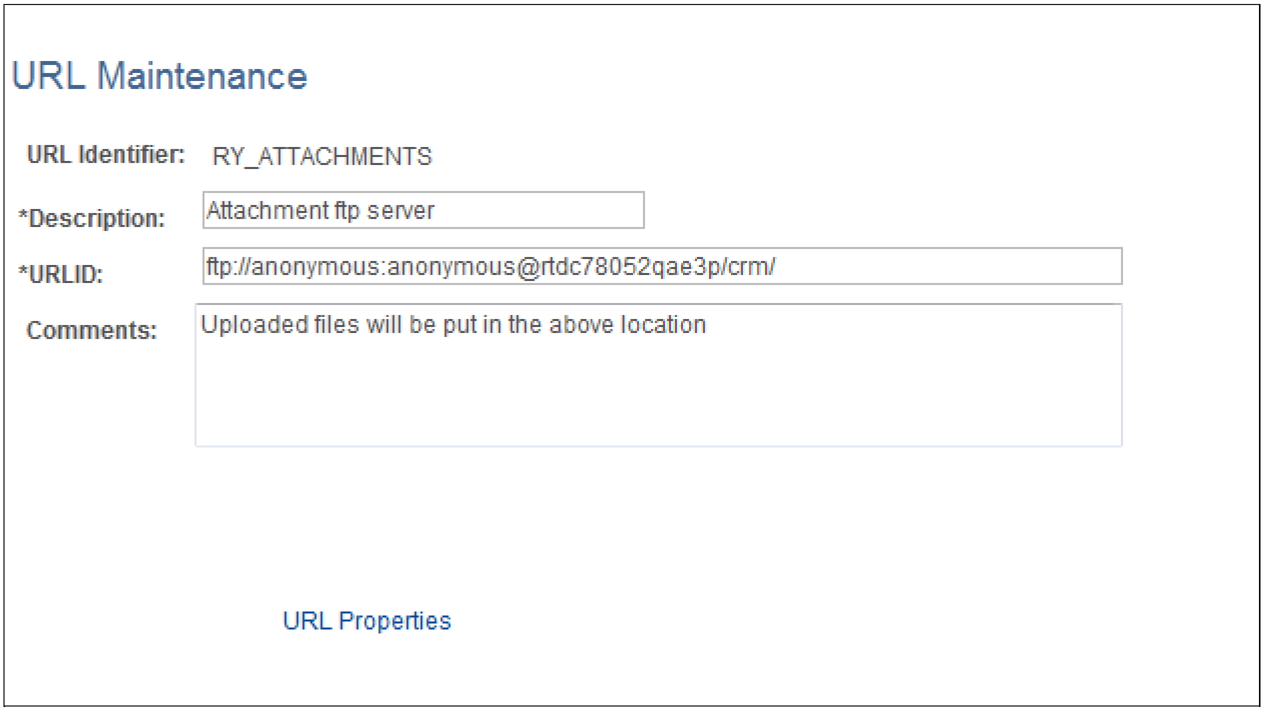
To specify the FTP URL:

1. Select PeopleTools, Utilities, Administration, URLs.

   The URL Search page appears.

2. Search for the *RY_ATTACHMENTS* URL and open it.

   The URL Maintenance page appears, as shown in the following example:

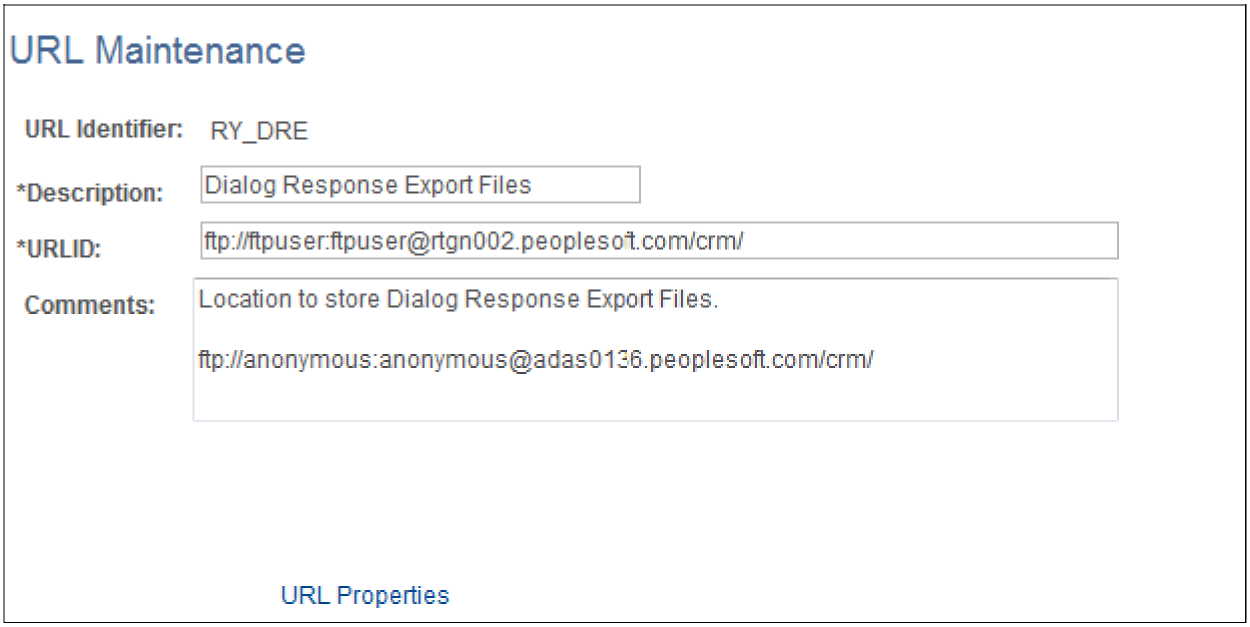


URL Maintenance page

3. Verify that the *RY_ATTACHMENTS* URL in the URL field contains the value of a valid FTP server location for use by PeopleSoft CRM OLM during the file upload procedure.

   If this URL is no longer valid or the location of the FTP server has changed, you must update this URL accordingly.

4. Repeat steps 1 and 2 for RY_DRE. Verify that the RY_DRE URL in the URL field contains the value of a valid FTP server location for use by PeopleSoft CRM OLM during the file upload procedure, as shown in the following example:



URL Maintenance page

Task 3-3: Setting the PS_FILEDIR Environment Variable

The administrator must set the PS_FILEDIR environment variable on the server where the Process Scheduler is running. This variable is usually set to PS_CFG_HOME\appserv\prcs\<*db_name*>\files\. This is required to write files to the application server and process scheduler server.

Refer to your operating system documentation for information about how to set environment variables.

Task 3-4: Setting Up Web Profile to Bypass the Sign-In Page

To access the PeopleSoft CRM Self-Service component directly from the Dialog Login page, the PeopleSoft Pure Internet Architecture web profile must be set to sign in by default. This means that you must bypass the PeopleSoft Pure Internet Architecture sign-in page.

To set up the web profile to bypass the sign-in page:

1. Decide which PeopleSoft Pure Internet Architecture server needs to bypass the sign-in page.

2. Open the *configuration.properties* file and note the value of the Web Profile parameter (for example, *DEV*).

Note. The default location of the *configuration.properties* file is:

For weblogic,

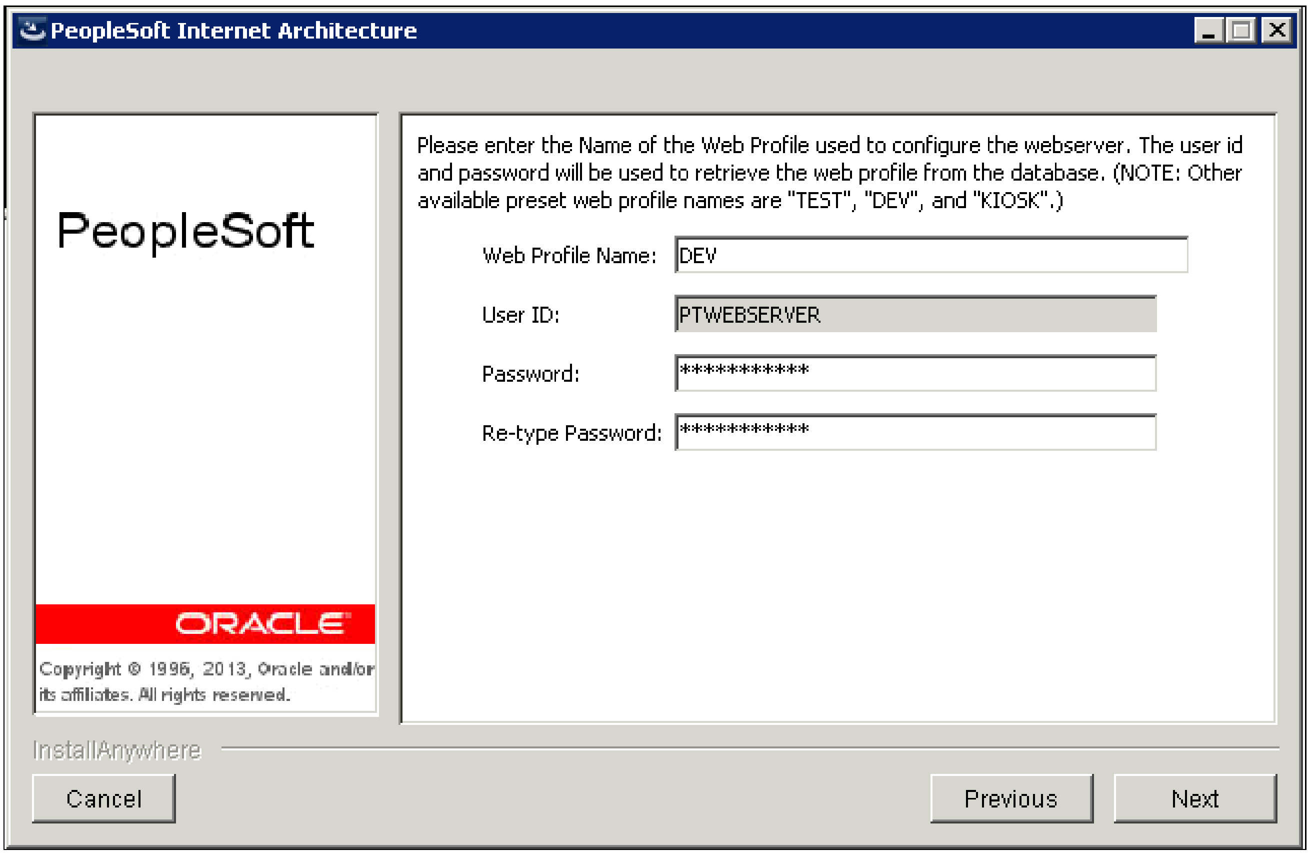
<%PS_CFG_HOME%>\webserv\<domain_name>\applications\peoplesoft\PORTAL.war\WEB-INF\psftdocs\ps

For websphere,

<%PS_CFG_HOME%>\webserv\<domain_name>\installedApps\<domain_name>NodeCell\<domain_name>.ear\PORTAL.war\WEB-INF\psftdocs\ps

---

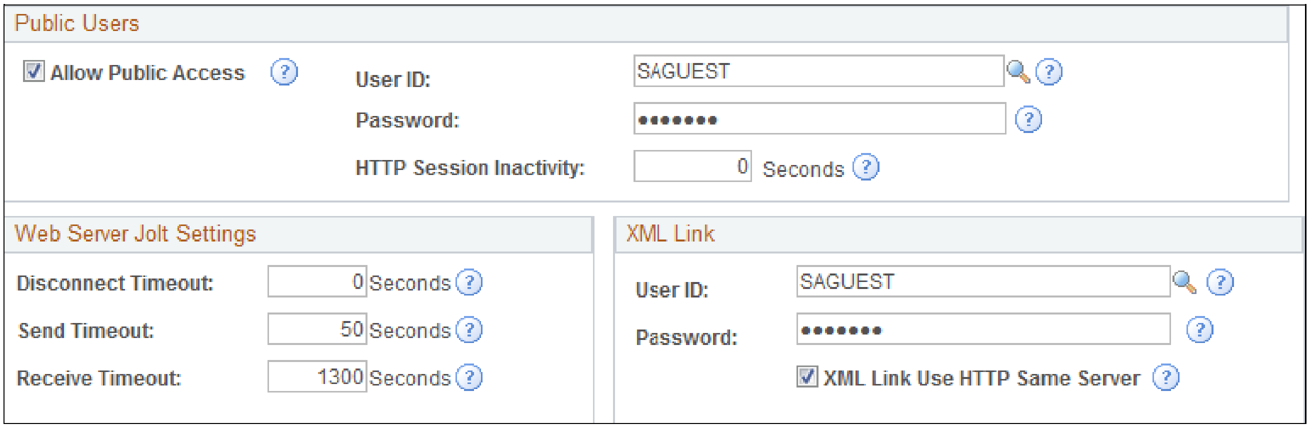
The value of the Web Profile parameter was specified in the Web Profile Name field during the PeopleSoft Pure Internet Architecture installation, as shown in the following example:



PeopleSoft Internet Architecture: Web Profile page

3. Select PeopleTools, Web Profile, Web Profile Configuration.
4. Search for and open the web profile that is defined in the *configuration.properties* file (for example, *DEV*).
5. Select the Security tab.

6. In the Public Users section, select the Allow Public Access check box, as shown in the following example:



Web Profile page: Security tab

7. In the User ID and Password fields, select *SAGUEST.*
8. Click Save.
9. Restart the PeopleSoft Pure Internet Architecture server.

Task 3-5: Assigning PeopleSoft OLM Self-Service Permissions

This section discusses:

- Understanding PeopleSoft Self-Service Permissions
- Registering a PeopleSoft OLM User in Self-Service
- Assigning Self-Service Roles to PeopleSoft OLM Users

Understanding PeopleSoft Self-Service Permissions

You must assign the PeopleSoft Order Capture Self Service (OCSS) permission to the PeopleSoft OLM user. Users *SAGUEST* and *OLM* deliver with the appropriate self-service settings.

Note. For users *SAGUEST* and *OLM,* you can skip this task.

Use the procedures in this section to add new PeopleSoft OLM users as self-service users if:

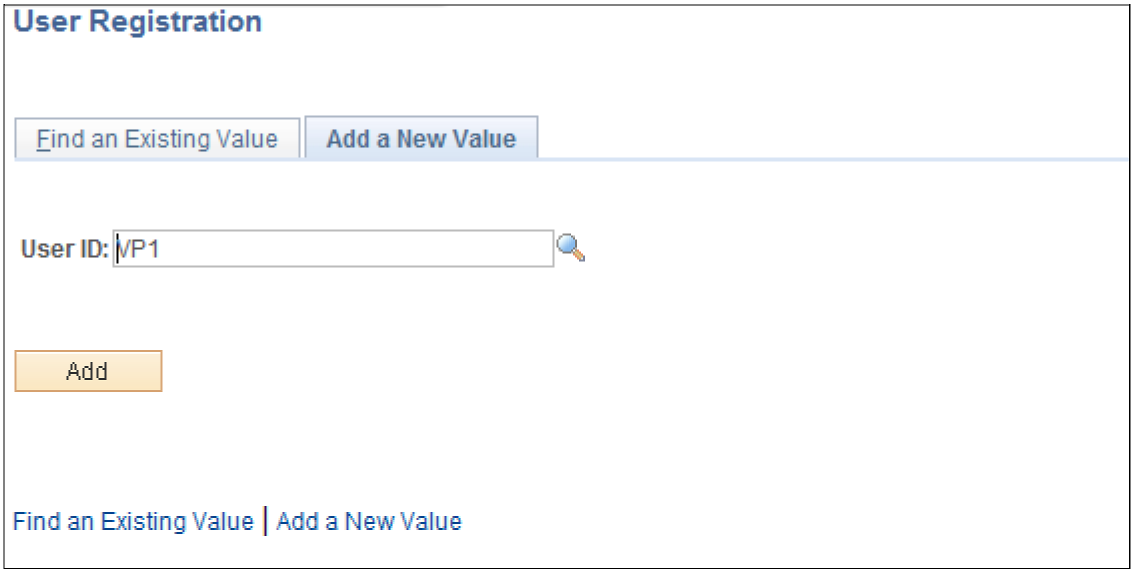
- The user requires execution of a dialog that includes creating a self-service user from the Dialog Link Report (this is not common).
- The user is a self-service "dummy" GUEST user (for example, *SAGUEST*) that requires the ability to register new users from the Dialog Login page.

Task 3-5-1: Registering a PeopleSoft OLM User in Self-Service

To register a PeopleSoft OLM user in the self-service application:

1. Select Set Up CRM, Security, Self-Service, User Registration.

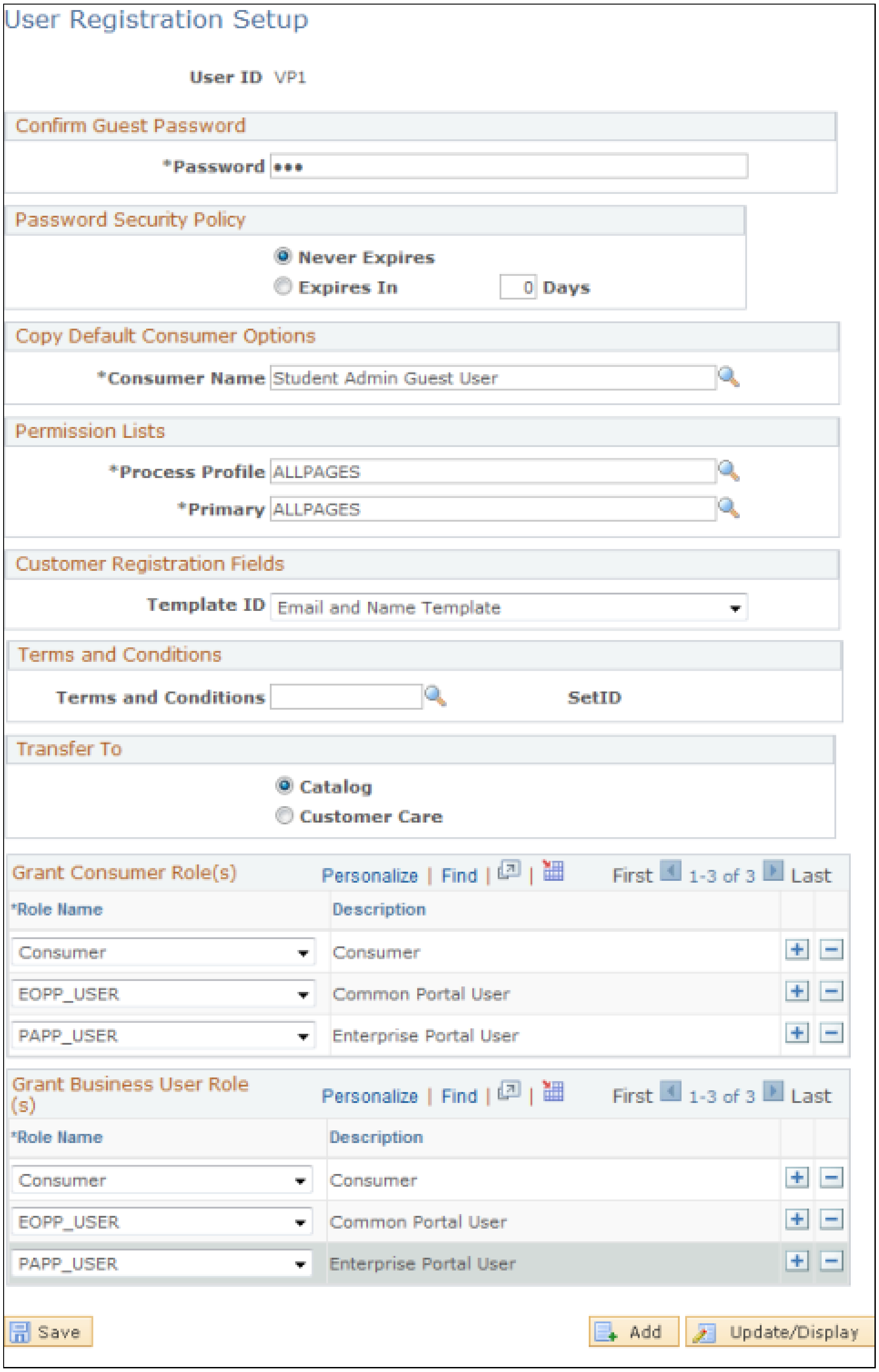
2. Select Add a New Value tab and enter a user ID (for example, *VP1*), as shown in the following example:



User Registration page: Add a New Value tab

3. Click Add.

4. Refer to the following example of the User Registration Setup page, and then complete the page with the information that follows:



Example of the User Registration Setup page

- In the Password Security Policy section, select the Password Never Expires option.
- In the Copy Default Consumer Options section, in the Consumer Name field, enter *Student Admin Guest.*

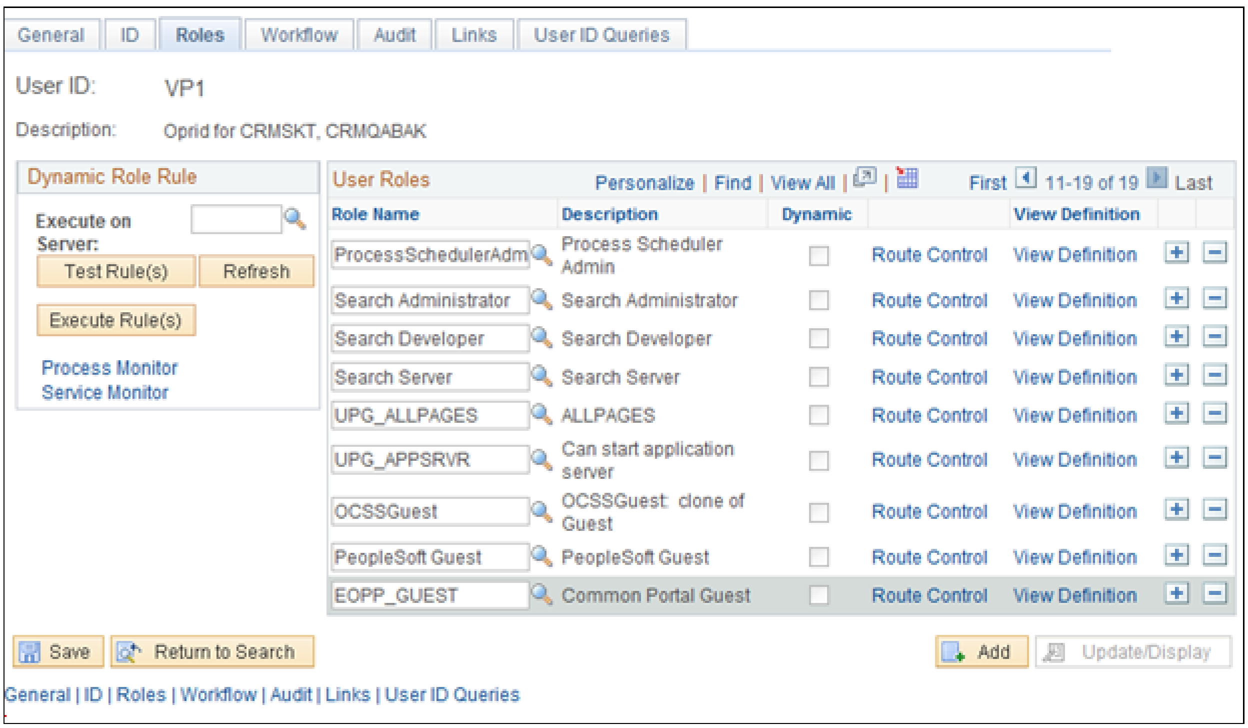
- In the Permission Lists section, in the Process Profile and Primary fields, enter *ALLPAGES.*
- In the Customer Registration Fields section, in the Template field, select *Email and Name Template* from the drop-down list.
- In the Transfer To section, select the Catalog option.
- Under Grant Consumer Role(s), add the role names *Consumer*, *EOPP_USER*, and *PAPP_USER*..
- Under Grant Business Role(s), add the role names *Consumer*, *EOPP_USER*, and *PAPP_USER*..

5. Click Save.

Task 3-5-2: Assigning Self-Service Roles to PeopleSoft OLM Users

To assign self-service roles to a PeopleSoft OLM user:

1. Select PeopleTools, Security, User Profiles, User Profiles.
2. Search for the appropriate user ID (for example, *VP1*) and select the Roles tab.
3. Ensure that you add the following three roles to the list of role names, as shown in the following example:



User Roles tab

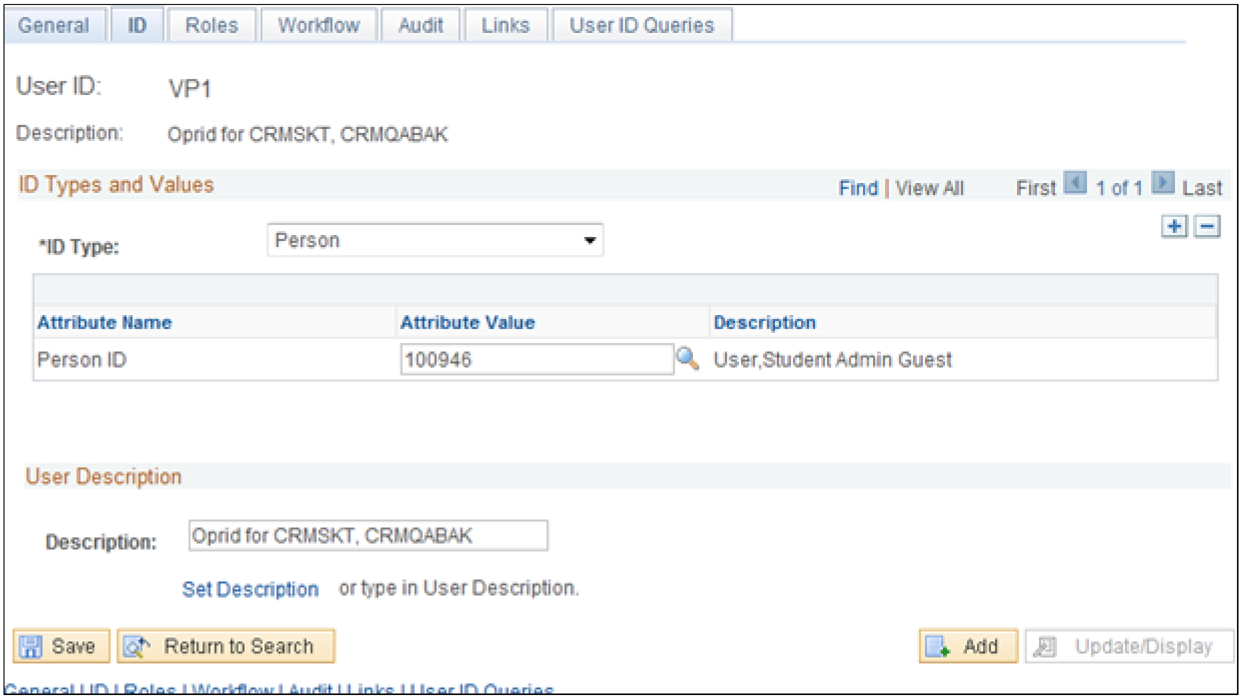
- OCSSGuest
- PeopleSoft Guest
- EOPP_GUEST

4. Click Save.
5. If you receive the following message, click OK:

```
Warning -- PERSON_ID = '<a ID>' assigned to another User ID.
```

6. Select the ID tab, and then select *Person* from the ID Type drop-down list.

7. Enter the person ID in the Attribute Value field, and note down the person ID or person's name *(100946* or *User, Student Admin Guest),* as shown in the following example:



ID tab

This person is defined in the Demo database with both business contact and consumer roles.

Note. If you are working on the system database, you must create a person first, and that person should have both business contact and consumer roles.

For information about Person creation,

See *PeopleSoft CRM: Business Object Management, for your current release.*

8. Click Save.

Task 3-6: Setting Up PeopleSoft OLM Integration Points

This section discusses:

- Understanding PeopleSoft OLM Messages
- Loading Gateway Connectors
- Setting PeopleSoft Integration Security Properties
- Setting Up the Service Operations
- Setting Up the URL for the PSFT_OLM Node

Understanding PeopleSoft OLM Messages

PeopleSoft CRM OLM uses XML messages that are sent directly to the PeopleSoft Integration Broker using JOLT. Additionally, messages are used to update the PeopleSoft OLM Activation Framework whenever a profile status is modified. The following tasks set up PeopleSoft OLM internal Enterprise Integration Points (EIP).

Task 3-6-1: Loading Gateway Connectors

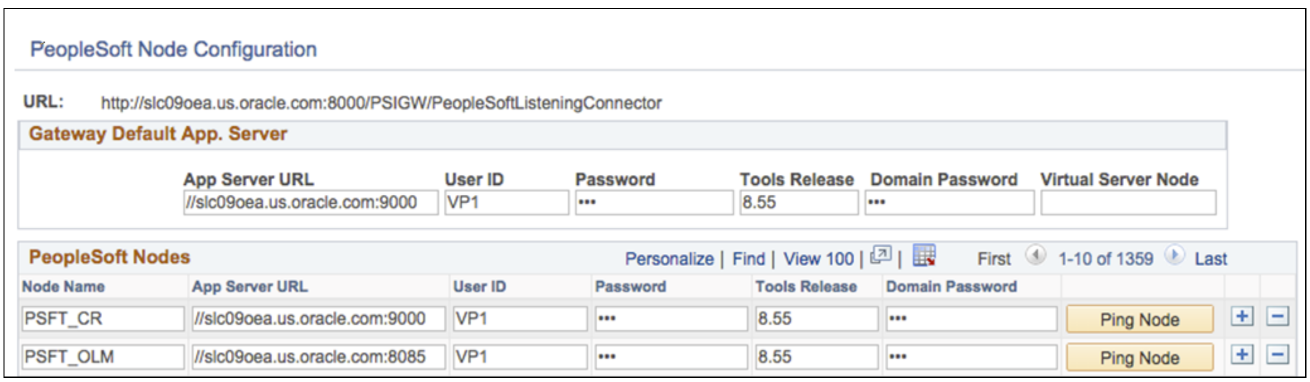
To load gateway connectors:

1. Select PeopleTools, Integration Broker, Configuration, Gateways.
2. Click Search.
3. Replace <*webserver*>:<*port*> with this URL:

   ```
   http://<webserver>:<port>/PSIGW/PeopleSoftListeningConnector
   ```

4. Click Load Gateway Connectors.
5. Click Save.

Note. To ensure proper routing of messages, ensure that the gateway properties is set up with both the default integration broker node, *PSFT_CR,* and the default OLM node, *PSFT_OLM,* as shown in the following example:



Example of PeopleSoft Node Configurations

Task 3-6-2: Setting PeopleSoft Integration Security Properties

The Gateway property *secureFileKeystorePasswd* should be encrypted.

For more details about gateway property and encryption requirements,

See PeopleTools: PeopleSoft Integration Broker Administration, for your database platform.

1. Select PeopleTools, Integration Broker, Configuration, Gateways.
2. Search for and open the Local Gateway.
3. Click the Gateway Setup Properties link, and then login to the Gateway Properties.
4. Click the Advanced Properties link, then locate the property *secureFileKeystorePasswd* and verify that it is encrypted.

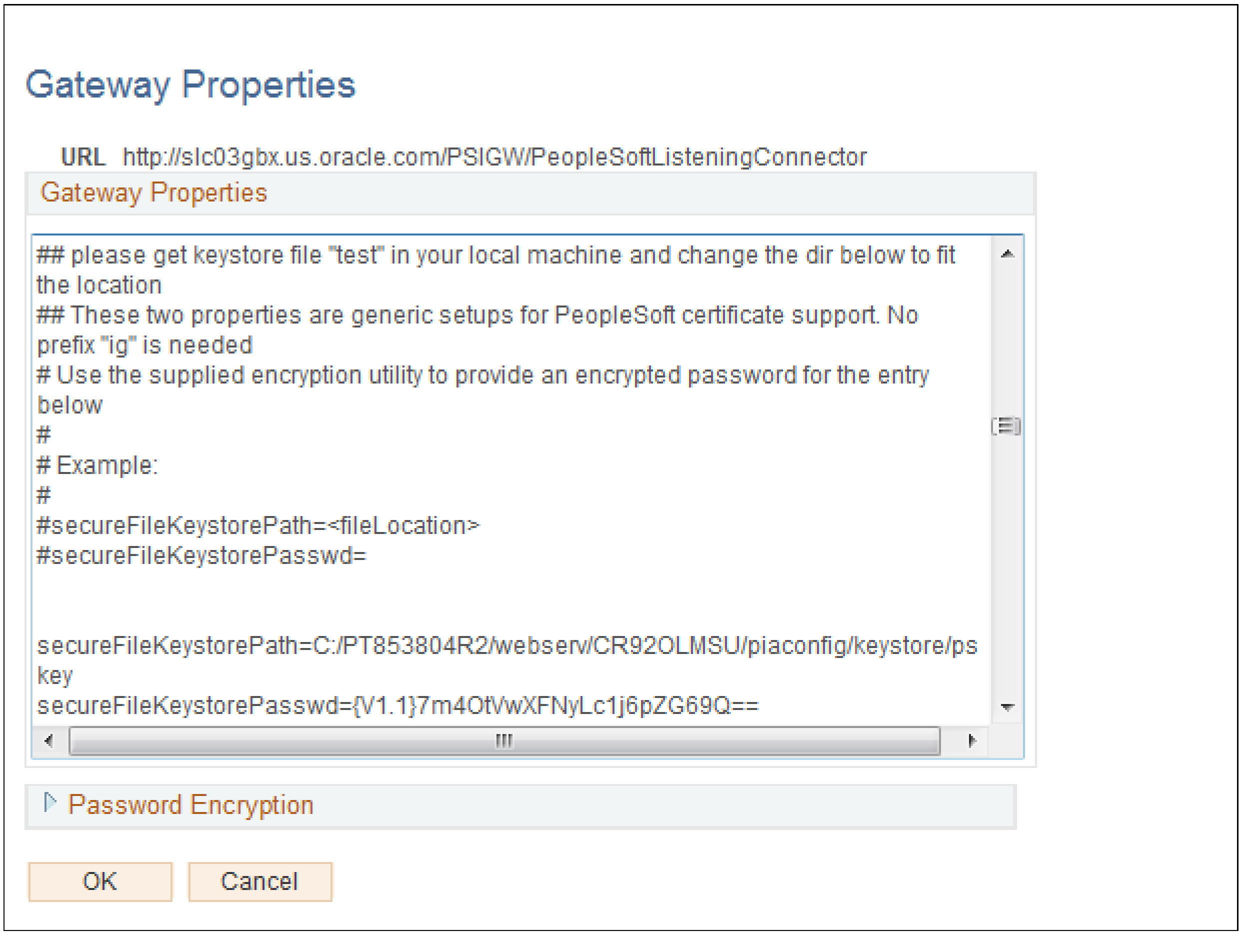
   If this property is *not* encrypted, use the Password Encryption utility that is available at the bottom of the

Gateway Properties - Advanced Properties page to encrypt the password value. This replaces the plain password with an encrypted value and fulfills the requirement.

5. Click OK, and then click Save to save your settings.
6. Click OK to exit the Gateway Properties page.
7. Click Save again, to save the changes that you made to the Gateway.

Warning! Integrations will fail if you do not set the path to the keystore using the *secureFileKeystorePath* property and enter an encrypted keystore password for the *secureFileKeystorePasswd* property.

The following example shows the Gateway Properties - Advanced Properties page with the Password Encryption utility and an encryption example:



Gateway Properties - Advanced Properties page

Task 3-6-3: Setting Up the Service Operations

To set up the Service Operations:

1. Select PeopleTools, Integration Broker, Integration Setup, Service Operations. Enter *RY_XMSG_AREQ* in the Service field.
    a. Check the Regenerate Any-To-Local check box in the Routing Actions Upon Save section under the General tab.

Note. When the user wants to Regenerate Any-To-Local routing and if any system delivered routing is already present, then the user will get an error message while saving the Service Operations. In this case, the user needs to delete the system delivered routing under the Routings tab and then Regenerate Any-To-Local routing.

---

b. Set to *Active* in the Default Service Operation Version section.

c. Click the Handlers tab and verify the handlers are active. If the handlers are not active, make the status as Active and save.

d. Click the Routings tab. If the routing is not active then activate it by selecting the check box and then click the Activate Selected Routing.

e. Select Routing Definition from the Routing tab. It will open the *IB Routing Definitions* page.

f. Click on the Parameters tab and change the Parameter External Alias from *RY_XMSG.AREQ.VERSION1* to *RY_XMSG_AREQ.*

g. Click Save. Save *IB Routing Definition* and *Service Operation.*

2. Select PeopleTools, Integration Broker, Integration Setup, Service Operations. Enter *RY_XMSG_SREQ* in the Service field.

   a. Check the Regenerate Any-To-Local check box in the Routing Actions Upon Save section under the General tab.

Note. When the user wants to Regenerate Any-To-Local routing and if any system delivered routing is already present, then the user will get an error message while saving the Service Operations. In this case, the user needs to delete the system delivered routing under the Routings tab and then Regenerate Any-To-Local routing.

---

   b. Set to *Active* in the Default Service Operation Version section.

   c. Click the Handlers tab and verify the handlers are active. If the handlers are not active, make the status as Active and save.

   d. Click the Routings tab. If the routing is not active then activate it by selecting the check box and then click the Activate Selected Routing.

   e. Select Routing Definition from the Routing tab. It will open the *IB Routing Definitions* page.

   f. Click on the Parameters tab and change the Parameter External Alias from *RY_XMSG.SREQ.VERSION1* to *RY_XMSG_SREQ.*

   g. Click Save. Save *IB Routing Definition* and *Service Operation.*

3. Select PeopleTools, Integration Broker, Integration Setup, Service Operations. Enter *RA_PROFILE_MSG* in the Service field.

   a. Check the Generate Any-To-Local check box in the Routing Actions Upon Save section under the General tab.

   b. Set to *Active* in the Default Service Operation Version section.

   c. Click Save.

4. Select PeopleTools, Integration Broker, Integration Setup, Service Operations. Enter *RA_OM_AUDIENCE_MSG* in the Service field.

   a. Check the Generate Any-To-Local check box in the Routing Actions Upon Save section under the General tab.

   b. Set to *Active* in the Default Service Operation Version section.

   c. Click Save.

5. Select PeopleTools, Integration Broker, Integration Setup, Queues. Search for *RA_AUDIENCE_CHNL* queue. This contains theRA_OM_AUDIENCE_MSG service operation.
   a. Change *Pause* to *Run.*
   b. Click Save.
6. Select PeopleTools, Integration Broker, Integration Setup, Queues. Search for *RY_XMSG_CHNL* queue. This contains RY_XMSG_AREQ and RY_XMSG_SREQservice operations.
   a. Change *Pause* to *Run.*
   b. Click Save.

Task 3-6-4: Setting Up the URL for the PSFT_OLM Node

To set up the URL for the PSFT_OLM node:

1. Select PeopleTools, Integration Broker, Integration Setup, Nodes.
2. Search for and open the PSFT_OLM node.
3. Select the Connectors tab.
4. Modify the PRIMARYURL property, replacing <*webserver*>*:*<*port*> with the Dialog Execution Server (DES) name and port:

   ```
   http://<webserver>:<port>/DCS/DlgBroker
   ```

5. Click Save.

Note. If you do not set up the Gateway, the connector HTTPTARGET will not be available.

Task 3-7: Installing the DES on the Oracle WebLogic Server

This section discusses:

- Understanding DES Installation on Oracle WebLogic
- Installing DES on Oracle WebLogic for MS Windows
- Installing the DES on Oracle WebLogic on UNIX
- Modifying the setEnv.sh
- Starting the DES on an Oracle WebLogic Server

Understanding DES Installation on Oracle WebLogic

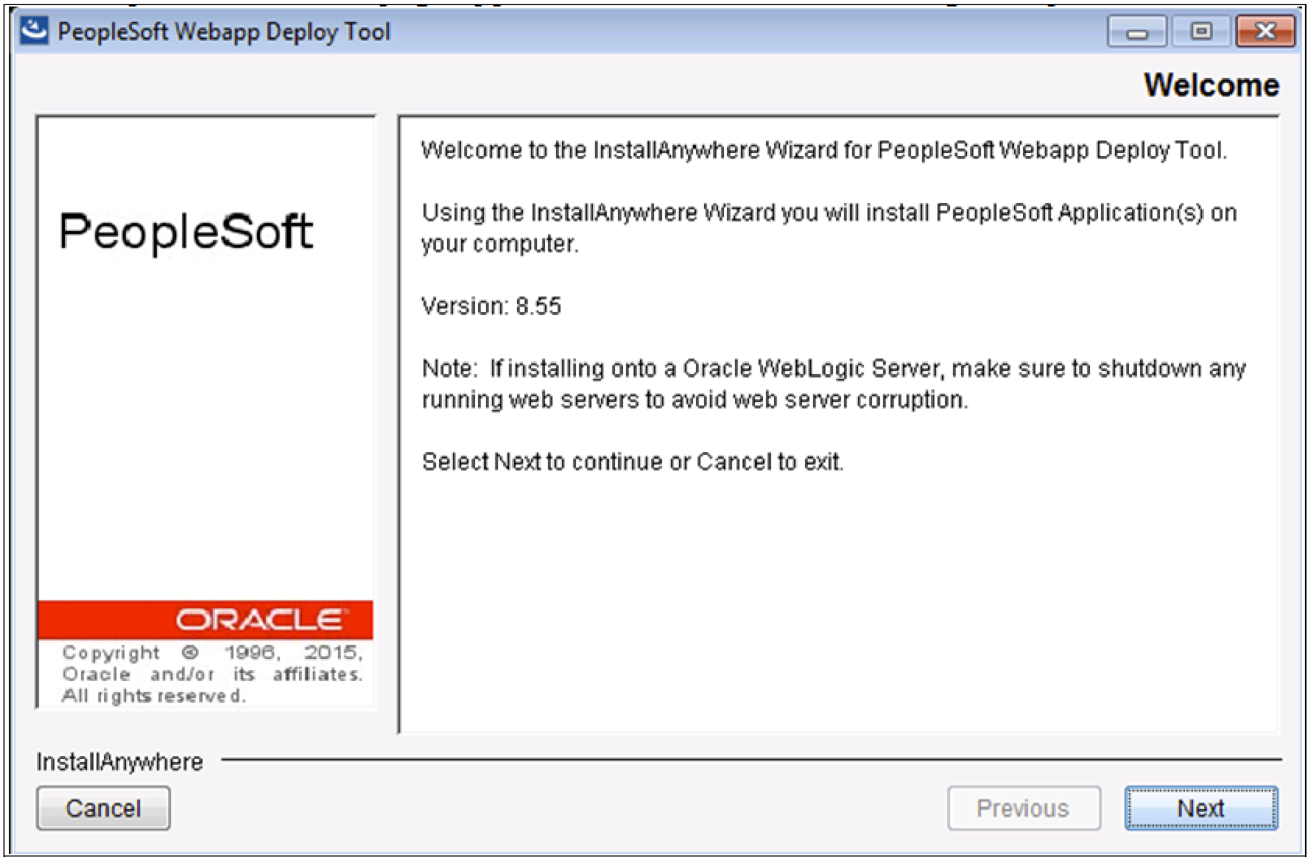
You cannot use an existing PeopleSoft Pure Internet Architecture domain on an Oracle WebLogic Server for the Dialog Execution Server (DES). A new Oracle WebLogic domain creates during the DES installation. Additionally, you cannot use the same PeopleSoft Pure Internet Architecture HTTP/HTTPS port number for the DES HTTP/HTTPS port number.

Task 3-7-1: Installing DES on Oracle WebLogic for MS Windows

To install the DES application on an Oracle WebLogic Server running on Microsoft Windows:

1. Navigate to *PS_HOME*\setup\PsMpWebAppDeployInstall and run setup.bat.

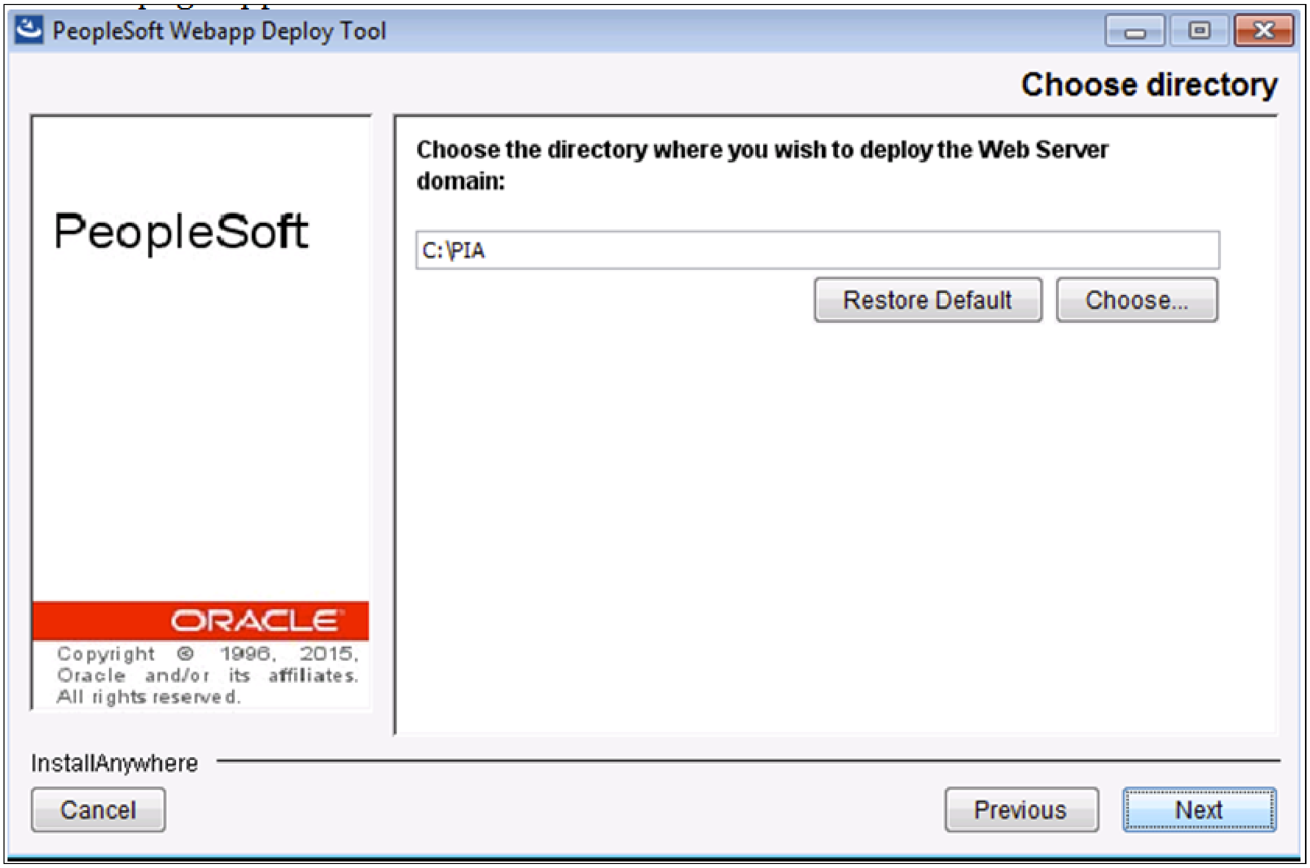
   The PeopleSoft Welcome page appears, as shown in the following example:



PeopleSoft Webapp Deploy: Welcome page

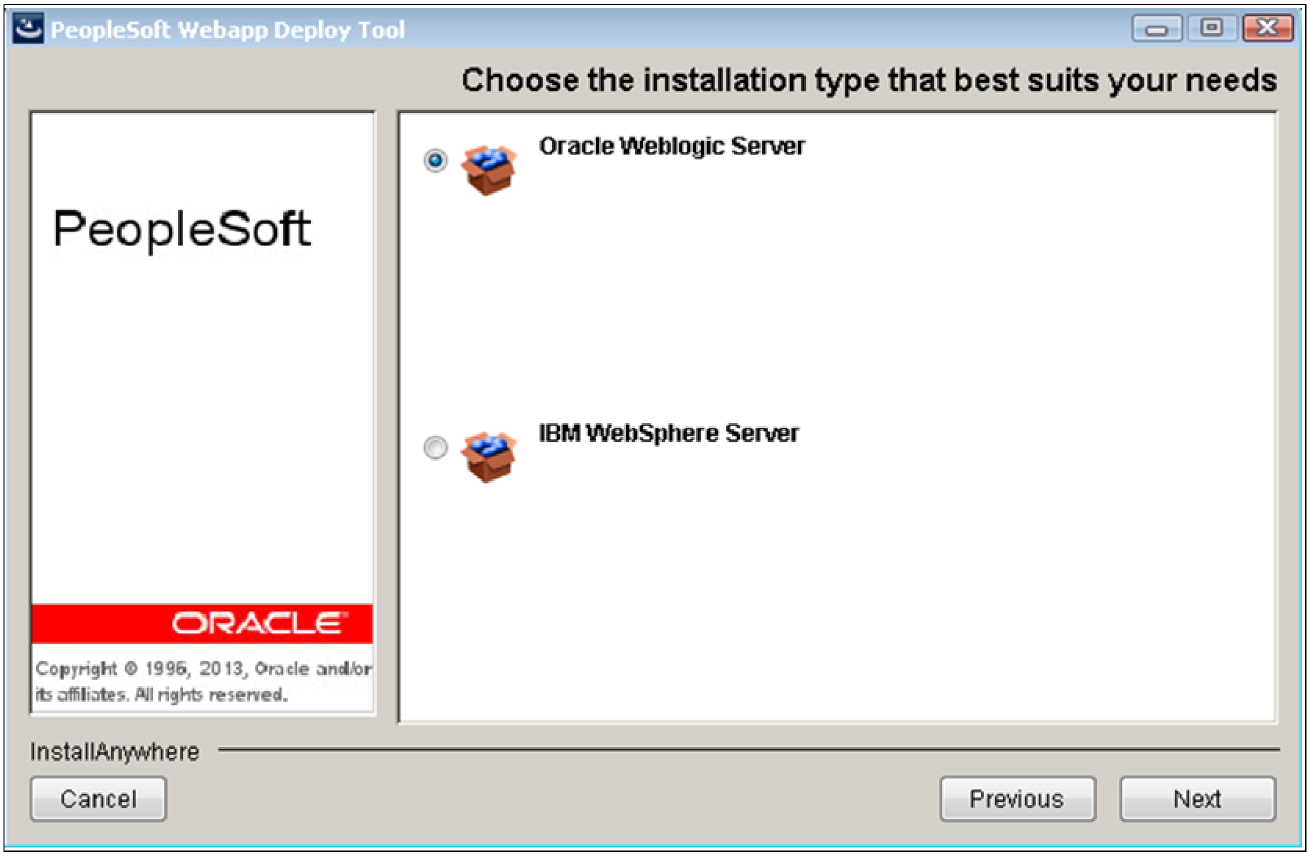
2. On the Welcome page, click Next.

   The Choose directory page appears with a default directory, as shown in the following example:



PeopleSoft Webapp Deploy: Directory to deploy Web Server domain

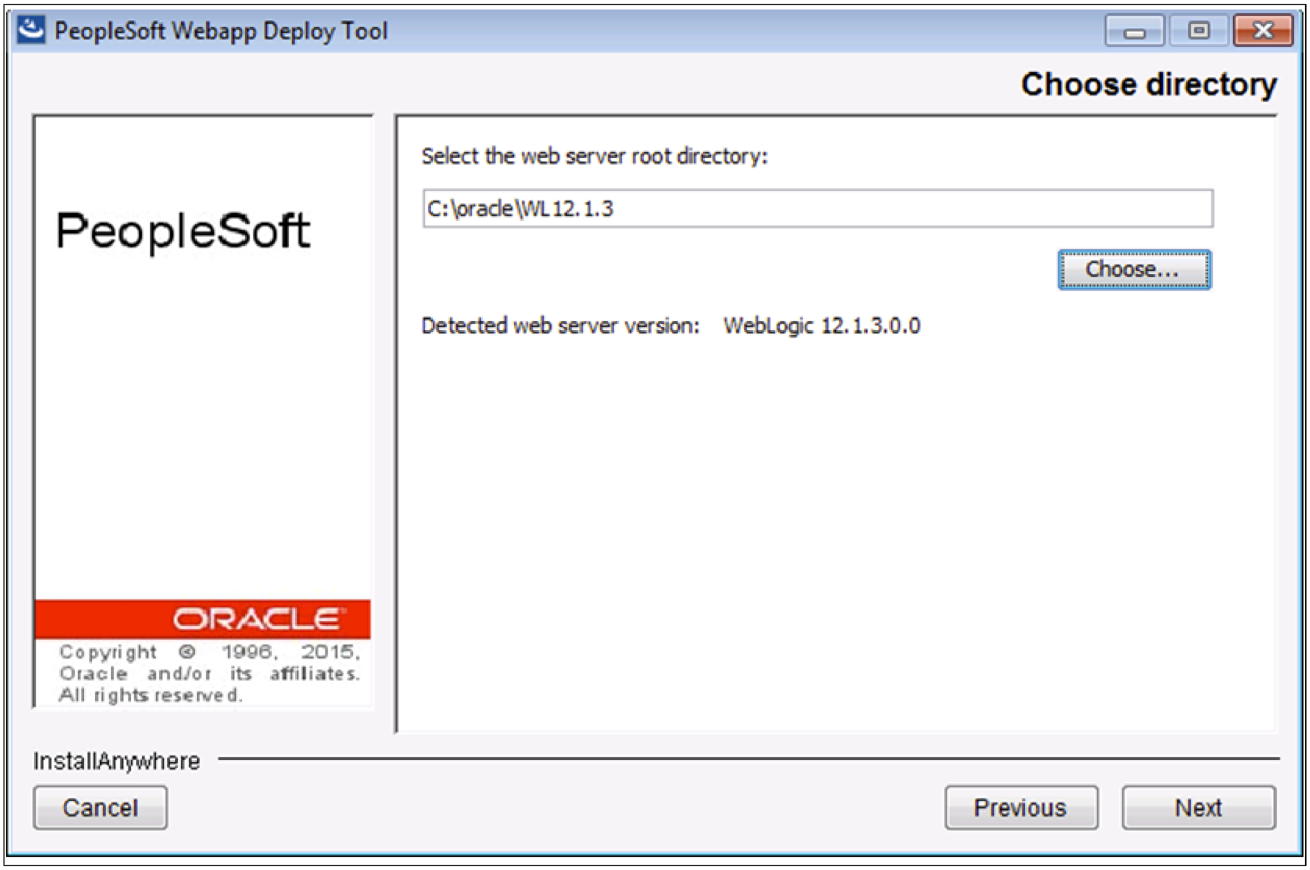
3. Click Next, and select Oracle Weblogic Server, as shown in the following example:



PeopleSoft Webapp Deploy: Select Oracle Weblogic Server

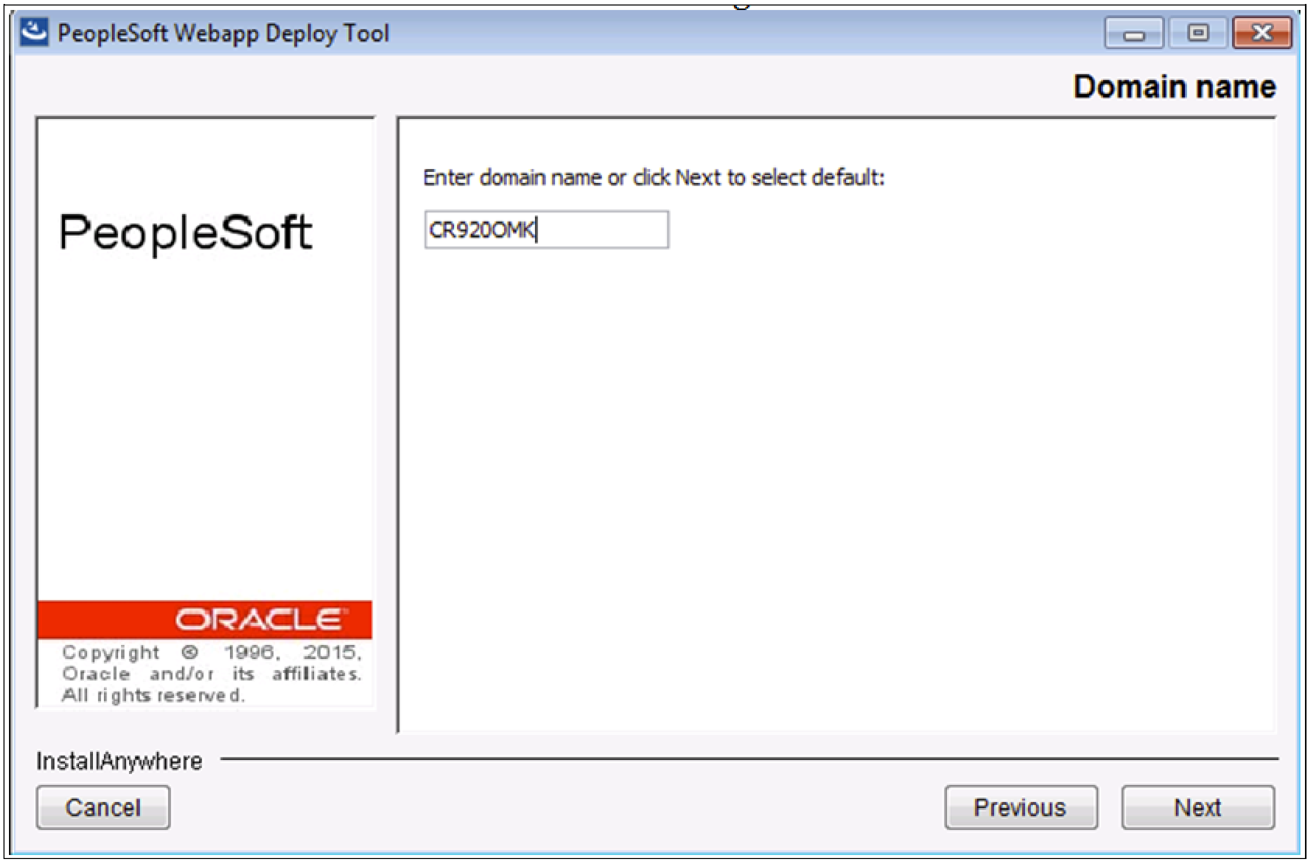
4. Click Next, and the Choose directory page appears.

5. On the Choose directory page, select Weblogic installation directory (web server root directory), as shown in the following example:



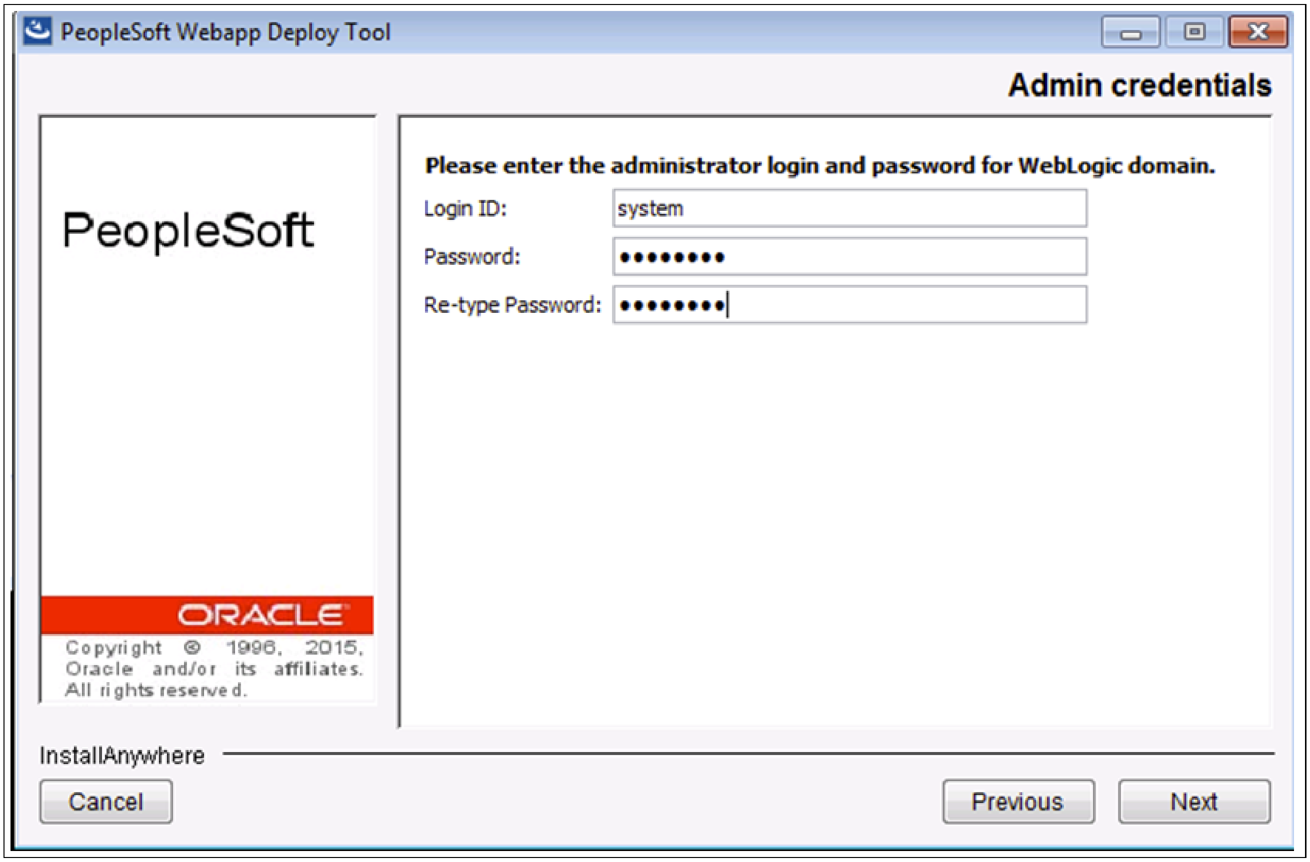
PeopleSoft Webapp Deploy: Select Weblogic Server Installation Directory

6. Click Next, and the Domain name page appears to enter a domain name, as shown in the following example:



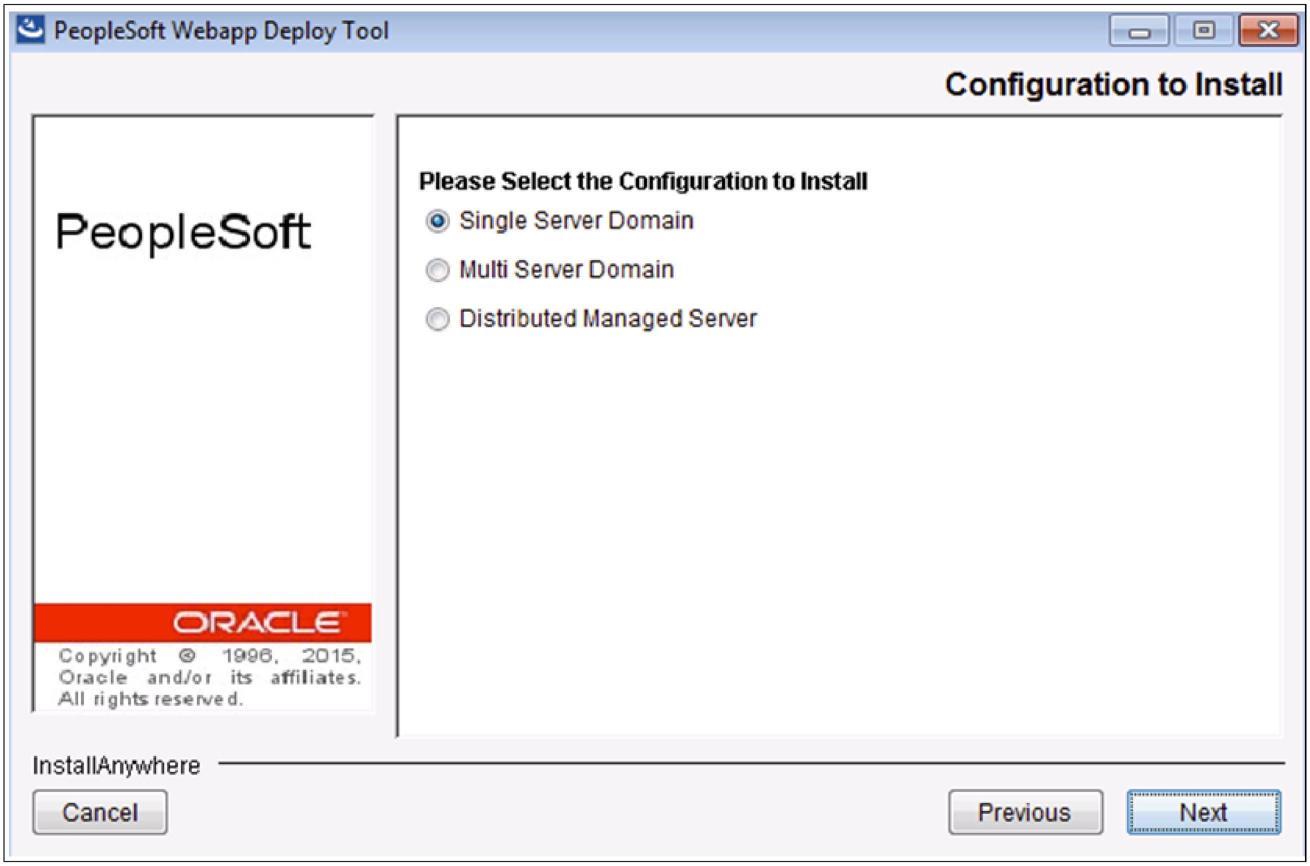
PeopleSoft Webapp Deploy: Enter Domain Name

7. Click Next. The Admin credentials page appears to enter login ID and password, as shown in the following example:



PeopleSoft Webapp Deploy: Enter login ID and password

8. Click Next. The Configure to Install page appears to select one of the install configuration options, as shown in the following example:



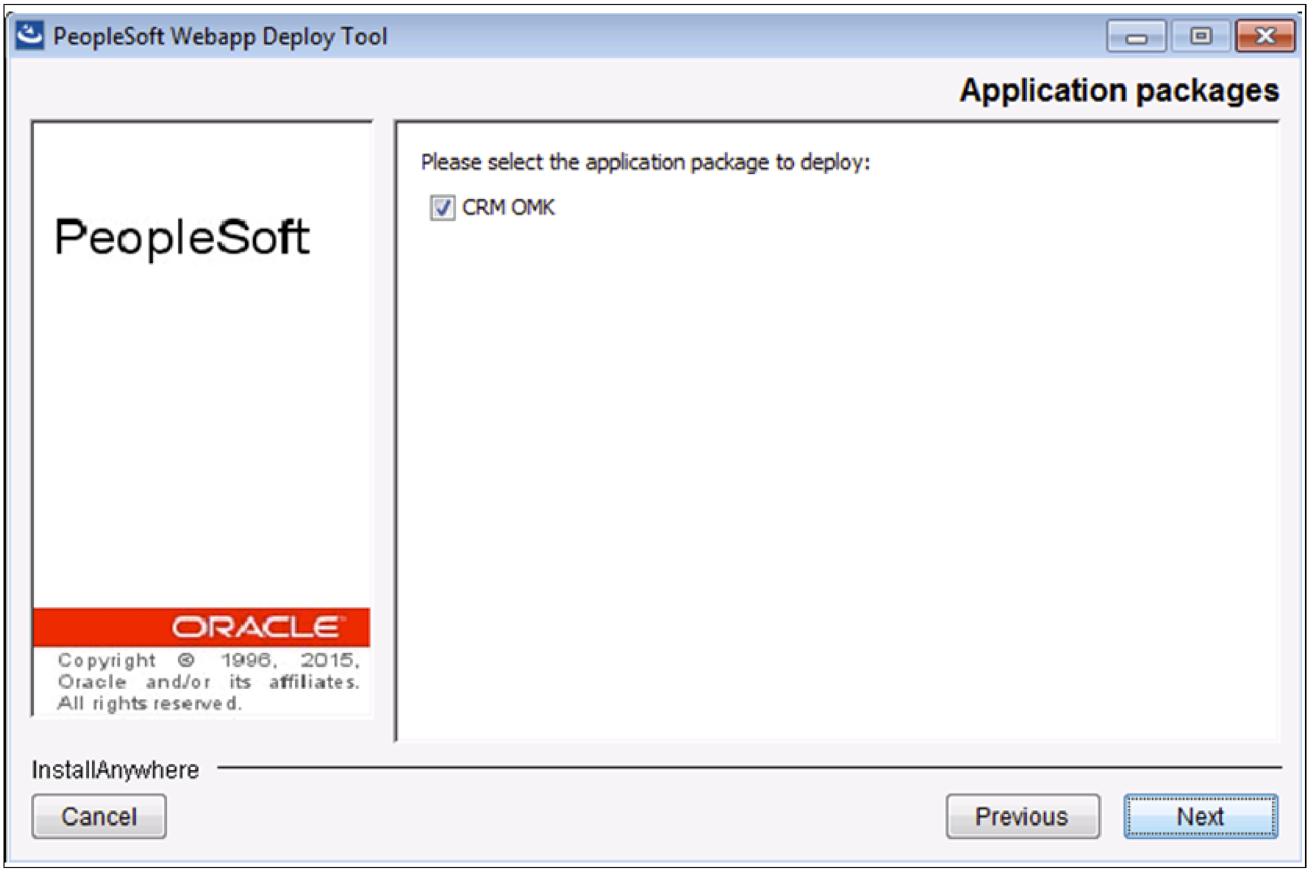
PeopleSoft Webapp Deploy: Select install configuration option

9. Click Next. The Choose Apps Install Home page appears, as shown in the following example:

PeopleSoft Webapp Deploy: Choose Apps Install Home page

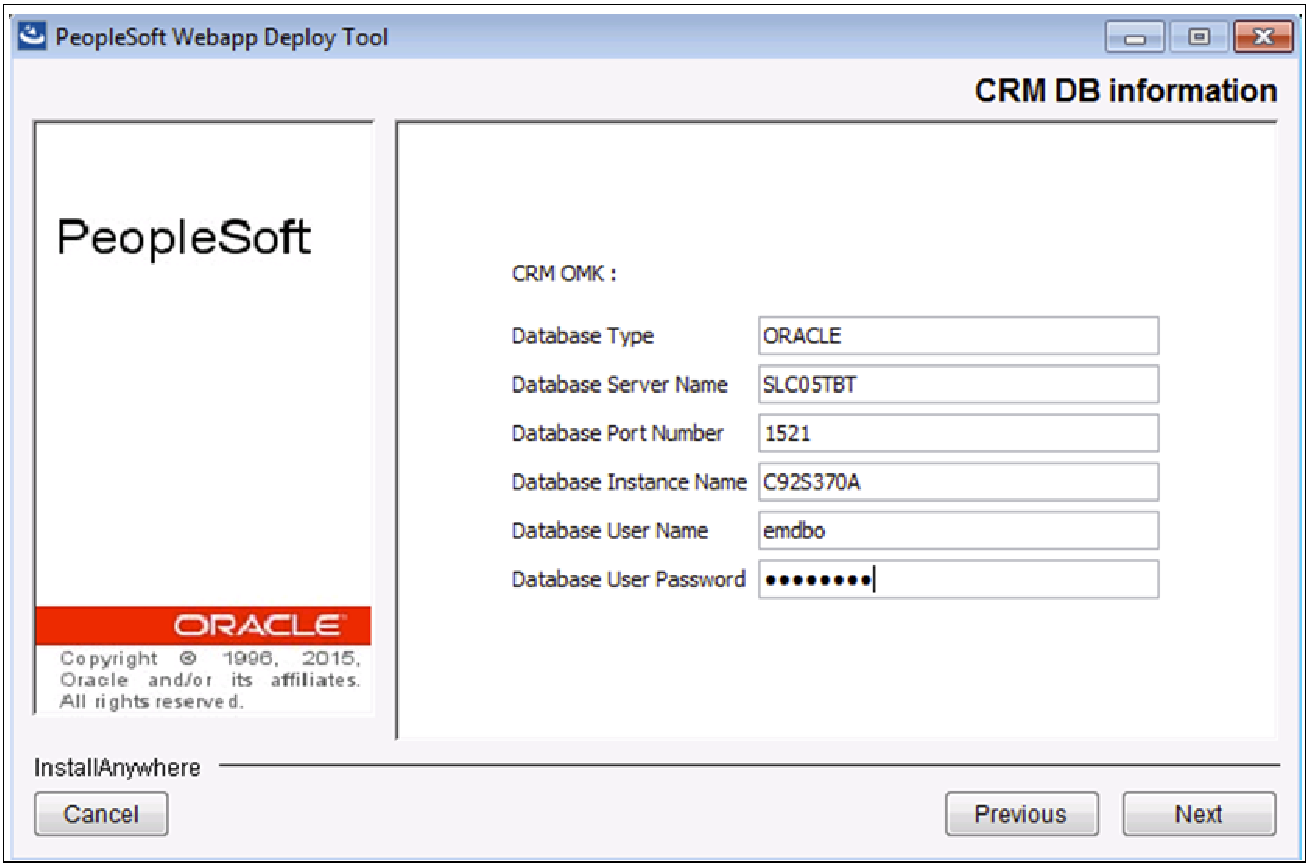
On this page, enter *PS_APP_HOME* in the Directory Name field. This is the same location where you installed PeopleSoft CRM application.

10. Click Next. The Application packages page appears where you can select CRM OMK as the application package to deploy, as shown in the following example:



PeopleSoft Webapp Deploy: Application packages page

11. Click Next. The CRM DB information page appears, as shown in the following example:



PeopleSoft Webapp Deploy: Database Information page

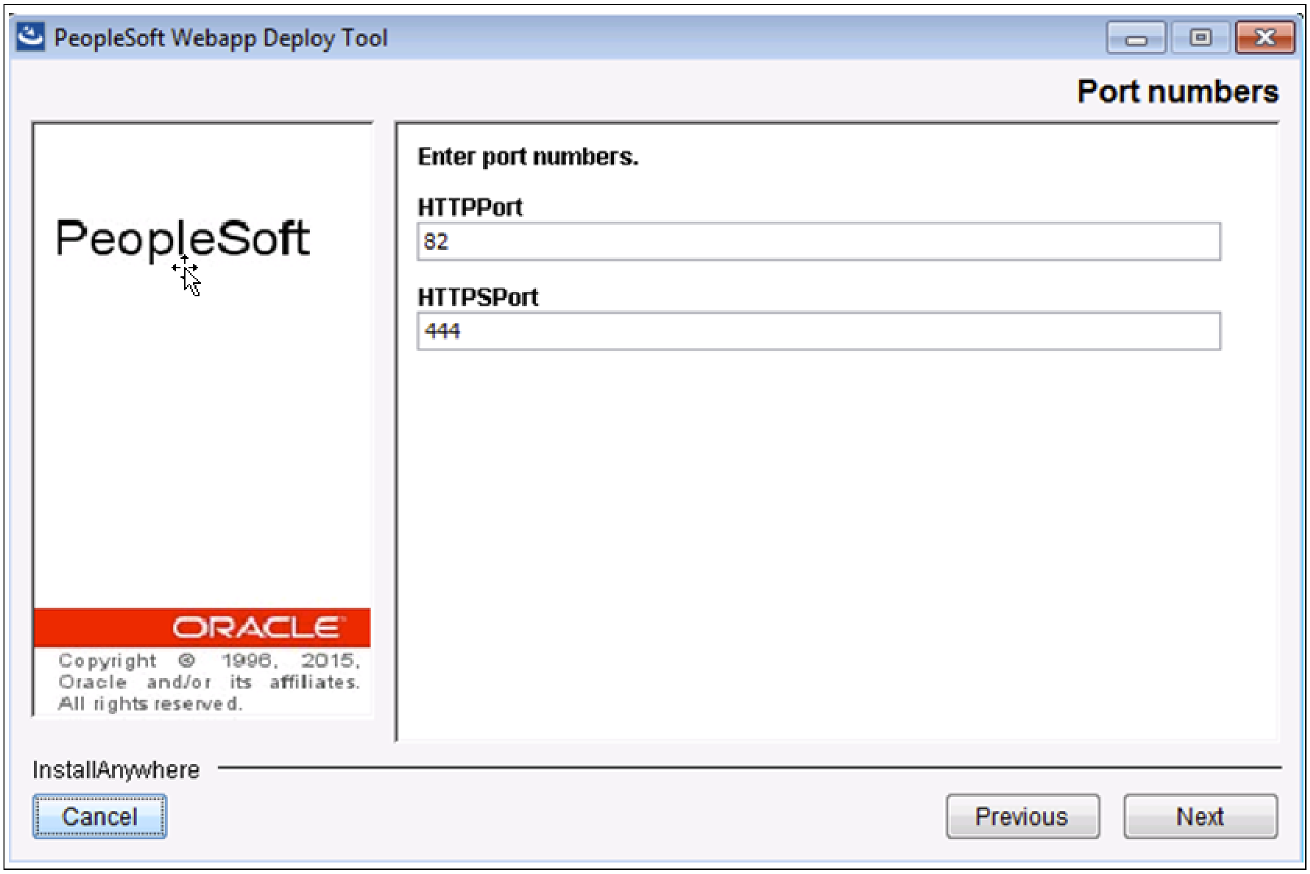
Populate the CRM DB information page using the following instructions:

- In the Database Type field, enter *ORACLE, MSSQL,* or *DB2LUW*.
- In the Database Server Name field, enter the name of the machine that is hosting the database.
- The Database Port Number value can differ depending on your database server configuration. Consult your database administrator to determine the correct value for your configuration.

Note. For MSSQL2008 *Only*: On the server where the database is running, check the port by opening SQL Server Configuration Manager, Protocols for SQL2008, and select the Properties of TCP/IP. In the tab IP addresses, set the TCP Port in section IPAll to *1433* (replace with actual port number on your site, if 1433 is the not the default SQL2008 port selected). Consult your database administrator to determine the correct value for your configuration and for further information.

- In the Database Instance Name field, enter the name of the database.
- In the Database User Name field, enter the name of the database user.
- In the Database User Password field, enter the password of the database user.

12. Click Next. The Port numbers page appears where you can enter the DES HTTP and HTTPS port numbers, as shown in the following example:

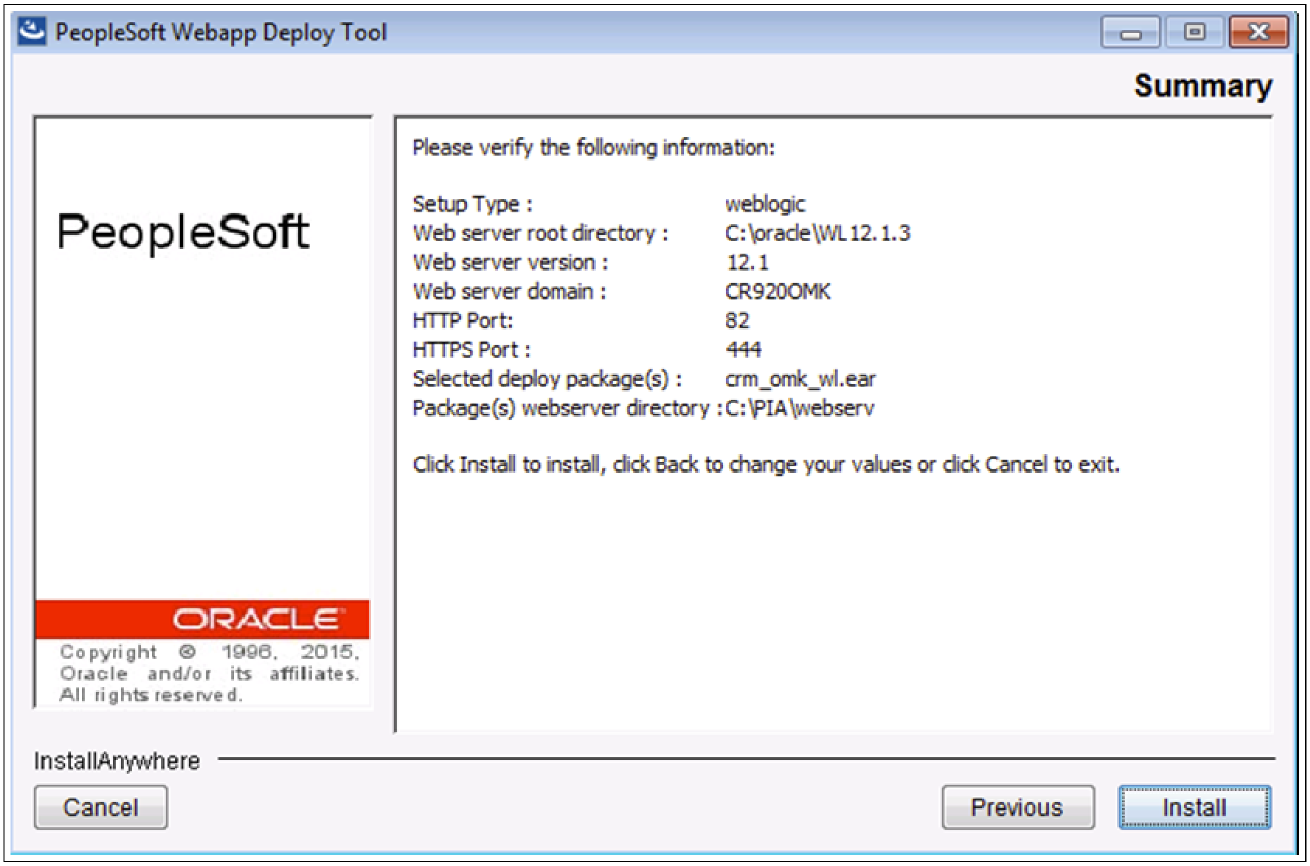


PeopleSoft Webapp Deploy: Port Numbers page

Important! This port number must be different from your PeopleSoft Pure Internet Architecture port number.

---

13. Click Next. The Summary page appears where you can verify the information, as shown in the following example:



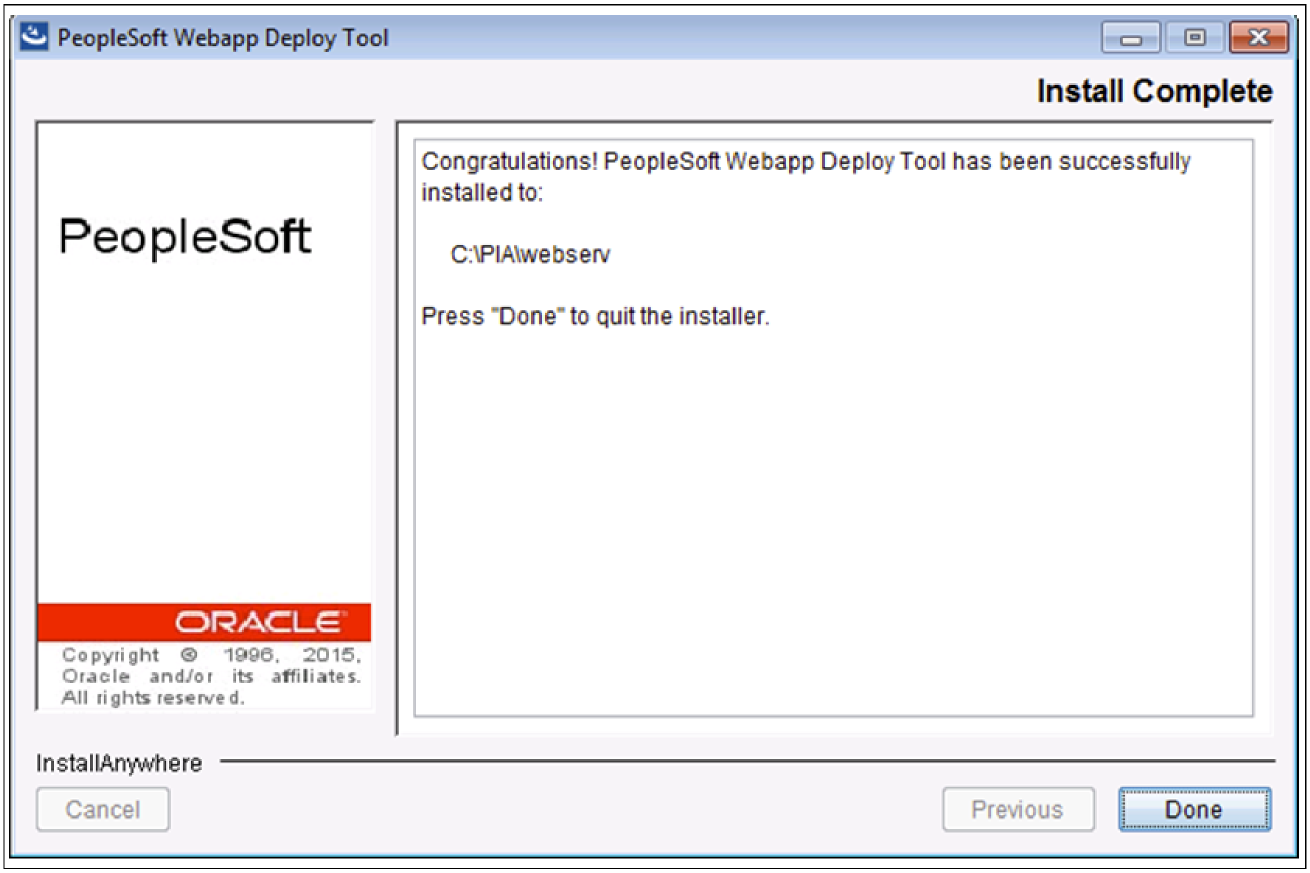
PeopleSoft Webapp Deploy: Summary page

If the information is not correct, click Previous and make the necessary corrections.

14. Click Install to start the installation.

Note. This process may take up to five minutes. If it does not complete within five minutes, check the DES0_stderr.log file in the DES installation directory for errors or information (for example, *PS_CFG_HOME*\webserv\omk\DES\DES0.stderr.log).

When the installation successfully completes, the following page appears:



PeopleSoft Webapp Deploy: Successful Message page

15. Click Done to exit the installation.

Task 3-7-2: Installing the DES on Oracle WebLogic on UNIX

To install the DES application on an Oracle WebLogic server running on UNIX:

1. Shut down any Oracle WebLogic web server that is running.
2. Go to *PS_HOME*/setup/PsMpWebAppDeployInstall and run the appropriate setup command with these additional parameters.

```
ple336150.us.oracle.com:$ setup.sh Setting temporary directory
/tmp/IA.4132 Executing setup.linux LAX_VM /data1/ora/CRM/855-
902R1/jre/bin/java -DCOMP_NAME= ple336150.us.oracle.com -DPS_UMASK=0022
Preparing to install... Extracting the installation resources from the
installer archive Configuring the installer for this system's
environment... Launching installer...
=========================================================================
====== PeopleSoft Webapp Deploy Tool (created with InstallAnywhere)
```



```
-------------------------------------------------------------------------
------ Preparing CONSOLE Mode Installation...
=========================================================================
====== Welcome to the InstallShield Wizard for PeopleSoft Webapp Deploy
Tool. Using the InstallShield Wizard you will install PeopleSoft Webapp
Deploy Tool on your computer. Version: 8.55 Note: If installing onto a
Oracle WebLogic Server, make sure to shutdown any running web servers to
avoid web server corruption. Press 1 for Next, 3 to Cancel or 5 to
Redisplay [1] :
```

3. Select *1* for Next.
4. Choose the directory where you installed Web server domain:

   For example,

```
=========================================================================⇒
=======
Choose the directory where you wish to deploy the Web Server domain:


   Please specify a directory name or press Enter
   [/ds1/home/upgtest2/psft/pt/8.55]:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1]

=========================================================================⇒
=======
```

5. Select *1* for Next.
6. Choose the installation type. Select 1 for Oracle Weblogic server.

   For example:

```
Choose the installation type that best suits your needs.
 ->1- Oracle WebLogic Server
   2- IBM WebSphere Server
To select an item enter its number, or 0 when you are finished [0] :

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

7. Select *1* for Next.
8. Select the web server root directory.

   For example,

```
Select the web server root directory [/ds1/home/upgtest2/oracle⇒
/Middleware]
   : /products/weblogic/12.1.3.0-64bit

Detected web server version : WebLogic 12.1.3.0.0

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

9. Select *1* for Next.
10. Enter *Domain Name.*

For example,

```
Enter domain name or click Next to select default [PSWebApp]: DES
Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

11. Select *1* for Next.
12. Please enter the Administrator *Login* and *Password* for WebLogic domain.

For example,

```
Please enter the administrator login and password for WebLogic domain.


   Login ID [system]:

   Password []:

   Re-type Password []:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

13. Select *1* for Next.
14. Select the configuration.

For example,

```
Please select the configuration to install.

  ->1- Single Server Domain
    2- Multi Server Domain
    3- Distributed Managed Server

To select an item enter its number, or 0 when you are finished [0] :

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

15. Select *1* for Next.
16. Choose the directory where you previously installed PeopleSoft Applications.

For example,

```
Choose the directory where you previously installed PeopleSoft⇒
 Applications,
commonly known as "PS_APP_HOME".
Note: If you have installed PeopleSoft Applications outside PeopleTools⇒
 PS_HOME
then choose the PeopleSoft Applications home "PS_APP_HOME", else leave⇒
 the
default "PS_HOME".

Please specify a directory name or press Enter [/data2/ora/pt855]: ⇒
/data2/ora/CR92
```

```
Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

17. Select *1* for Next.
18. Select the application package to deploy.

    For example,

```
Please select the application package to deploy:
->1- CRM OMK

To select an item enter its number, or 0 when you are finished [0] :

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

19. Select *1* for Next.
20. Specify the CRM database information.

    For example,

```
CRM OMK :

   Database Type [MSSQL]: ORACLE

   Database Server Name [ ]: ple336150

   Database Port Number [1433]: 1521

   Database Instance Name [ ]: CR92C386

   Database User Name [Admin]: SYSADM

   Database User Password [*]:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

21. Select *1* for Next.
22. Enter port numbers.

    For example,

```
Enter port numbers.

   HTTPPort [80]: 8030

   HTTPSPort [443]:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

Important! The HTTP and HTTPS port numbers must be different from your PeopleSoft Pure Internet Architecture port number.

---

23. Select *1* for Next.
24. Review and confirm your selections before deploying the DES server.

For example,

```
Setup Type : weblogic

Web server root directory : /products/weblogic/12.1.3.0-64bit

Web server version : 12.1

Web server domain : PSWebApp

HTTP port : 8030

HTTPS port : 443

Selected deploy package(s) : crm_omk_wl.ear

Package(s) webserver directory : /ds1/home/upgtest2/psft/pt/8.55/webserv

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

25. Select *1* to deploy.

    For example.

```
=========================================================================⇒
=======
Installing.
=========================================================================⇒
=======
Installation Complete
---------------------
Congratulations! PeopleSoft Webapp Deploy Tool has been successfully⇒
 installed
to: /ds1/home/upgtest2/psft/pt/8.55/webserv

PRESS <ENTER> TO EXIT THE INSTALLER:
```

26. Click Done to quit the installer.

Task 3-7-3: Modifying the setEnv.sh

To modify the setEnv.sh after the installation completes:

1. Go to *PS_CFG_HOME/webserv/omk_domain/bin* - *vi setEnv.sh.*
2. Append *:${PS_HOME}/webserv/${DOMAIN_NAME}/lib/xalan.jar* to *PSCLASSPATH=*

   It will become:

   PSCLASSPATH=${PS_HOME}/webserv/${DOMAIN_NAME}/lib/ptib.jar:${PS_HOME}/webserv/${DOMAIN_NAME}/lib/psjoa.jar:${PS_HOME}/webserv/${DOMAIN_NAME}/lib/xalan.jar

---

Note. If Jolt connectivity test as mentioned in the task Testing the DES Installation returns a blank page, comment the PSCLASSPATH value completely and retry.

Task 3-7-4: Starting the DES on an Oracle WebLogic Server

Start the DES application as follows:

- On Microsoft Windows, start the DES application on an Oracle WebLogic Server by entering the following in the command window:

  ```
  %PS_CFG_HOME%\webserv\<domain name>\bin\startPSWEBAPPS.cmd
  ```

- On UNIX, start the DES application on an Oracle WebLogic Server by entering the following in the command window:

  ```
  >cd PS_CFG_HOME/webserv/<domain name>/bin
  >startPSWEBAPPS.sh
  ```

Task 3-8: Installing the DES on an IBM WebSphere Server

This section discusses:

- Understanding DES Installation on IBM WebSphere
- Installing the DES on IBM WebSphere on MS Windows
- Installing the DES on an IBM WebSphere for UNIX
- Starting the DES on an IBM WebSphere Server

Understanding DES Installation on IBM WebSphere

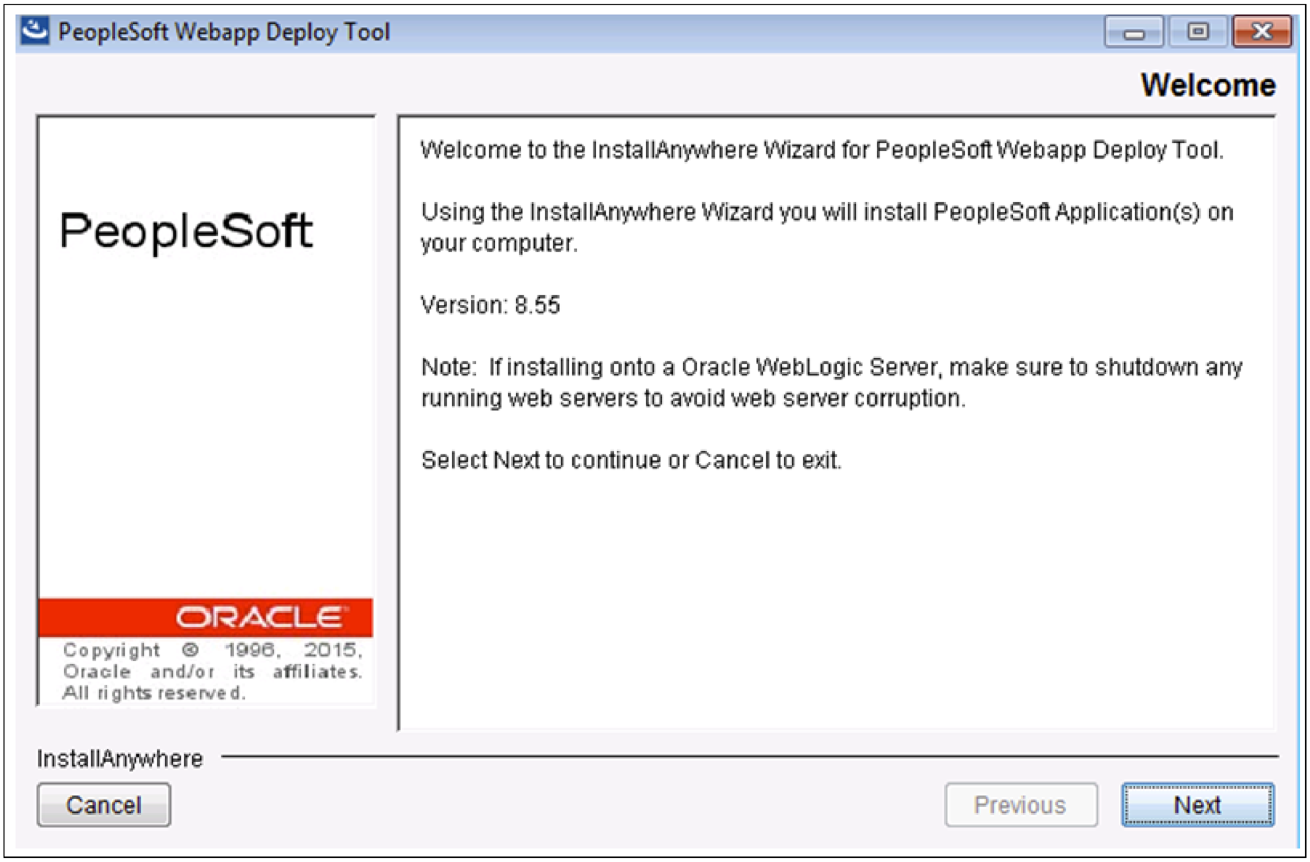
You cannot use an existing PeopleSoft Pure Internet Architecture server or application on IBM WebSphere for the Dialog Execution Server (DES). Also, you cannot use the same PeopleSoft Pure Internet Architecture HTTP/HTTPS port number for the DES HTTP/HTTPS port number.

Task 3-8-1: Installing the DES on IBM WebSphere on MS Windows

To install the DES application on an IBM WebSphere server running on Microsoft Windows:

1. Go to *PS_HOME*\setup\PsMpWebAppDeployInstall and run setup.bat.

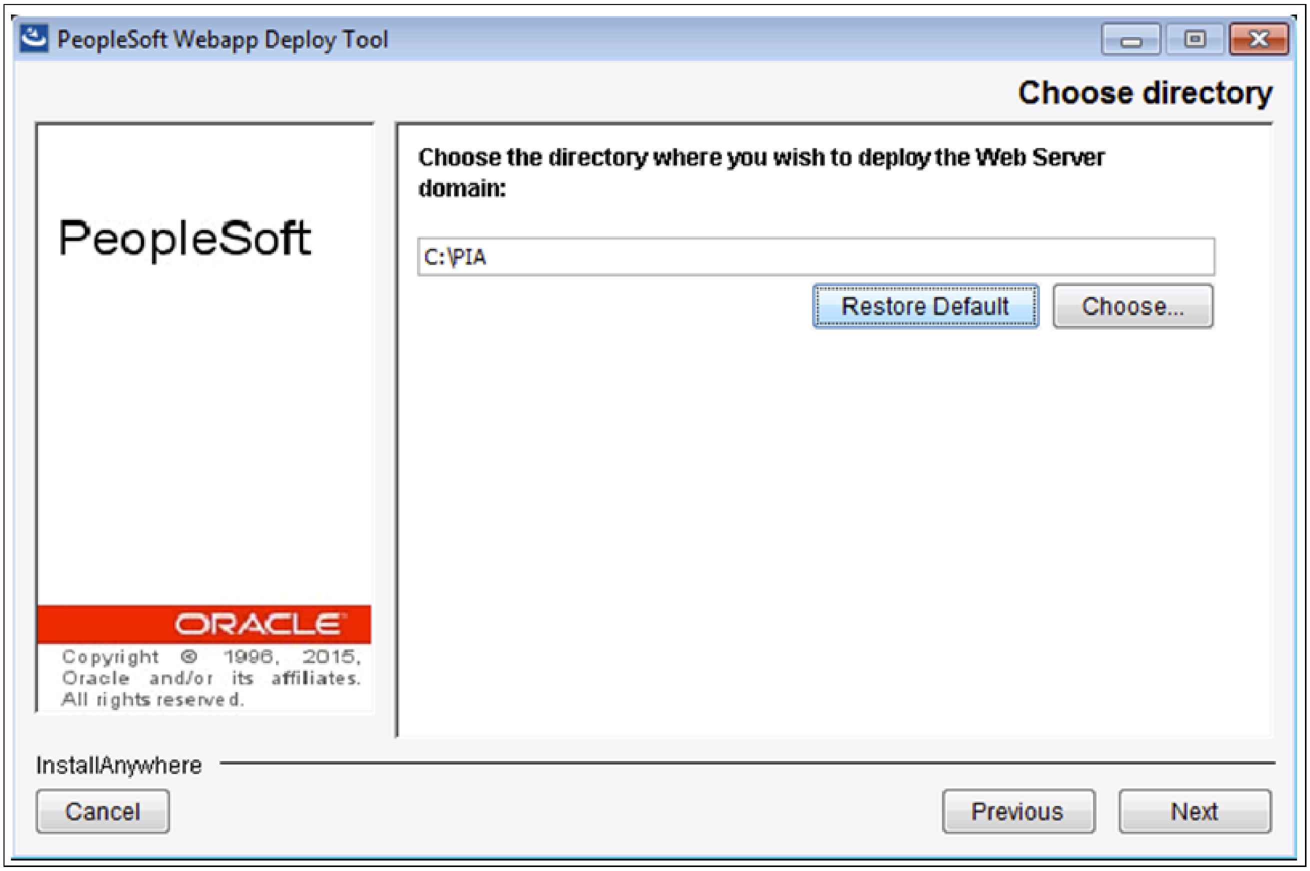
   The PeopleSoft Welcome page appears, as shown in the following example:



PeopleSoft Webapp Deploy Tool: Welcome page

2. On the PeopleSoft Webapp Deploy welcome page, click Next.

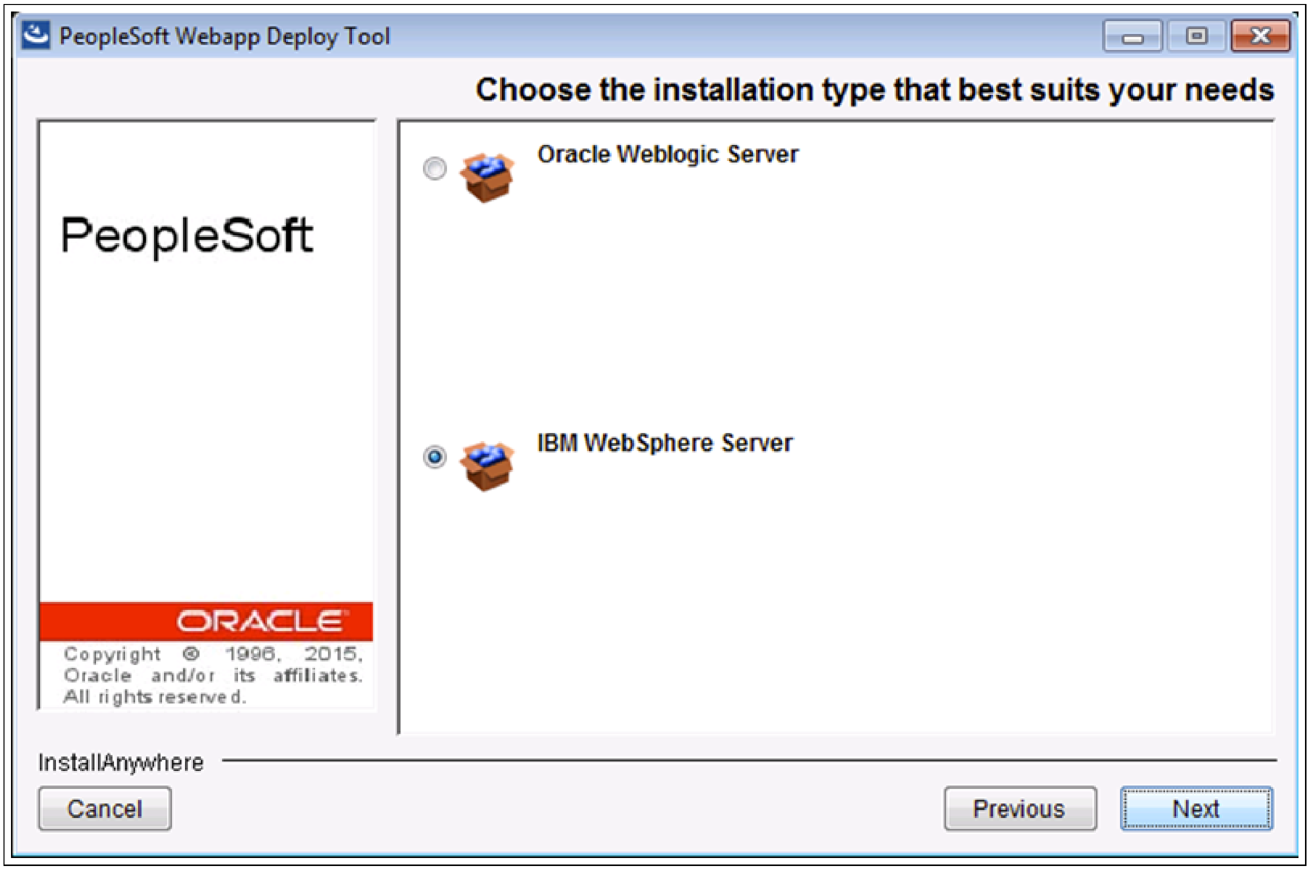
   The PeopleSoft PeopleTools home directory selection page appears, as shown in the following example:



PeopleSoft Webapp Deploy Tool: PS_HOME directory selection page

3. On the PeopleSoft PeopleTools directory selection page, enter the *PS_HOME* directory and click Next.

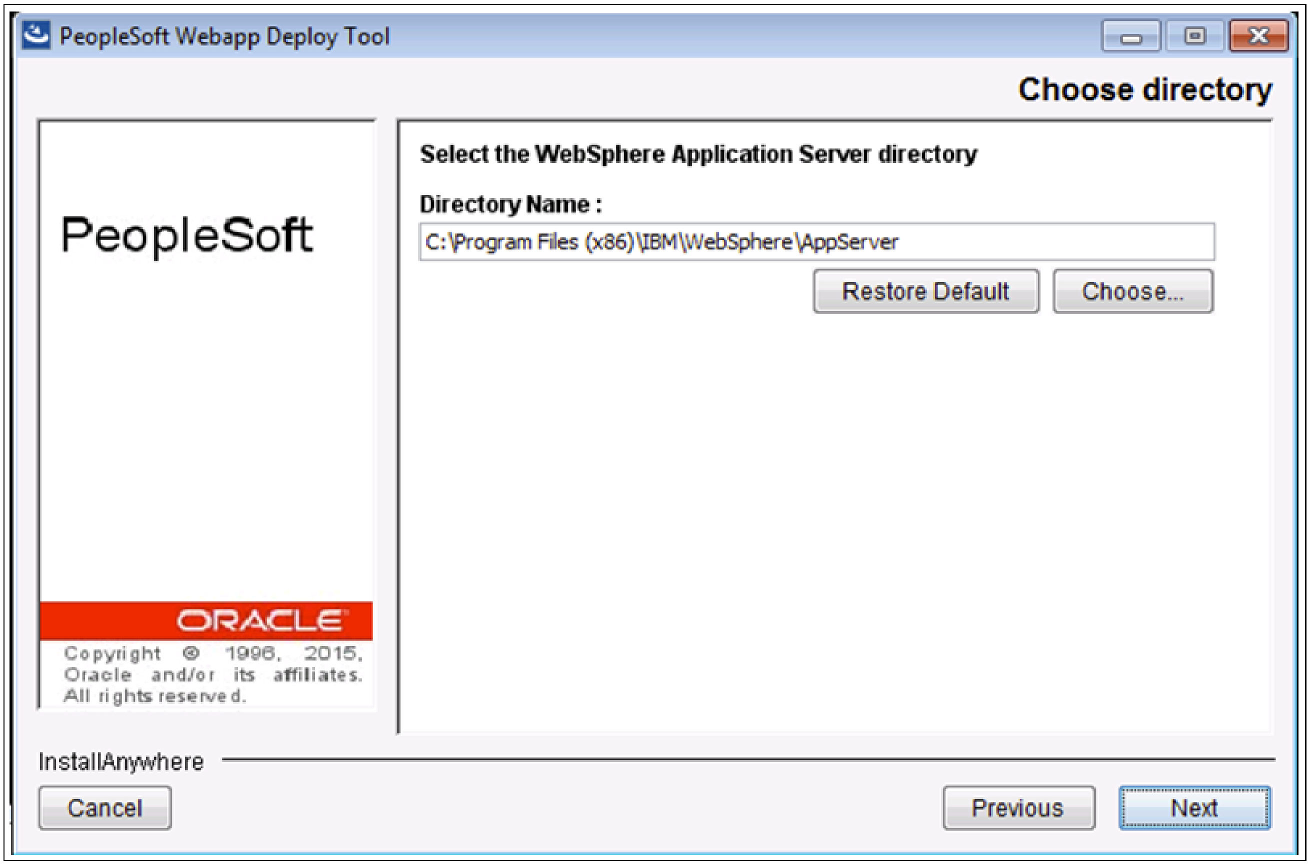
   The Web server selection page appears, as shown in the following example:



PeopleSoft Webapp Deploy Tool: Web server selection page

4. On the web server selection page, select the IBM WebSphere Server option, and click Next.

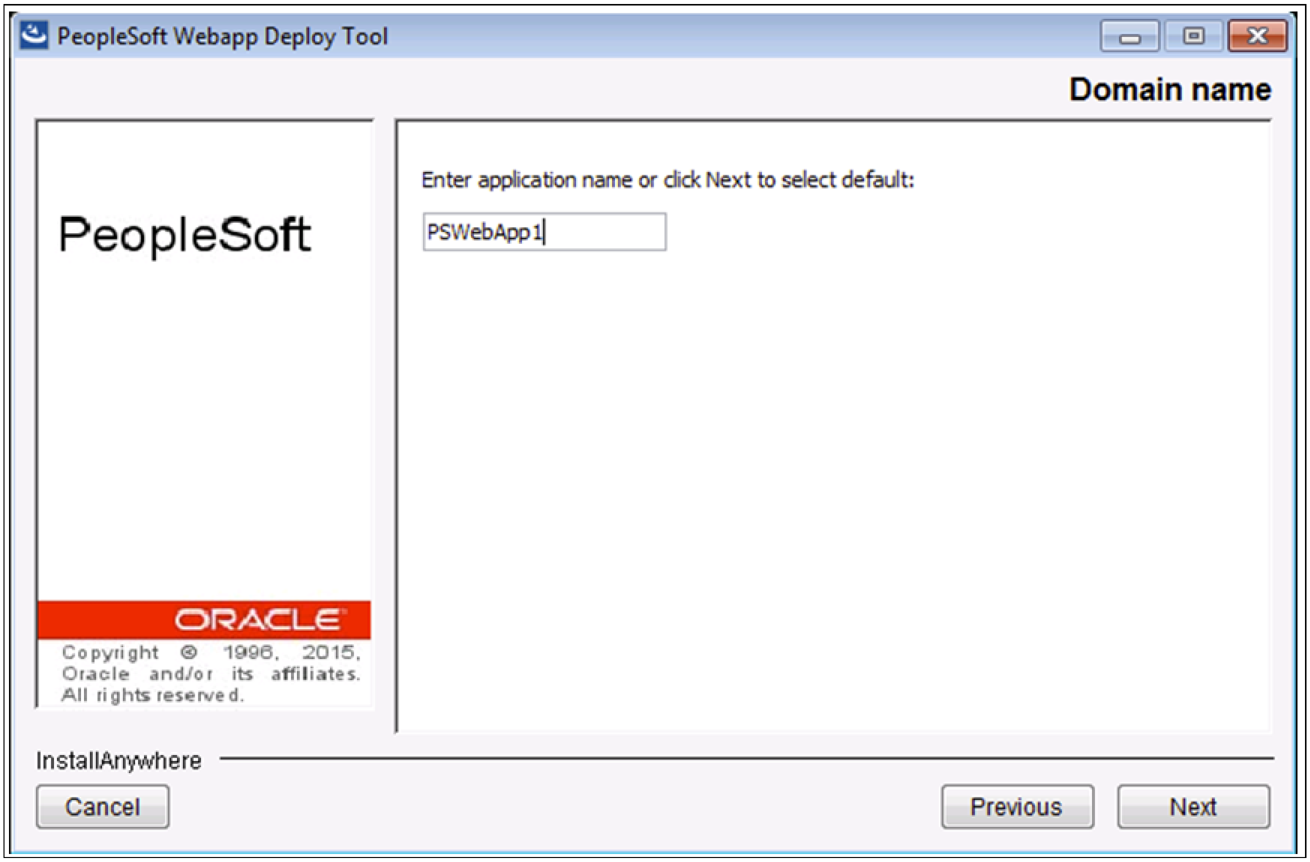
   The WebSphere Application Server directory page appears, as shown in the following example:



PeopleSoft Webapp Deploy Tool: WebSphere Application Server directory page

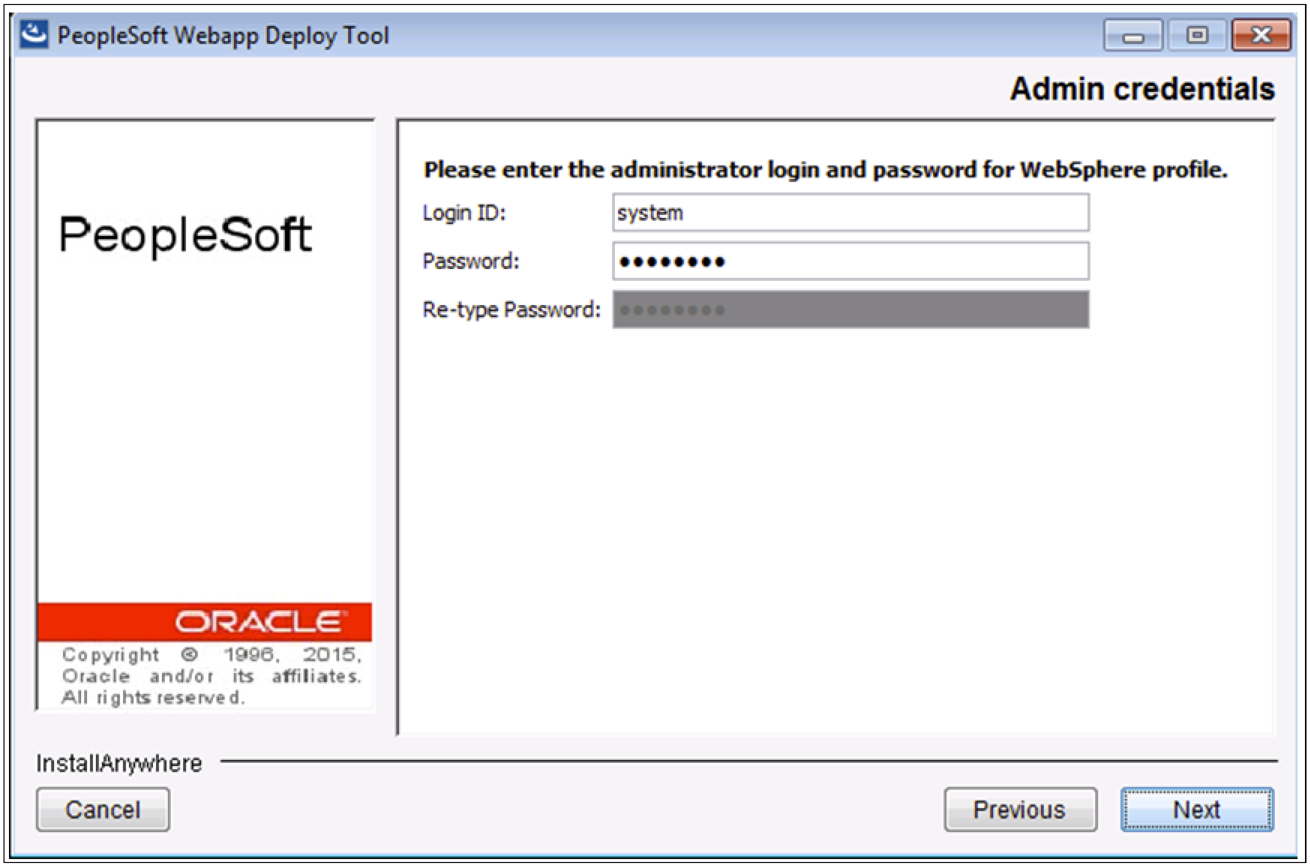
5. In the WebSphere Application Server directory page, enter the IBM WebSphere Application Server directory, in the Directory Name field.

   Click Next. The Application name selection page appears, as shown in the following example:



PeopleSoft Webapp Deploy Tool: Application Name Selection page

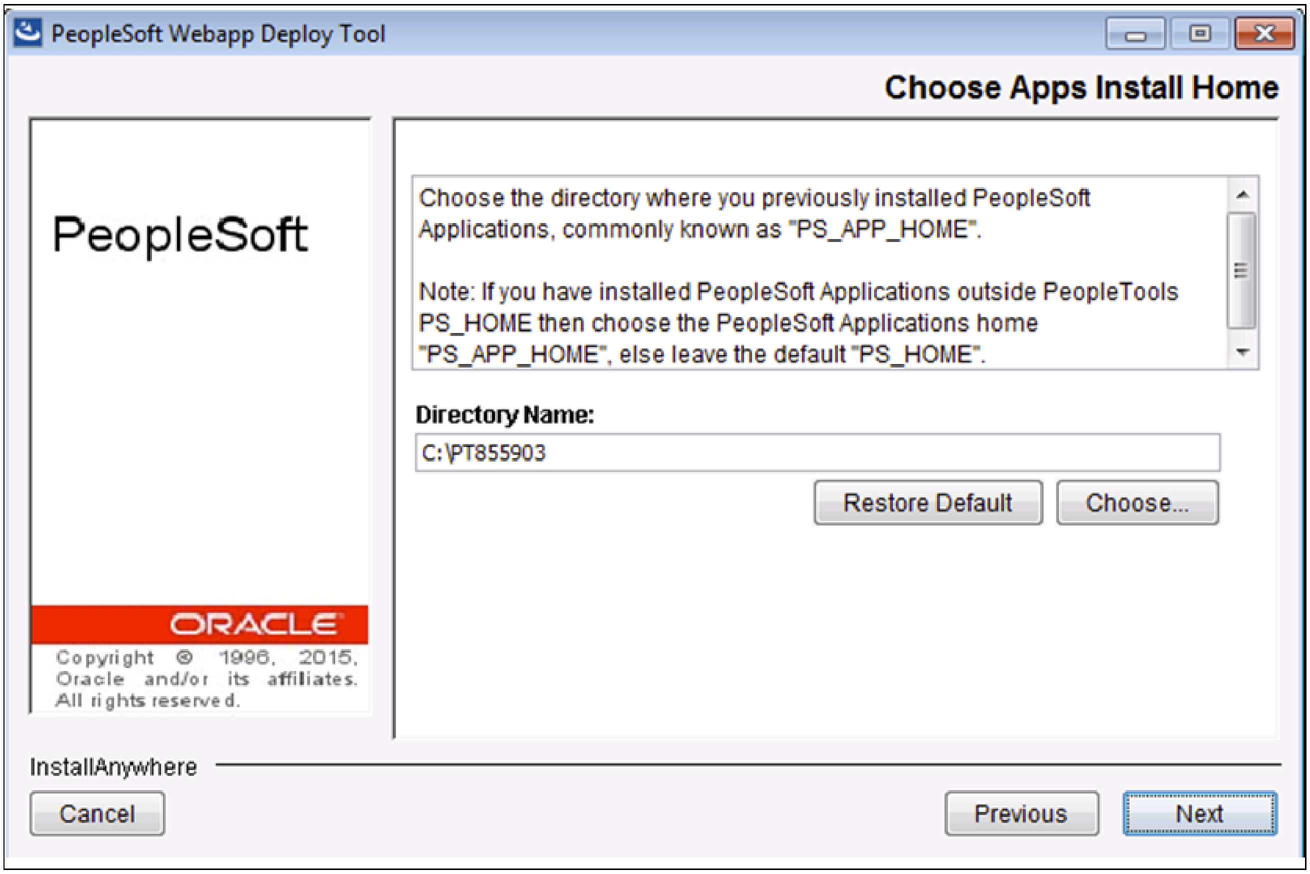
6. On the Application name selection page, enter the application name and click Next. The WebSphere profile login information page appears, as shown in the following example:



PeopleSoft Webapp Deploy: WebSphere Login Information page

7. On the WebSphere login information page, enter the login ID in the Login ID field and *Passw0rd* in the Password field for the WebSphere domain and Click Next.

   The Choose Apps Install Home page appears, as shown in the following example:



PeopleSoft Webapp Deploy Tool: Choose Apps Install Home page

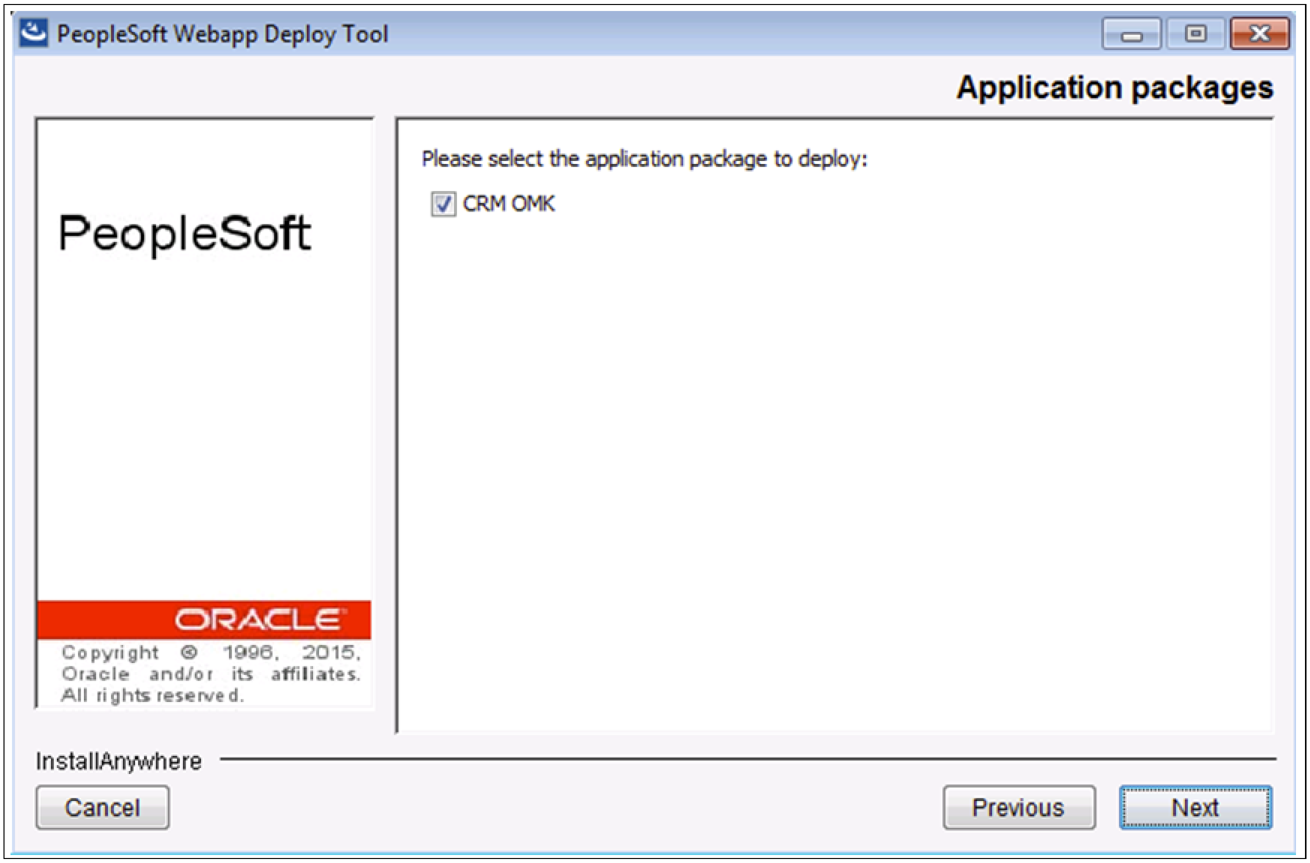
8. In the Choose Apps Install Home page, enter the location of PeopleSoft Application install home in the Directory Name field.

   This directory is commonly known as PS_APP_HOME. Modify the directory name to reflect your PS_APP_HOME installation path, which is the high level directory where you installed the PeopleSoft Application software.

Note. The Choose Apps Install Home window shown above has PeopleSoft PeopleTools PS_HOME location as the default directory. Modify that location to reflect your PS_APP_HOME installation path only if you have the PeopleSoft Application software installed outside the PeopleSoft PeopleTools PS_HOME.

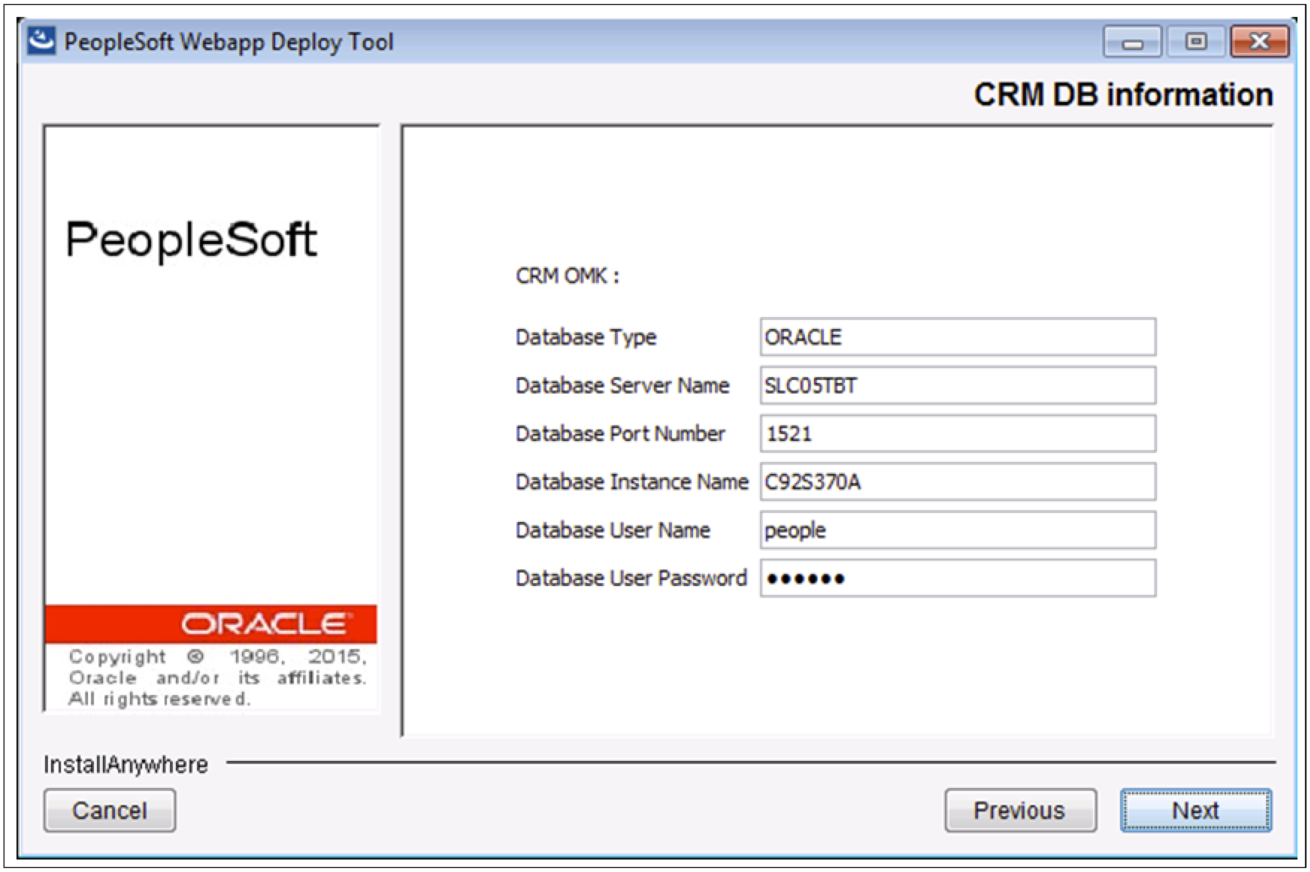
---

9. After entering the directory name, click Next. The application package to deploy selection page appears, as shown in the following example:



PeopleSoft Webapp Deploy Tool: Application package to deploy selection page

10. On the application package selection page, select the CRM OMK check box option as the application package to deploy and click Next. The CRM DB information page appears, as shown in the following example:



PeopleSoft Webapp Deploy Tool: Database Information page

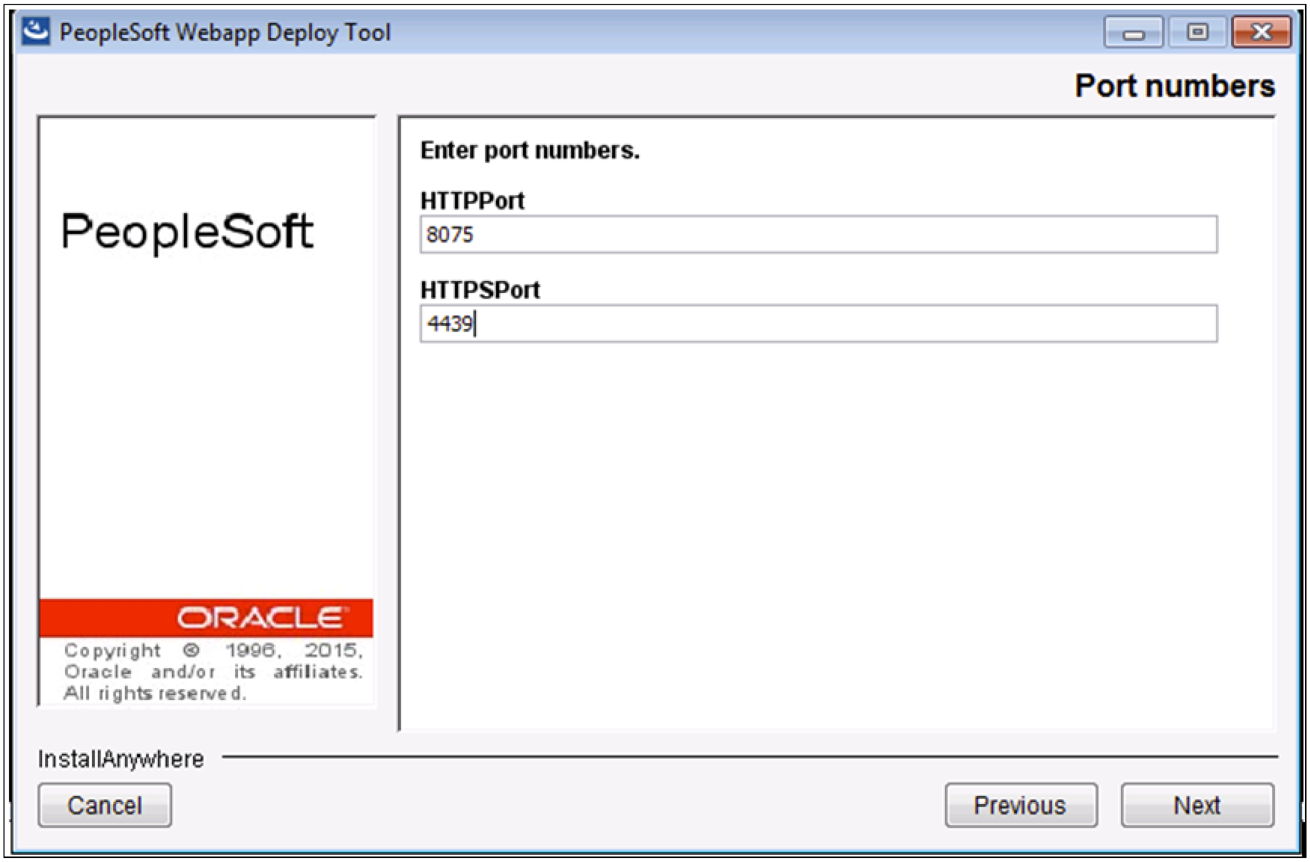
11. Complete the CRM DB information page, as follows:

- In the Database Type field, enter *ORACLE*, *MSSQL*, or *DB2LUW*.
- In the Database Server Name field, enter the name of the machine that is hosting the database.
- The Database Port Number value can differ depending on your database server configuration. Consult your database administrator to determine the correct value for your configuration.

Note. For MSSQL2008 Only. On the server where the database is running, check the port by opening SQL Server Configuration Manager, Protocols for SQL2008, and select the Properties of TCP/IP. In the tab IP addresses, set the TCP Port in section IPAll to 1433 (replace with actual port number on your site, if 1433 is the not the default SQL2008 port selected). Consult your database administrator to determine the correct value for your configuration and for further information.

- In the Database Instance Name field, enter the name of the database.
- In the Database User Name field, enter the name of the database user.
- In the Database User Password field, enter the password of the database user.

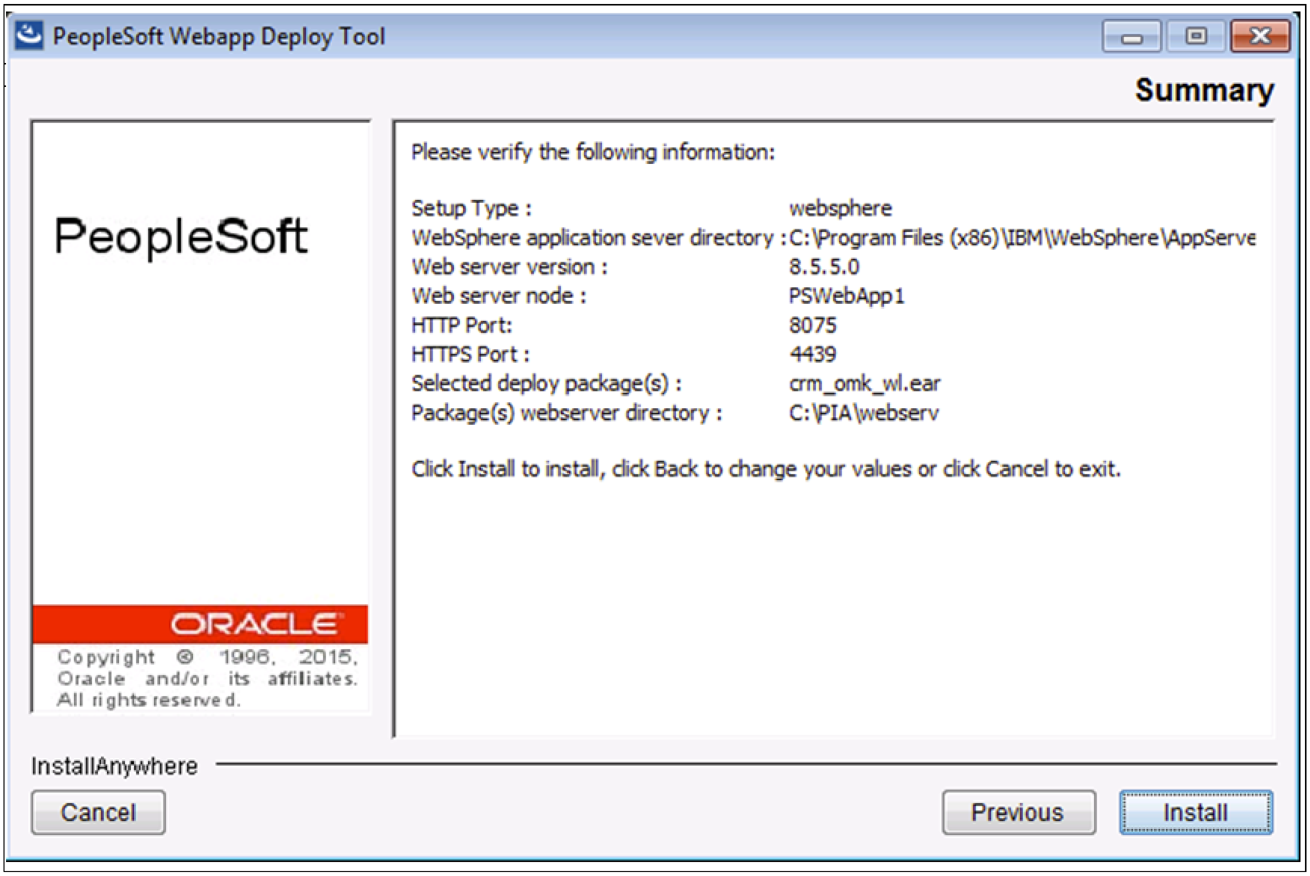
12. After entering all the required Database Information; click Next. The DES HTTP/HTTPS port selection page appears, as shown in the following example:



PeopleSoft Webapp Deploy Tool: Database Information page

13. On the DES HTTP/HTTPS port selection page, enter the DES HTTP and HTTPS port numbers and click Next.

    The installation Summary page appears, as shown in the following example:

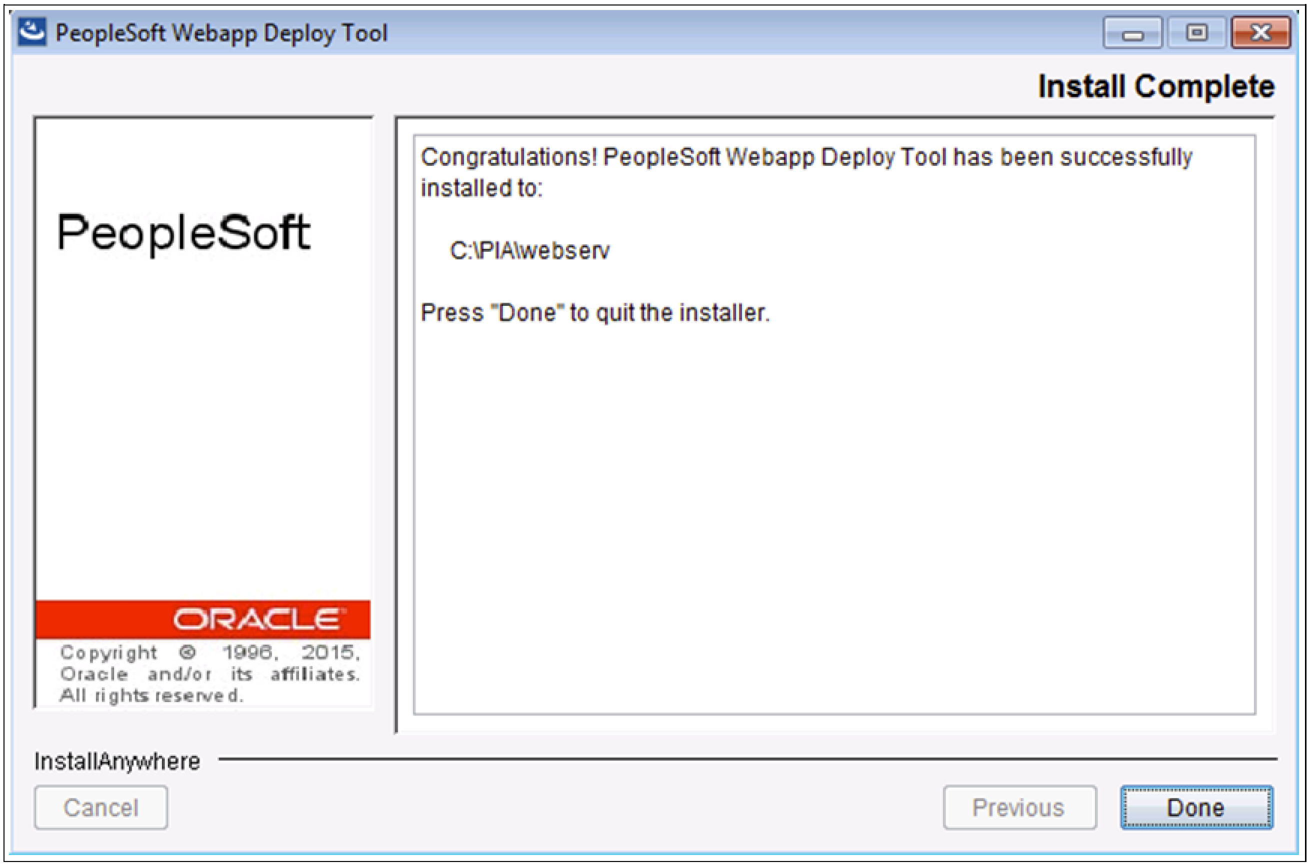


PeopleSoft Webapp Deploy Tool: Summary page

14. Verify that the information is correct.

    If the information is not correct, click Previous and make the necessary corrections.

15. Click Install to start the installation.



PeopleSoft Webapp Deploy Tool: Successful Message page

16. Click Done to exit the installation.

Task 3-8-2: Installing the DES on an IBM WebSphere for UNIX

To install the DES application on an IBM WebSphere server running on UNIX:

1. Go to *PS_HOME*/setup/PsMpWebAppDeployInstall and run the setup.sh script. The following message appears:

```
ple336155.us.oracle.com:$ setup.sh Setting temporary directory
/tmp/IA.28034 Executing setup.linux LAX_VM /data1/ram/PT855/jre/bin/java
-DCOMP_NAME=ple336155.us.oracle.com -DPS_UMASK=0022 Preparing to
install... Extracting the installation resources from the installer
archive... Configuring the installer for this system's environment...
Launching installer...
=========================================================================
====== PeopleSoft Webapp Deploy Tool (created with InstallAnywhere)
-------------------------------------------------------------------------
------ Preparing CONSOLE Mode Installation...
=========================================================================
====== Welcome to the InstallShield Wizard for PeopleSoft Webapp Deploy
Tool. Using the InstallShield Wizard you will install PeopleSoft Webapp
Deploy Tool on your computer. Version: 8.55 Note: If installing onto a
Oracle WebLogic Server, make sure to shutdown any running web servers to
avoid web server corruption. Press 1 for Next, 3 to Cancel or 5 to
```



```
Redisplay [1] :
```

Note. If you are installing onto an Oracle WebLogic Server, ensure that you shut down any running web servers to avoid web server corruption.

---

2. Enter *1* to continue. The following message appears:

   ```
   Choose the directory where you wish to deploy the Web Server domain:
   Please specify a directory name or press Enter
   [/ds1/home/upgtest4/psft/pt/8.55]: Press 1 for Next, 2 for Previous, 3 to
   Cancel or 5 to Redisplay [1] :
   ```

3. Enter the directory where you installed PeopleSoft application, commonly known as "PS_HOME".
4. Enter *1* to continue. The following message to select webserver appears:

   ```
   Choose the installation type that best suits your needs. ->1- Oracle
   WebLogic Server 2- IBM WebSphere Server To select an item enter its
   number, or 0 when you are finished [0] : 2 Choose the installation type
   that best suits your needs. 1- Oracle WebLogic Server ->2- IBM WebSphere
   Server To select an item enter its number, or 0 when you are finished [0]
   : Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
   ```

5. Enter *2* to select IBM WebSphere Server.
6. Enter *0* to finish.
7. Enter *1* to continue. The message to select the WebSphere Application Server directory appears:

   ```
   Select the WebSphere Application Server directory Directory Name
   [/opt/WebSphere61/AppServer]: /ds1/home/upgtest4/IBM/WebSphere/AppServer
   Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
   ```

8. Specify the location of the IBM WebSphere Application Server directory.
9. Enter *1* to continue. The message to enter application name appears.
10. Enter the Administrator *Login* and *Password.*

    ```
    Please enter the administrator login and password for WebSphere profile.
    Login ID [system]: Password []: Re-type Password []: Press 1 for Next, 2
    for Previous, 3 to Cancel or 5 to Redisplay [1] :
    ```

11. Enter *1* to continue. The message to enter application name appears as shown in the example:

    ```
    Enter application name or click Next to select default [PSWebApp]: Press
    1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
    ```

12. Enter *1* to select default application and continue. Otherwise enter the application name.
13. Enter *1* to continue. The message to select PeopleSoft Application directory commonly known as *PS_APP_HOME*, appears as shown in the example:

    ```
    Choose the directory where you previously installed PeopleSoft
    Applications, commonly known as "PS_APP_HOME". Note: If you have
    installed PeopleSoft Applications outside PeopleTools PS_HOME then choose
    the PeopleSoft Applications home "PS_APP_HOME", else leave the default
    "PS_HOME". Please specify a directory name or press Enter
    [/data1/ram/PT855]: /data1/ram/CRM92_P10 Press 1 for Next, 2 for
    Previous, 3 to Cancel or 5 to Redisplay [1] :
    ```

14. Enter the directory where you previously installed PeopleSoft Applications.

Note. If you have installed PeopleSoft Applications outside PeopleTools *PS_HOME,* then choose the PeopleSoft Applications home *PS_APP_HOME,* else leave the default *PS_HOME.*

---

15. Enter *1* to continue. The message to select the application package to deploy appears:

```
Please select the application package to deploy: ->1- CRM OMK To select
an item enter its number, or 0 when you are finished [0] : Press 1 for
Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

16. Enter to select CRM OMK for the application package to deploy.
17. Enter *0* to finish.
18. Enter *1* to continue. Specify the CRM database information as shown in the example:

```
CRM OMK : Database Type [MSSQL]: DB2LUW Database Server Name [ ]:
ple336155 Database Port Number [1433]: 60030 Database Instance Name [ ]:
CRMDB Database User Name [Admin]: admin Database User Password [*]: Press
1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

19. Enter *1* to continue. The message to enter port numbers appears:

```
Enter port numbers. HTTPPort [80]: HTTPSPort [443]: Press 1 for Next, 2
for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

20. Enter the appropriate HTTP/HTTPS port numbers for the DES server.

Important! The HTTP and HTTPS port numbers must be different from your PeopleSoft Pure Internet Architecture port number.

21. Enter *1* to continue. Summary message appears:

```
Setup Type : websphere WebSphere application sever directory : Web server
version : 8.5.5.0 Web server node : PSWebApp HTTP port : 80 HTTPS port :
443 Selected deploy package(s) : crm_omk_wl.ear Package(s) webserver
directory : /ds1/home/upgtest4/psft/pt/8.55/webserv Press 1 for Next, 2
for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

22. Review and confirm your selections before deploying the DES server.
23. Enter *1* to continue. The installation of DES server begins.
24. After the installation completes, a congratulation message appears::

```
========================================================================
====== Installation Complete --------------------- Congratulations!
PeopleSoft Webapp Deploy Tool has been successfully installed to:
/ds1/home/upgtest4/psft/pt/8.55/webserv PRESS <ENTER> TO EXIT THE
INSTALLER:
```

25. Enter Done to quit the installer.

Task 3-8-3: Starting the DES on an IBM WebSphere Server

To start the DES application on an IBM WebSphere server, do one of the following:

- For IBM WebSphere on Microsoft Windows, enter the following in the command window:

  ```
  %WAS_HOME%\bin\startServer.bat <server name> -profileName <DOMAIN_NAME>
  ```

- For IBM WebSphere on UNIX, enter the following:

  ```
  <WAS_HOME>/bin/startServer.sh <server name> -profileName <DOMAIN_NAME>
  ```


Task 3-9: Retrieving and Installing JDBC Drivers

This section discusses:

- Downloading JDBC Drivers
- Installing JDBC Driver on the PeopleSoft Server
- Installing the JDBC Driver on the DES

Task 3-9-1: Downloading JDBC Drivers

Because PeopleSoft Online Marketing is a Java based application, you must obtain the relevant JDBC drivers from the install media of the database that you are using.

The following table lists the database and required files to assist you in identifying which files to copy from the install media:

Database	Required Files
Oracle 10g	ojdbc14.jar
Oracle 11g	ojdbc6.jar
Oracle 12c	ojdbc7.jar
IBM DB2 LUW	db2jcc.jar db2jcc_license_cu.jar db2jcc_license_cisuz.jar
Microsoft SQL server	sqljdbc4.jar

Task 3-9-2: Installing JDBC Driver on the PeopleSoft Server

To install the JDBC driver for the PeopleSoft Application Server in the classes directory:

- For UNIX, copy the jar files into <*PS_APP_HOME*>/appserv/classes.
- For Microsoft Windows, copy the jar files into <*PS_APP_HOME*>\class.

Task 3-9-3: Installing the JDBC Driver on the DES

To install the JDBC driver on the DES:

Copy the jar files to the appropriate location, as shown in the following table:

DES Installed on	UNIX	Microsoft Windows
Oracle WebLogic	<*PS_CFG_HOME*>/webserv /<*DOMAIN_NAME*>/applications /crm/	<*PS_CFG_HOME*>\webserv \<*DOMAIN_NAME*>\applications \crm\

DES Installed on	UNIX	Microsoft Windows
IBM WebSphere	<WAS_HOME>/profiles/<*DOMAIN_NAME*>/installedApps/<*DOMAIN_NAME*>NodeCell/crm.ear	<WebSphereInstallRoot>\lib

Note. Replace <*DOMAIN_NAME*> with your DES domain name. For example:*PSWebApp* or *omk.*

Task 3-10: CyberSource Credit Card Integration Configuration (Optional)

In this task, you will perform Credit Card Integration Configuration prior to starting the DES. After you install the DES, you must perform the following manual configuration steps. This task is for users who want to use Credit Card to make the payments in Dialog.

Note. You must perform the Customer Relationship Management (CRM) Credit Card setup before performing this task.

To perform CyberSource Credit Card Integration Configuration:

1. Select Enterprise Components, Component Configurations, Credit Card Interface, Payment Process to configure the payment process *CYBER-TEST* for CyberSource.
2. Select Set Up CRM, Install, Installation Options and enable the Hosted Payment Integration option.
3. Select Set Up CRM, Product Related, Online Marketing, Settings and add the following parameter.

   PaymentProcessName=CYBER-TEST
4. Get the CRM Credit Card HOP feature generated file HOP.jsp from CyberSource and add it to com.peoplesoft.crm.omk.warfile at [PS_HOME]\webserv\[DOMAIN]\applications\crm\

   Add the com.peoplesoft.crm.omk.warfile at [PS_HOME]\webserv\[DOMAIN]\applications\crm\ through,
   a. Copy file HOP.jsp to [PS_HOME]\webserv\[DOMAIN]\applications\crm\
   b. Change directories to [PS_HOME]\webserv\[DOMAIN]\applications\crm\ in your command prompt.
   c. Execute the following command:

      jar -uvf com.peoplesoft.crm.omk.war HOP.jsp

Task 3-11: Setting Up Single Sign-On (Optional)

This task is for users who want use OLM SSO feature to access the Login Required Dialog from PIA.

To set up the Single Sign-On, perform the following steps:

1. Configure Single Sign-On by following the tools Single Sign-On instructions.
2. Configure the full domain name in all the URL related parameters.

   For example: http://crmPIA.us.oracle.com:87
   a. The DES parameter in DES Setting page:

      psPIAServerURL

      defaultURLBase

   b. PSFT_OLM IB node is PRIMARURL

3. Select PeopleTools, Utilities, Administration, PeopleTools Options to enable the Switch User privilege to the JOLT user.
4. Select All in the Enable Switch User field.
5. Select Set Up CRM, Product Related, Online Marketing, Settings and add the following parameter.

   useSingleSignOn=true

Task 3-12: Testing the DES Installation

Before you test the DES installation, you should stop the application server, clear the cache and restart the server. Then start the DES.

To test the DES installation, perform the following steps:

1. Test the communication to the server and verify that PeopleSoft OLM is installed.

   Go to http://<webserver>:<port>/DCS/mcp?rut=1.

   If the connection is working properly, the web page displays the message "i am here."
2. Verify database connectivity with the web server.

   Go to http://<webserver>:<port>/DCS/mcp?rutdb=1.

   If the connection and the database is working properly, the web page displays the message "db: i am here."
3. Verify JOLT connectivity with the web server.

   Go to http://<webserver>:<port>/DCS/mcp?rutas=1.

   If the connection and the application server is working properly, the web page displays the message as: "i am here."
4. Verify FTP connectivity with the FTP server.

   Go to http://<webserver>:<port>/DCS/mcp?rutftp=1.

   If the connection and the application server are working properly, the web page displays the message "ftp: i am here."
5. Check for errors in the DES log files:

   Note. For a DES UNIX installation, you should log into the machine using the same web server and application server user ID.

   - For IBM WebSphere, the log files reside in these directories:

     <*WAS_HOME*>\profiles\<*DOMAIN_NAME*>\installedApps\<*DOMAIN_NAME*>NodeCell\crm.ear\DES

     <*WAS_HOME*>\profiles\<*DOMAIN_NAME*>\installedApps\<*DOMAIN_NAME* >NodeCell\crm.ear\DES\log
   - For Oracle WebLogic, the log files reside in these directories:

     <*PS_CFG_HOME*>\webserv\<*domain name*>\DES\DES0.stderr.log

     <*PS_CFG_HOME*>\webserv\<*domain name*>\DES\log\DES1_Debug.log
6. Verify that the DES is accessible from the PeopleSoft Pure Internet Architecture:

   a. Log on to PeopleSoft Pure Internet Architecture.

   b. Select Marketing, Dialog Monitoring, Control Center, Server Monitor.

   c. Click the Timer Status button.
   d. Confirm that the message Scheduler Timer is running.
7. Verify that the Integration Broker for PeopleSoft OLM is accessible:
   a. Select PeopleTools, Integration Broker, Integration Setup, Nodes.
   b. Search for and open the PSFT_OLM node.
   c. Select the Connectors tab.
   d. Click the Ping Node button and verify that the ping was successful.

Task 3-13: Testing the Email Server

You must obtain and install one of the additional component email servers that Oracle recommends. Oracle does not provide this email server. After the email server installs, you must test to ensure that it is operational.

To verify that the email server is operational, perform the following tests:

1. If ping is enabled on your servers, ensure that the email server can send a ping notification *to* and receive a ping notification *from* the machine where the PeopleSoft OLM Mailcaster will be installed.
2. On the Mailcaster system, telnet to port 25 of the email server to test SMTP connectivity as follows:

```
telnet <emailserver> 25
HELO there
QUIT
```

3. Create a POP account on your email server.
4. On the Mailcaster system, telnet to port 110 to test POP account connectivity as follows:

```
telnet <emailserver> 110
HELO there
QUIT
```

Task 3-14: Adding Standalone Dialog Servers (Optional)

This section discusses:

- Understanding Adding Standalone Dialog Servers
- Adding Standalone Dialog Servers
- Adding E-mail Response Processor
- Adding Mail Service
- Adding Watch Dog
- Starting, Stopping, and Deleting Services

Understanding Adding Standalone Dialog Servers

If you run your batch servers on UNIX and want to run an E-mail Response Processor (ERP) application, you must copy the *ptib.jar* file from the DES installation to the *PS_HOME/*setup directory on the batch server.

Note. This task is not a requirement for Microsoft Windows and is only necessary if you plan to run ERP on the system.

To add standalone dialog servers (such as Mailcaster, ERP and Watchdog), you must make sure that the PeopleSoft Process Scheduler is started.

Note. All PeopleSoft OLM Standalone Dialog Server files will be installed to the ps_root/JavaApps directory. This directory must be writable and accessible by the PeopleSoft Process Scheduler. You must set the ps_root directory in the environment variable PS_VAL_HOME. If the environment variable PS_VAL_HOME cannot be found, the system will look for the environment variable PS_CFG_HOME. If both of these variables are not defined, the system will look for the directory in environment variable PS_HOME.

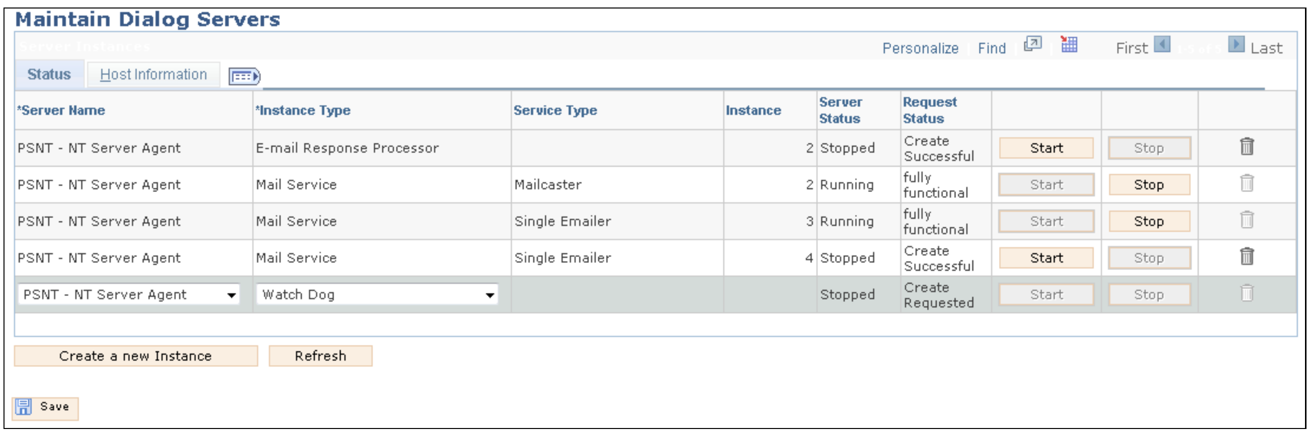
For the purpose of this task, PS_HOME is used.

Task 3-14-1: Adding Standalone Dialog Servers

To add standalone dialog servers:

1. Select Marketing, Dialog Monitoring, Control Center, Maintain Dialog Servers.

   The Maintain Dialog Servers page appears, as shown in the following example:



Maintain Dialog Servers page

2. Click the Create a new Instance button.
3. From the Server Name list, select one of your Process Scheduler servers.
4. Select the type of service that you want to add: *E-mail Response Processor*, *Mail Service*, or *Watch Dog*.

   Note. Adding services of each type increases the generated instance ID. The names of the directories that you create reflect this instance ID. For example, Mail Service with an instance ID of 3 creates an MCR3 directory.

5. To complete the addition of the service that you selected in the previous step, go to one of the following procedures, as applicable:
   - Adding E-mail Response Processor
   - Adding Mail Service
   - Adding Watch Dog

Task 3-14-2: Adding E-mail Response Processor

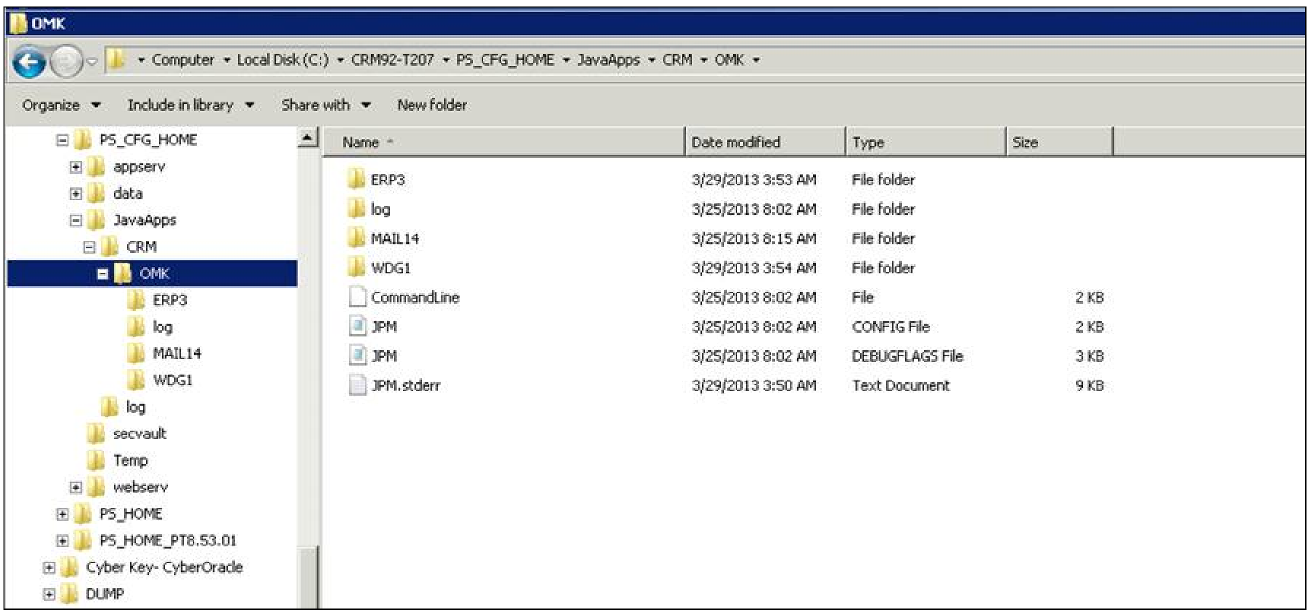
If your selection is *E-mail Response Processor* (ERP) for the service type in step 4 of the previous section Adding Standalone Dialog Servers, you must complete the service installation by continuing with these steps.

To add the E-mail Response Processor service:

1. Select one of the following service type options, and click Save:
   - *Bounce Process*— Select to manage mail bounces for cases in which the mail was sent to a nonexistent user.
   - *Reply Process*— Select to manage reply mails from existing users.
2. The request status is *Create Requested.*

   This status changes to *Create Successful* or *Create Failed* when the process completes.

   When successful, this step creates a *PS_CFG_HOME*/JavaApps/CRM/OMK/ERP3 directory under the Process Scheduler installation that you selected, as shown in the following example:



   Example of OMK directory

3. Go to the installation directory and edit either bounce.script or reply.script, depending on which service option you installed.

   Both files are placed in this directory in case you want to change the behavior of this ERP. Many parameters must be modified because all of the necessary information is *not* available at installation. Some fields prepopulate with information that was available at the time of the installation. See the ERP documentation for more details about how to configure the ERP.

   The *commandLine* file in the same directory is the command that is run to start this ERP. If you want to modify the ERP server type (bounce, reply, or both), change the script that is included at the end of the command. If you include both, the ERP process does both. More information is available in the ERP documentation.

   If you want *both* bounce and reply processing to occur, Oracle recommends that you set up *both* script files and change the *commandLine* file to include *both* script file names on the command line.

Task 3-14-3: Adding Mail Service

If you select *Mail Service* for the service type in step 4 of previous section Adding Standalone Dialog Servers, you must complete the service installation by completing these steps.

To add Mail Service:

1. Select one of the following service type options, and click Save:
   - *Mailcaster***—** Select to send bulk mails.
   - *Single Mailer***—** Select to send single mails.
   - *Frequency Mailer***—** Select to queue the bulk mails and single mails according to the frequency policy.
2. The request status is *Create Requested.*

   This status changes to *Create Successful* or *Create Failed* when the process completes.

   This step creates a *PS_CFG_HOME/*JavaApps/CRM/OMK/MCR1 directory under the Process Scheduler installation that you selected.
3. Review the *MCR.config* file that is found in the created directory.

   It is not necessary to modify the *MCR.config* file, unless you want to make a specific change.
4. If you want to change the type of mail service (for example, from bulk to single), edit the *commandLine* file and change the *"-t"* parameter.

   Use `single` for single mailer, `bulk` for bulk mail, and `frequency` for frequency mail.
5. If you select *Mail Service*, you can use it to install another service type.

   Because you will need both a single mailer and a bulk mailer, and you may also need a frequency mailer, you can repeat the preceding mail service installation steps 1 through 4 by selecting a different service type option. This installs as MCR2 or CRM3.

Important! If a firewall is in use between the DES server and the Mailcasters, two parameters can be used to force the Mailcaster RMI server object to listen on a specific port. Add the following configuration parameters to each MCR.config file: HAS_FIREWALL=true, and FIREWALL_PORT=*PORT#,* where *PORT#* is the number of the port that opens in the firewall.

The default RMI port 1099, or the port to be specified in the RMIPORT config parameter, must open in the firewall as well. That port is the one through which the DES connects to the RMI registry.

Task 3-14-4: Adding Watch Dog

If your selection is *Watch Dog* for the service type in step 4 of previous section Adding Standalone Dialog Servers, you must complete the service installation by completing these steps.

To add the Watch Dog service:

1. If your selection is the Watch Dog service, just click Save.

   Watch Dog has no service type options.
2. The request status is *Create Requested.* This status changes to *Create Successful* or *Create Failed* when the process completes.

   This step creates a *PS_CFG_HOME/*JavaApps/CRM/OMK/WDG1 directory under the Process Scheduler installation that you selected.
3. Edit the WDG.config file.

The Watch Dog configuration file is complicated; therefore, you should review the Watch Dog documentation before you attempt the configuration.

4. If you are installing more than one Watch Dog on the same machine, you must set *qkLookPort* differently in each of the configuration files.

   However, there should be no reason to run more than one Watch Dog on the same server.

Task 3-14-5: Starting, Stopping, and Deleting Services

To start one of the services, click the Start button, and then click Save. You must click Save to start the service.

Note. The Start button is not active until the services are at the *Create Successful* state.

The system sets the state to *Run Requested,* and that changes to *Fully Functional.* If the state becomes *Run Request Failed,* further diagnosis is necessary. Many log files in the *JavaApps* directory tree can help with this result.

To stop a service, click the Stop button, and then click Save. You must click Save to stop the service.

Note. The Stop button is not active unless a service is operational.

The state changes to *Stop Requested,* and that changes to *Shutdown Normally* or *Timed Out* or *killed by process monitor.* In these cases, the process stops. If the state changes to *Stop Request Failed,* further investigation is necessary.

To delete a service, wait until the process stops. When the trashcan button becomes active, click the trashcan button, and then click Save to delete the service.

Task 3-15: Installing Adobe Graphic Dialog Flow Designer

This section discusses:

- Installing Adobe Graphic Dialog Flow Designer on Linux and UNIX for Oracle WebLogic
- Installing Adobe Graphic Dialog Flow Designer on Linux and UNIX for IBM WebSphere
- Installing Adobe Graphic Dialog Flow Designer on Microsoft Windows

Task 3-15-1: Installing Adobe Graphic Dialog Flow Designer on Linux and UNIX for Oracle WebLogic

Graphic Dialog Flow Designer is an Adobe Flex application on the PeopleSoft Pure Internet Architecture server. This task details how to deploy the Adobe Graphic Dialog Flow Designer on Linux and UNIX for Oracle WebLogic.

Note. If you have installed PeopleSoft Application outside PeopleTools *PS_HOME* then choose the PeopleSoft Application home as *PS_APP_HOME,* else leave the default as *PS_HOME.*

---

1. Verify that files *DialogDesigner_wl.ZIP* for Oracle WebLogic exist and are located at: <*PS_HOME* >/setup/PsMpPIAInstall/archives/ or <*PS_APP_HOME*>/setup/PsMpPIAInstall/archives/
2. Run the PIA *install.sh* again at <*PS_HOME*>\\setup\PsMpPIAInstall. You will see the following:

```
ple336150.us.oracle.com:$ setup.sh
Setting temporary directory /tmp/IA.19303
```

```
Executing setup.linux LAX_VM /data1/ora/CRM/85501/jre/bin/java  -DCOMP_⇒
NAME=ple336150.us.oracle.com -DPS_UMASK=0022
Preparing to install...
Extracting the installation resources from the installer archive...
Configuring the installer for this system's environment...

Launching installer...


=====================================================================⇒
=======
PeopleSoft Internet Architecture                (created with Install⇒
Anywhere)
---------------------------------------------------------------------⇒
-------

Preparing CONSOLE Mode Installation...

Welcome to the InstallShield Wizard for PeopleSoft Internet⇒
 Architecture.
Using the InstallShield Wizard you will install PeopleSoft Internet
Architecture on your computer.

Version: 8.55.01


  Note: If installing onto a Oracle WebLogic Server, make sure to⇒
 shutdown any
running web servers to avoid web server corruption.

Press 1 for Next, 3 to Cancel or 5 to Redisplay [1] :
```

Note. If installing onto an Oracle WebLogic Server, make sure to shutdown any running web servers to avoid web server corruption.

---

3. Select *1* for Next.
4. Choose the directory where you wish to deploy PeopleSoft Pure Internet Architecture for OLM.

   For example,

   ```
   Choose the directory where you wish to deploy PeopleSoft Pure Internet
   Architecture :
   Please specify a directory name or press Enter [/ds1/home/upgtest2/psft⇒
   /pt/8.55]:
   Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
   ```

5. Specify the directory name and enter *1* to continue.
6. Choose the installation type that best suits your needs from the following. To select an item, enter its number or *0* when you are finished.

   For example,


```
Choose the installation type that best suits your needs.
  ->1- Oracle WebLogic Server
    2- IBM WebSphere Server

To select an item enter its number, or 0 when you are finished [0] :

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

7. Select *1* for Next.
8. Select the web server root directory.

   For example,

```
Select the web server root directory
[/ds1/home/upgtest2/oracle/Middleware]:/products/weblogic/12.1.3.0-64bit

Detected web server version : WebLogic 12.1.3.0.0

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

9. Select *1* for Next.
10. Select the webserver domain. Select the option 2 for existing weblogic domain.

    For example,

```
->1- Create New WebLogic Domain
  2- Existing WebLogic Domain
To select an item enter its number, or 0 when you are finished [0] : 2
  1- Create New WebLogic Domain
  2- Existing WebLogic Domain
To select an item enter its number, or 0 when you are finished [0] :
Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

11. Select *1* for Next.
12. Select the application name.

    For example,

```
Select application name from list:
->1- CR92C396

To select an item enter its number, or 0 when you are finished [0] :
```

13. Select the option 4 to deploy additional Peoplesoft Extensions.

    For example,

```
Select application name from list:
  ->1- Install additional PeopleSoft site
    2- Redeploy PeopleSoft Internet Architecture
    3- Re-create WebLogic domain and redeploy PeopleSoft Internet⇒
 Architecture
    4- Deploy additional PeopleSoft application extensions

To select an item enter its number, or 0 when you are finished [0] :
```



```
Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

14. Select *1* for Next.
15. Enter the administrator login and password for your WebLogic domain.

    For example,

```
Please enter the administrator login and password for Weblogic Domain.

  Login ID [system]:

   Password []:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

16. Select *1* for Next.
17. Enter Integration Gateway User and password.

    For example,

```
Please enter the Integration Gateway User and Password.

  Integration Gateway User [administrator]:

   Password []:

   Re-type Password []:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

18. Select *1* for Next.
19. Enter the *AppServer Domain Connection Password.*

    For example,

```
Please enter the AppServer Domain Connection Password.

   Password []:

   Re-type Password []:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

20. Choose the directory where you previously installed PeopleSoft Applications.

    For example,

```
Choose the directory where you previously installed PeopleSoft⇒
 Applications,
commonly known as "PS_APP_HOME".

Note: If you have installed PeopleSoft Applications outside PeopleTools⇒
 PS_HOME
then choose the PeopleSoft Applications home "PS_APP_HOME", else leave⇒
 the
```



```
default "PS_HOME".

   Please specify a directory name or press Enter [/data1/ora/CRM/C396]:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

21. Select *1* for Next.
22. Select the application package to deploy.

    For example,

```
Please select the application package to deploy:

  ->1- Dialog Designer

To select an item enter its number, or 0 when you are finished [0] :

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

23. Select *1* for Next.
24. Specify a name for the PeopleSoft web site.

    For example,

```
Please specify a name for the PeopleSoft web site:

   Website name [ps]:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

25. Select *1* for Next.
26. Enter the port numbers and summaries.

    For example,

```
  AppServer name [ple336150.us.oracle.com]:

   JSL Port [9000]:

   HTTP Port [80]: 8000

   HTTPS Port [443]:

   Authentication Token Domain:(optional) []: us.oracle.com

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

27. Select *1* for Next.
28. Enter the Name of the Web Profile used to configure the webserver.

    For example,

```
Please enter the Name of the Web Profile used to configure the⇒
 webserver. The
user id and password will be used to retrieve the web profile from the
database. (NOTE: Other available preset web profile names are TEST",⇒
 "DEV",and
"KIOSK".)


   Web Profile Name [PROD]:
   User ID : PTWEBSERVER
   Password []:

   Re-type Password []:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

29. Select *1* for Next.
30. Select the Report Repository location.

    For example,

```
Select the Report Repository location:


   Please specify a directory name or press Enter
   [/ds1/home/upgtest2/PeopleSoft Internet Architecture/psreports]:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

31. Select *1* for Next.
32. The summary message appears as shown in the example:

    For example,

```
Setup Type : weblogic
Web server root directory : /products/weblogic/12.1.3.0-64bit
Web server version : 12.1
Web server domain : CR92C396
Internet Architecture app name : PORTAL
Integration Gateway app name : PSIGW
PeopleSoft Business Interlink app name : PSINTERLINKS
Environment Management Hub : PSEMHUB
Portlet Container app name : pspc
Site name : ps
Authentication Token Domain : .us.oracle.com
Application server name : ple336150.us.oracle.com
JSL port : 9000
Report repository directory : /ds1/home/upgtest2/PeopleSoft Internet
Architecture/psreports
PIA webserver directory : /ds1/home/upgtest2/psft/pt/8.55/webserv
Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

33. Select *1* for Next.
34. You will receive the following message:

    For example,

```
==============================================================================⇒
=======
Installing...
-------------
Installation Complete

Congratulations! PeopleSoft Internet Architecture has been successfully
installed to:

/ds1/home/upgtest2/psft/pt/8.55/webserv
```

35. Press Enter to exit the installer.

    The following will be displayed:

```
ple336150.us.oracle.com:$
```

Task 3-15-2: Installing Adobe Graphic Dialog Flow Designer on Linux and UNIX for IBM WebSphere

Graphic Dialog Flow Designer is an Adobe Flex application on the PeopleSoft Pure Internet Architecture server. This task details how to deploy the Adobe Graphic Dialog Flow Designer on Linux and UNIX for IBM WebSphere.

Note. If you have installed PeopleSoft Application outside PeopleTools *PS_HOME* then choose the PeopleSoft Application home as *PS_APP_HOME,* else leave the default as *PS_HOME.*

---

1. Verify that files *DialogDesigner_ws.ZIP* for IBM WebSphere exist and are located at: <*PS_HOME* >/setup/PsMpPIAInstall/archives/ or <*PS_APP_HOME*>/setup/PsMpPIAInstall/archives/
2. Run the PIA *install.sh* again at <*PS_HOME*>\\setup\PsMpPIAInstall. You will see the following:

```
.ple336155.us.oracle.com:$ setup.sh
Setting temporary directory /tmp/IA.25686
Executing setup.linux LAX_VM /data1/ram/PT85501C/jre/bin/java  -DCOMP_⇒
NAME=ple33                                              6155.us.oracle.com -⇒
DPS_UMASK=0022
Preparing to install...
Extracting the installation resources from the installer archive...
Configuring the installer for this system's environment...

Launching installer...

==============================================================================⇒
=======
PeopleSoft Internet Architecture                 (created with Install⇒
Anywhere)
------------------------------------------------------------------------------⇒
-------
```



```
Preparing CONSOLE Mode Installation...
======================================================================⇒
=======
Welcome to the InstallShield Wizard for PeopleSoft Internet⇒
 Architecture.

Using the InstallShield Wizard you will install PeopleSoft Internet
Architecture on your computer.

Version: 8.55.01

Note: If installing onto a Oracle WebLogic Server, make sure to⇒
 shutdown any
running web servers to avoid web server corruption.

Press 1 for Next, 3 to Cancel or 5 to Redisplay [1]:
```

3. Select *1* for Next.
4. Choose the directory where you wish to deploy PeopleSoft Pure Internet Architecture:

   For example,

```
Choose the directory where you wish to deploy PeopleSoft Pure Internet
Architecture :
Please specify a directory name or press Enter
[/ds1/home/upgtest4/psft/pt/8.55]:
Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1]:
```

5. Select *1* for Next.
6. Choose the web server installation type and enter *2* to select IBM WebSphere server.

   For example,

```
Choose the installation type that best suits your needs.

  ->1- Oracle WebLogic Server
    2- IBM WebSphere Server

To select an item enter its number, or 0 when you are finished [0] : 2

Choose the installation type that best suits your needs.


    1- Oracle WebLogic Server
  ->2- IBM WebSphere Server

To select an item enter its number, or 0 when you are finished [0] :

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

7. Select *1* for Next.
8. Select the WebSphere Application Server directory.

   For example,

```
Select the WebSphere Application Server directory

Directory Name [/opt/WebSphere61/AppServer]: /ds1/home/upgtest4/IBM/Web⇒
Sphere/AppServer

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1]:
```

9. Select *1* for Next.
10. Select web server domain and enter option *2* for existing WebSphere application.

    For example,

```
  ->1- Create New WebSphere Application
    2- Existing WebSphere Application

To select an item enter its number, or 0 when you are finished [0] : 2

    1- Create New WebSphere Application
  ->2- Existing WebSphere Application

To select an item enter its number, or 0 when you are finished [0] :

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

11. Select *1* for Next.
12. Select domain name and action as Deploy additional PeopleSoft Application Extensions.

    For example,

```
Select domain name from list

  ->1- PSWebApp
    2- CRM92IN2
    3- PSWebApp1
    4- PSWebApp2
    5- CRM92INS
    6- PSWebApp3
    7- CRM92IN3
    8- PSWebApp4
    9- CRMIN396

To select an item enter its number, or 0 when you are finished [0] : 1

Select domain name from list

  ->1- PSWebApp
    2- CRM92IN2
    3- PSWebApp1
    4- PSWebApp2
    5- CRM92INS
    6- PSWebApp3
    7- CRM92IN3
    8- PSWebApp4
```

```
    9- CRMIN396

To select an item enter its number, or 0 when you are finished [0] :

The domain name already exists.  Please select an action

  ->1- Install additional PeopleSoft site
    2- Redeploy PeopleSoft Internet Architecture
    3- Deploy additional PeopleSoft application extensions

To select an item enter its number, or 0 when you are finished [0] : 3

The domain name already exists.  Please select an action

    1- Install additional PeopleSoft site
    2- Redeploy PeopleSoft Internet Architecture
  ->3- Deploy additional PeopleSoft application extensions

To select an item enter its number, or 0 when you are finished [0] :

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

13. Select *1* for Next.
14. Please enter the Administrator *Login* and *Password* for WebSphere profile.

    For example,

```
Please enter the administrator login and password for WebSphere profile.


   Login ID [system]:

   Password []:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

15. Select *1* for Next.
16. Enter the *Integration Gateway User* and *Password.*

    For example,

```
Please enter the Integration Gateway User and Password.

   Integration Gateway User [administrator]:

   Password []:

   Re-type Password []:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] : 1
```

17. Select *1* for Next.
18. Enter the *AppServer Domain Connection Password.*

For example,

```
Please enter the AppServer Domain Connection Password.

   Password []:

   Re-type Password []:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] : 1
```

19. Select *1* for Next.
20. Choose the directory where you previously installed PeopleSoft applications.

    For example,

```
Choose the directory where you previously installed PeopleSoft⇒
 Applications,
commonly known as "PS_APP_HOME".

Note: If you have installed PeopleSoft Applications outside PeopleTools⇒
 PS_HOME
then choose the PeopleSoft Applications home "PS_APP_HOME", else leave⇒
 the
default "PS_HOME".

Please specify a directory name or press Enter [/data1/ram/PT85501C]: ⇒
/data1/CRM

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

21. Select *1* for Next.
22. Select the application package to deploy.

    For example,

```
Please select the application package to deploy:

  ->1- Dialog Designer

To select an item enter its number, or 0 when you are finished [0] :

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] : 1
```

23. Select *1* for Next.
24. Specify a name for the PeopleSoft web site.

    For example,

```
Please specify a name for the PeopleSoft web site:


   Website name [ps]:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

25. Select *1* for Next.
26. Enter the port numbers.

    For example,

```
Enter port numbers and summaries.
 AppServer name [ple336155.us.oracle.com]:
 JSL Port [9000]: 9000
 HTTP Port [80]: 8000
 HTTPS Port [443]:
 Authentication Token Domain:(optional) []: us.oracle.com
Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

27. Select *1* for Next.
28. Enter the Name of the Web Profile used to configure the webserver.

    For example,

```
Please enter the Name of the Web Profile used to configure the⇒
 webserver. The
user id and password will be used to retrieve the web profile from the
database. (NOTE: Other available preset web profile names are TEST",⇒
 "DEV",and
"KIOSK".)

   Web Profile Name [PROD]: PROD
   User ID : PTWEBSERVER
   Password [**************]:

   Re-type Password [***********]:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] :
```

29. Select *1* for Next.
30. Select the Report Repository location.

    For example,

```
Select the Report Repository location:


   Please specify a directory name or press Enter
      [/ds1/home/upgtest4/PeopleSoft Internet Architecture/psreports]:

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1] : 1
```

31. Select *1* for Next.
32. The summary message appears.

    For example,

```
Setup Type : websphere

WebSphere application sever directory :
```



```
/ds1/home/upgtest4/IBM/WebSphere/AppServer

Web server version : 8.5.5.0

Web server node : PSWebApp

Internet Architecture app name : PORTAL

Integration Gateway app name : PSIGW

PeopleSoft Business Interlink app name : PSINTERLINKS

Environment Management Hub : PSEMHUB

Portlet Container app name : pspc

Site name : ps

Authentication Token Domain : .us.oracle.com

Application server name : ple336155.us.oracle.com

JSL port : 9000

Report repository directory : /ds1/home/upgtest4/PeopleSoft Internet
Architecture/psreports

PIA webserver directory : /ds1/home/upgtest4/psft/pt/8.55/webserv

Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1]
```

33. Select *1* for Next.
34. You will receive the following message:

```
=========================================================================⇒
=======
Installing...
=========================================================================⇒
===
Install Complete
```

35. Press Enter to exit the Installer.

Task 3-15-3: Installing Adobe Graphic Dialog Flow Designer on Microsoft Windows

Graphic Dialog Flow Designer is an Adobe Flex application on the PeopleSoft Pure Internet Architecture server. This task details how to deploy the Adobe Graphic Dialog Flow Designer on Microsoft Windows for both Oracle WebLogic and IBM WebSphere.

Note. If you have installed PeopleSoft Application outside PeopleTools *PS_HOME* then choose the PeopleSoft Application home as *PS_APP_HOME,* else leave the default as *PS_HOME.*

1. Verify that files *DialogDesigner_wl.ZIP* for Oracle WebLogic, and *DialogDesigner_ws.ZIP* for IBM WebSphere, are located at: <*PS_HOME*>\setup\PsMpPIAInstall\archives\ or <*PS_APP_HOME* >/setup/PsMpPIAInstall/archives/
2. After you install the PeopleSoft Pure Internet Architecture server, run the *setup.bat* from <*PS_HOME*>\setup\PsMpPIAInstall again to install the OLM extension.
3. Enter the same information that you used during the installation of the PeopleSoft Pure Internet Architecture server, with the exception of the next two steps (4 and 5).
4. Select Existing Weblogic/Websphere Domain and Deploy additional PeopleSoft extensions in the next step of the PeopleSoft Pure Internet Architecture Installation Wizard.
5. Check the Dialog Designer check box.
6. After installation completes, the flex application will be deployed as follows:
   - For Oracle WebLogic: <*PS_CFG_HOME*>\webserv\<*DOMAIN_NAME* >\applications\peoplesoft\PORTAL.war\crm
   - For IBM WebSphere: <*PS_CFG_HOME*>\webserv\<*DOMAIN_NAME*>\installedApps\< *DOMAIN_NAME*>NodeCell\<*DOMAIN_NAME*>.ear\PORTAL.war\crm
7. Restart the PeopleSoft Pure Internet Architecture server.

Task 3-16: Setting Up Profiles

This section discusses:

- Setting Up Automatic Numbering for Profiles
- Setting Non English Based Reserved Word

Task 3-16-1: Setting Up Automatic Numbering for Profiles

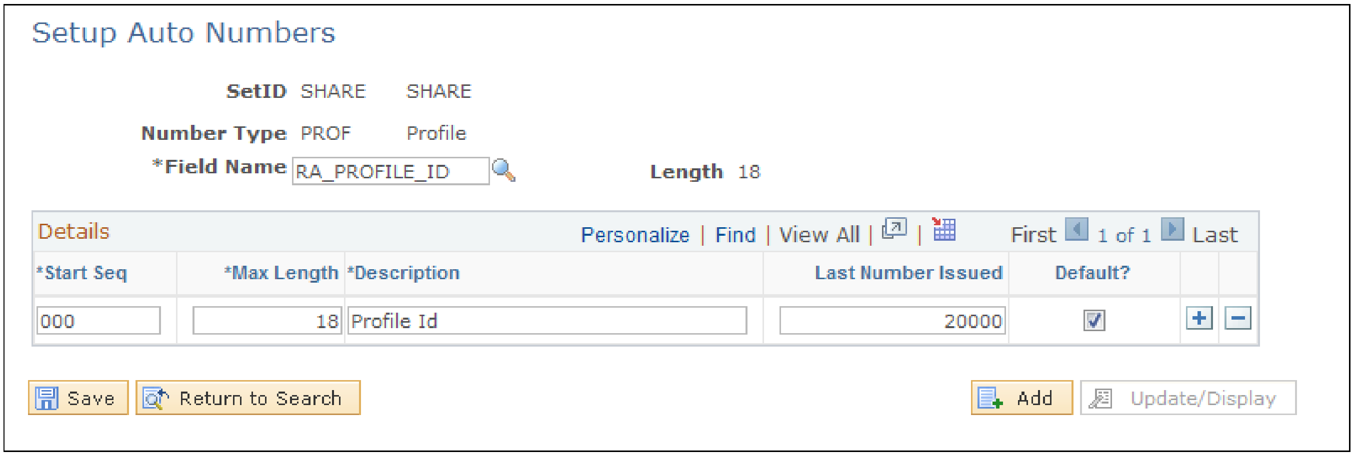
Define the automatic number initial value for profiles to ensure that Oracle can deliver system profiles in future releases.

To set up automatic numbering for profiles:

1. Select Set Up CRM, Common Definitions, Codes and Auto Numbering, Automatic Numbering.
2. Search for a row using these search parameters:

   SetID field set to *SHARE* and Number Type field set to *Profile.*
3. If no row matches, then click Add a New Value. If a row matches, open it.
4. Enter or verify the settings, as shown in the following example, and then click Save.

Note. If the existing value is greater than 20,000, retain the existing value without changes.



Profile Automatic Number page

Task 3-16-2: Setting Non English Based Reserved Word

If the base language for the PeopleSoft CRM database is a language other then English, do the following:

1. Run the PeopleSoft Data Mover Script *resetreservedwords.dms* in PeopleSoft Data Mover.
2. Run the Application Engine program RA_PROF_CACH from PeopleSoft Application Designer, to refresh the Application profile cache.
3. Sign in to PeopleSoft Pure Internet Architecture and manually open and then immediately save each document in the Demo database.

   Note. This step applies only to Demo databases.

4. Stop and restart the PeopleSoft Application Server and clear the server cache.
5. Stop and restart the DES.
6. If the name of any of the profile fields *(Individual.People.Role Type*, *Individual.People.Do Not Email*, and *Individual.People.Organization Role Type)* were modified and the profile reactivated, you must update the configuration parameters as follows:
   a. Select Set Up CRM, Product Related, Online Marketing, Setting.
   b. Change the value of the *doNotEMailProfileElementName* parameter to the value of the *Individual.People.Do Not Email* parameter.
   c. Change the value of the *roleTypeIdProfileElementName* parameter to the value of the *Individual.People.Role Type* parameter.
   d. Change the value of the *orgRoleTypeIdProfileElementName* parameter to the value of the *Individual.People.Organization Role Type* parameter.
   e. Click Save.

Task 3-17: Tuning the System (Optional)

This section discusses:

- Improving PeopleSoft OLM Transaction Performance

- Starting the Daily Survey Report Data Purge
- Checking Heap Size for Java Virtual Machine on DES

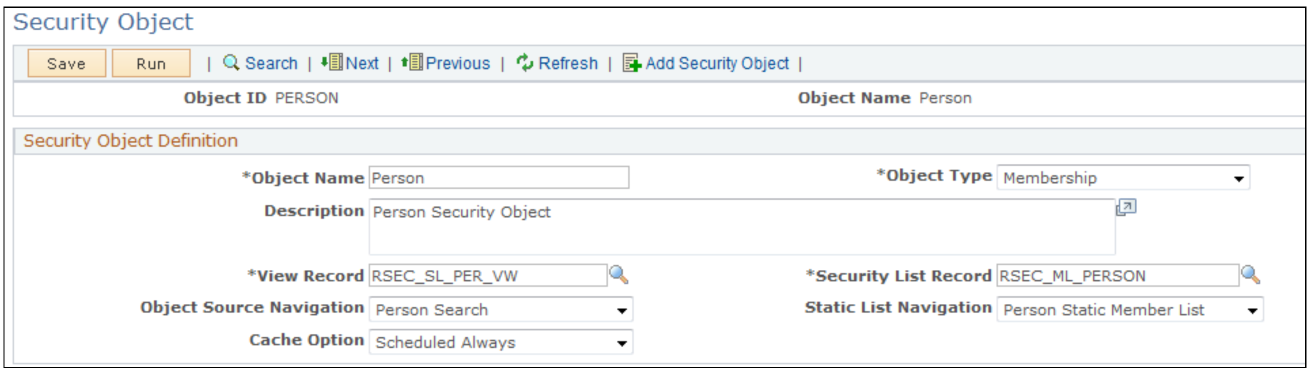
Task 3-17-1: Improving PeopleSoft OLM Transaction Performance

To allow the PeopleSoft OLM inserts to perform properly, you must set the security of the Person object to *Scheduled Always.*

Note. Complete this task if you plan to run the PeopleSoft Online Marketing (OLM) and Student Administration (SA) integration demo dialogs.

To set the security of the Person object:

1. Select Set Up CRM, Security, CRM Application Security, Security Object.
2. Search for the object ID *PERSON.*
3. In the Cache Option field, select *Scheduled Always,* as shown in the following example:



Security Object page

4. Click Save.

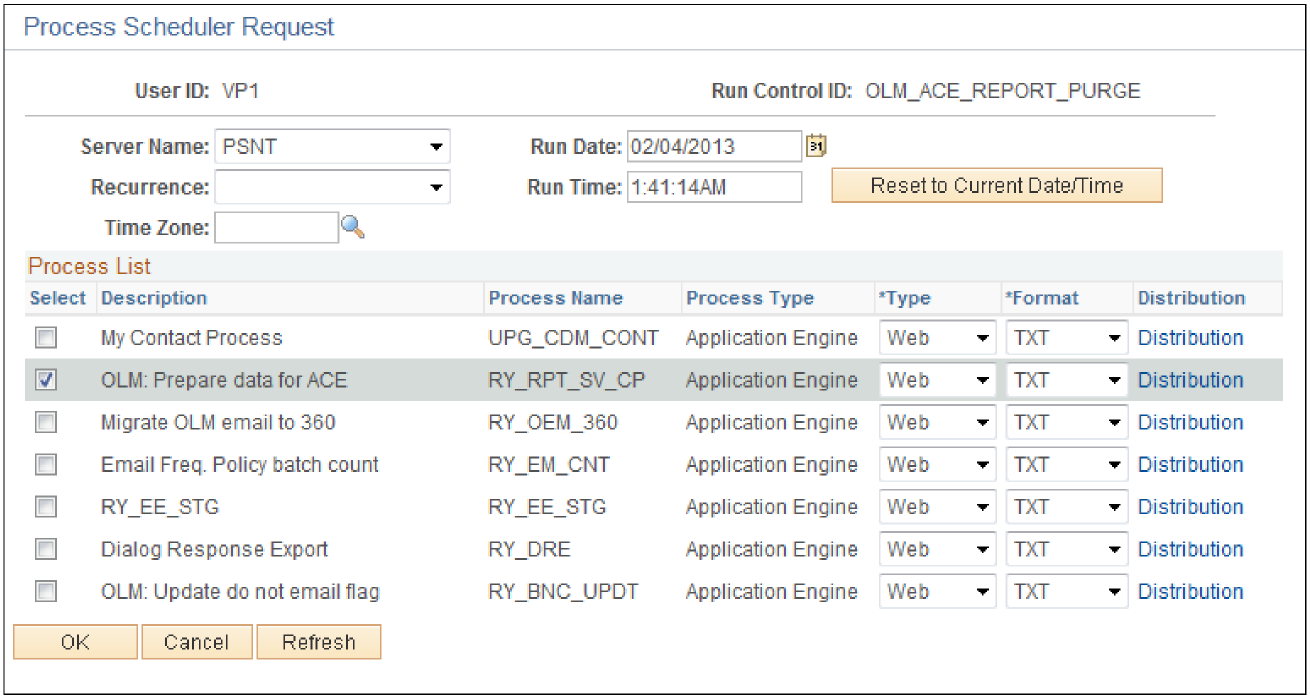
Task 3-17-2: Starting the Daily Survey Report Data Purge

Generating Survey ACE reports increases the data volume in the report table and can affect your system performance. Starting a daily report data purge process helps to maximize system performance for Survey ACE report generation.

To start the daily survey report data purge process:

1. Select PeopleTools, Process Scheduler, System Process Requests.
2. Create a new Run Control ID *OLM_ACE_REPORT_PURGE.*
3. Click Run.

4. Under Process Name, find *RY_RPT_SV_CP* and select the check box for that row, as shown in the following example:



Process Scheduler Request page

5. Click OK.

Task 3-17-3: Checking Heap Size for Java Virtual Machine on DES

This section discusses:

- Understanding Memory Allocation for the DES
- Checking DES Java Options for DES on Oracle WebLogic
- Checking DES Java Options for DES on IBM WebSphere

Understanding Memory Allocation for the DES

You must allocate an appropriate amount of memory based on DES usage.

Verify that *-Xms32m -Xmx512m -XX:MaxPermSize=512m* is specified in the DES JAVA options.

Checking DES Java Options for DES on Oracle WebLogic

To check the DES Java options for DES on the Oracle WebLogic Server:

1. Open the DES *SetEnv* file and check the Java options.
2. Check the value of SET JAVA_OPTIONS_WIN32=.
3. If *-Xms32m -Xmx300m -XX:MaxPermSize=128m* does not appear, add it and save the file.

Checking DES Java Options for DES on IBM WebSphere

To check the DES Java options for DES on an IBM WebSphere Server:

1. If Heapdumps and JavaCore dumps are being generated in IBM WebSphere in the *WebSphereRoot/*AppServer directory, increasing the *maxHeapSize* to *512* megabytes may help.

   Increase the *maxHeapSize* as shown:

   ```
   <WebSphereRoot>\config\cells\<Nodename>\nodes\<Nodename>\servers⇒
   \<omkserver>⇒
   \server.xml
    has following...the maxHeapSize is in Megabytes
   <jvmEntries XMI:id="JavaVirtualMachine_1"
    verboseModeClass="false"
   verboseModeGarbageCollection="false"
   verboseModeJNI="false"
   initialHeapSize="0"
   maximumHeapSize="256"
   runHProf="false"
   hprofArguments=""
   debugMode="false"
   debugArgs="-DJava.compiler=NONE -Xdebug -Xnoagent -Xrunjdwp:transport=⇒
   dt_⇒
   socket,server=y,suspend=n,address=7777"
   genericJvmArguments="">
   ...
    </jvmEntries>
   ```

2. After you modify the Java options, restart the DES.

Chapter 4

Installing PeopleSoft Order Capture Self-Service

This chapter discusses:

- Understanding PeopleSoft Order Capture SelfService
- Understanding the Guest User Role
- Understanding the Homepage URL
- Defining the Guest User
- Disabling the New Window URL

Understanding PeopleSoft Order Capture SelfService

This chapter provides instructions for the installation and setup of Oracle's PeopleSoft Order Capture Self-Service (OCSS) 9.2 with PeopleSoft Pure Internet Architecture. These instructions assume that you have already installed and configured a PeopleSoft CRM 9.2 database following the instructions that are provided earlier in this guide.

See the chapter "Installing PeopleSoft CRM 9.2 Applications," in this installation guide.

Note. Oracle recommends that you consult the PeopleSoft CRM 9.2 Product-to- Index found on My Oracle Support, to determine which PeopleSoft Online Help (PeopleBooks) you should include in your installation for the PeopleSoft CRM products that you are implementing.

PeopleSoft OCSS is an externally facing application; therefore Oracle recommends that you implement PeopleSoft OCSS on separate web and application servers from your other internally facing PeopleSoft applications. This provides improved performance, increased security, and minimizes downtime for your website.

See Also

PeopleSoft PeopleTools Installation Guide, for your database platform.

PeopleTools: System and Server Administration

Understanding the Guest User Role

PeopleSoft OCSS does not use the standard PeopleSoft PeopleTools sign-on screen. Instead, all visitors to your site are automatically signed in with a default user ID of your choice (referred to as the *guest* user for the remainder of this chapter). The guest user ID determines the default language and business unit for your site. You must define and assign the following guest user roles:

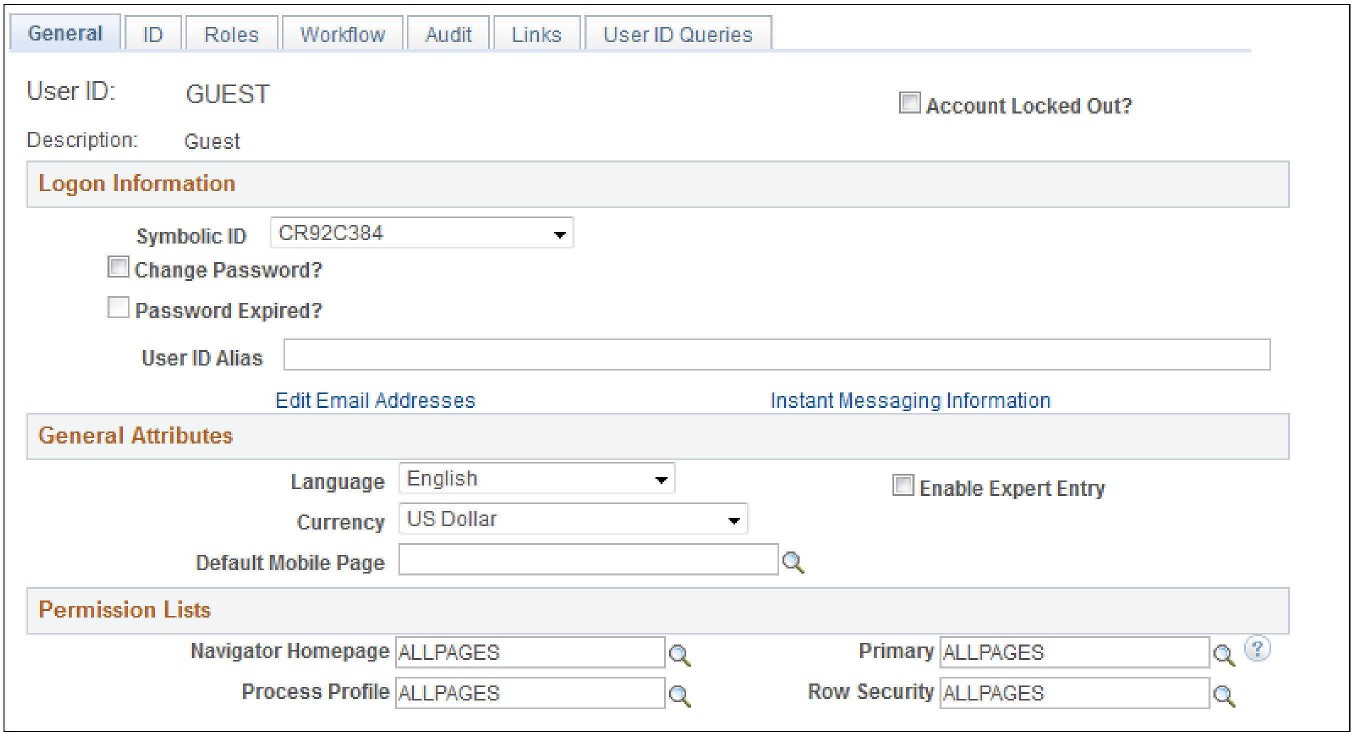
- Guest

- PeopleSoft Guest

Oracle delivers a sample *GUEST* user profile as an example. You can use the example to understand how to set up a guest user correctly, and clone the profile as necessary. The guest user definition determines the default language and business unit in use on your site.

To view the sample guest user profile, select PeopleTools, Security, User Profiles.

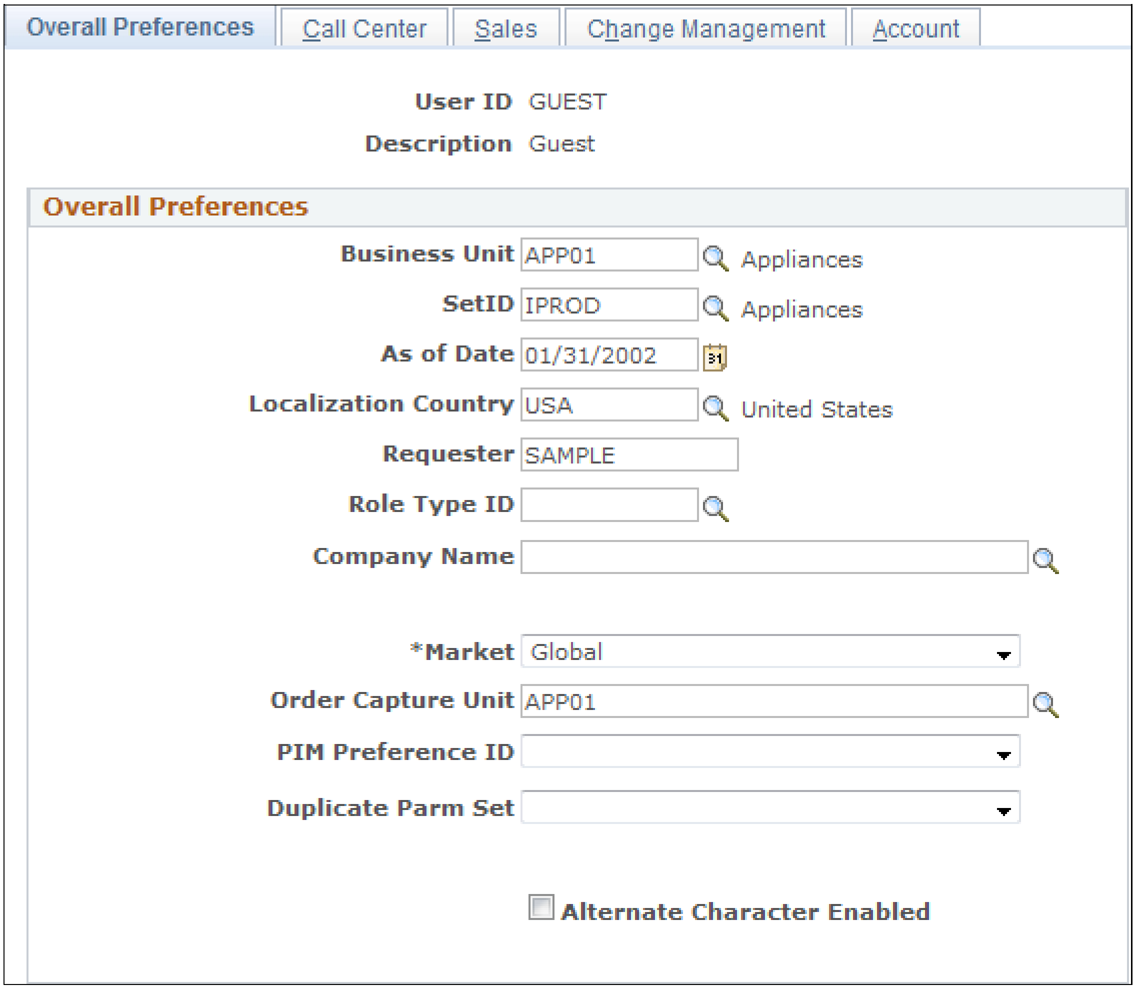
The User Profile - General page appears, as shown in the following example:



User Profile page: General tab

To define the business unit, select Set Up CRM, Security, User Preferences.

The Overall Preferences page appears, as shown in the following example:



Overall Preferences page

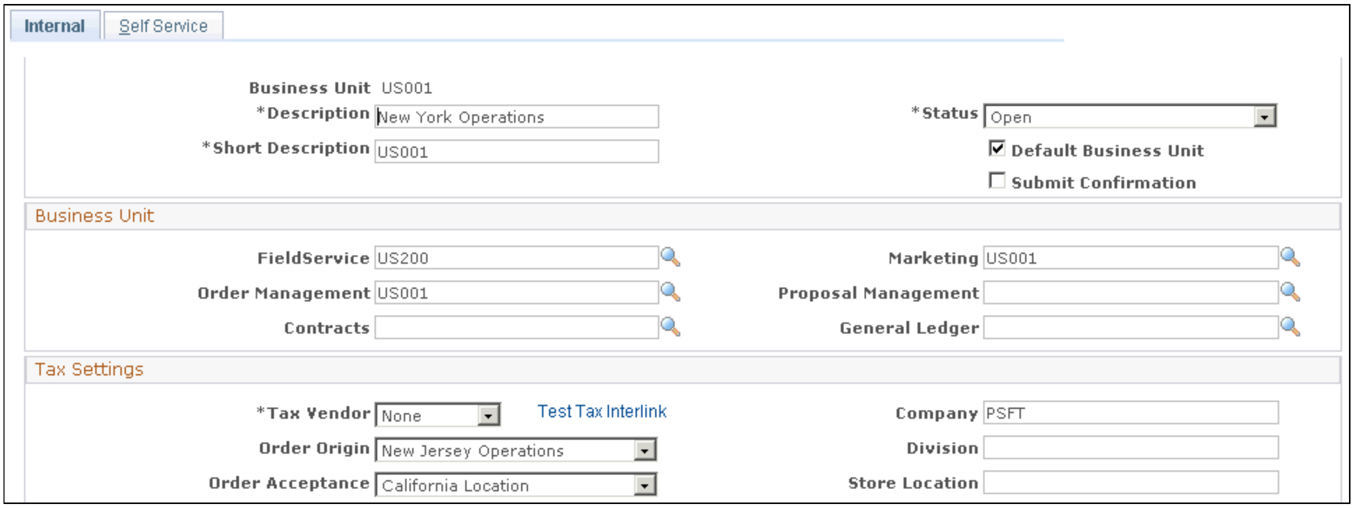
This business unit must be a valid PeopleSoft Order Capture (OC) business unit.

If no business unit is defined on the Overall Preferences page, the default business unit is determined by using the Default Business Unit option set on the Order Capture Business Unit definition page.

To define or view PeopleSoft Order Capture business units:

1. Select Setup CRM, Business Unit Related, Order Capture Definition.
2. Verify that your guest user is set up to meet your business needs.

   The following example shows the Internal page displaying the default business unit:



Internal business unit page

See *PeopleSoft CRM: Application Fundamentals*" Setting Up Security and User Preferences."

Understanding the Homepage URL

The URL of your PeopleSoft Order Capture Self-Service (OCSS) homepage depends on a number of factors. The following is a breakdown of the components of the URL:

```
http://<ServerName>/psp/<Site>/<portal>/<Node>/h/?tab=DEFAULT
```

- *Server Name*— This is your server name (for example, www.mycompany.com).
- *Site*— This is your server name (for example, www.mycompany.com).
- *Node*— This is the local portal node.

For example, if you accept all of the defaults when you are installing PeopleSoft OCSS, your URL would be:

```
http://www.servername.com/psp/ps/CUSTOMER/PSFT_CR/h/?tab=DEFAULT
```

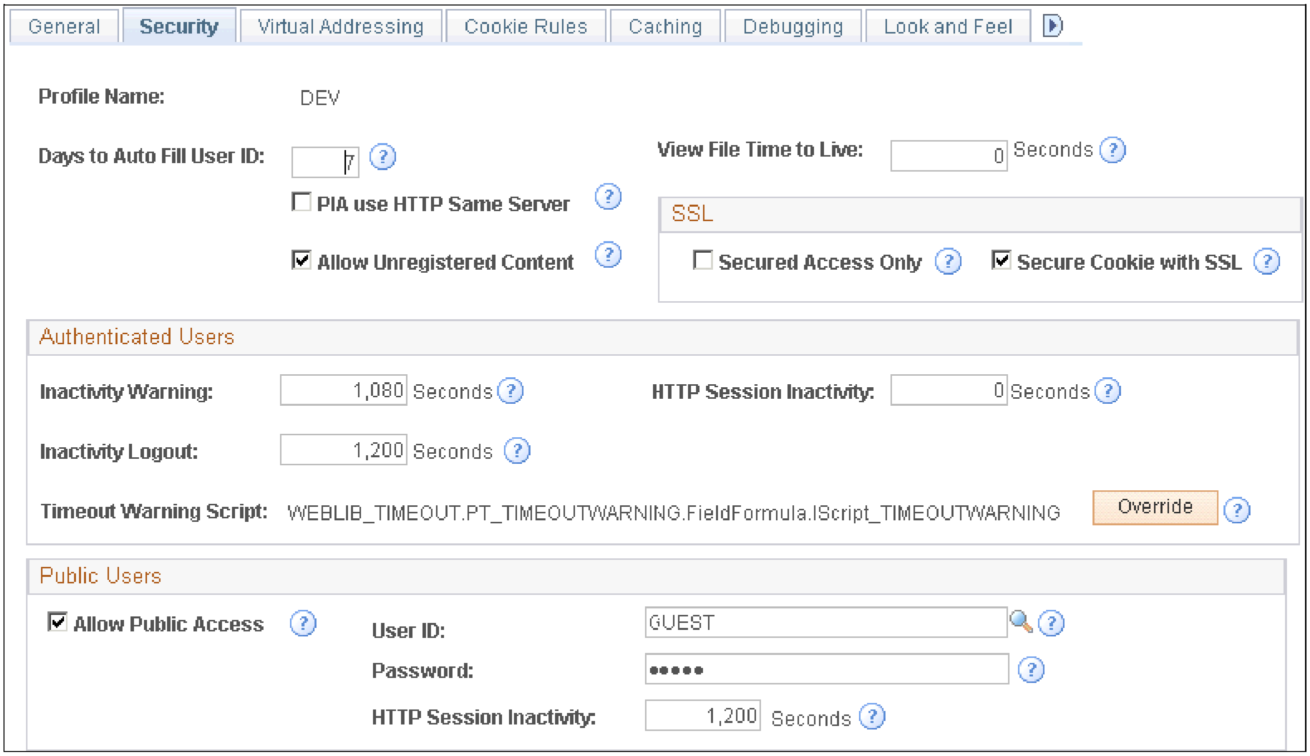
Task 4-1: Defining the Guest User

You can define the guest user in the *configuration.properties* file:

1. Select PeopleTools, Web Profile, Web Profile Configuration.
2. Open the active web profile definition based on your Setup.

   For example: PROD or DEV.
3. Select the Security tab and locate the Public Users group box.
4. Select the Allow Public Access check box.

5. Enter *GUEST* in the User ID field and in the Password field, as shown in the following example:



Web Profile Configuration: Security page

6. Click Save.

Task 4-2: Disabling the New Window URL

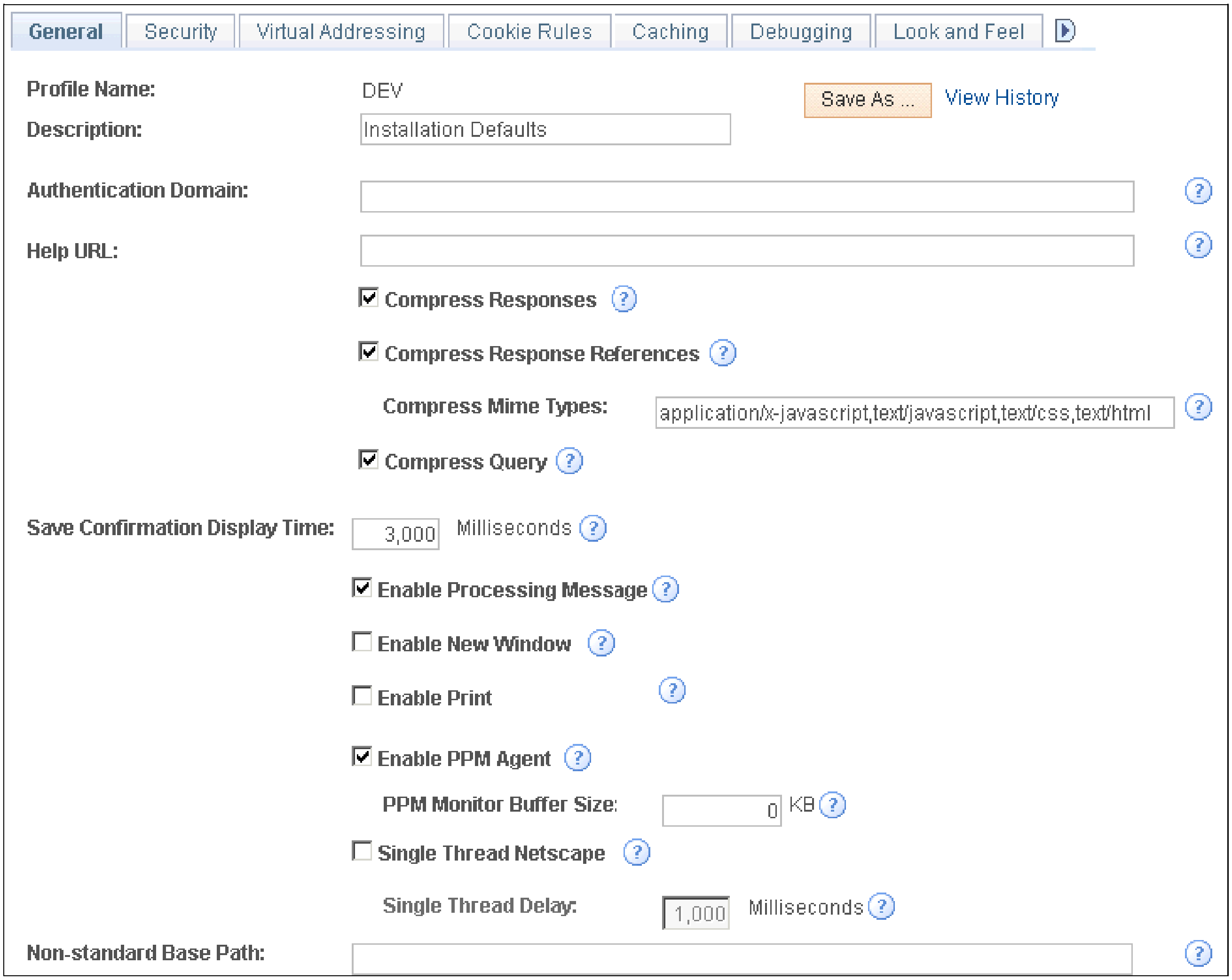
Disable the New Window link provided by default on every PeopleSoft Pure Internet Architecture page. If present, this link creates a potential security hole in your application.

To disable the New Window link and modify the web server *configuration.properties* file:

1. Select PeopleTools, Web Profile, Web Profile Configuration.
2. Open the active web profile definition based on your Setup.

   For example: PROD or DEV.

3. Clear the Enable New Window check box, as shown in the following example:



Web Profile Configuration: General page

4. Click Save.

Chapter 5

Integrating PeopleSoft Order Capture Self-Service

This chapter discusses:

- Understanding Additional Component Integration
- Integrating the PeopleSoft Freight Calculation
- Setting Up Business Interlink Architecture for Tax
- Installing ADP Taxware and Vertex Databases
- Setting Up PeopleSoft OC with ADP Taxware WorldTax

Understanding Additional Component Integration

This chapter provides instructions for the integration and setup of additional component software with PeopleSoft Order Capture (OC) and Order Capture Self-Service (OCSS).

Note. Before proceeding with your installation consult My Oracle Support, to ensure that you have the latest version of the following documents: PeopleSoft CRM 9.2 Installation Guide, PeopleSoft PeopleTools Installation guide for your database platform, and PeopleSoft PeopleTools 8.55 Online Help (PeopleBooks).

Note. Additionally, consult the PeopleSoft CRM 9.2 Product-to- PeopleSoft Online Help (PeopleBooks) Index found on My Oracle Support, to determine which PeopleSoft Online Help (PeopleBooks) you should include in your installation for the PeopleSoft CRM products that you are implementing.

Task 5-1: Integrating the PeopleSoft Freight Calculation

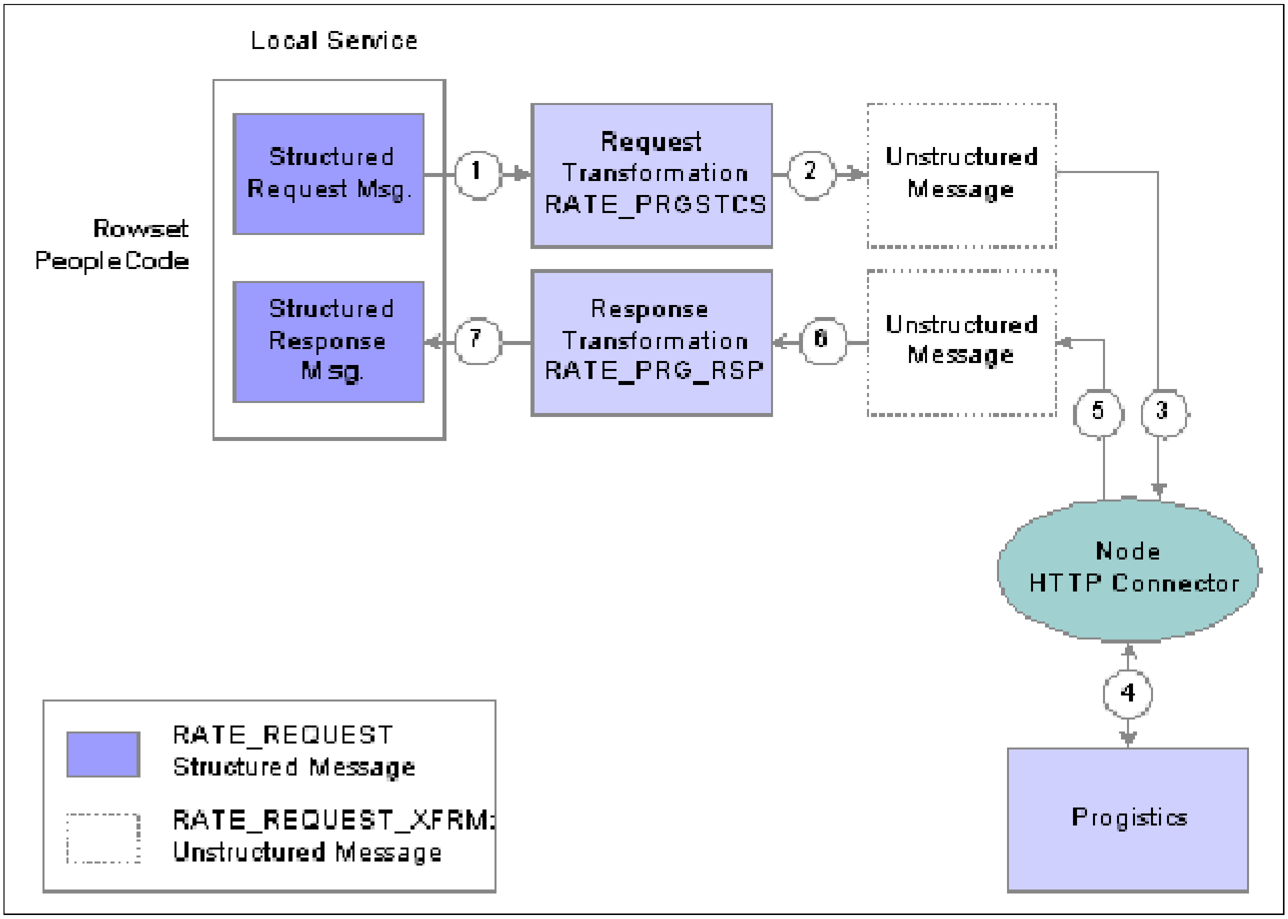
This section discusses:

- Understanding PeopleSoft Freight Calculation
- Setting Up PeopleSoft Freight Calculation
- Testing the PeopleSoft Freight Calculation

Understanding PeopleSoft Freight Calculation

PeopleSoft products integrate with the Progistics ConnectShip application for freight calculation. Application messaging is used to communicate to the Progistics freight server. This task discusses how to set up the freight calculation integration.

The following diagram represents the message flow between PeopleSoft applications and the Progistics ConnectShip application:



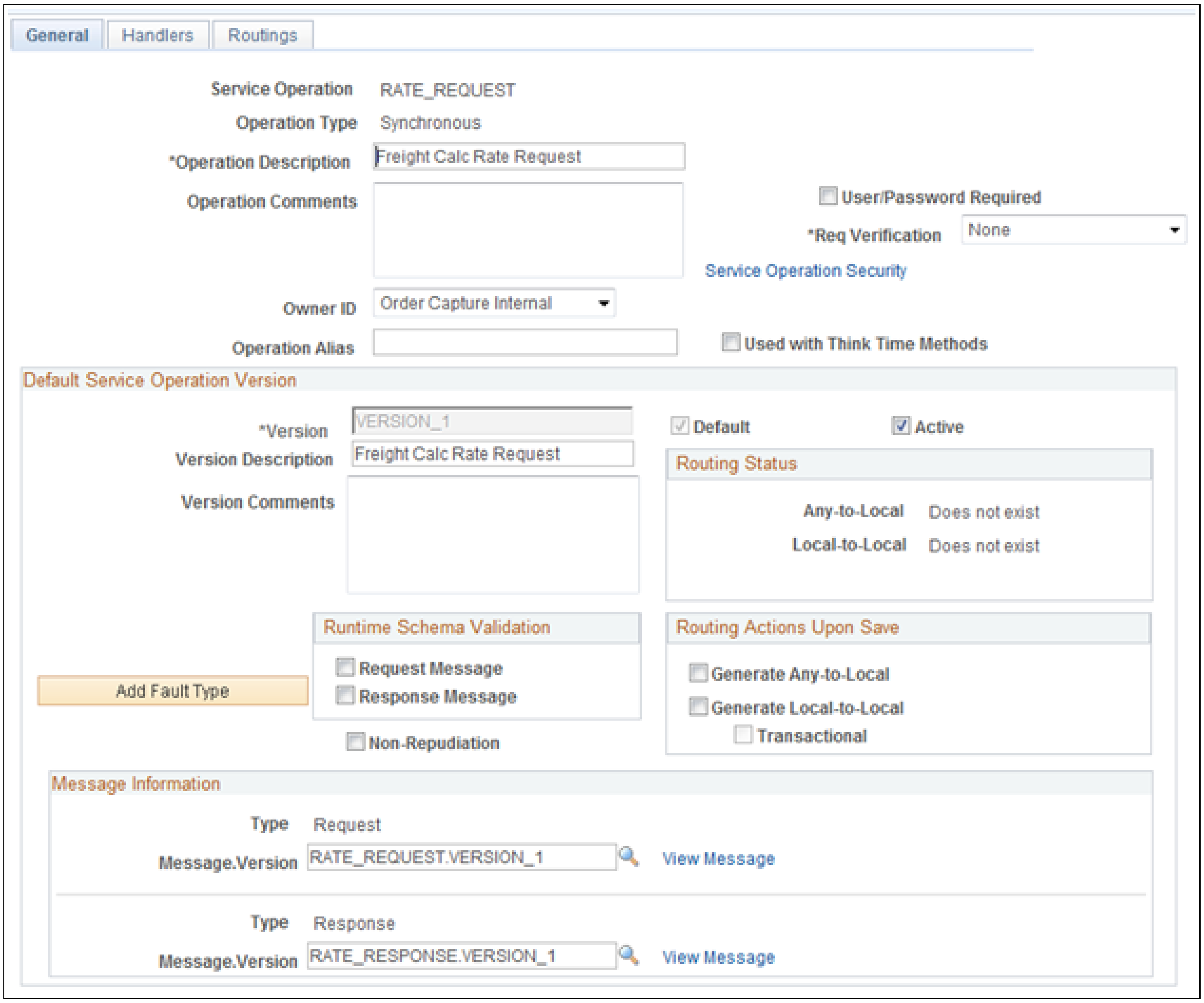
Message flow between PeopleSoft applications and the Progistics ConnectShip application

Task 5-1-1: Setting Up PeopleSoft Freight Calculation

To set up PeopleSoft freight calculation:

1. Select PeopleTools, Integration Broker, Integration Setup, Service Operations.
2. Search for the RATE_REQUEST service operation.

3. On the Service Operation - General page, select the Active check box, as shown in the following example:

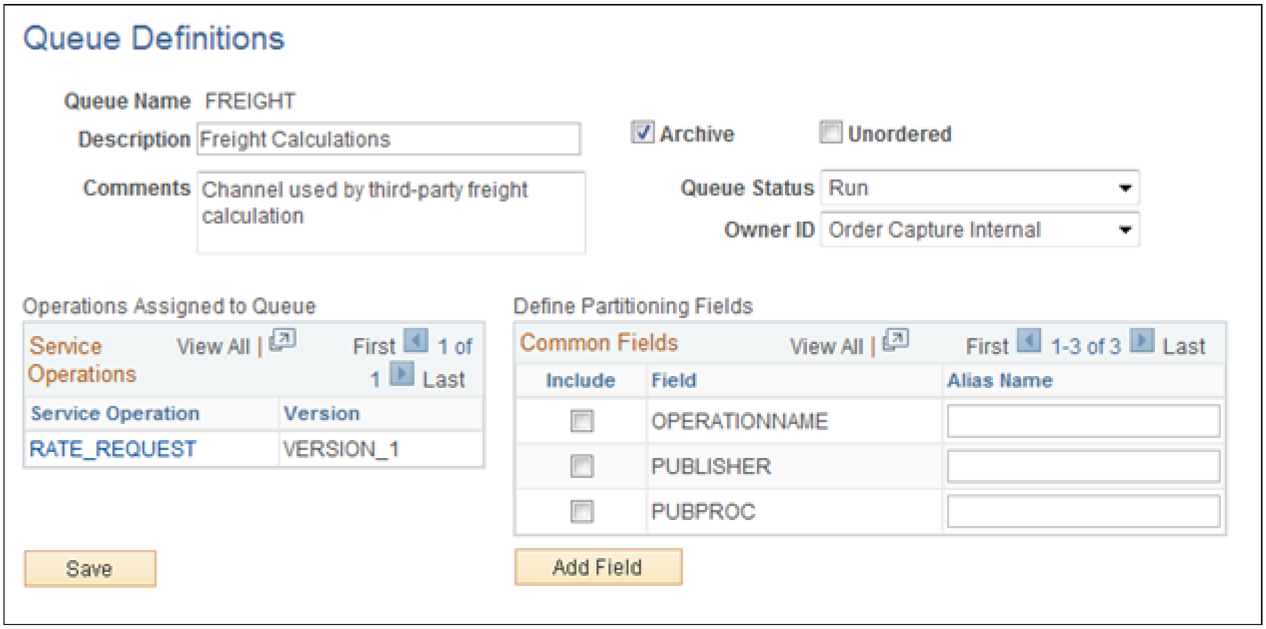


Service Operation: General page

4. Click Save.

5. Set the FREIGHT queue to *Run.*

   Select PeopleTools, Integration Broker, Integration Setup, Queues and search for the queue name FREIGHT. On the Queue Definitions page, set Queue Status to *Run*, as shown in the following example:

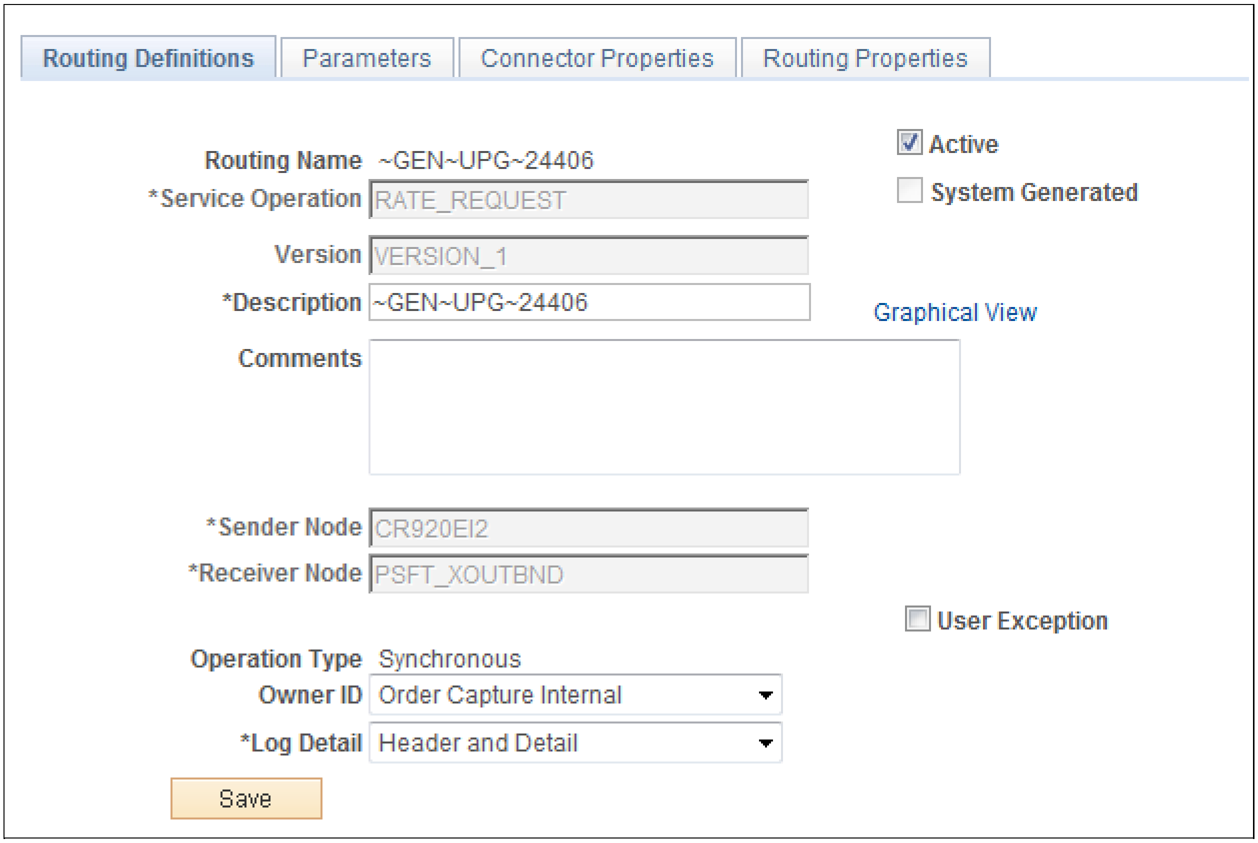


Queue Definitions page

6. Click Save.

7. Activate the RATE_REQUEST routing.

   Select PeopleTools, Integration Broker, Integration Setup, Routings and enter *RATE_REQUEST* in the Service Operation search field. On the Routing Definitions page, select the Active check box, as shown in the following example:



Routing Definitions page

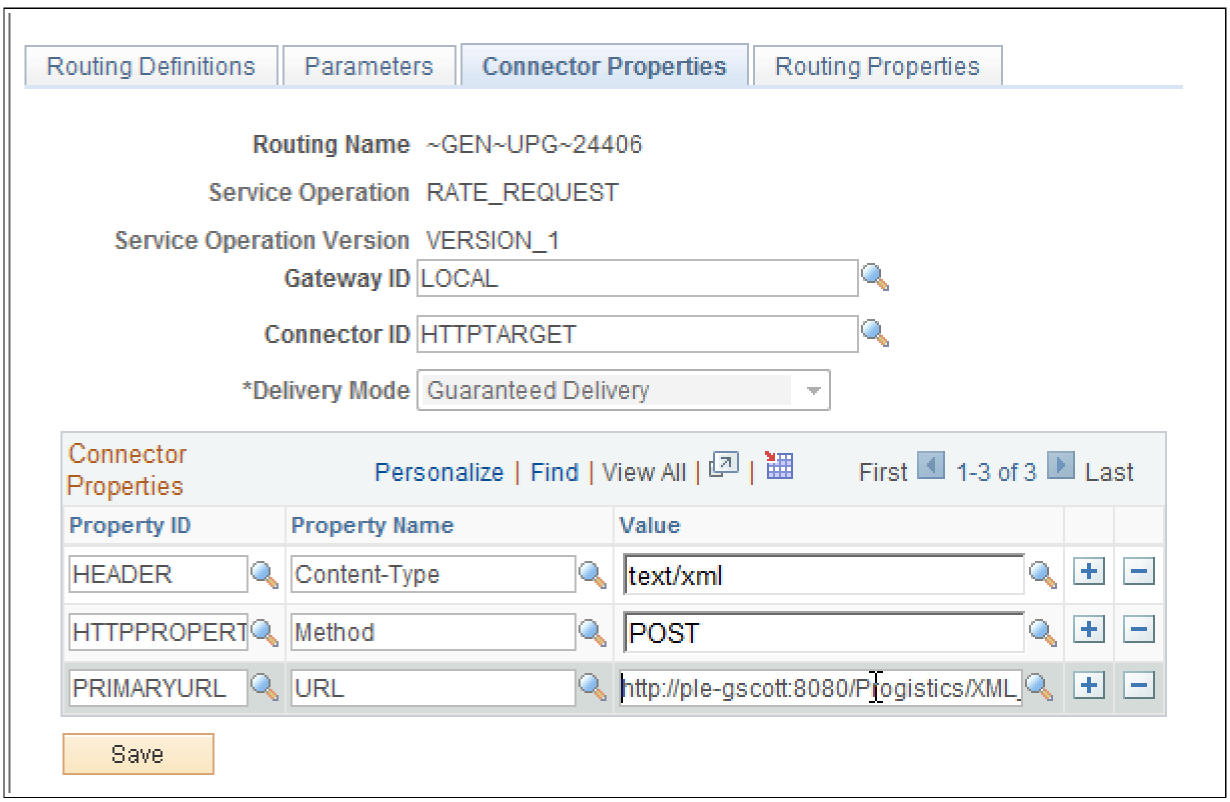
   Optionally, you can set the Log Detail field to *Header and Details* to facilitate troubleshooting of the freight calculation setup.

8. Set up the connector properties for the freight server. Click the Connector Properties tab to access the Connector Properties page.

9. On the Connector Properties page, enter rows with the field values, as listed in the following table:

Property ID	**Property Name**	**Value**
Header	Content-Type	text/xml
HTTPPROPERTY	Method	POST
PRIMARYURL	URL	ENTER the URL for the freight server. **Note.** The URL format will be similar to http://<machine>/Progistics/XML_Processor/Server/XMLProcDLL.asp. If you are not using port 80 on the progistics server, indicate the port in this the url, for example, <machine>:8080 .

The following shows an example of the Connector Properties page with the values entered from the table:



Connector Properties page

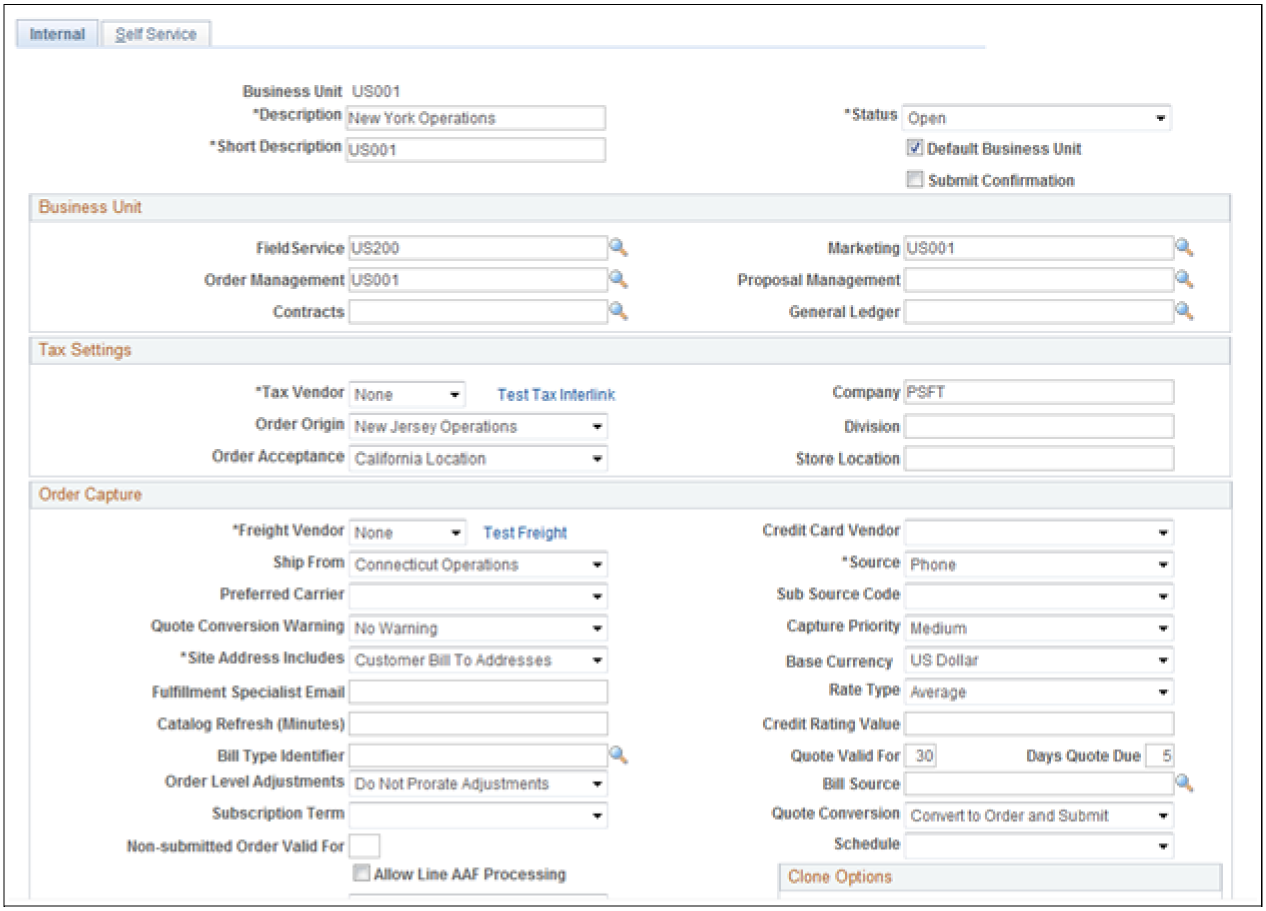
Task 5-1-2: Testing the PeopleSoft Freight Calculation

To test PeopleSoft Freight Calculations:

Note. This test uses UPS Ground as the carrier (TANDATA-UPS.UPS.GND). If you have not configured UPS Ground in Progistics for your business unit, the test can not calculate freight amounts.

1. Select Setup CRM, Business Unit Related, Order Capture Definition.

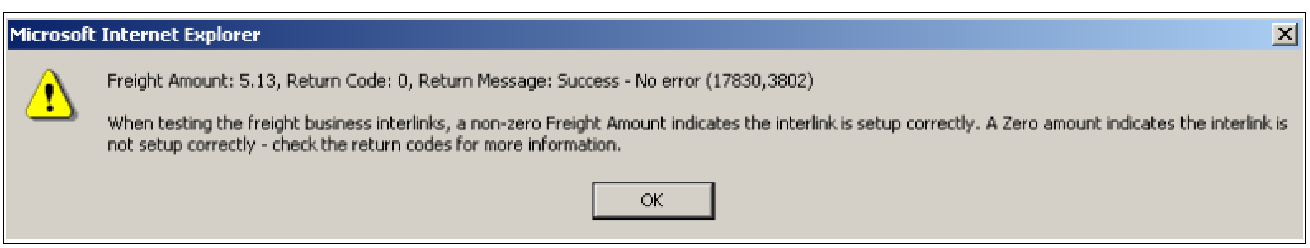
   This opens the Progistics Business Unit definition set up within PeopleSoft CRM, as shown in the following example:



Order Capture Definition - Internal page (partial)

2. Click the Test Freight link.

   A message box displays with the results of your test, as shown in the following example:



Freight Amount Success Message

   If the Freight Amount returned is not zero, you are set up correctly.

3. Troubleshoot setup issues.

   If a zero freight amount is returned, check the Return Code and Return Message for assistance in determining what is not set up correctly. If you enabled Header and Details logging on the Routing Definitions page, you can also examine the synchronous message sent to Progistics during this test. To view the synchronous message details, select PeopleTools, Integration Broker, Service Operations Monitor, Monitoring, Synchronous Details.

Task 5-2: Setting Up Business Interlink Architecture for Tax

This section discusses:

- Understanding the Business Interlink Setup
- Selecting Vendor Plug-in Locations
- Editing the Application Server Configuration File
- Selecting Vendor DLLs and Shared Library Locations

Understanding the Business Interlink Setup

PeopleSoft OC delivers two business interlink objects to interact with Vertex and ADP Taxware for both online and batch transactions: VERTEX_CALCTAX and TAXWARE_CALCTAX.

Note. PeopleSoft Business Interlinks is a deprecated product. The Business Interlinks class currently exists for backward compatibility only. For new integrations, use PeopleSoft Integration Broker instead.

All interlink objects must point to an interlink plug-in to function. As part of each interlink object setup, the parameter URL points to the interlink plug-in used to process transactions. For Vertex and ADP Taxware, this is set to point by default to the Microsoft Windows dynamic link library delivered to PeopleSoft CRM customers by each tax vendor as follows:

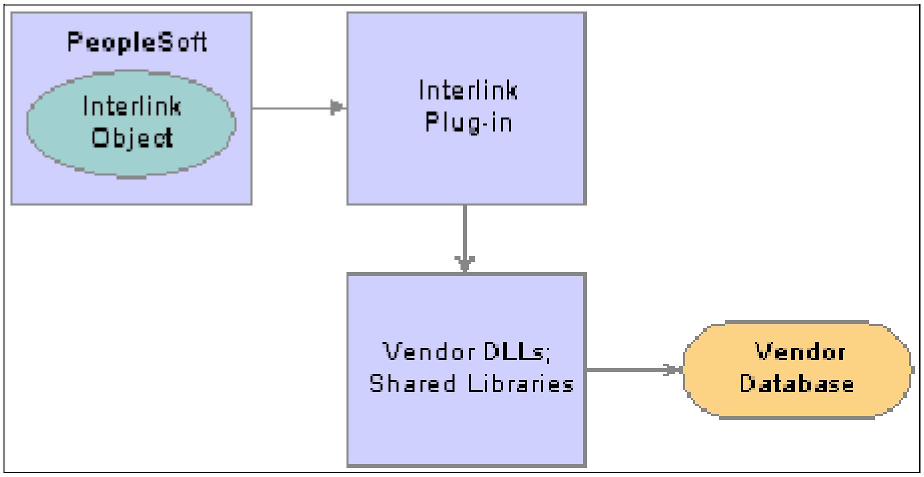
- For Vertex, this objects points to file://psbivrtx.dll.
- For ADP Taxware, the object points to file://pstxwint.dll.

Important! For UNIX, the 64 bit plug-ins are required. Contact Vertex or ADP Taxware directly to obtain the 64 bit plug-ins required for integration with PeopleSoft CRM and Order Capture.

When running in a UNIX environment, the interlink architecture converts the name from a DLL to a UNIX shared library/shared object. This is true even though the interlink object definition points to a Windows DLL. The interlink architecture adds the prefix "lib" to the name, and then adds the appropriate extension for each particular UNIX platform to replace the DLL extension.

For example, the interlink architecture changes the Windows DLL file, psbivrtx.dll, to libpsbivrtx.sl prior to each call to the interlink plug-in.

The following diagram illustrates the interlink architecture flow:



Interlink Architecture flow

In the Interlink Architecture Flow diagram, the PeopleSoft box can represent a 2-tier client (now only used to run the PeopleSoft Application Designer), the application server, or the Process Scheduler server.

You can only perform 2-tier testing on a Microsoft Windows client running the PeopleSoft Application Designer. Use the Application Designer to open the interlink object definition and run the Interlink Tester.

Perform the setup instructions in the following tasks on each computer that you plan to use as an application server.

Selecting Vendor Plug-in Locations

By default, PeopleSoft CRM looks for the interlink plug in the directories listed in the following table:

Location	**Mode**
<*PS_APP_HOME*>\bin\client\winx86\InterfaceDrivers	For 2-tier testing
<*PS_APP_HOME*>\bin\server\<OS>\InterfaceDrivers where "OS" is your server's operating system	For the application server

These directories contain the XML script files that describe the interlink plug-in structure. The directories are also used to create the delivered interlink objects in PeopleSoft CRM. The XML script files have the same name as the windows DLL plug-in, except that the file extension "XML" is used instead of the "DLL" file extension.

When you purchase the Vertex software or the ADP Taxware software, each vendor provides the appropriate interlink plug-in that you must place in these directories. Although the copy under <*PS_APP_HOME* >\bin\client\winx86\InterfaceDrivers is not used in production, you can use this copy when testing initial connectivity in 2-tier mode by way of the interlink tester. The application server uses the plug-in copy in < *PS_APP_HOME*>\bin\server\<OS>\InterfaceDrivers.

For 2-tier testing, you can change the default interlink plug-in directory location in the Configuration Manager.

Editing the Application Server Configuration File

The application server configuration file has the following entry. Use this entry to change the plug-in default location:

```
[PSTOOLS]
=============================================================
; General settings for PSTOOLS
=============================================================
;Uncomment this to specify an alternate directory to search for Interface⇒
 Drivers.
;Business Interlink Driver Directory=
```

Note. If you are using or plan to use the Bulk Order feature of PeopleSoft OC, your Process Scheduler calculates the taxes for child orders. You must perform the same plug-in configuration on your Process Scheduler as you do for the Application Server.

Note. PeopleSoft Business Interlinks is a deprecated product. The Business Interlinks class currently exists for backward compatibility only. For new integrations, use PeopleSoft Integration Broker instead.

Task 5-2-1: Selecting Vendor DLLs and Shared Library Locations

Vendor-supplied DLLs or shared libraries can be placed in the following locations for each respective operating system:

- For Microsoft Windows:

  Typically, the vendor DLLs should be placed in the same directory as the PeopleSoft CRM main executable file, as listed in the following table:

Location	Mode
<*PS_HOME*>\bin\client\winx86	For 2-tier testing
<*PS_HOME*>\bin\server\winx86	For Application Server and Process Scheduler Server

  Vendor DLLs can also be placed in any directory that is in the PATH environment variable, which is accessible from the application server and the Process Scheduler server. This is also true when setting up a distributed interlink architecture.

- For UNIX:

  Typically, the vendor libraries should be placed in the same directory with the other PeopleSoft libraries. This directory is usually one of the directories pointed to by the LIBPATH environment variable that is set up in the psconfig.sh UNIX shell script: <*PS_HOME*>/bin.

  Note. If the system cannot find the plug-in DLL and shared library or vendor supplied DLL and shared library, an error displays.

Task 5-3: Installing ADP Taxware and Vertex Databases

This section discusses:

- Understanding the ADP Taxware and Vertex Install
- Installing ADP Taxware
- Installing Vertex

Understanding the ADP Taxware and Vertex Install

Vertex Software and ADP Taxware provide installation instructions for their products for different operating systems and database formats. These can be as simple as creating ISAM files or as complex as creating and populating relational database tables. Check with your vendor contact for supported operating system platforms, database types and installation instructions.

Note. After you install the vendor software, test the software independent of the PeopleSoft CRM environment. Each tax vendor provides utilities for testing their software in this way. You must also provide a way for the vendor DLLs and shared libraries to find the location of the vendor database.

Task 5-3-1: Installing ADP Taxware

To install ADP Taxware on the following operating systems:

- For Microsoft Windows:

  ADP Taxware provides the following three INI files that you must set up to point to the location of the ADP Taxware database directories:

  - AVPTAX.INI
  - AVPSTEP.INI
  - AVPZIP.INI

    Place all three INI files into the WINNT directory. Each file contains a set of pointer variables that should point to the location where the ADP Taxware database files were placed during the installation of the ADP Taxware software.
- For UNIX:

  You must set up several environment variables in the psconfig.sh script of the PeopleSoft user who starts the application server and the Process Scheduler server. Define these variables and make them available to both the application server process and the Process Scheduler process. Directories should correspond to the location where you placed the ADP Taxware database files during the installation of the ADP Taxware software.

Task 5-3-2: Installing Vertex

To install Vertex on these operating systems, do the following:

- For Microsoft Windows:

  Vertex provides a registry file to populate entries in the Microsoft Windows registry.
- For UNIX:

Vertex provides a configuration file called PSVTXCFG that contains similar entries to the files in an NT registry. This file must be accessible to the vendor supplied Shared libraries. Place this file in the same location as the shared libraries <*PS_HOME*>/lib. You can also place this file in any directory as long as an environment variable called PSVTXCFG is defined in psconfig.sh, and is set to point to the location of the configuration file. The psconfig.sh file must be for the PeopleSoft CRM user on the UNIX box that starts the application server and the Process Scheduler server. Define the variable for both the application server process and the Process Scheduler process so that the Vertex software can use it.

Note. PeopleSoft Business Interlinks is a deprecated product. The Business Interlinks class currently exists for backward compatibility only. For new integrations, use PeopleSoft Integration Broker instead.

Task 5-4: Setting Up PeopleSoft OC with ADP Taxware WorldTax

This section discusses:

- Understanding ADP Taxware WorldTax Integration
- Integrating PeopleSoft OC with ADP Taxware
- Testing the Integration

Understanding ADP Taxware WorldTax Integration

PeopleSoft Order Capture (OC) integrates with ADP Taxware WorldTax to calculate value-added tax (VAT). This integration utilizes PeopleSoft Business Interlink technology.

PeopleSoft OC makes a synchronous, XML-based call containing the order information (such as products, customers, pricing, and so on) to ADP Taxware WorldTax, which then calculates the appropriate VAT amount and returns it to PeopleSoft CRM. These VAT amounts are displayed on the order.

Note. PeopleSoft Business Interlinks is a deprecated product. The Business Interlinks class currently exists for backward compatibility only. For new integrations, use PeopleSoft Integration Broker instead.

Task 5-4-1: Integrating PeopleSoft OC with ADP Taxware

To integrate PeopleSoft Order Capture (OC) with ADP Taxware WorldTax:

1. Verify that ADP Taxware WorldTax, System 2.5 is installed and operating correctly.

   For information, refer to the UTL2-1-2.pdf on the ADP Taxware WorldTax CD for installation instructions.
2. Verify that the Sun Java environment is installed and running on your application server.
3. Ensure psinterlinks.jar is referenced in the CLASSPATH.

   Note. PeopleSoft Business Interlinks is a deprecated product. The Business Interlinks class currently exists for backward compatibility only. For new integrations, use PeopleSoft Integration Broker instead.

   ---

4. Copy taxcommon.class from ADP Taxware WorldTax system that you installed in your environment to your <*PS_APP_HOME*>\class directory.

   For more information, refer to the UTL2-1-2.pdf on the WorldTax CD for installation instructions.
5. Extract crm_psoci_worldtax.class from the clear case of your installation and copy it to the <*PS_APP_HOME* >\class directory.

This is the java class file developed by PeopleSoft to integrate with the ADP Taxware Worldtax system. Copy crm_psoci_worldtax.xml to the following two directories:

- <*PS_APP_HOME*>\bin\client\winx86\interfacedrivers
- <*PS_APP_HOME*>\bin\server\winx86\interfacedrivers

6. Configure the business interlink as a WebApp on IBM WebSphere.

Note. PeopleSoft Business Interlinks is a deprecated product. The Business Interlinks class currently exists for backward compatibility only. For new integrations, use PeopleSoft Integration Broker instead.

Task 5-4-2: Testing the Integration

After you integrate PeopleSoft OC with ADP Taxware, as instructed in the previous section, you can test the integration.

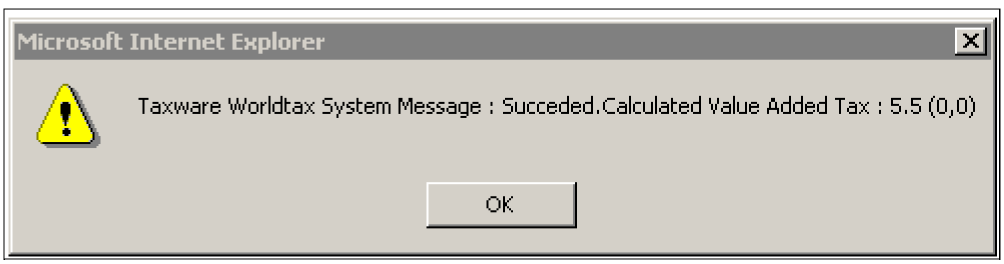
To test the business interlink:

Note. PeopleSoft Business Interlinks is a deprecated product. The Business Interlinks class currently exists for backward compatibility only. For new integrations, use PeopleSoft Integration Broker instead.

---

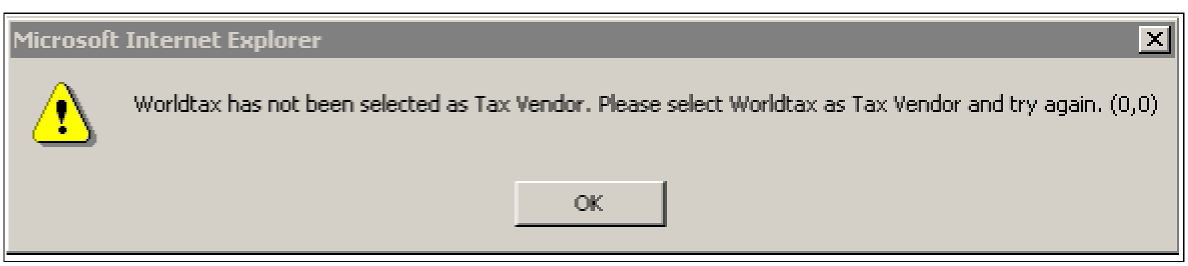
1. From the PeopleSoft CRM menu, select Set Up CRM, Business Unit Related, Order Capture Definition.
2. Select *WorldTax* from the Tax Vendor drop-down list box, and then click the Test WorldTax Interlink button.

   If the environment is set up correctly, the success message *Taxware Worldtax System Message: Succeded. Calculated Value Added Tax: 5.5* displays, as shown in the following example:



Taxware Worldtax success message

3. If you do not select *WorldTax* from the Tax Vendor drop-down list and click the Test Worldtax Interlink button, the error message *Worldtax has not been selected as Tax Vendor. Please select Worldtax as Tax Vendor and try again* displays, as shown in the following example:



Worldtax system error message

Chapter 6

Integrating PeopleSoft Customer Relationship Management 9.2 with Oracle E-Business Suite

This chapter discusses:

- Understanding PeopleSoft CRM and Oracle E-Business Suite Integration
- Prerequisites
- Integrating PeopleSoft CRM for Oracle EBS using Fullsync
- Integrating PeopleSoft CRM for Oracle EBS using Incremental Sync
- Integrating PeopleSoft CRM for Oracle EBS using PeopleSoft 360-Degree
- Setting Up Action Links
- Setting Up Basic Business Events Subscriptions
- Creating New Business Events to Indicate Target URLs
- Setting the Encryption Key
- Applying Patches for Incremental Sync
- EBS HCM Side Setup
- Setting Up PeopleSoft CRM for EBS
- Verifying Set Up Between PeopleSoft CRM and Oracle EBS

Understanding PeopleSoft CRM and Oracle E-Business Suite Integration

This chapter discusses the basic integration setup required in PeopleSoft Customer Relationship Management (CRM) for integration with Oracle E-Business Suite (EBS). This document does not contain details of the PeopleSoft integration framework. Tasks discussed in this document are based on the latest PeopleSoft PeopleTools release.

Three types of integration are involved when integrating PeopleSoft CRM and Oracle EBS:

- Data Synchronization to transfer relevant data from the Oracle EBS HR system to the PeopleSoft CRM system to create cases.

  This is performed in one of the following modes:

  - *Fullsync* mode: This mode copies the entire set of data from Oracle EBS.
  - *Incremental sync* mode: This mode only copies newly added or updated data.
- The PeopleSoft 360 Degree page.

The PeopleSoft 360 Degree page retrieves data in *synchronous* mode.

Prerequisites

For integration of PeopleSoft CRM and Oracle EBS, ensure that your system meets the following criteria:

1. You have installed and configured PeopleSoft PeopleTools 8.55 or higher.
2. You have installed and configured PeopleSoft Customer Relationship Management (CRM) 9.2 or higher.
3. Oracle E-Business Suite (EBS) Human Capital Management (HCM) - Build X1 or higher (the latest build available at the time of your install).
4. A dedicated Integration Broker.
5. All Service Operations and Messages set to Active.
6. WSDL must be published for all Services named (beginning with RC_EBS).
7. Oracle EBS_HR node configured to point to the Oracle EBS domain (the domain defined in the latest Oracle EBS HCM build).
8. You have access to the FTP location of the Oracle EBS Domain (where the files are created from the Full Sync process).
9. You have access to the Oracle EBS database (and you are able to use SQL Developer, SQLPlus, and so on).
10. Business Events discussion.
11. PeopleSoft 360-Degree Set Up.

Task 6-1: Integrating PeopleSoft CRM for Oracle EBS using Fullsync

This section discusses:

- Setting Up Service Operations for Fullsync
- Verifying Schemas for all Messages for Fullsync
- Configuring the Process Scheduler for Fullsync
- Locating the Fullsync Data File Folders
- Retrieving and Copying Fullsync Oracle EBS Data Files to the Process Scheduler

Task 6-1-1: Setting Up Service Operations for Fullsync

The fullsync process does not use integration set up. Instead, Fullsync mode uses Service Operations and Messages for coding efficiency.

To verify that all service operations are active:

1. Select PeopleTools, Integration Broker, Integration Setup, Service Operations.
2. Verify that the following Service Operations are available and set to *Active* in the PeopleSoft CRM system:
    - RC_EBS_DEPARTMENT_INC_SO
    - RC_EBS_JOBCODE_INC_SO
    - RC_EBS_LOCATION_INC_SO

- RC_EBS_PERSON_INC_SO
- RC_EBS_WORKFORCE_INC_SO
- JOBCODE_FULLSYNC
- PERSON_BASIC_FULLSYNC

Task 6-1-2: Verifying Schemas for all Messages for Fullsync

To verify that all messages have schemas defined:

1. Select PeopleTools, Integration Broker, Integration Setup, Messages.

   Open the message and click the Schema tab to access the Schema page.
2. Verify that the following messages have schemas defined:
   - RC_EBS_DEPARTMENT_INC, version 1.
   - RC_EBS_JOBCODE_INC, version 1.
   - RC_EBS_LOCATION_INC, version 1.
   - PERSON_BASIC_SYNC, Version 3.
   - WORKFORCE_SYNC, version 2.
3. If no schemas exist, do the following:
   a. Handle the first three messages as bugs (RC_EBS_DEPARTMENT_INC, RC_EBS_JOBCODE_INC and RC_EBS_LOCATION_INC), following your organization's *bug* procedures. This may involve contacting Oracle Software Support (OSS).

   Important! Rowset based messages must have schemas defined and are delivered with schemas. If any schemas are missing, you must treat it like a bug and assume that something did not install or copy correctly, causing the schemas to be lost.

   ---

   b. For PERSON_BASIC_SYNC and WORKFORCE_SYNC, click the Build Schema button on the Schemas page.

   As in step 1, you can access the Schema page by selecting PeopleTools, Integration Broker, Integration Setup, Messages. Open the message and click the Schema tab to access the Schema page.
4. If the Build Schema button is not visible, check the Service Configuration component. Ensure that the Service System Status is set to *Development.*
5. On Message Definition main page, if your new build displays a PeopleSoft PeopleTools message indicating that there is some inconsistency between the WSDL publish status and the actual WSDLs, or if the entire page is in Read Only mode and you cannot build a schema, do the following to clear the WSDL publish status:
6. On Message Definition main page, if your new build displays a PeopleSoft PeopleTools message indicating that there is some inconsistency between the WSDL publish status and the actual WSDLs, or if the entire page is in Read Only mode and you cannot build a schema, do the following to clear the WSDL publish status:
   a. Select PeopleTools, Service Utilities, Service Administration.
   b. Click the Clear WSDL export status link.

Task 6-1-3: Configuring the Process Scheduler for Fullsync

To configure your process scheduler for Fullsync:

1. Create your own process scheduler using psadmin.

2. Start the server once, to register it.
3. Shut down the server.

   Shutting down the server is not required but recommended. Server shut down ensures that the server definition changes will be applied when you restart the server.
4. Select PeopleTools, Process Scheduler, Servers.
5. Search for and open the server that you just created.
6. On Server Definition page, in the Server Load Balancing Option field, select *Do not use for Load Balancing* from the drop-down list box.
7. In the Redistribute Workload Option field, select *Do not redistribute* from the drop-down list box.
8. Click the Save button to save the server definition.
9. Restart the process scheduler from psadmin.

   From the database list, select the database of the process server that you just created to start the process server. Allow a few minutes for the startup process to complete.

Task 6-1-4: Locating the Fullsync Data File Folders

After you run the Fullsync process in Oracle EBS, the Fullsync Data files are copied under the ftp <*EBS Server Name*> and folder:

Generally, this folder is located under *Documents and Settings\<Windows User>\ psft\pt\<Tools Release>\appserv\prcs\<DB Name>\files.*

See Retrieving and Copying Fullsync EBS Data Files to the Process Scheduler, in this installation guide.

If you cannot locate or access the file, contact the group within your organization that handles your environments (this may be your Environments Group, your Network Administrator, or another entity within your organization).

Task 6-1-5: Retrieving and Copying Fullsync Oracle EBS Data Files to the Process Scheduler

Before you can copy the Fullsync data file to the process scheduler folder, you must retrieve that file from the Oracle EBS server.

Use the Microsoft Windows *ftp* command to copy the file to your local machine. The file can then be copied to the Process Scheduler Server folder.

1. To obtain the Request ID from the Oracle EBS server:
   a. Login to the Oracle EBS server using hrms/welcome.
   b. Select the responsibility Superuser HRMS Manager, Vision Corporation.
   c. Select Processes and Reports, View Requests.
   d. Select All my requests, and if required change the number of days value, and then click the Find button.
   e. Write down the request ID.
2. Obtain the path and file name by running SQL in the SQL Developer and connecting to the Oracle EBS database.

   Select *outfile_name from fnd_concurrent_requests where request_id = <request id>*
3. Open the DOS command window and change the directory to the folder where you want the data file to be copied on your local machine.

   If you are using your c:\temp directory to copy files to your local machine, do the following:

a. From your Start button, select Run.

b. In the Run dialog box, enter *cmd,* and then press the Enter key on your keyboard.

c. In the cmd.exe DOS prompt, enter *cd\temp,* and then press the Enter key on your keyboard.

4. Use the ftp command to connect to the Oracle EBS server. Retrieve the user ID and password to connect to the Oracle EBS domain using the FTP from your environments group. Your regular user ID that you use to login to your applications will not work.

Note. Oracle's Environments Group sets user IDs and passwords for FTP usage independently from any other user ID and password, due to security concerns and standards. The FTP user ID and password for access must be obtained from the group within your organization that sets and maintains the security settings. The following is an example session that shows the starting and executing of FTP on a Microsoft WindowsXP client:

Usage: *ftp <EBS Server Name>*

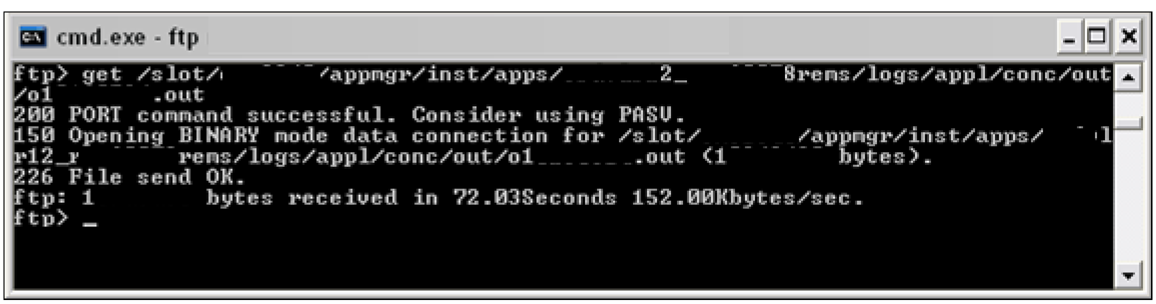
5. Enter the user ID and password.

Verify that you receive the message *Login Successful,* as shown in the following example:

Command Window

6. Use the get command to retrieve the file.

You must use the same path and file name that you retrieved from the database in step 2, as shown in the following example:



Command Window showing the get command to retrieve the file

Usage: *get <path>/filename*

7. If the file is transferred to your local workstation successfully, you will receive the message *OK.*

8. Copy this file to the Process Scheduler server as explained in the task *Configuring the Process Scheduler for Fullsync.*

See "Integrating PeopleSoft Customer Relationship Management 9.2 with Oracle E-Business Suite," Configuring the Process Scheduler for Fullsync, in this installation guide.

This concludes your integration set up in PeopleSoft CRM using Fullsync.

Task 6-2: Integrating PeopleSoft CRM for Oracle EBS using Incremental Sync

This section discusses:

- Setting Up the Local Gateway for Incremental Sync
- Verifying Schemas for all Messages for Incremental Sync
- Verifying Service Operations for Incremental Sync
- Verifying Handlers for Incremental Sync
- Verifying Routings for Incremental Sync
- Verifying Nodes for Incremental Sync
- Publishing WSDLs for Service Operations for Incremental Sync

Task 6-2-1: Setting Up the Local Gateway for Incremental Sync

Incremental Sync uses the PeopleSoft Integration Gateway to receive messages that are published by the Oracle EBS system.

Ensure that the Local Gateway is set up correctly:

1. Select PeopleTools, Integration Broker Configuration, Gateways.
2. Search for and open the local gateway to access the Gateways page.
3. On the Gateway Definition page, click the Ping Gateway button.
4. Verify that the status window indicates the Gateway is active.

Task 6-2-2: Verifying Schemas for all Messages for Incremental Sync

To verify that all messages have schemas defined:

1. Select PeopleTools, Integration Broker, Integration Setup, Messages.

   Open the message and click the Schema tab to access the Schema page.
2. Verify that the following messages have schemas defined:
   - RC_EBS_DEPARTMENT_INC, version 1.
   - RC_EBS_JOBCODE_INC, version 1.
   - RC_EBS_LOCATION_INC, version 1.
   - PERSON_BASIC_SYNC, Version 3.
   - WORKFORCE_SYNC, version 2.
   - RC_EBS_PERSON_INC, version 1.
   - RC_EBS_WORKFORCE_INC, version 1.
3. If no schemas exist, do the following:

a. Handle the first three messages as bugs (RC_EBS_DEPARTMENT_INC, RC_EBS_JOBCODE_INC and RC_EBS_LOCATION_INC), following your organization's *bug* procedures. This may involve contacting Oracle Software Support (OSS).

Important! Rowset based messages must have schemas defined and are delivered with schemas. If any schemas are missing, you must treat it like a bug and assume that something did not install or copy correctly, causing the schemas to be lost.

---

b. For PERSON_BASIC_SYNC and WORKFORCE_SYNC, click the Build Schema button on the Schemas page.

   As in step 1, you can access the Schema page by selecting PeopleTools, Integration Broker, Integration Setup, Messages. Open the message and click the Schema tab to access the Schema page.

4. If the Build Schema button is not visible, check the Service Configuration component. Ensure that the Service System Status is set to *Development.*
5. On Message Definition main page, if your new build displays a PeopleSoft PeopleTools message indicating that there is some inconsistency between the WSDL publish status and the actual WSDLs, or if the entire page is in *Read Only* mode and you cannot build a schema, do the following to clear the WSDL publish status:
   a. Select PeopleTools, Integration Broker, Service Utilities, Service Administration.
   b. Click the Clear WSDL export status link to clear the WSDL publish status.

Task 6-2-3: Verifying Service Operations for Incremental Sync

To verify that the following service operations are active:

1. Select PeopleTools, Integration Broker, Integration Setup, Service Operations to access the Service Operations pages.
2. On the General page, verify that the following Service Operations are available and set to *Active* in the PeopleSoft CRM system:
   - RC_EBS_DEPARTMENT_INC_SO
   - RC_EBS_JOBCODE_INC_SO
   - RC_EBS_LOCATION_INC_SO
   - RC_EBS_PERSON_INC_SO
   - RC_EBS_WORKFORCE_INC_SO

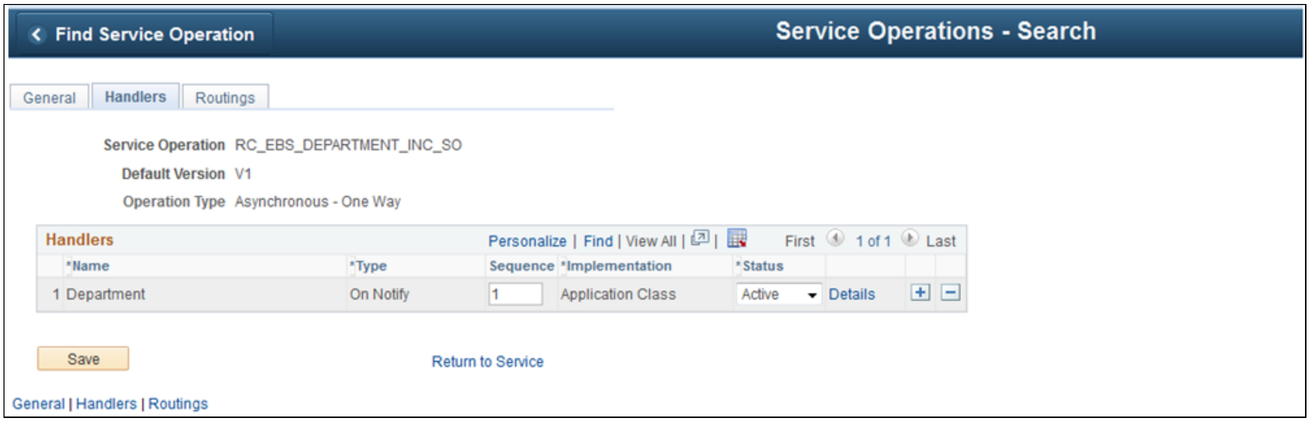
Task 6-2-4: Verifying Handlers for Incremental Sync

To verify that handlers are defined for each service operation mentioned in the previous task:

1. Select PeopleTools, Integration Broker, Integration Setup, Service Operations.

2. Click the Handlers tab to access the Handlers page and review each of the service operation definitions.

   A specified handler with a status of *Active* should be present, as shown in the following example:



Handlers tab

3. If no handler is specified, treat this issue as a bug and follow your organization's *bug* procedures. This may involve contacting Oracle Software Support (OSS).

Important! Handlers *must* be defined and are delivered accordingly by Oracle. If any handlers are not defined, you must treat this issue like a bug and assume that something did not install or copy correctly, causing the handler definitions to be lost.

Task 6-2-5: Verifying Routings for Incremental Sync

Each of the service operations discussed in the previous task should contain at least one inbound routing.

Verify this by clicking the Routings tab to access the Routings page and review each of the service operation definitions.

Task 6-2-6: Verifying Nodes for Incremental Sync

To verify that the EBS_HR node is set to active:

1. Select PeopleTools, Integration Broker, Integration Setup, Nodes.
2. On the Node definitions page, verify that the Active Node check box is selected for the EBS_HR node.
3. Verify that the Default User ID field contains a valid default user ID.

   If the user ID is missing, contact your environments department. Your regular user ID and password that you use to access other applications will not work.

Note. Oracle's Environments Group sets user IDs and passwords for FTP usage independently from any other user ID and password, due to security concerns and standards. The FTP user ID and password for access must be obtained from the group within your organization that sets and maintains these security settings.

Task 6-2-7: Publishing WSDLs for Service Operations for Incremental Sync

Each time your database is refreshed (for example, when you receive a new build), Oracle recommends that you publish the WSDLs of the following Service Operations:

- RC_EBS_DEPARTMENT_INC_SO
- RC_EBS_JOBCODE_INC_SO
- RC_EBS_LOCATION_INC_SO
- RC_EBS_PERSON_INC_SO
- RC_EBS_WORKFORCE_INC_SO

Before publishing, clear the WSDL publish status if the WSDLs were already published in a prior build.

To clear:

1. Select PeopleTools, Service Utilities, Service Administration.
2. On the WSDL page, click the Clear WSDL export status link.

To publish WSDLs:

1. Select PeopleTools, Integration Broker, Web Services, Provide Web Service.

   The Provide Web Service Wizard - Select Services page appears (Wizard step 1).
2. On the Provide Web Service - Select Services page, enter *RC_EBS* in the Service Name field.
3. Click the Search link.

   Your search should display a list of five service operations on the Provide Web Service Wizard - Select Service Operations page (Wizard step 2).
4. Click the Select All link, and then click the Next button.

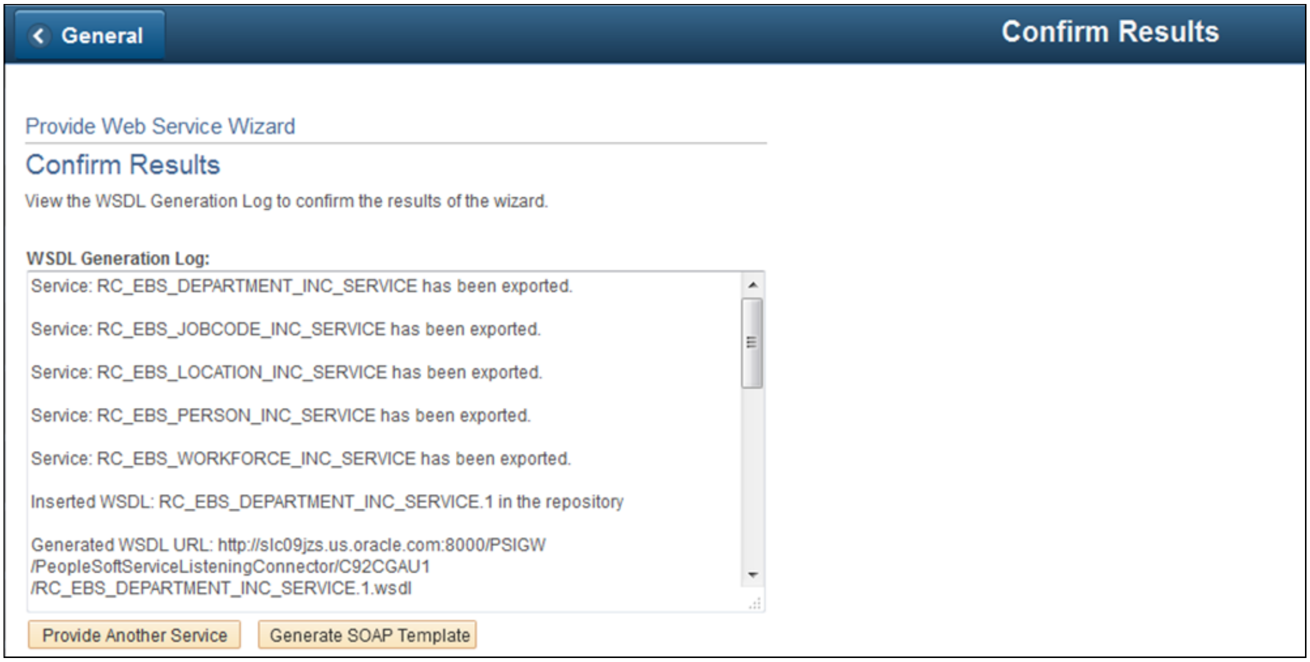
   The Select Service Operations page shows all of the service operations that you selected.
5. Click the Select All link again, and then click the Next button.

   The Provide Web Service Wizard - View WSDL page (Wizard step 3) showing all Services for whom WSDLs are generated.
6. Click the Next button.

   A confirmation page appears.

7. On the Provide Web Service Wizard - Specify Publishing Options page (Wizard step 4) confirmation page, click the Finish button.

   The Provide Web Service Wizard - Confirm Results page (Wizard final step showing the WSDL Generation Log and details) displays important WSDL details, as shown in the following example:



Provide Web Service Wizard - Confirm Results page is the Wizard's final step and shows the WSDL generation log and details

8. Copy the content into a buffer and paste into a text editor. You will need these URLs to set up Business Events in the Oracle EBS system.
9. Use each URL that ends in *wsdl* to configure the corresponding Business Events in the Oracle EBS system.

   For instructions, refer to the task Creating New Business Events to Indicate Target URLs in this chapter.

This concludes your integration set up in PeopleSoft CRM using Incremental Sync.

Task 6-3: Integrating PeopleSoft CRM for Oracle EBS using PeopleSoft 360-Degree

This section discusses:

- Setting Up Messages for PeopleSoft 360-Degree
- Setting Up Nodes for PeopleSoft 360-Degree
- Verifying Service Operations for PeopleSoft 360-Degree
- Verifying Service Operation Handlers for PeopleSoft 360-Degree
- Verifying Service Operation Routings for PeopleSoft 360-Degree

Task 6-3-1: Setting Up Messages for PeopleSoft 360-Degree

To set up messages for PeopleSoft 360-Degree:

1. Select PeopleTools, Integration Broker, Integration Setup, Messages.
2. Verify that the following messages are available:
   - EBS_360_REQUEST, version 1.
   - EBS_360_RESPONSE, version 1.
   - HD_360_RESPONSE_SYNC, version 2.
3. If schemas are missing for EBS_360_REQUEST and EBS_360_RESPONSE, treat this as a bug.
4. If a schema does not exist for HD_360_RESPONSE_SYNC, click the Build Schema button on the Schemas page of the message definition.

Task 6-3-2: Setting Up Nodes for PeopleSoft 360-Degree

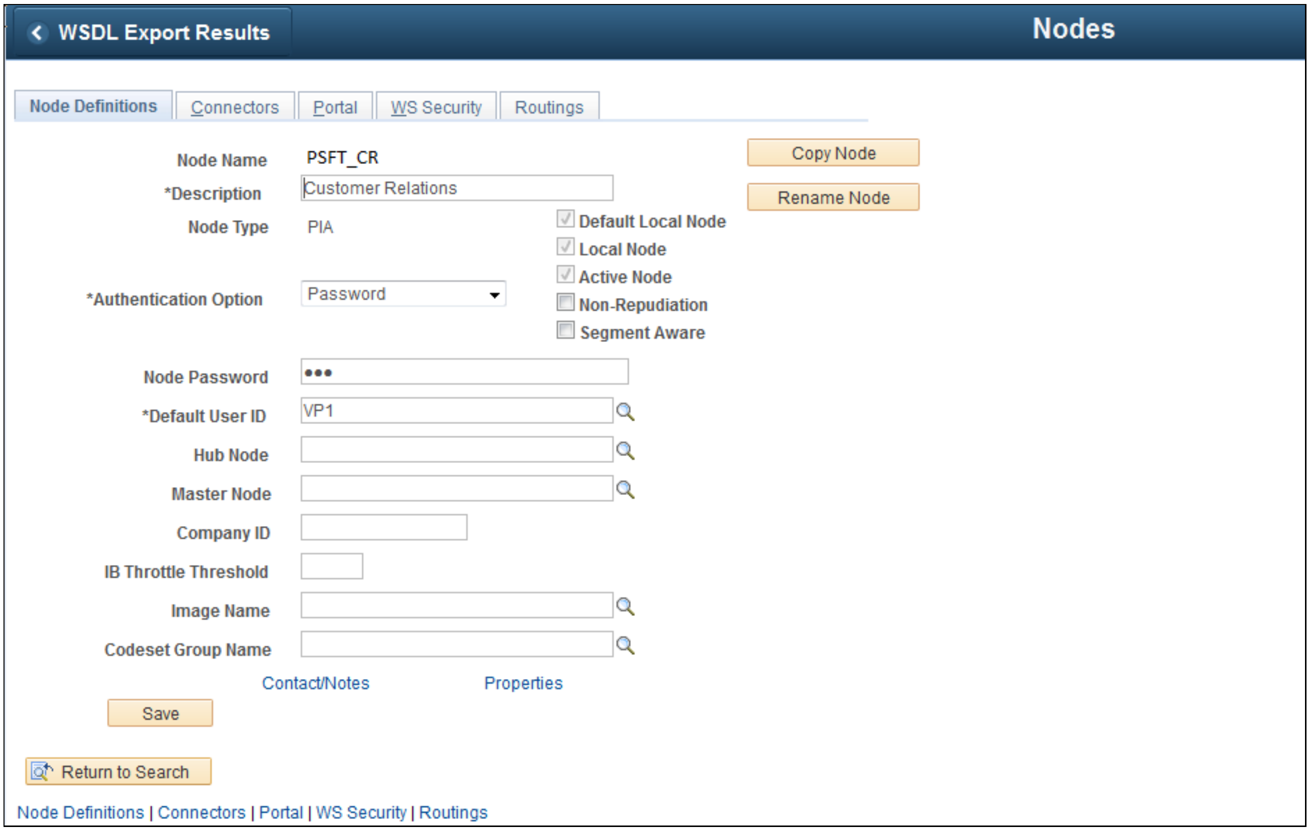
Configuring the PSFT_CRM Node

The PeopleSoft 360-Degree page publishes messages to Oracle EBS in sync mode. Therefore, a URL to Oracle EBS Service WSDL is required. This is the opposite of Incremental Sync, where PeopleSoft CRM provides WSDL links to Oracle EBS.

To set up the nodes for PeopleSoft 360-Degree:

1. Select PeopleTools, Integration Broker, Integration Setup, Nodes, to access and configure the Oracle EBS_HR node in the PeopleSoft CRM system.

2. Click the Node Definitions tab to verify that the local node is PSFT_CR, as shown in the following example:



PSFT CRM - Local Node

Note. Because PeopleSoft PeopleTools Integration Broker uses the local node name to sign, for testing purposes PeopleSoft PeopleTools delivers a sample digital certificate for the PSFT_CR node. If a different node name is used, you must generate the keypair value in the *interop.jks,* and have it signed by the CA, or self-signed.

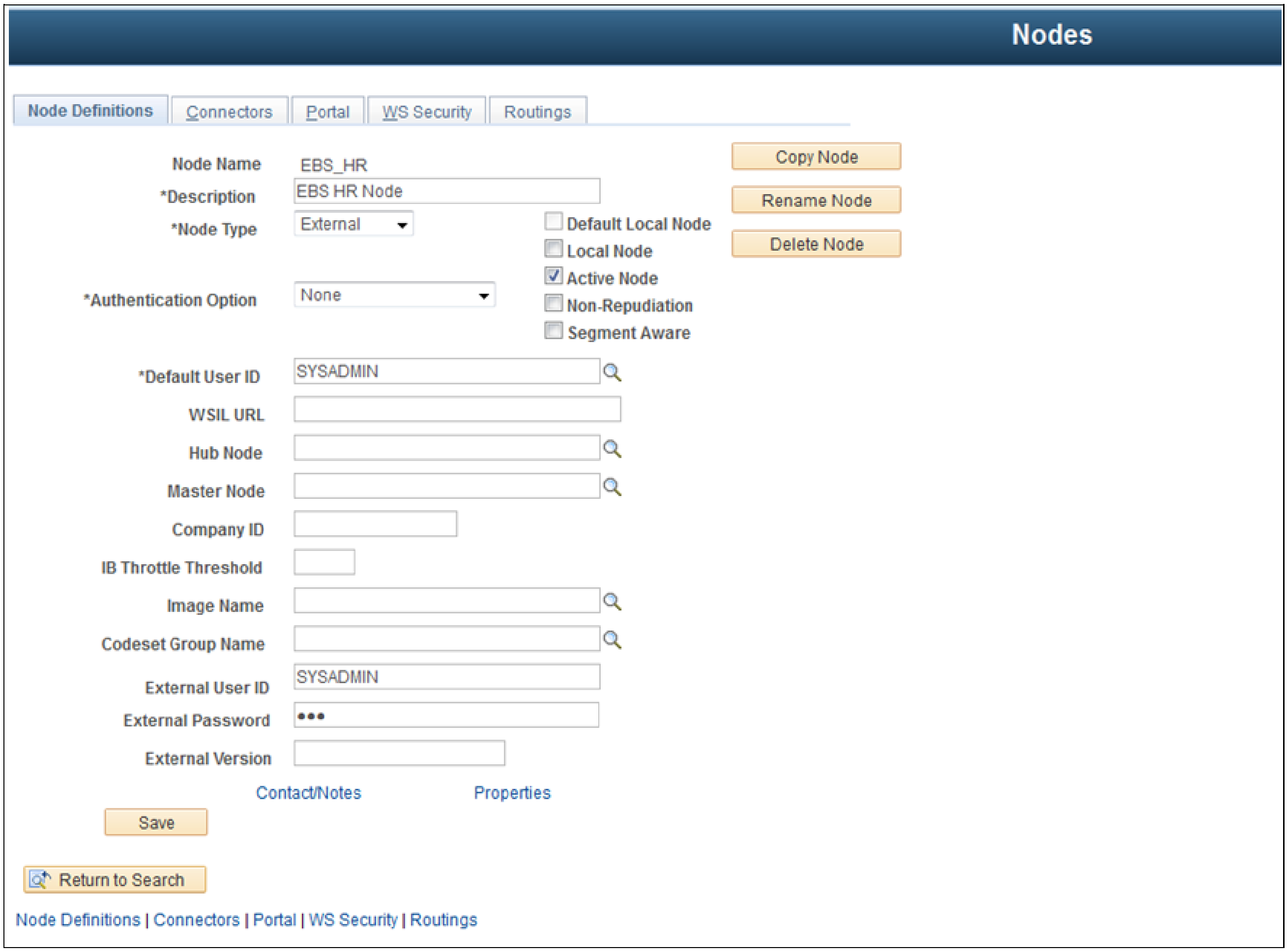
Configuring the EBS_HR Node

To configure the EBS_HR node:

1. Select PeopleTools, Integration Broker, Integration Setup, Nodes, to access and configure the Oracle EBS_HR node in the PeopleSoft CRM system.
2. Search for and open the EBS_HR node.

   The Node Definitions page appears.

3. Define the EBS_HR node definition parameters, as shown in the following example:



Node Definitions tab with EBS_HR node parameters

a. In the Node Type field, select *External* from the drop-down list.

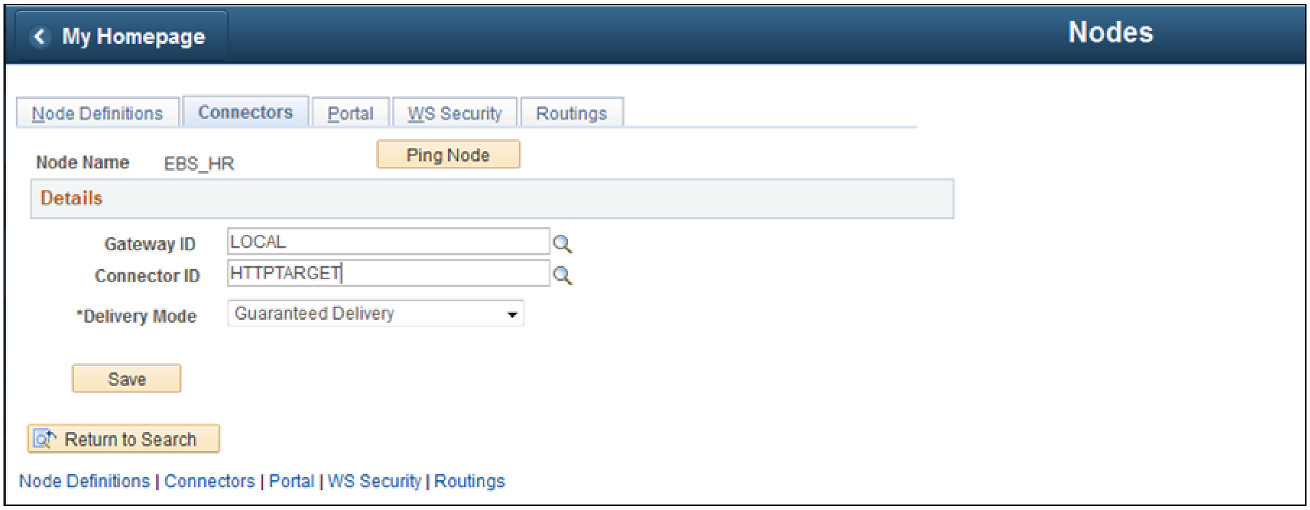
b. In the Authentication Option field, select *None* from the drop-down list.

c. In the Default User ID field, enter *CVP1*.

d. Select the Active Node check box.

4. Click the Connectors tab to access the Connectors page for the EBS_HR node.

5. Define the EBS_HR node connector parameters, as shown in the following example:



Connectors tab with EBS_HR node connector parameters

a. In the Gateway ID field, enter LOCAL.

b. In the Connector ID field, enter HTTPTARGET.

   Refer to the same example to now define the parameters in the Properties section (on the Properties tab), as follows:

c. In the Property ID field of row 1, enter *HEADER.*

d. In the Property Name field of row 1, enter *Content-Type.*

e. Leave the Required check box of row 1 clear (deselected)..

f. In the Value field of row 1, enter *text/xml; encoding=utf- 8.*

   As needed, click the Add button (+) to add another row.

g. In the Property ID field of row 2, enter *HEADER.*

h. In the Property Name field of row 2, enter *sendUncompressed.*

i. Select the Required check box of row 2.

j. In the Value field of row 2, enter *Y.*

   As needed, click the Add button (+) to add another row.

k. In the Property ID field of row 3, enter *HTTPPROPERTY.*

l. In the Property Name field of row 3, enter *SOAPUpContent.*

m. Leave the Required check box of row 3 clear (deselected).

n. In the Value field of row 3, enter *Y.*

   As needed, click the Add button (+) to add another row.

o. In the Property ID field of row 4, enter *HTTPPROPERTY.*

p. In the Property Name field of row 4, enter *Method.*

q. Select the Required check box of row 4.

r. In the Value field of row 4, enter *POST.*

   As needed, click the Add button (+) to add another row.

   The parameters for PRIMARYURL is handled differently than the previous values. For PRIMARYURL, you will use the URL of the WSDL that you generated in Oracle EBS (from step 1: Publish the WSDL by following the instructions in the Oracle EBS Setup Doc). Your PRIMARYURL row should look something like the example PRIMARYURL row, using the values that you generated from Oracle EBS.

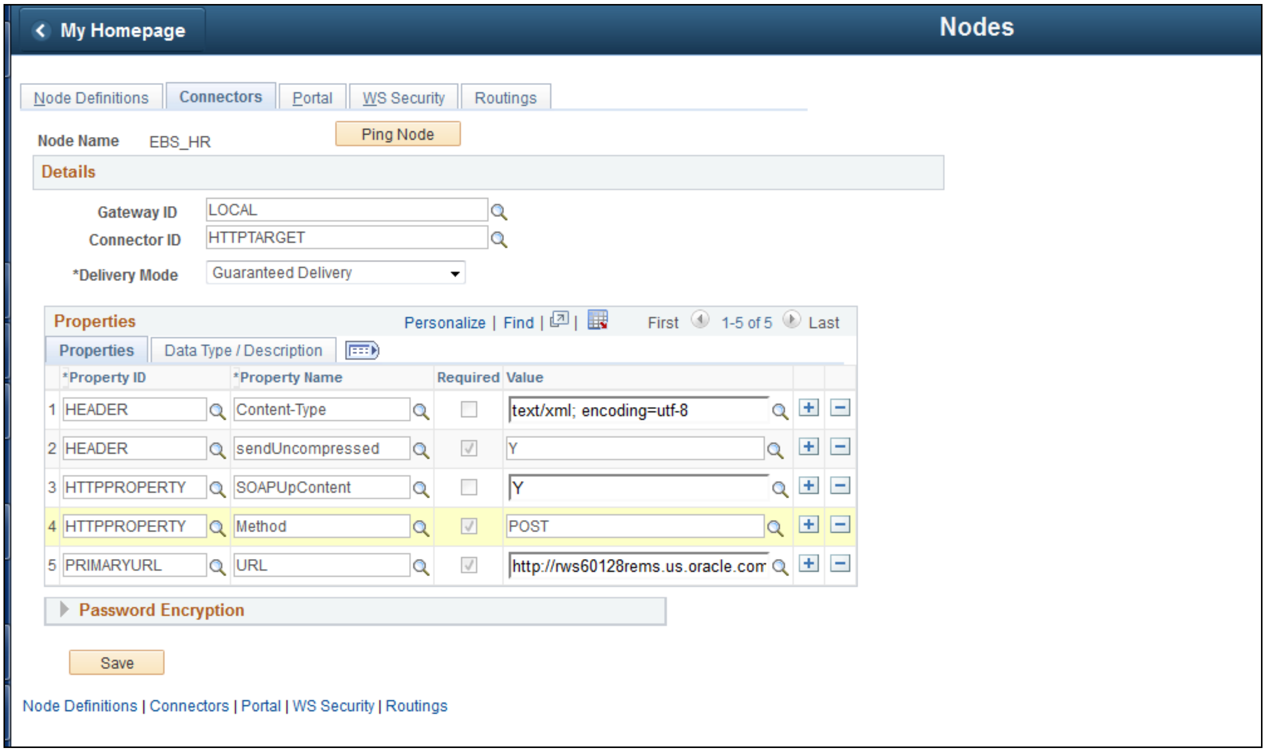
s. In the Property ID field of row 5, enter *PRIMARYURL*.

t. In the Property Name field of row 5, enter *URL*.

u. Select the Required check box of row 5.

v. In the Value field of row 5, enter *http://<URL of the WSDL generated in Oracle EBS >*.

The following example shows PRIMARYURL pointing to EBS 360 WSDL:



Connectors tab with PRIMARYURL pointing to EBS 360 WSDL

6. Click the WS Security tab to access the WS Security page for the EBS_HR node.

7. Define the EBS_HR node security parameters as shown in the following example:

   a. In the Authentication Token Type field, select *SAML Token* from the drop-down list.

   b. Leave the Encrypted check box and the Use Default User ID checkbox clear.

   c. Click Save.

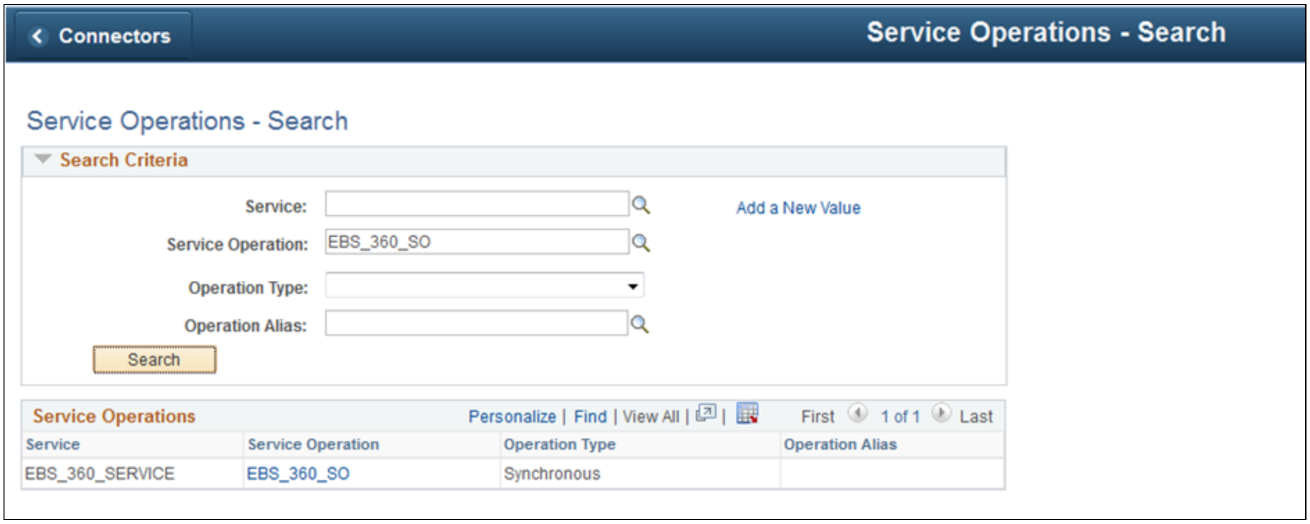
8. Click the Routings tab to access the Routings page. Verify that the Sender Node is *PSFT_CR* and the Receiver Node is *EBS_HR*.

Task 6-3-3: Verifying Service Operations for PeopleSoft 360-Degree

To verify service operations for PeopleSoft 360-Degree:

1. Select PeopleTools, Integration Broker, Integration Setup, Service Operations.

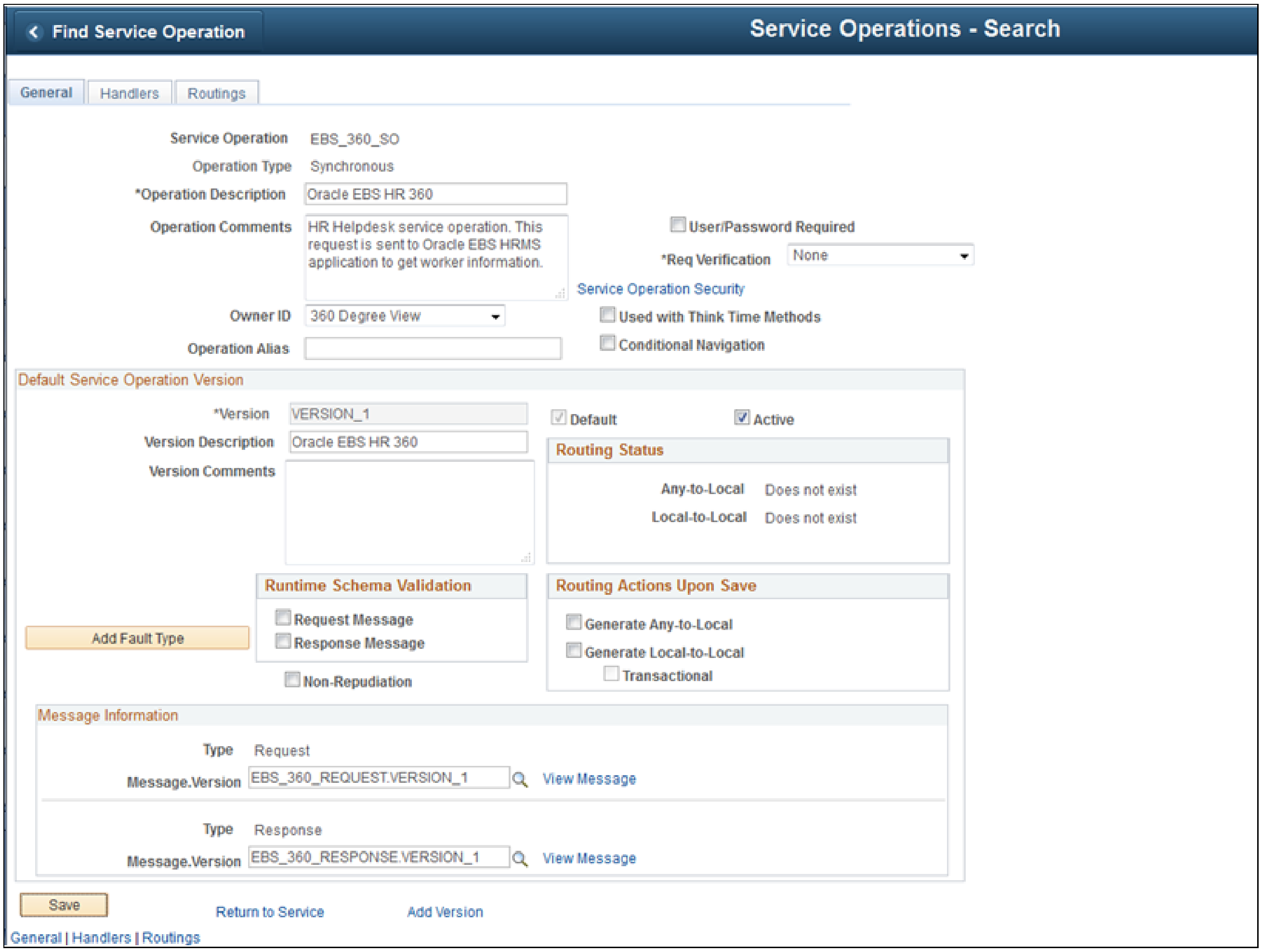
   The Service Operations search page appears, as shown in the following example:



Find Service Operation search page

2. Enter EBS_360_SO in the Find Service Operations search page.

3. Open the EBS_360 Service Operation to verify that EBS_360_SO is active, as shown in the following example:



Service Operation: General Page

Task 6-3-4: Verifying Service Operation Handlers for PeopleSoft 360-Degree

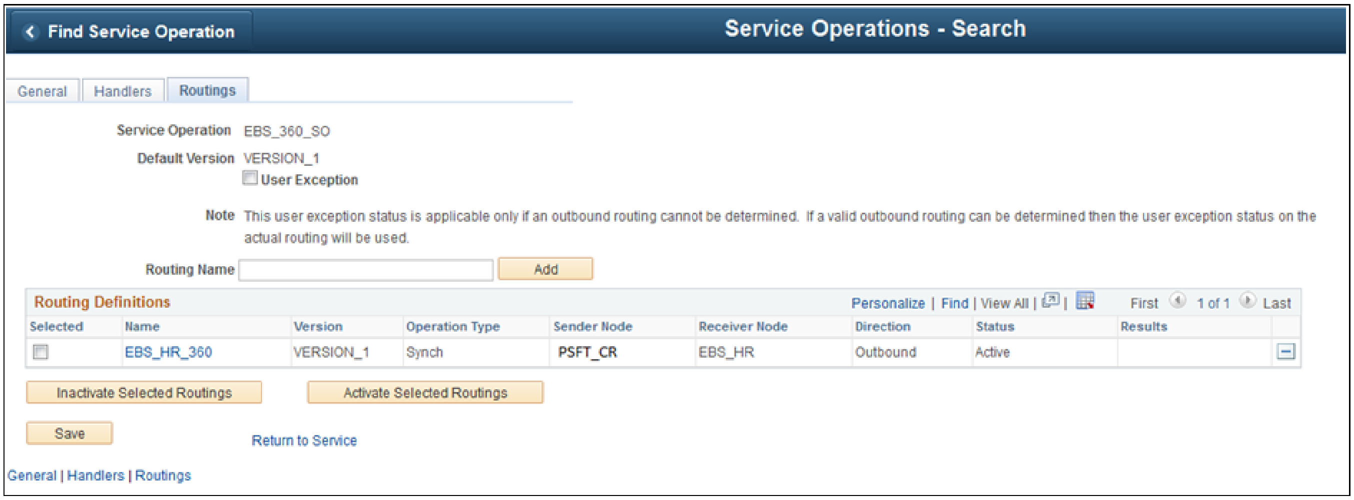
From the EBS_360_SO General page in the previous task, click the Handlers tab (alternatively, you can select PeopleTools, Integration Broker, Integration Setup, Service Operations) to access the Handlers page displaying no handlers, as shown in the following example:

Service Operations - Handlers page for EBS_360_SO

The PeopleSoft 360-Degree Service Operation does *not* contain any handlers, so there is nothing to verify.

Task 6-3-5: Verifying Service Operation Routings for PeopleSoft 360-Degree

From the EBS_360_SO Handlers page in the previous task, click the Routings tab (alternatively, you can select PeopleTools, Integration Broker, Integration Setup, Service Operations) to access the Routings page displaying one outbound routing, as shown in the following example:



Service Operations - Routings page for EBS_360_SO

There should be at least one outbound routing.

Task 6-4: Setting Up Action Links

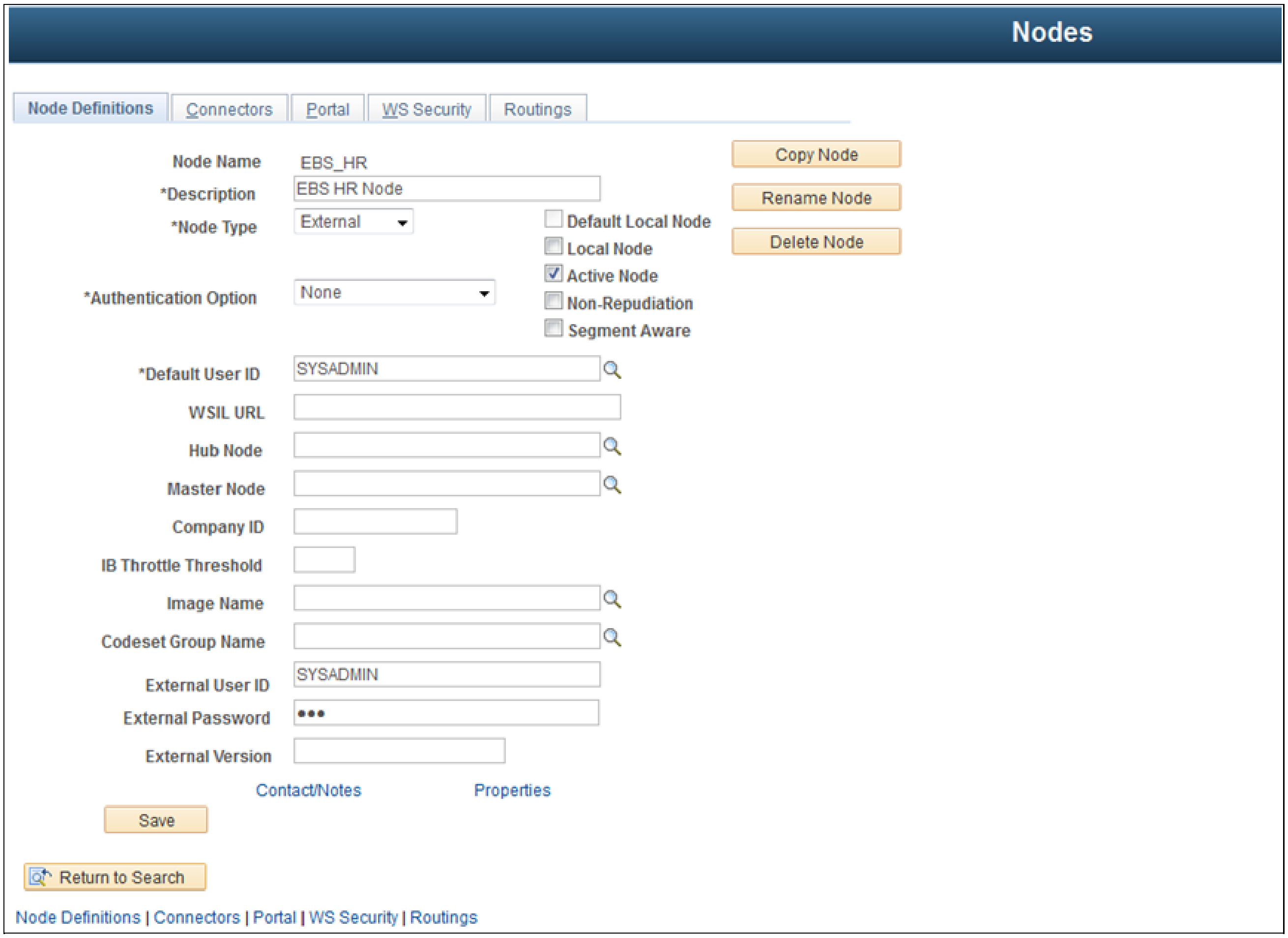
The Portal URI Text on the Node Definition for the Oracle EBS database must contain the URI for both the Oracle EBS database and the Oracle Function HR_HELPDESK_SS.

Edit the Portal URI Text field with the following modifications:

1. Select PeopleTools, Portal, Node Definitions.

2. Search for and open the Oracle EBS Node Definition (EBS_HR node).

   This opens the Node Definitions page for the Oracle EBS_HR node, as shown in the following example:



Node Definitions page for EBS_HR node

3. Click the Portal tab to access the Portal page.
4. In the Content URI Text field, enter the following:

   http://<domain>:<port>/OA_HTML/OA.jsp?OAFunc=HR_HELPDESK_SS
5. Click Save.

Task 6-5: Setting Up Basic Business Events Subscriptions

The following instructions create the subscription for Basic Business Events in the Oracle EBS system. Business Events are an Oracle EBS mechanism that creates and sends messages to the PeopleSoft CRM system whenever a change is made in the Oracle EBS system. This setup is required for Incremental Synchronization processes to function properly.

Each of the Business Events in the following table must be subscribed to by performing steps 2 through 14 in this task.

This table lists business events and the corresponding workflow processes to be mapped:

Business Events	**Workflow Process to be Mapped**
oracle.apps.per.api.person_address.create_person_address	HRRIR_ADDR_CRE_PRCS
oracle.apps.per.api.person_address.update_person_address	HRRIR_ADDR_CRE_PRCS
oracle.apps.per.api.person_address.update_pers_addr_with_style	HRRIR_ADDR_CRE_PRCS
oracle.apps.per.api.phone.create_phone	HRRIR_PHO_CRE_PRCS
oracle.apps.per.api.phone.update_phone	HRRIR_PHO_CRE_PRCS
oracle.apps.per.api.job.create_job	HRRIR_JOB_CRE_PRCS
oracle.apps.per.api.job_api.delete_job	HRRIR_JOB_DEL_PRCS
oracle.apps.per.api.job_api.update_job	HRRIR_JOB_UPD_PRCS
oracle.apps.per.api.location.create_location	HRRIR_LOC_CRE_PRCS
oracle.apps.per.api.location.delete_location	HRRIR_LOC_DEL_PRCS
oracle.apps.per.api.location.update_location	HRRIR_LOC_UPD_PRCS
oracle.apps.per.api.organization.create_hr_organization	HRRIR_ORG_CRE_PRCS
oracle.apps.per.api.organization.create_org_information	HRRIR_ORG_CRE_PRCS
oracle.apps.per.api.organization.create_organization	HRRIR_ORG_CRE_PRCS
oracle.apps.per.api.organization.delete_organization	HRRIR_ORG_DEL_PRCS
oracle.apps.per.api.organization.update_org_information	HRRIR_ORG_UPD_PRCS
oracle.apps.per.api.organization.update_organization	HRRIR_ORG_UPD_PRCS
oracle.apps.per.api.employee.create_employee	HRRIR_EMP_CRE_PRCS
oracle.apps.per.api.person.update_person	HRRIR_PER_UPD_PRCS
oracle.apps.per.api.assignment.create_secondary_cwk_asg	HRRIR_WF_CRE_PRCS
oracle.apps.per.api.assignment.create_secondary_emp_asg	HRRIR_WF_CRE_PRCS
oracle.apps.per.api.assignment.final_process_cwk_asg	HRRIR_WF_UPD_PRCS
oracle.apps.per.api.assignment.final_process_emp_asg	HRRIR_WF_UPD_PRCS

Business Events	**Workflow Process to be Mapped**
oracle.apps.per.api.assignment.set_new_primary_asg	HRRIR_WF_UPD_PRCS
oracle.apps.per.api.assignment.set_new_primary_cwk_asg	HRRIR_WF_UPD_PRCS
oracle.apps.per.api.assignment.suspend_cwk_asg	HRRIR_WF_UPD_PRCS
oracle.apps.per.api.assignment.activate_emp_asg	HRRIR_WF_UPD_PRCS
oracle.apps.per.api.assignment.activate_cwk_asg	HRRIR_WF_UPD_PRCS
oracle.apps.per.api.assignment.activate_apl_asg	HRRIR_WF_UPD_PRCS
oracle.apps.per.api.assignment.accept_apl_asg	HRRIR_WF_UPD_PRCS
oracle.apps.per.api.assignment.actual_termination_cwk_asg	HRRIR_WF_UPD_PRCS
oracle.apps.per.api.assignment.actual_termination_emp_asg	HRRIR_WF_UPD_PRCS
oracle.apps.per.api.assignment.suspend_emp_asg	HRRIR_WF_UPD_PRCS
oracle.apps.per.api.assignment.update_apl_asg	HRRIR_WF_UPD_PRCS
oracle.apps.per.api.assignment.update_cwk_asg	HRRIR_WF_UPD_PRCS
oracle.apps.per.api.assignment.update_emp_asg	HRRIR_WF_UPD_PRCS
oracle.apps.per.api.ex_employee.actual_termination_emp	HRRIR_PER_UPD_PRCS
oracle.apps.per.api.ex_employee.reverse_terminate_employee	HRRIR_PER_UPD_PRCS

Oracle Business Events are delivered as seed data.

To subscribe to the basic business events in the previous table:

1. Log in to the application using *sysadmin* as your User ID and Password.
2. Select the left hand ResponsibilityWorkflow, Administrator, Web Applications.

   In the Administrator Workflow column, select the menu named Business Events.

   The Business Events page appears.

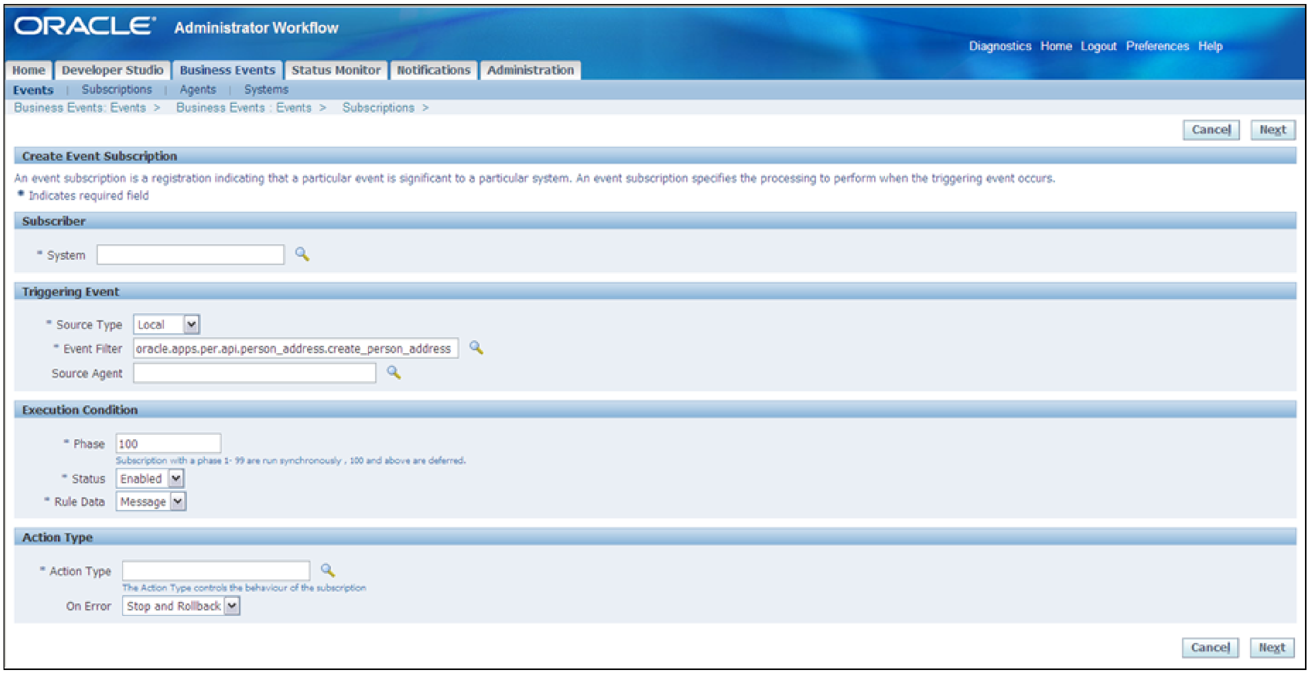
3. Search for and open the Business Event function, as named in the previous table.

   For example, enter *person_address* and click the Go button to search, as shown in the following example:

Oracle Administrator Workflow - Business Events page

4. If the Business Event is disabled, click the Update icon to access the page where you can select the Enable option.
5. Click the Apply button.
6. Return to the Business Events page and search for and open the Business Event that you just enabled.

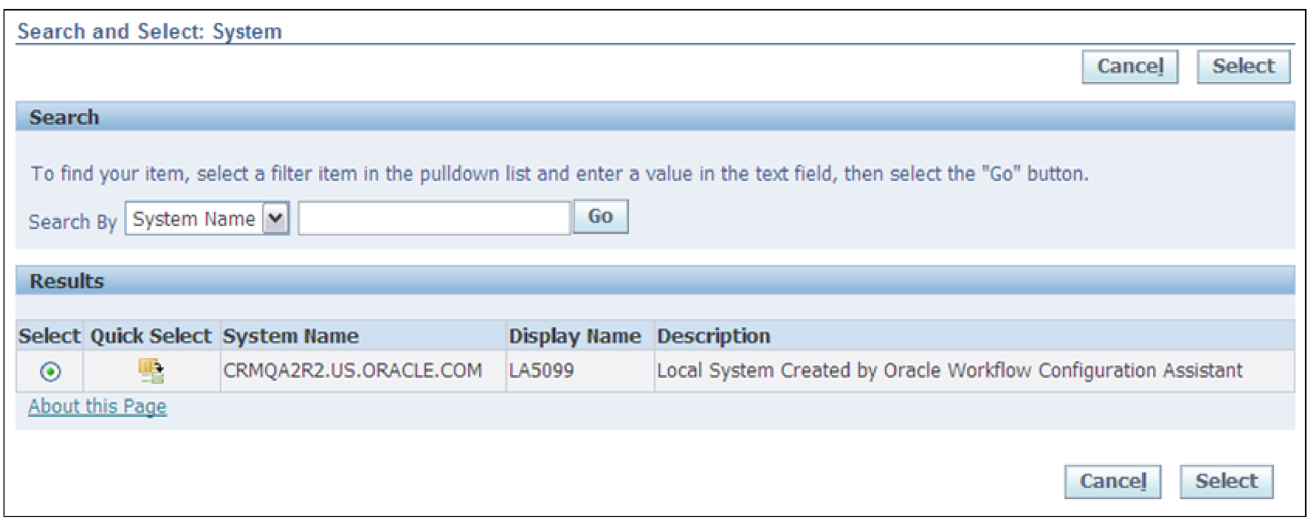
7. Click the Subscription button to access the Subscription page, as shown in the following example:



Business Events - Subscription page

8. On the Subscription page, in the System field, enter the system name.

   For example: *<instance name>.us.oracle.com*, as shown in the following example:



Search and Select: System

   a. To select the System Name, click the radio button to enable.

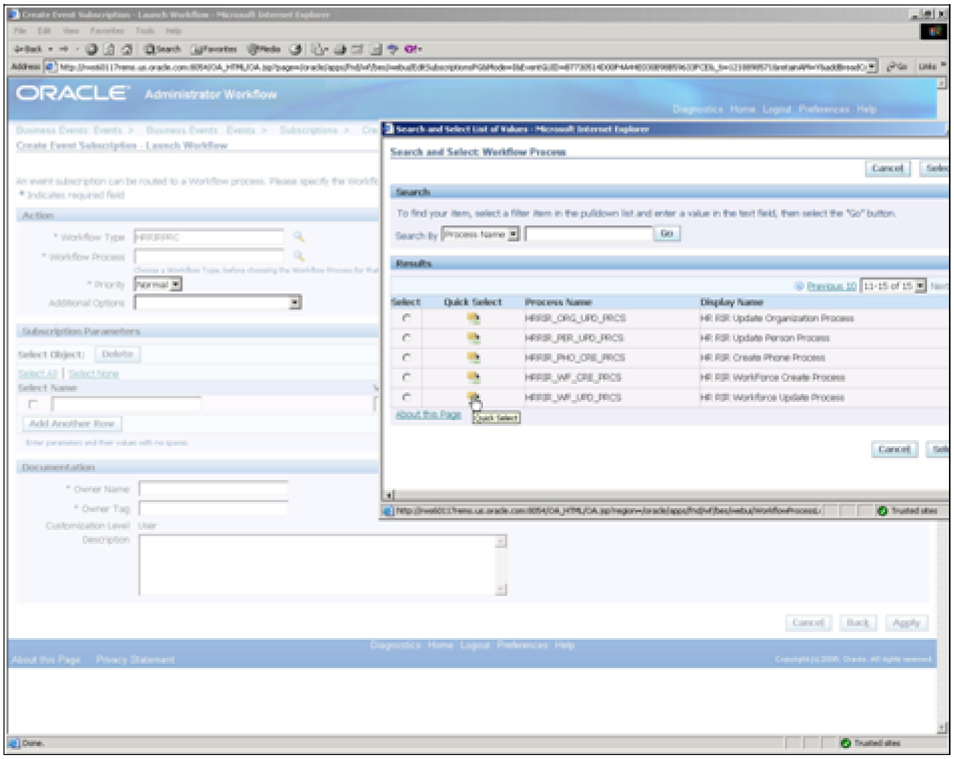
   b. Click the Select button at the lower right of the page. This returns you to the previous page.

      You can click the Help link to access the instance name.

9. Click the Next button. In the Action Type field, enter *Launch Workflow*, and press the Tab key on your keyboard.

10. In the Workflow Name field, enter *HRRIRPRC*, and then press the Tab key on your keyboard to move to the next field.

11. Click the Help link to access the Workflow Process, as shown in the following example:

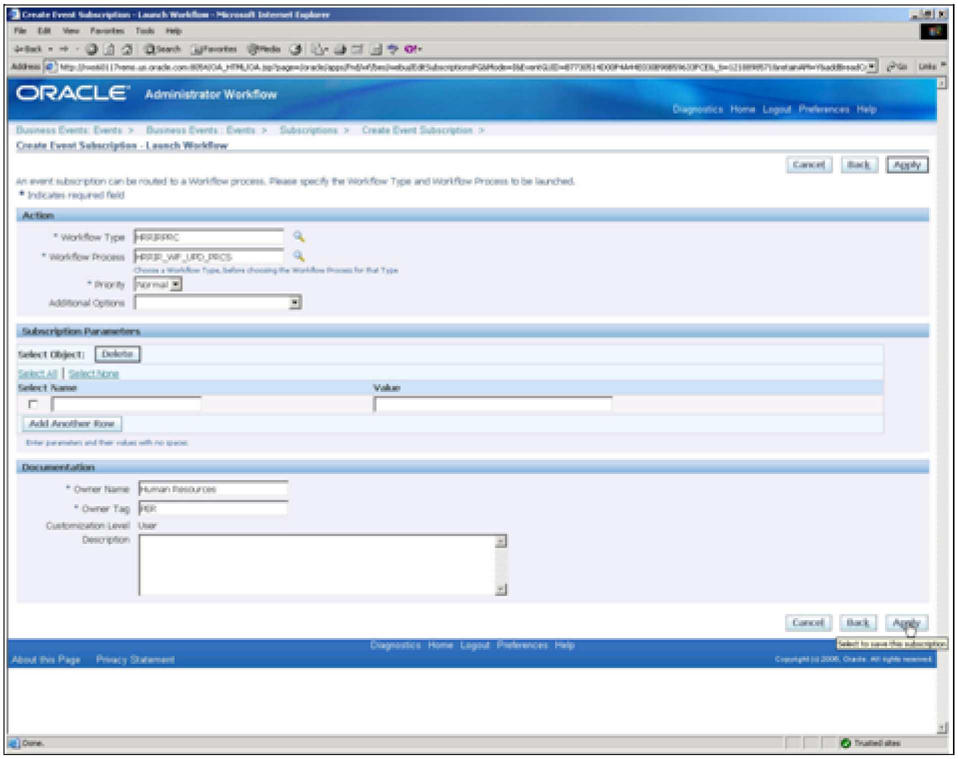


Help link search results

You can refer to the delivered Business Event workflow table, at the beginning of this task, to select the corresponding process name.

12. In the Owner Name field, enter *Human Resources.*
13. In the Owner Tag field, enter *PER.*

14. Click the Apply button, as shown in the following example:



Events Subscriber - Launch Workflow page

15. Repeat the same steps (3-14) for each row defined in the Business Events table.
16. After you complete this set up and you also complete the subscription to the HRHelpdesk specific Business Events, the Regular Incremental Refresh (RIR) events will start to trigger.

Note. RIR (Regular Incremental Refresh) is a term for the process of communicating changes made inside of the Oracle EBS system. Changes are recorded and sent by way of messages to the PeopleSoft CRM system to update the data already sent from the Oracle EBS system. Oracle EBS drives all of the data changes and the PeopleSoft CRM system retains a copy for inquiry and display purposes. The RIR events are a mechanism built within Oracle EBS that is triggered when certain events occur. For example, Name change has a Business Event that generates a workflow process to send a message to the PeopleSoft system with the appropriate key information of the change. Shortly after the Oracle EBS system processes the name change, the information is recorded in the PeopleSoft system.

Refer to the previous table of Business Events to see all of the events (actions) in Oracle EBS that send messages and corresponding changes to the PeopleSoft CRM system, where the change is recorded. When a change occurs in Oracle EBS, these Business Events are triggered automatically, provided they are mapped to a workflow process (steps 3 - 14 of this task).

Task 6-6: Creating New Business Events to Indicate Target URLs

Five additional Business Events and their subscriptions must be created manually. These Business Events are used to retrieve the end-point address (target URLs) to publish the message.

The following are the events that need to be created:

- oracle.apps.per.hrhd.locchange
- oracle.apps.per.hrhd.orgchange
- oracle.apps.per.hrhd.jobchange
- oracle.apps.per.hrhd.personchange
- oracle.apps.per.hrhd.asgchange

The steps involved to create these Business Events and corresponding subscriptions is similar to the previous task.

1. Select the responsibility *Workflow Administrator Web Applications.*

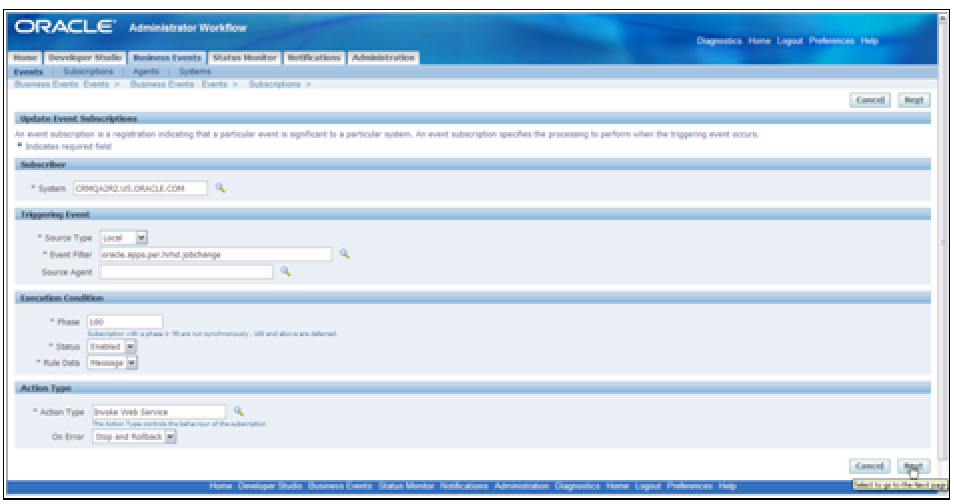
   In Oracle EBS, the left hand menu (referred to as *Responsibility,* and is similar to the PeopleSoft *Role*), is selected from the first page. After you select a responsibility, the next column of menus display that directly correspond to the responsibility that you selected.

2. Navigate to the Business Events Function.
3. In the Event Filter field, enter *oracle.apps.per.hrhd.jobchange.*

   Instead, in the Name field under the Search section, enter *oracle.apps.per.hrhd.jobchange* (this is one of the five new Events to be created).

   Use the Business Events specified in the previous list for the respective RIR.

4. In the Action Type field, enter *Invoke Webservice.*
5. Accept the default values for the remaining fields.
6. Click the Next button to access the Business Events page, as shown in the following example:

   Event Subscriptions - Business Events page

7. On the Business Events page, enter the WSDL URL value.

   Refer to the earlier task *Publishing WSDLs for Service Operations for Incremental Sync* for details about how to retrieve the URLs.

8. Accept the default values for the remaining fields to complete the Wizard.

Note. Though the previous list of Business Events exist in your system, you may need to update or add subscriptions to enable them to point to the correct PeopleSoft system.

Task 6-7: Setting the Encryption Key

You must run the following script in the Oracle EBS database. This sets the encryption keys and must be run before any person fullsync of incremental sync.

Run the script using the SQL Developer:

```
begin
fnd_vault.put('HRHD','CRYPT_KEY',
'AAAAACOREHRAAAAAAAAAACOREHRAAAAAAAAAACOREHRAAAAAAAAAACOAAAAAACOA');
commit;
end;
```

Task 6-8: Applying Patches for Incremental Sync

Apply the following patches for Incremental Sync:

- 7364056:R12.PER.B
- 7496131:R12.PER.B
- 7530917:R12.PER.B (relates to missing events)
- 7550819:R12.PER.B
- 7587316:R12.PER.B

You can also try bouncing the middle tier and Apache server of the EBS instance.

Task 6-9: EBS HCM Side Setup

This section discusses:

- Deploy web service HR_HELPDESK_PERSON_RECORD
- Setting Up SAML Token
- Working with Java 7 Keytool

Task 6-9-1: Deploy web service HR_HELPDESK_PERSON_RECORD

The web service *HR_HELPDESK_PERSON_RECORD* is the foundation of the 360 integration between CRM and EBS. It accepts the data request from CRM and performs the retrieval and response of the data.

To deploy the web service:

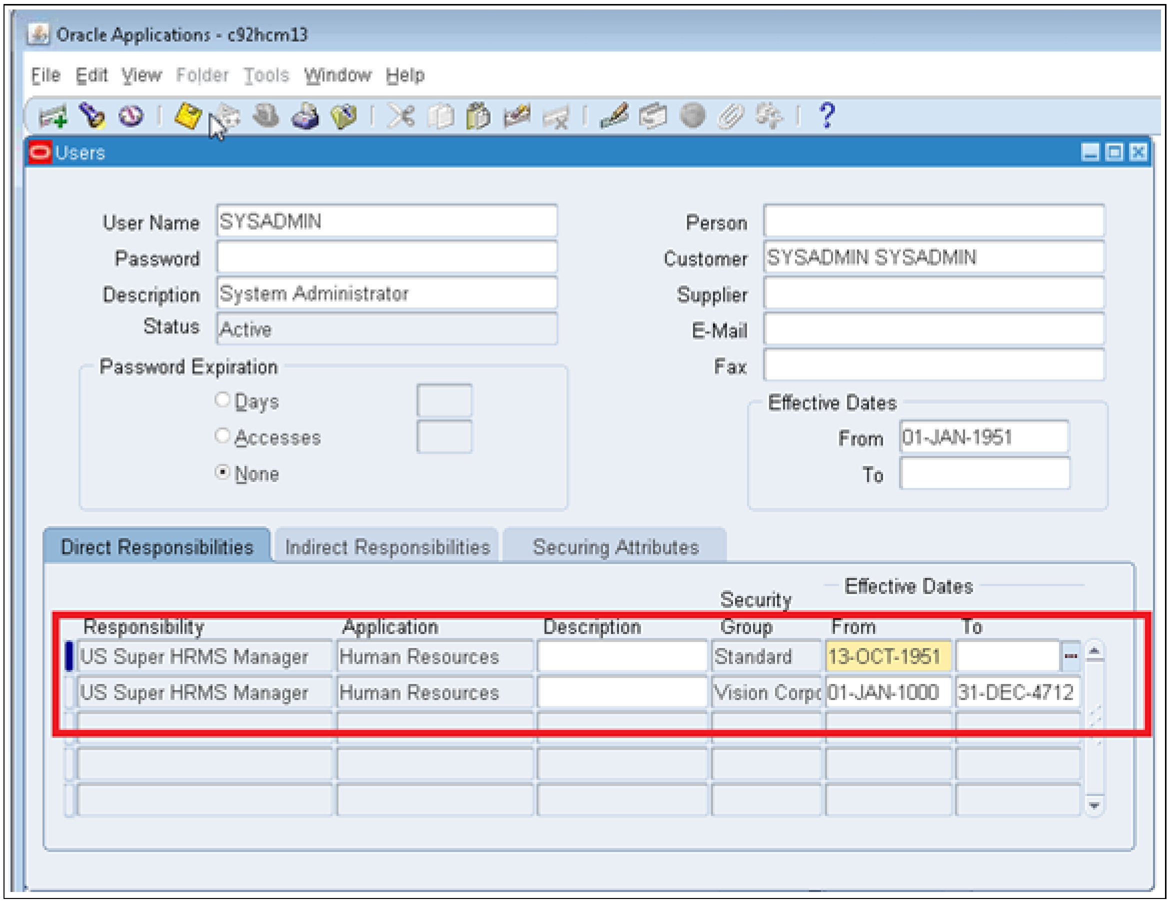
1. Log on to the Oracle Integration Repository with the integration repository administrator role through the Integrated SOA Gateway responsibility.
2. Select Integration Repository tab.
3. Select *Interface Type* from the View By drop-down list.
4. Select PL/SQL, Human Resources Suite and Human Resources.
5. Click Interface Definition Name link to open the Interface Details page

Note. Make sure that user id SYSADMIN is granted rights to this web service. SYSADMIN is the integration user id that is shared between CRM and EBS. It will also be used during the CRM set up.

6. Select SAML Token (Sender Vouches) checkbox in the Web Service - SOA Provider section.
7. Click Deploy to deploy the service from the Integration Repository user interface.

   Once the generated service is successfully deployed, the Web Service Status appears as *Deployed* along with the *Redeploy* and *Undeploy* buttons allowing to redeploy or undeploy the service.

Note. Make sure that User ID SYSADMIN is assigned all Responsibility group.



Users: Direct Responsibility

Task 6-9-2: Setting Up SAML Token

To setup the SAML token:

1. Enable the Oracle E-Business Suite Integrated SOA Gateway Release 12.1.3 Upgraded From Oracle E-Business Suite Release 12.1.X.

   To enable:

   a. Follow the instructions on My Oracle Support Knowledge (Document ID 454811.1) to upgrade your system to Oracle Application Server 10g Release 3 (10.1.3) Patch Set 5 (10.1.3.5.0).

   b. Ensure that Oracle E-Business Suite Release 12.1.3 is applied.

c. Source the file $INST_TOP/ora/10.1.3/.env and then apply the following patches to the Oracle Application Server 10.1.3.5 Oracle Home:

   Patch 13800972: Merge Request on Top of 10.1.3.1.0 for Bugs 8857799 9223438 12352047 (Patch 13800972 is also compatible with Oracle Application Server 10.1.3.5.0.)

   Patch 9371120: Web Service Framework Takes More Time for Giving the Response

   Patch 7366746: WLP: Enabling "Use SAML Authority: Verify Signature" Doesn't Require SAML Token

   Patch 15914125: Merge Request on Top of 10.1.3.5.1 for Bugs 9187189 9668283 13248533

   Patch 16925040: ERROR WHEN DECRYPTING MESSAGE Release iAS 10.1.4.0.1

d. Apply the following Oracle E-Business Suite patches:

   Patch 13347633:R12.OWF.B: Performance Issues in PIM Load.

   Patch 13957925:R12.OWF.B: One-off:13029726:12.1.3: SQL Exception in SOA Monitor Page.

   Patch 14063221:R12.OWF.B: Consolidated Fixes on Top of 11688301:R12.OWF.B.

   Patch 9139673:R12.OWF.B: IREP Issues When APPLSYS Schema Name is Changed.

   Patch 13516999:R12.OWF.B: Performance Degradation of Web Service Calls Hosted in R12 SOA Gateway

   Patch 14741766:R12.TXK.B: Need to Add a New Property for Session in OC4J.Properties

e. Set applications environment and stop all application tier processes.

   From the applications instance $APPL_TOP, set the environment by running the APPS<CONTEXT_NAME>.env script.

   Stop all application tier processes for the instance by running the script $ADMIN_SCRIPTS_HOME/adstpall.

f. Run TXK development script to install Oracle Application Server Adapter for Oracle applications.

```
$FND_TOP/bin/txkrun.pl -script=CfgOC4JApp -applicationname=pcapps -⇒
oracleinternal=Yes -oc4jpass=welcome runautoconfig=No
```

Note. If the *oc4jadmin* password for the *OAFM oc4j* instance is unknown, then reset the password in the file $INST_TOP/ora/10.1.3/j2ee/oafm/config/system-jazn-data.xml before running the script. Take the backup of system-jazn-data.xml before resetting the password. Replace the modified system-jazn-data.xml with backup of system-jazn-data.xml after running the script.

For example, enter the following to reset the password to *!welcome*; `<user> <name>oc4jadmin</name> <display-name>OC4J Administrator</display-name> <guid>23C8E4F0BDDE11DCBFB8AF3B7E0DDB2D</guid> <description>OC4J Administrator</description> <credentials>!welcome</credentials> </user>`

---

g. Run TXK deployment script to install forms-c4ws.ear and configure the container Forms-c4ws J2EE group correctly, as shown below:

```
$FND_TOP/bin/txkrun.pl -script=DeployForms-c4ws
```

h. Enable the new container forms-c4ws by modifying the following values of context variables in the $CONTEXT_FILE:

   Set's_forms-c4wsstatus' to *Enabled.*

   Set's_forms-c4ws_nprocs' to *1.*

Note. The 's_forms-c4ws_display' context variable is used by the forms-c4ws OC4J instance. It must be set correctly in order to use the Java APIs for Forms interfaces. This display must always be accessible during runtime. It should be set to an active and authorized X Windows display, and should point to a machine that is always available to the application instance.

i. Run AutoConfig script present in $ADMIN_SCRIPTS_HOME on the application tier.

   For example, `$ADMIN_SCRIPTS_HOME/adautocfg.sh`

j. Ensure to start up the middle tier when AutoConfig script completes.

   For information on how to run AutoConfig;

   See My Oracle Support: Document ID: 387859.1

k. Start all application tier processes for the instance by running the script.

   `$ADMIN_SCRIPTS_HOME/adstrtal`

2. Enable the user ASADMIN using the following steps:
   a. Log on to Oracle E-Business Suite using sysadmin/sysadmin.
   b. Select User Management responsibility.
   c. Click Users link.
   d. Locate the ASADMIN user by entering information in the search area to retrieve the ASADMIN user.
   e. Click Update.
   f. Remove the Active To date field.
   g. Click Apply.
   h. Click Reset Password.
   i. Enter new password twice.
   j. Click Submit.
3. After activating the ASADMIN user, verify if the ASADMIN user has the Apps Schema Connect Role (UMX|APPS_SCHEMA_CONNECT) in wf_user_roles.

   If the Apps Schema Connect Role role is not present in the wf_user_roles for the ASADMIN user, then run the Workflow Directory Services User/Role Validation concurrent program to grant the role.
4. After ASADMIN user is enabled from Oracle E-Business Suite, update the file $INST_TOP/ora/10.1.3/j2ee/oafm/config/system-jazn-data.xml as shown below to reset the password.

```
<user>
<name>ASADMIN</name>
<display-name>Default Apps SOA User</display-name>
<description>Used by SOAProvider for DB connection</description>
<credentials>!<NEW PASSWORD></credentials>
</user>
```

   Note. The password should be preceded by a '!' (Exclamation) so that when OAFM is started, it gets encrypted. For example, if your password is welcome, then you should enter it in the above file as !welcome.

5. Oracle E-Business Suite system administrator needs to perform the following steps on the server side:
   a. Create a keystore and key-pair or obtain from a Certificate Authority: The server needs to have a keystore where the public keys for all the trusted nodes are maintained and also its own key-pair is stored. The path to this keystore needs to be mentioned in $INST_TOP/ora/10.1.3/j2ee/oafm/config/wsmgmt.xml. Use the

following xml to mention the keystore details, inbound and outbound signature and encryption configuration. Find the intended port (service) which is deployed with SAML Token.

```
<security>
 ...
</security>
                     with following xml:
 <key-store  store-pass="<keystore_pass>"  path="<path_to_keystore>"⇒
/>
 <signature-key alias="<server_key>" key-pass="<server_key_pass>"/>
 <encryption-key  alias="<server_key>"  key-pass="<server_key_pass>"⇒
/>
 <inbound>
           <verify-saml-token/>
           <verify-signature>
                     <signature-methods>
                                <signature-method>RSA-SHA1<⇒
/signature-method>
                     </signature-methods>
                     <tbs-elements>
                                <element  name-space="http:⇒
//schemas.xmlsoap.org/soap/envelope/"  local-part="Body"/>
                     </tbs-elements>
           </verify-signature>
           <decrypt>
                     <encryption-methods>
                               <encryption-method>AES-128<⇒
/encryption-method>
                     </encryption-methods>
                     <tbe-elements>
                                <element  name-space="http:⇒
//schemas.xmlsoap.org/soap/envelope/"  local-part="Body" mode=⇒
"CONTENT"/>
                                <element  name-space="urn:oasis:⇒
names:tc:SAML:1.0:assertion"  local-part="Assertion" mode="CONTENT"⇒
/>
                     </tbe-elements>
           </decrypt>
 </inbound>
 <outbound>
           <signature>
                     <signature-method>RSA-SHA1</signature-method>
                     <tbs-elements>
                               <tbs-element  local-part="Body" name-⇒
space="http://schemas.xmlsoap.org/soap/envelope/"/>
                     </tbs-elements>
                     <add-timestamp  created="true" expiry="28800"/>
           </signature>
           <encrypt>
                     <use-request-cert>true</use-request-cert>
                     <encryption-method>AES-128</encryption-method>
```

```
                    <tbe-elements>
                              <tbe-element  local-part="Body"  name-⇒
space="http://schemas.xmlsoap.org/soap/envelope/"/>
                    </tbe-elements>
          </encrypt>
 </outbound>
```

Note. This configuration is port (service) specific and will have its effect for only one service. Following is a sample configuration for service FND_USER_PKG_Service which is deployed with SAML token security:

---

b. Import the exported client public key into server keystore.

c. Update $INST_TOP/ora/10.1.3/j2ee/oafm/config/system-jazn-data.xml for OAFM with the trusted node issuer identifier.

   Locate the loginmodule oracle.security.jazn.login.module.saml.SAMLLoginModule under application OAFM. Create a new entry for the trusted node as in the examples below.

Note. Default issuer for the PeopleSoft delivered trusted node identifier is .peoplesoft.com. If you have not modified this value on your PeopleSoft CRM webserver, then this is the entry to Include here.

```
<login-module>
<class>oracle.security.jazn.login.module.saml.SAMLLoginModule</class>
   <control-flag>required</control-flag>
   <options>
   <option>
   <name>issuer.name.1</name>
   <value>.peoplesoft.com</value>
   </option>
   <option>
   <name>issuer.name.2</name>
   <value>www.domain.com</value>
   </option>
   <option>
   <name>addAllRoles</name>
   <value>true</value>
   </option>
   </options>
   </login-module>
```

Task 6-9-3: Working with Java 7 Keytool

There is an option in jdk1.7 to create V3 certificates with SKI.

The following are the key commands that are required while working with Java 7 Keytool:

- Command to create a keypair:

  ```
  <jre1.7.0>/bin/keytool -genkeypair -alias client_alias -keyalg "RSA" -⇒
  sigalg "SHA1withRSA" -dname "cn=Surya, ou=ATG, o=Oracle, c=US" -keypass⇒
   password -keystore client.jks -storepass password -validity 5000
  ```

- Command to export client's public key:

```
<jre1.7.0>/bin/keytool -export -alias client_alias -file public_key.cer -⇒
keystore client.jks
```

- Command to import a public key in a keystore on server side:

```
<jre1.7.0>/bin/keytool -import -alias some_alias -file public_key.cer -⇒
trustcacerts -keystore server.jks
```

Task 6-10: Setting Up PeopleSoft CRM for EBS

This section discusses:

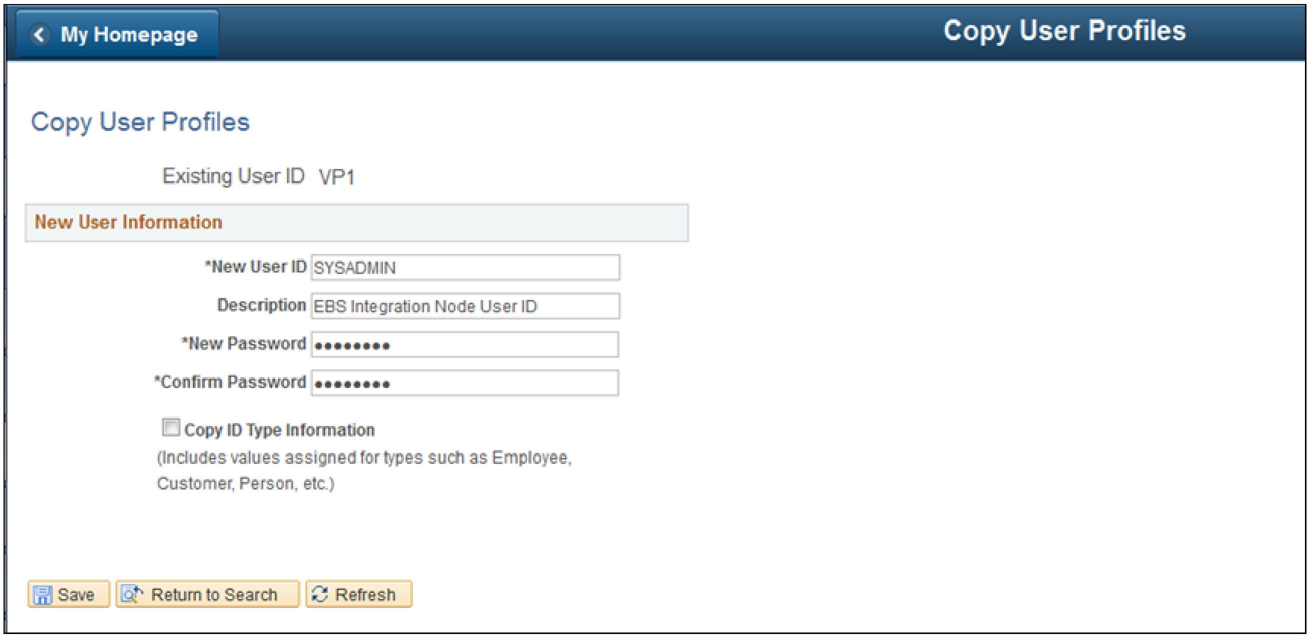
- Creating User ID
- Setting Up EBS_HR Node
- Routing Creation for EBS_360_SO Service Operation
- Generating Encryption Keypair
- Exporting Certificates
- Verifying File Paths in wss.properties
- Importing Certificates
- Restarting Integration Gateway Web Server
- Modifying Configuration for Digital Certificates
- Preparing End User ID

Task 6-10-1: Creating User ID

To create a User ID:

1. Select PeopleTools, Security, User Profiles, Copy User Profiles.

2. Replace the existing New User ID *VP1* to *SYSADMIN*, as shown in the following example:



Creating User ID

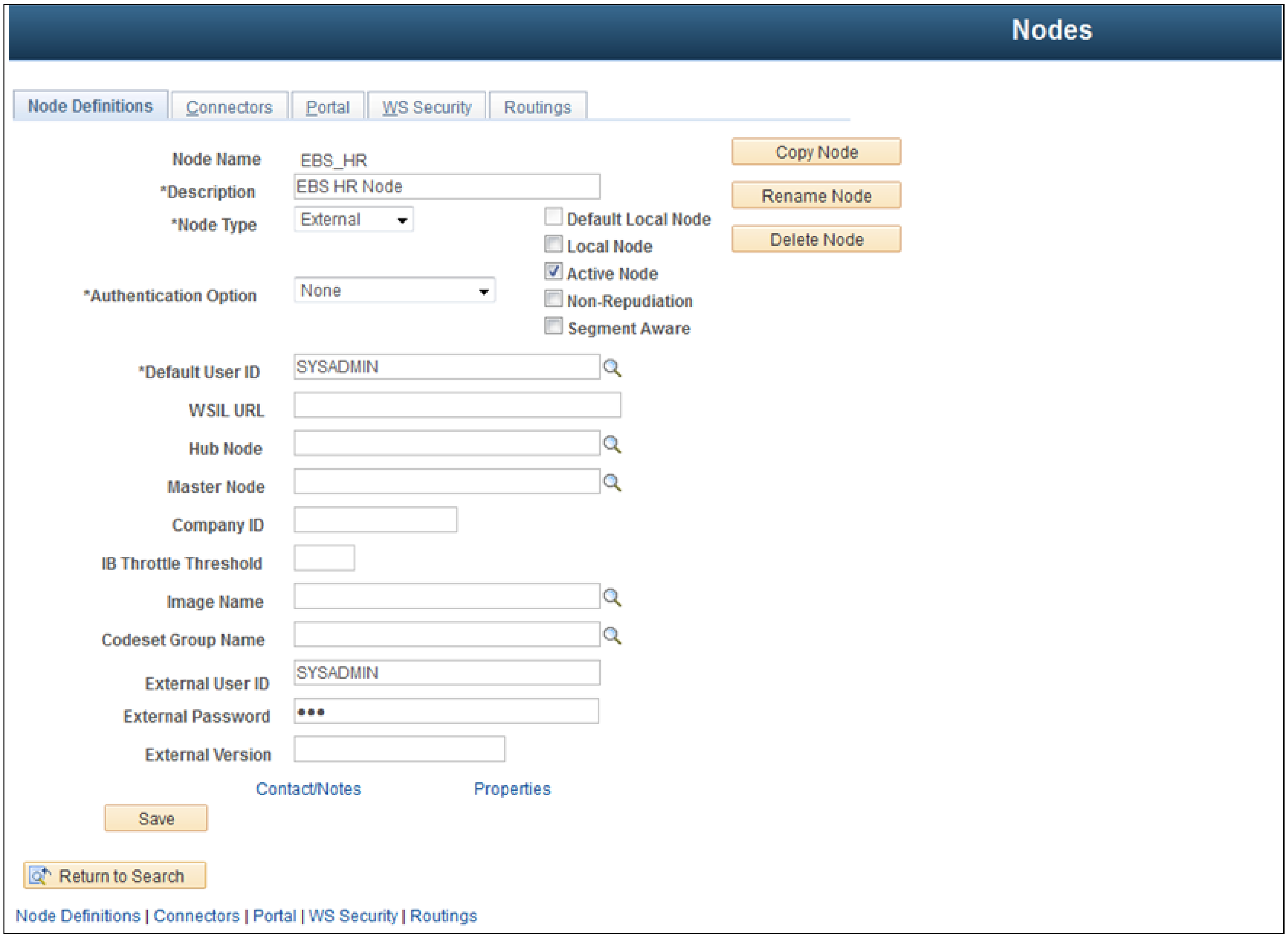
3. Click Save.

Task 6-10-2: Setting Up EBS_HR Node

To set up EBS_HR Node:

1. Select PeopleTools, Integration Broker, Integration Setup and Nodes.

2. Open the node EBS_HR, as shown in the following example:



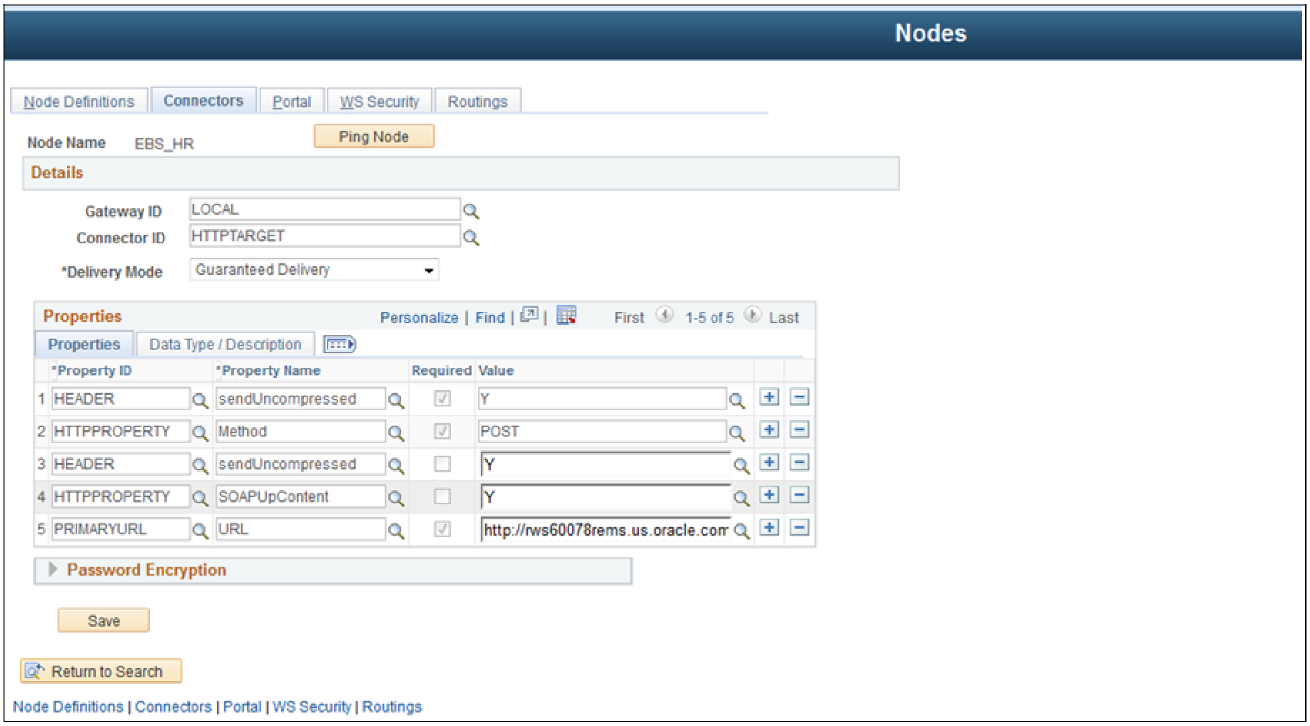
Setting Up EBS_HR Node

Note. If the node EBS_HR is not present, then you need to create an external node with the name EBS_HR.

---

3. Enter *SYSADMIN* in the Default User ID field.
4. Enter *SYSADMIN* in the External User ID field.
5. Enter *SYSADMIN* in the External Password field.

6. Click Connectors tab, as shown in the following example:

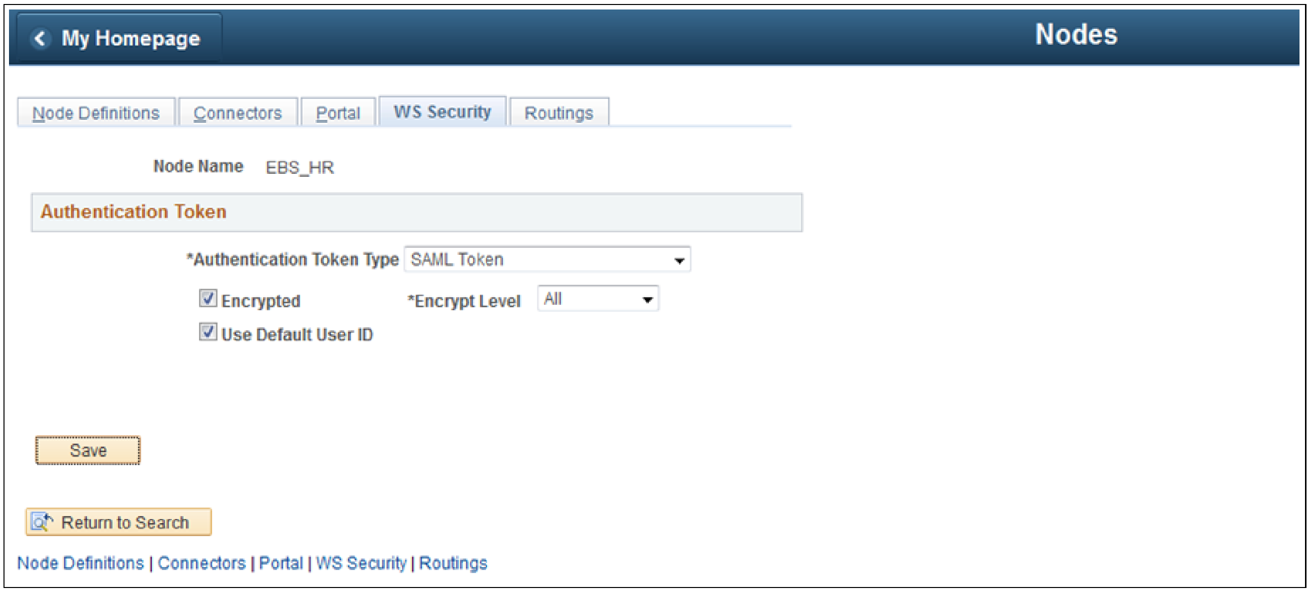


Connectors tab to set PRIMARYURL

7. Set the PRIMARYURL to the EBS web service wsdl url which should be of the format http://EBSservername:port/webservices/SOAProvider/plsql/hr_helpdesk_person_record/?wsdl

   Replace EBSservername:port with the correct name and port for your EBS install.
8. Click Save.
9. Click Ping Node to verify you can ping the URL successfully.
10. Click WS Security tab.
11. Select *SAML Token* from the Authentication Token Type drop down.

12. Select Encrypted and Use Default User ID check boxes, as shown in the following example:.



Selecting Authentication Token Type

13. Click Save.

Task 6-10-3: Routing Creation for EBS_360_SO Service Operation

The EBS_360_SO is a delivered service operation for HRHD 360 degree view.

To add a new routing for this service operation:

1. Ensure that sender node is PSFT_CR and the receiver node is EBS_HR.
2. Map the corresponding transformation parameters and message versions.
3. Click Save.

Task 6-10-4: Generating Encryption Keypair

To generate the encryption keypair in the interop keystore:

- Run the following command in the following subdirectory PSHome\webserv\peoplesoft\applications\peoplesoft\PSIGW.war\WEB-INF\classes:

```
keytool -genkeypair -alias psft_cr -keyalg RSA -dname "CN=Oracle, OU=⇒
PSFT, O=PSFT, L=TVM, S=KL, C=IN" -keystore interop.jks -storepass⇒
 interop -validity 3650
```

Note. The folder name may change based on the PeopleSoft Pure Internet Architecture installation.

- If you get the message that the keypair was not generated because the alias <psft_cr> already exists, run the following two commands to delete the existing alias and re-create it:

```
keytool -delete -alias psft_cr -keystore interop.jks -storepass interop

keytool -genkeypair -alias psft_cr -keyalg RSA -dname "CN=Oracle, OU=⇒
```



```
PSFT, O=PSFT, L=TVM, S=KL, C=IN" -keystore interop.jks -storepass⇒
 interop -validity 3650
```

See *PeopleTools: PeopleSoft Integration Broker Administration*

Task 6-10-5: Exporting Certificates

To export the encryption and root node certificates:

1. Run the following command in the following subdirectory PSHome\webserv\peoplesoft\applications\peoplesoft\PSIGW.war\WEB-INF\classes

   Export the public key and root certificate for encryption from the interop.jks keystore using the keytool **–** exportcert command.

   ```
   keytool -exportcert -v -alias rootca -keystore interop.jks -storepass⇒
    interop -rfc -file rootca.cer

   keytool -exportcert -v -alias psft_cr -keystore interop.jks -storepass⇒
    interop -rfc -file psft_cr.cer
   ```

   Note. The folder name may change based on the PeopleSoft Pure Internet Architecture installation.

   The files are generated in the same folder where the command is executed.

2. The two .cer files generated in the keytool must be imported into the EBS keystore using the import command.
3. Execute the following command to display the aliases in the keystore.

   ```
   keytool -list -keystore interop.jks -storepass interop
   ```

   Note. The second certificate has to be generated with the alias same as the default local node name of the PeopleSoft CRM system. With a default installation, the default local node is PSFT_CR. Also, above steps generate self signed certificate. However, for production environments, the certificate has to be signed by a Certification Authority.

Task 6-10-6: Verifying File Paths in wss.properties

To specify the keystore location for WS-Security:

1. Open the wss.properties file from the location PSHome\webserv\peoplesoft\applications\peoplesoft\PSIGW.war\WEB-INF\classes
2. Set the following property equal to the location and file name of the interops.jks keystore where you installed the integration gateway-based digital certificates:

   ```
   org.apache.ws.security.crypto.merlin.file=interop.jks
   ```

   Note. If the interop.jks file is not placed in the same folder as wss.properties file, then the absolute path has to be mentioned in the file.

   ---

3. Update Key Transport Mechanism. Peoplesoft by default uses rsa-oaep transport. We need to update this to rsa-1.5. Add the following line to update.

   ```
   ENC_KEY_TRANSPORT=http://www.w3.org/2001/04/xmlenc#rsa-1_5
   ```


4. Save the wss.properties file.

Task 6-10-7: Importing Certificates

The digital certificate has to be imported to PeopleSoft to enable secure integration. The certificate has to be placed at the following location:PSHome\webserv\peoplesoft\applications\peoplesoft\PSIGW.war\WEB-INF\classes

To import the certificate:

1. Run the following command in the following subdirectory PSHome\webserv\peoplesoft\applications\peoplesoft\PSIGW.war\WEB-INF\classes
2. Import the certificate into the interop.jks keystore using the keytool –importcert command, as follows:

```
keytool –importcert –alias ebs_hr –keystore interop.jks –storepass⇒
 interop –file public_key.cer
```

Note. Please make sure to use the alias as ebs_hr because it must be the same as the name of the node: EBS_HR. public_key.cer is the name of the certificate provided by EBS.

Task 6-10-8: Restarting Integration Gateway Web Server

Restart the Integration Gateway web server so that the changes made in above steps take effect.

Task 6-10-9: Modifying Configuration for Digital Certificates

To Modify Configuration for Digital Certificates:

1. Select PeopleTools, Security, Security Objects and Digital Certificates.
2. Add a new *Root CA* certificate.
3. Click Add Root link and enter the PEM formatted certificate data. This can be obtained by opening the certificate, obtained from EBS in Notepad.
4. Add a new remote certificate.
5. Click on Import link and enter the PEM formatted certificate data.
6. Click OK.

Task 6-10-10: Preparing End User ID

End Users who will be accessing employee data in the HR Helpdesk require specific configuration for their User Ids.

Note. Make sure that the CRM Userid is identical to their EBS HCM Userid.

Make sure thet the userid has the proper EBS HRHD Helpdesk Security Roles.

---

1. Select PeopleTools, Security, User Profiles and User Profiles.
2. Add EBS Agent Roles as shown below.
3. Select Set up CRM, Security and User Prefernces.
4. Open the Userid being configured to set the EBS security keys to be passed in the EBS data requests.

5. In the Responsibility Name field enter the main EBS responsibility that this user has access to in EBS HCM. This will determine which employees in HCM this user can retrieve data for.

   Note. If the user has access to more than this Responsibility in EBS, they will still be able to retrieve employee information from those Responsibilties as well.

   ---

6. Enter the Responsibilty Application for this user as found in EBS.
7. Enter the Security Group Name for this user as found in EBS.
8. Enter the Organizatiuon ID for this user as found in EBS if applicable.

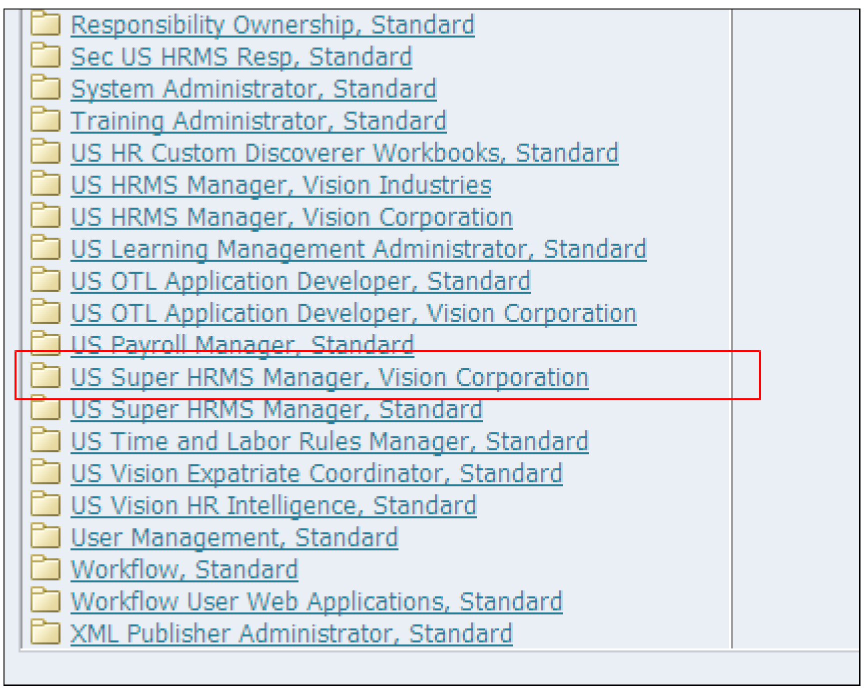
Task 6-11: Verifying Set Up Between PeopleSoft CRM and Oracle EBS

Use this scenario as an example that describes how to verify the set up between PeopleSoft CRM and Oracle EBS.

This example is for Incremental Sync.

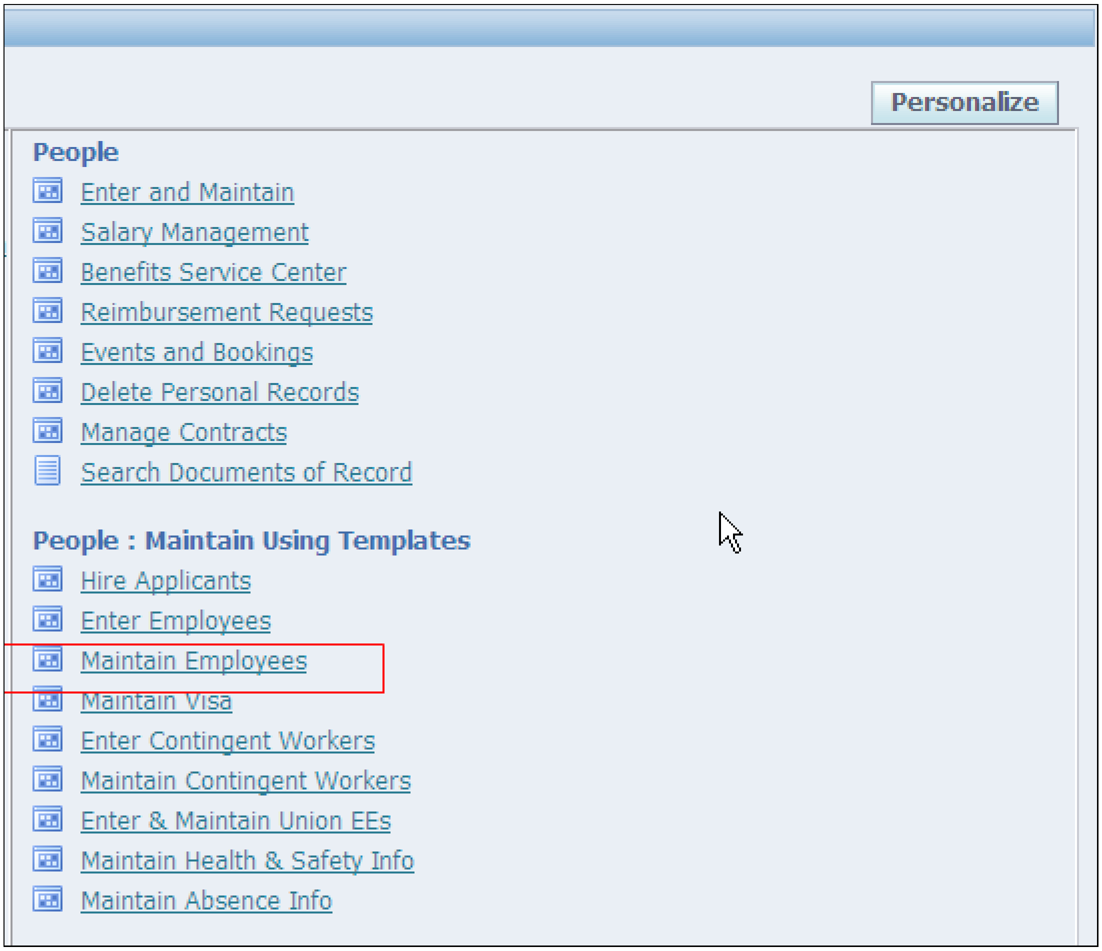
1. Log in to the Oracle EBS database by entering *hrms* in the User ID field, and *welcome* in the Password field.
2. Navigate to the first menu responsibility: US Super HRMS Manager, Vision Corporation.

   Responsibility refers to the left hand menu column, as shown in the following example:



Responsibility left hand menu column

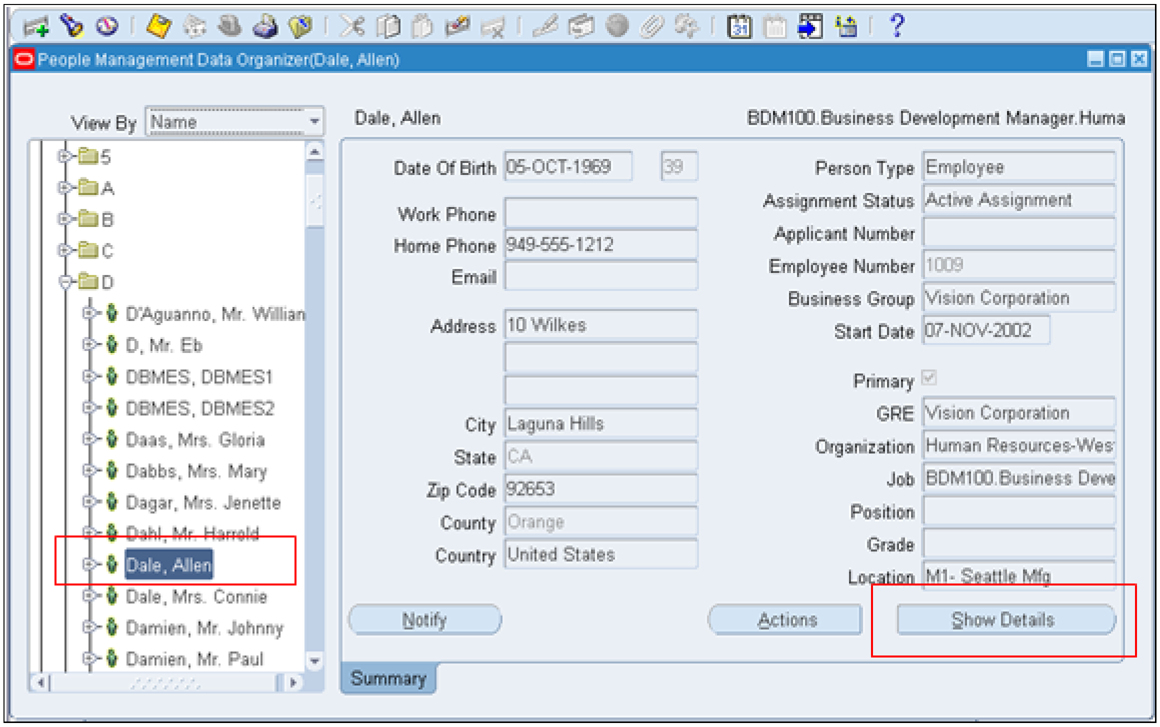
3. Navigate under People: Maintain using Templates select menu: Maintain Employees, as shown in the following example:



People: Maintain Using Templates: Maintain Employees

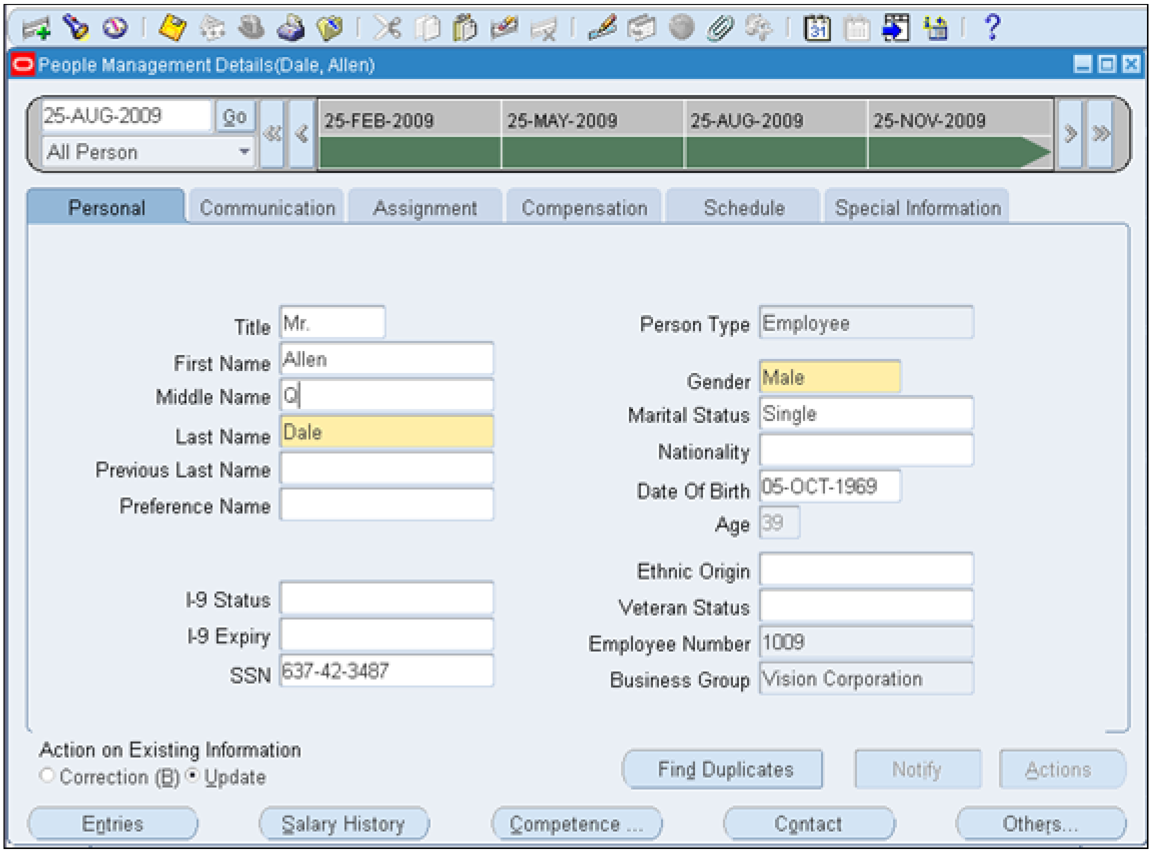
4. Open left hand navigation by People Name, open *D* and select the name Dale, Allen.

5. When the People Management Data Organizer displays, click the Show Details button, as shown in the following example:



PeopleSoft Management Data Organizer

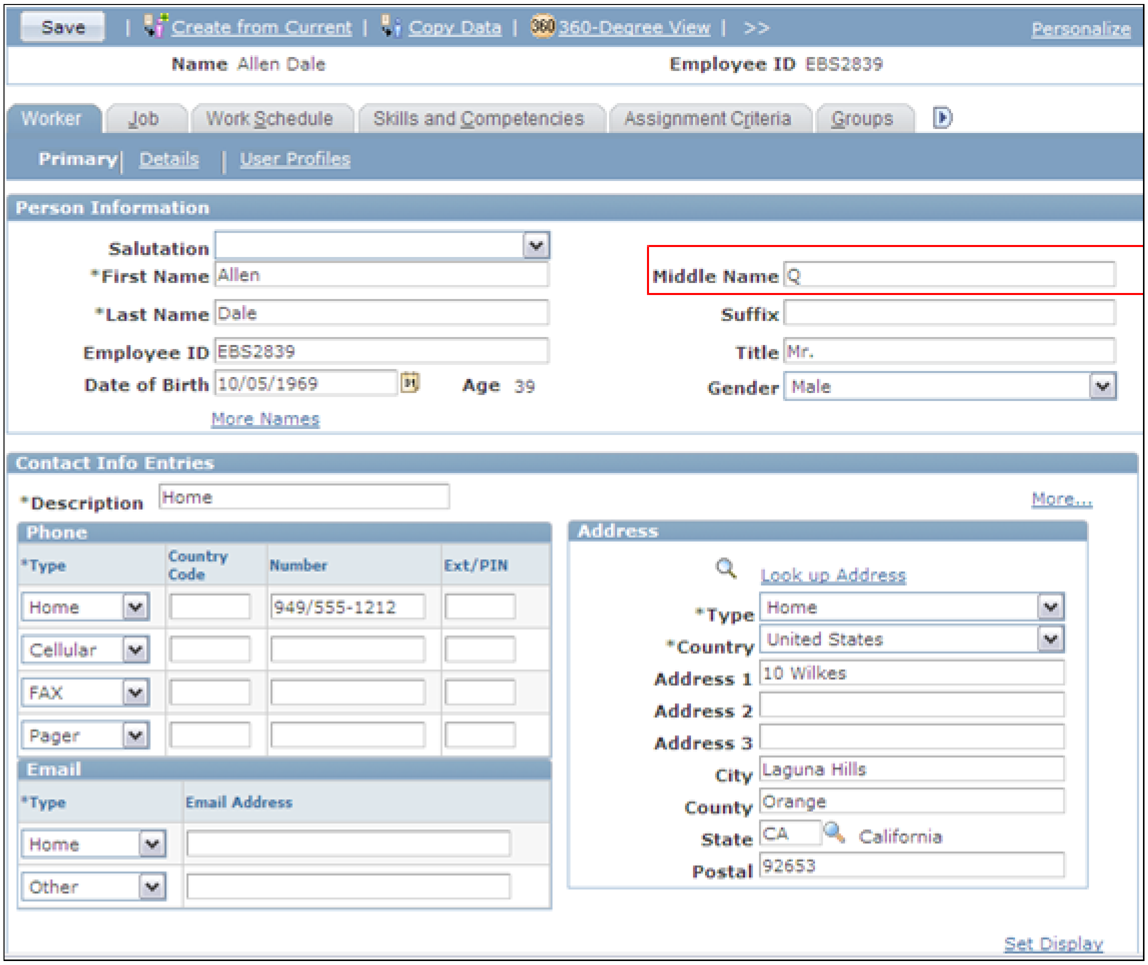
6. In the Middle Name field, enter *Q*, and then click the Save icon on the menu bar, as shown in the following example:



PeopleSoft Management Data Organizer - Personal page

7. Navigate to the PeopleSoft CRM system that you integrated with the Oracle EBS environment.
8. Log in by entering *VP1* in the User ID field and *VP1* in the Password field.
9. Navigate the CRM menu: Workforce, Search Worker.
10. In the First Name field, enter *Allen*.
11. In the Last Name field, enter *Dale*.
12. Click the Search button.

13. When the Worker page appears, notice that the Middle Name field has a value of *Q*, as shown in the following example:



Worker page

This confirms that the connection between the PeopleSoft CRM database and the Oracle EBS environment is valid and working properly.

Chapter 7

Integrating PeopleSoft CRM 9.2 and PeopleSoft HCM 9/9.1/9.2 with HRHD

This chapter discusses:

- Understanding PeopleSoft CRM 9.2 and PeopleSoft HCM 9.0/9.1/9.2 Integration
- Prerequisites
- Setting up the PeopleSoft HCM 9.0/9.1/9.2 Database
- Setting Up the PeopleSoft CRM 9.2 Database
- Integrating with PRE 8.51 People Tools

Understanding PeopleSoft CRM 9.2 and PeopleSoft HCM 9.0/9.1/9.2 Integration

This chapter provides instructions for setting up the 360-Degree View Enterprise Integration Point (EIP). The EIP enables access to the PeopleSoft HelpDesk for Human Resources (HRHD) Worker 360-Degree View from PeopleSoft CRM.

Ensure that you have the latest updates for the PeopleSoft PeopleTools 8.55 Installation instructions for your database platform for both the PeopleSoft CRM and PeopleSoft HCM applications.

Prerequisites

Before you can begin the PeopleSoft CRM and PeopleSoft HCM integration tasks in this chapter, you must complete these requirements:

- Install and configure a PeopleSoft CRM 9.2 database.
- Install and configure a PeopleSoft HCM 9.0, 9.1 or 9.2 database.

Task 7-1: Setting up the PeopleSoft HCM 9.0/9.1/9.2 Database

This section discusses:

- Setting Up the Gateway for PeopleSoft CRM and PeopleSoft HCM
- Accessing the PeopleSoft CRM Local Node Definition
- Accessing the PeopleSoft HCM Local Node Definition
- Adding PeopleSoft CRM Trusted Node for Single SignOn

- Accessing HD_360_REQUEST_SYNC Service Operation
- Adding a PeopleSoft HCM Active Routing for Version 2
- Running Row Level Security in PeopleSoft HCM

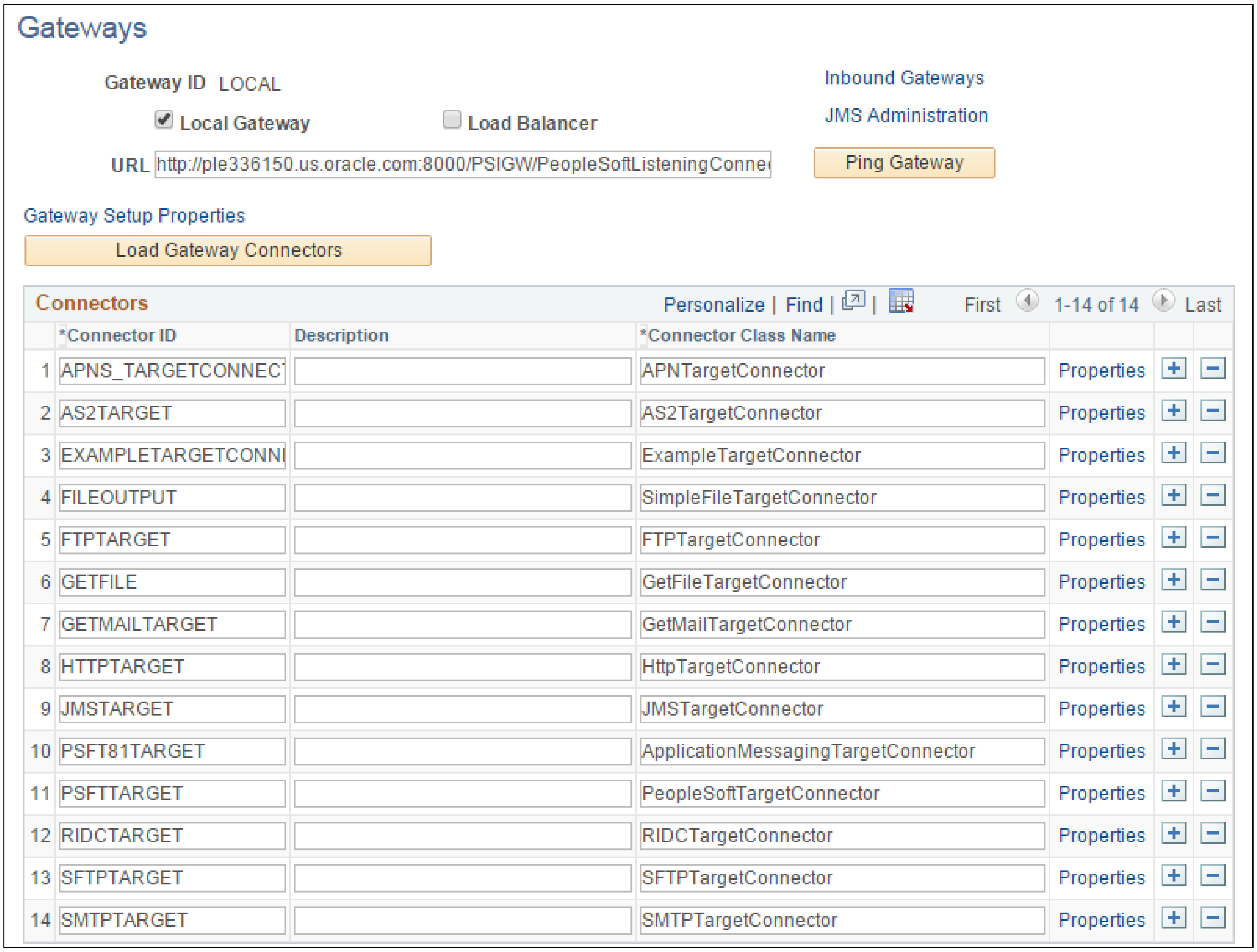
Task 7-1-1: Setting Up the Gateway for PeopleSoft CRM and PeopleSoft HCM

A gateway must be set up between the PeopleSoft CRM and PeopleSoft HCM systems. PSFT_CR is the delivered local node on the PeopleSoft CRM system. PSFT_HR is the delivered local node on the PeopleSoft HCM system. The gateway URL defines these two nodes in the gateway property.

To set up the gateway in both the PeopleSoft CRM and PeopleSoft HCM systems:

1. In the PeopleSoft CRM system, access the Gateways page by selecting PeopleTools, Integration Broker, Configuration, Gateways.

2. Search for and open the LOCAL gateway, as shown in the following example:



Gateways page

On the Gateways page, do the following:

a. Specify the Integration Gateway URL using the following syntax:

   http://<webserver machine name><port>/PSIGW/PeopleSoftListeningConnector

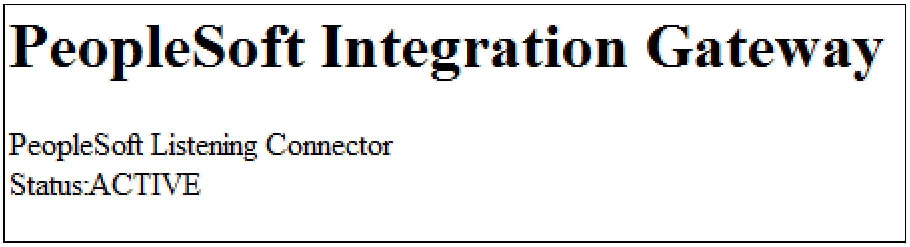
b. Click the Save button to save the page.

c. Click the Load Gateway Connectors button. You will receive a message *"Loading process was successful."*

d. Acknowledge the message.

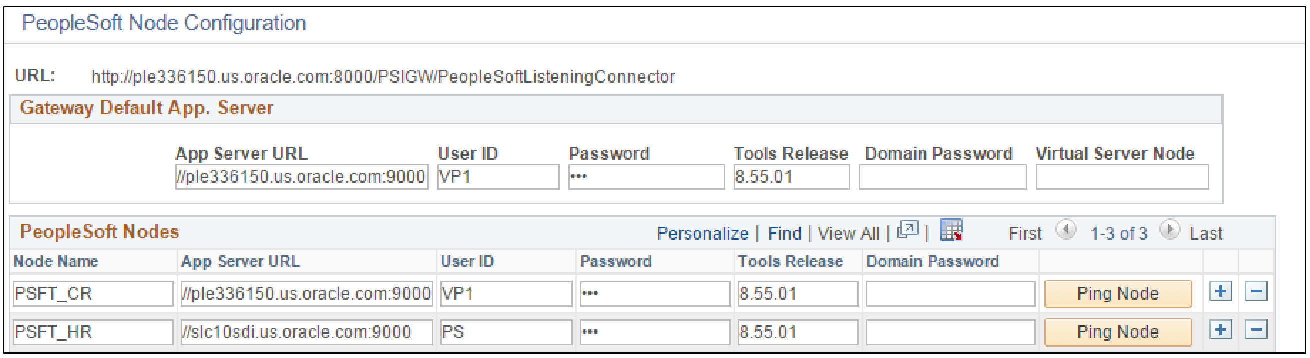
e. Click Save to save the page again.

f. Click the Ping Gateway button, to test your ping and verify that it is successful, as shown in the following example:



PeopleSoft Listening Connector

3. Click the Gateway Setup Properties link to set up local and remote nodes in the gateway.
4. Log in to the Gateway Setup Properties.
5. The PeopleSoft Node Configuration page appears, as shown in the following example:



PeopleSoft Node Configuration page

6. In the PeopleSoft Nodes grid, click the Add (+) button to add the local and remote node information:
   a. In the Node Name column, enter the node name.
   b. In the App Server URL column, enter the application server URL.
   c. In the User ID column, enter the user ID.
   d. In the Password column, enter the password.
   e. In the Tools Release column, enter the PeopleSoft PeopleTools release number.
7. Click Save.
8. Click the OK button to return to the Gateway page.
9. Click Save to save the Gateway page again.
10. Repeat the same Gateway set up steps in the PeopleSoft HCM system.

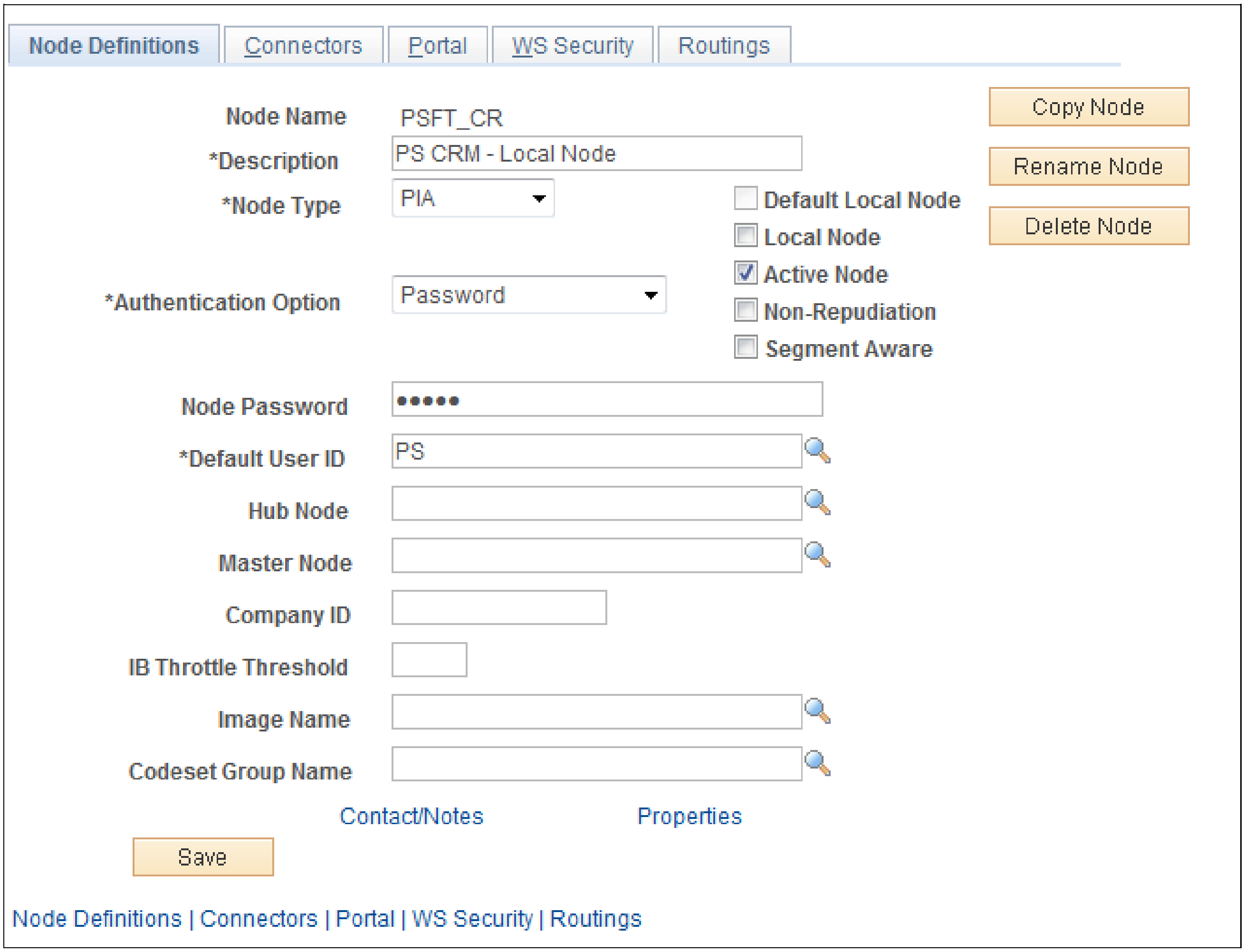
Task 7-1-2: Accessing the PeopleSoft CRM Local Node Definition

In the following examples, PSFT_CR is the PeopleSoft CRM 9.2 local node.

To set up the PeopleSoft HCM 9.0, 9.1 or 9.2 database:

1. Select PeopleTools, Integration Broker, Integration Setup, Nodes, and then search for the CRM local node. For example, *PSFT_CR* .

2. Select the Node Definitions tab to access the Node Definitions page, as shown in the following example:



Node Definitions page

3. Use this example to complete the Node Definitions page:

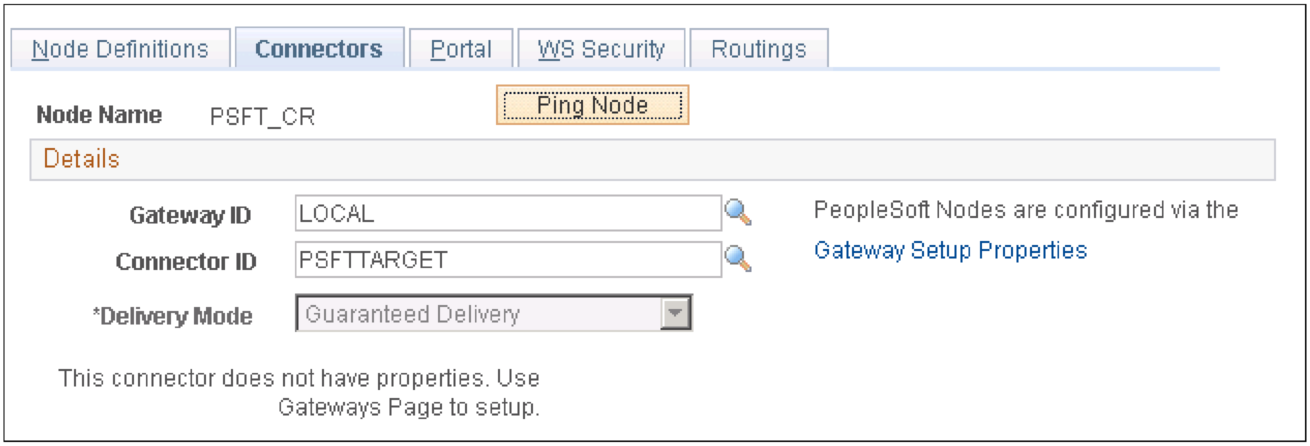
Note. The data you enter will differ and be specific to your system and set up.

a. In the Node Type field, select *PIA* (PeopleSoft Pure Internet Architecture) from the drop-down list.

b. If the Node Type field is enabled for selection, select *PIA* (PeopleSoft Pure Internet Architecture). Otherwise, PIA is already your default selection.

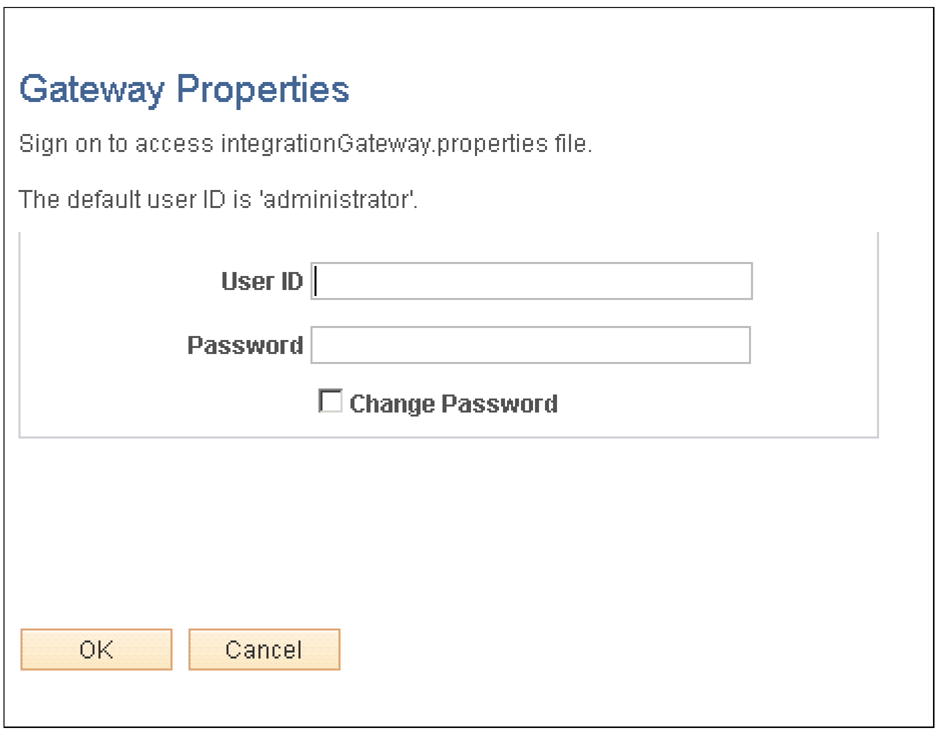
Note. For the Authentication option, you can select either *No Authentication* or *Password Authentication.* If you select *Password Authentication,* you must define the same node password for node PSFT_CR in both the PeopleSoft CRM and PeopleSoft HCM databases. The default password is *PSOFT.*

4. Select the Connectors tab to access the Connectors page, as shown in the following example:



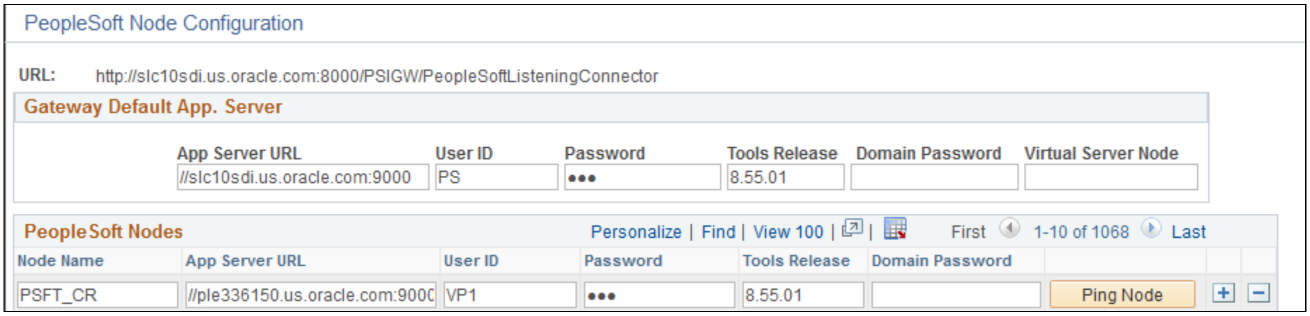
Connectors page

5. Click the Gateway Setup Properties link to access the Gateway Properties page, as shown in the following example:



Gateway Properties page

6. Login using the administrator and password to verify that the gateway settings are defined as shown in the following example:



PeopleSoft Node Configuration page

7. On the Gateway Properties page, ensure that there is a row for PSFT_CR and that it contains the correct URL for that database.
8. Click Save.

Task 7-1-3: Accessing the PeopleSoft HCM Local Node Definition

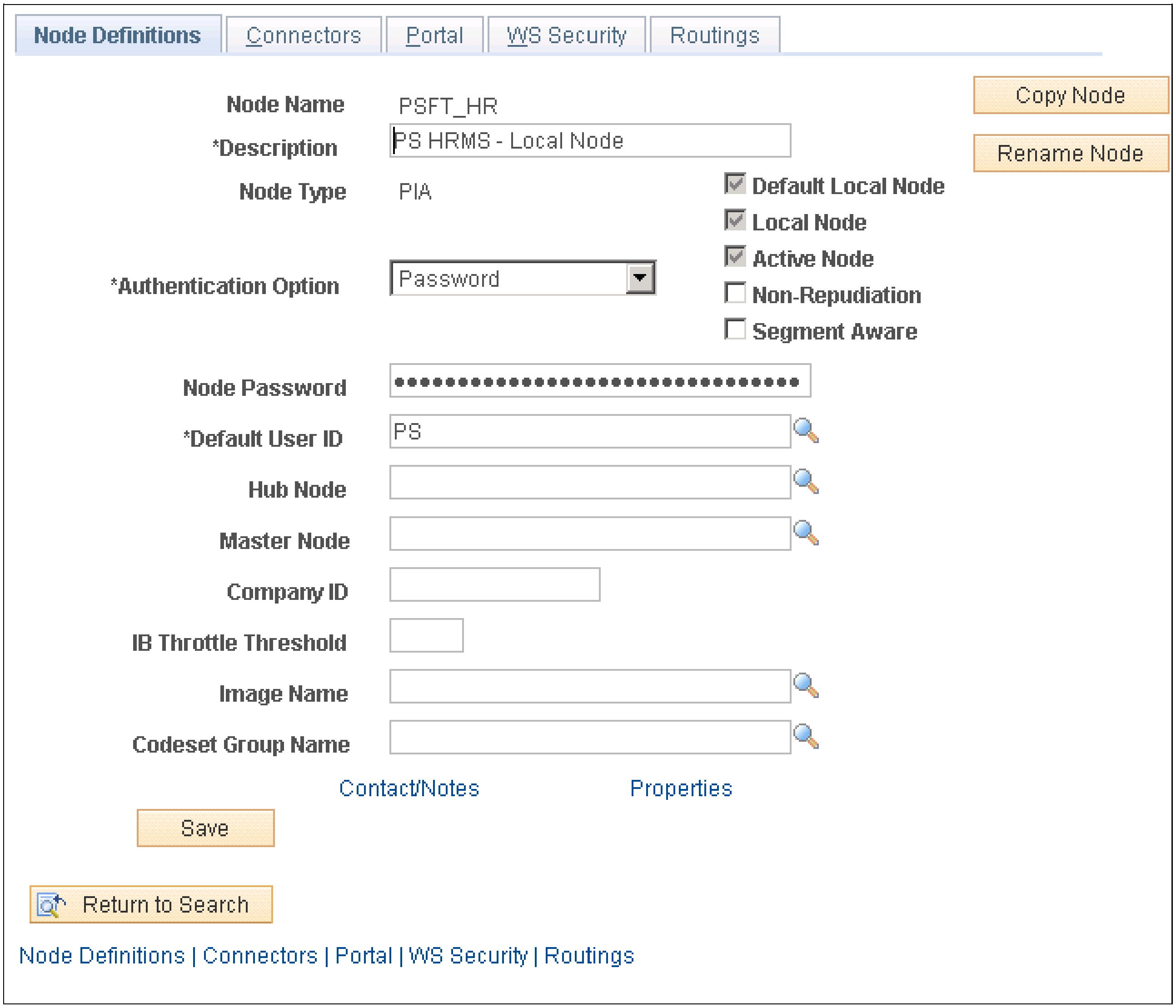
Implement the following steps in PeopleSoft HCM database.

In the following examples, PSFT_HR is the PeopleSoft HCM local node.

To access the PeopleSoft HCM local node definition:

1. Select PeopleTools, Integration Broker, Integration Setup, Nodes, and then search for the HCM local node. For example, *PSFT_HR*

2. Select the Node Definitions tab to access the Node Definitions page, as shown in the following example:



Node Definitions page

3. Use this example to complete the Node Definitions page:

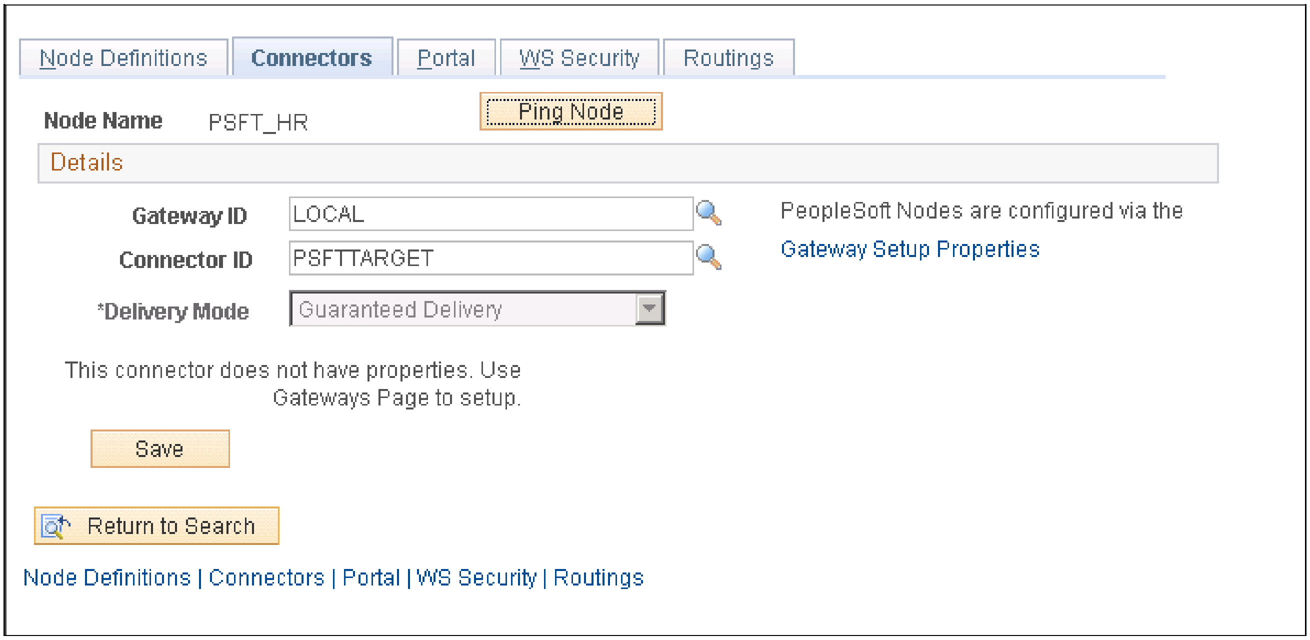
Note. The data you enter will differ and be specific to your system and set up.

a. In the Node Type field, select *PIA* (PeopleSoft Pure Internet Architecture) from the drop-down list.

b. In the Authentication Option field, select either *No Authentication* or *Password Authentication* from the drop-down list.

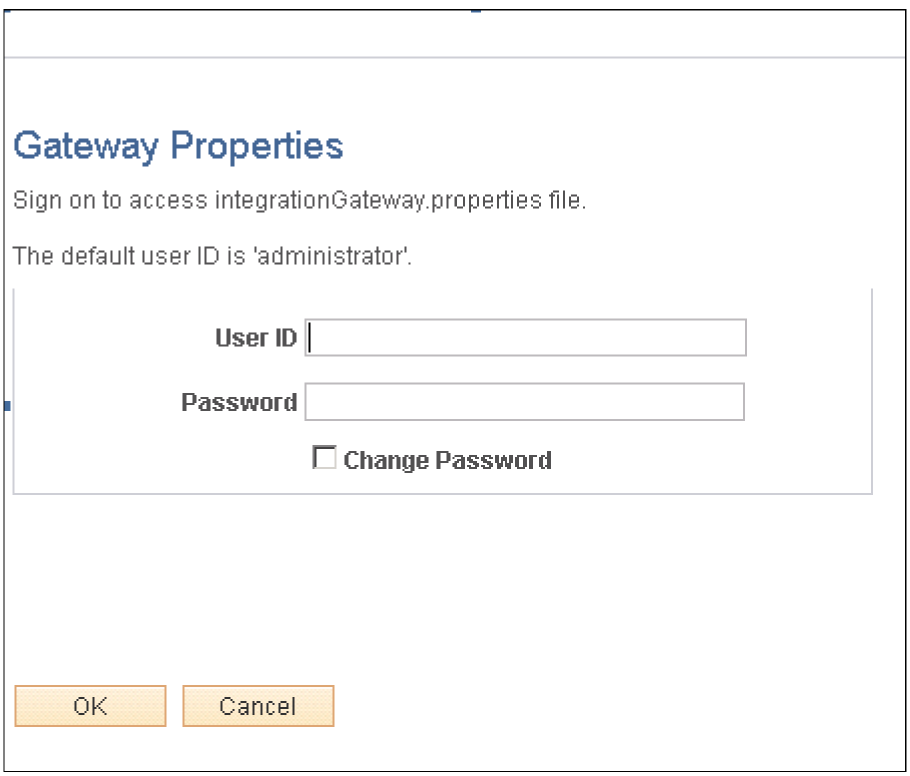
Note. For the Authentication option, you can select either *No Authentication* or *Password Authentication.* If you select *Password Authentication,* you must define the same node password for node PSFT_HR in both the PeopleSoft CRM and PeopleSoft HCM databases. The default password is *PSOFT.*

4. Select the Connectors tab to access the Connectors page, as shown in the following example:



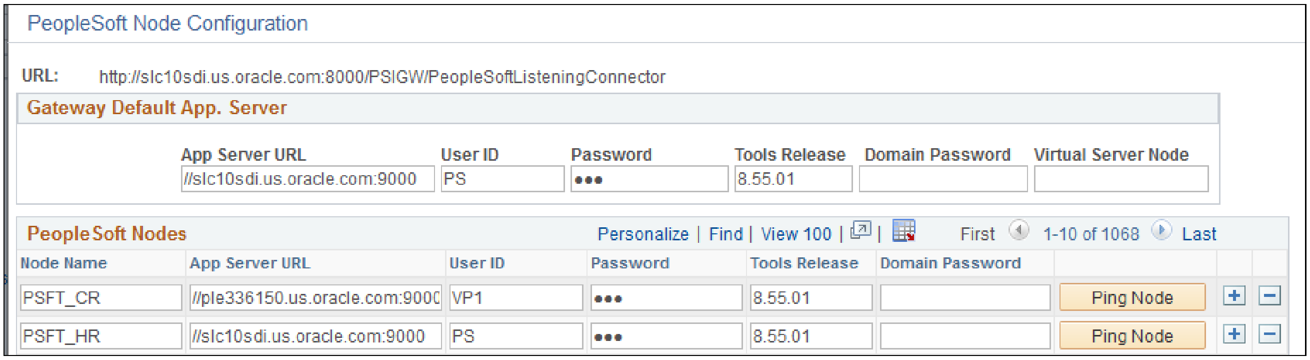
Connectors page

5. Click the Gateway Setup Properties link to access the Gateway Properties page, as shown in the following example:



Gateway Properties page

6. Login and ensure that there is a row for PSFT_HR and that it contains the correct URL for that database, as shown in the following example:



PeopleSoft Node Configuration page

7. Click Save.

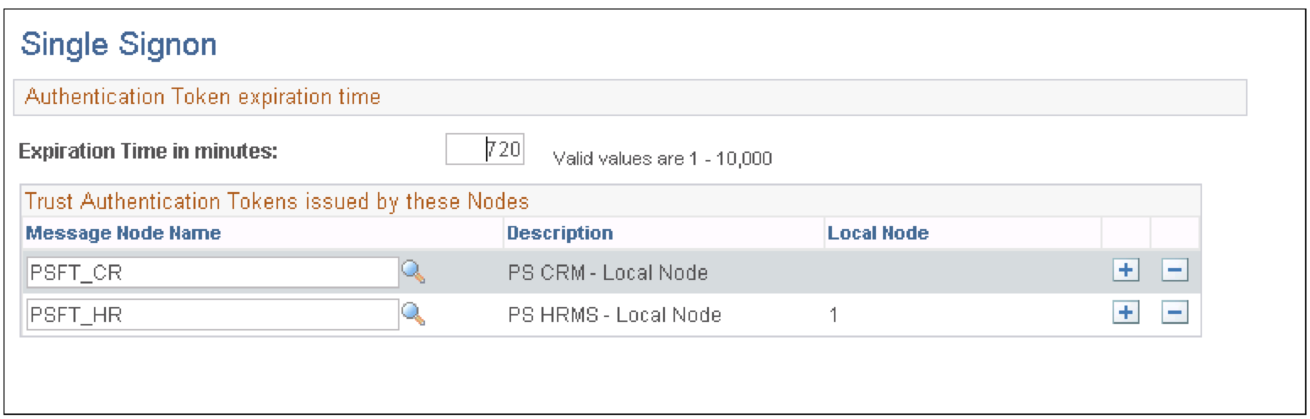
Task 7-1-4: Adding PeopleSoft CRM Trusted Node for Single SignOn

Implement the following steps in PeopleSoft HCM database.

To add the PeopleSoft CRM trusted node to enable PeopleSoft Single SignOn:

1. Select Home, PeopleTools, Security, Security Objects, Single SignOn.

   The PeopleSoft Single SignOn page appears, as shown in the following example:



Single Sign on page

2. Add a row for the PeopleSoft CRM local node.

   For example, *PSFT_CR*

3. Click Save.

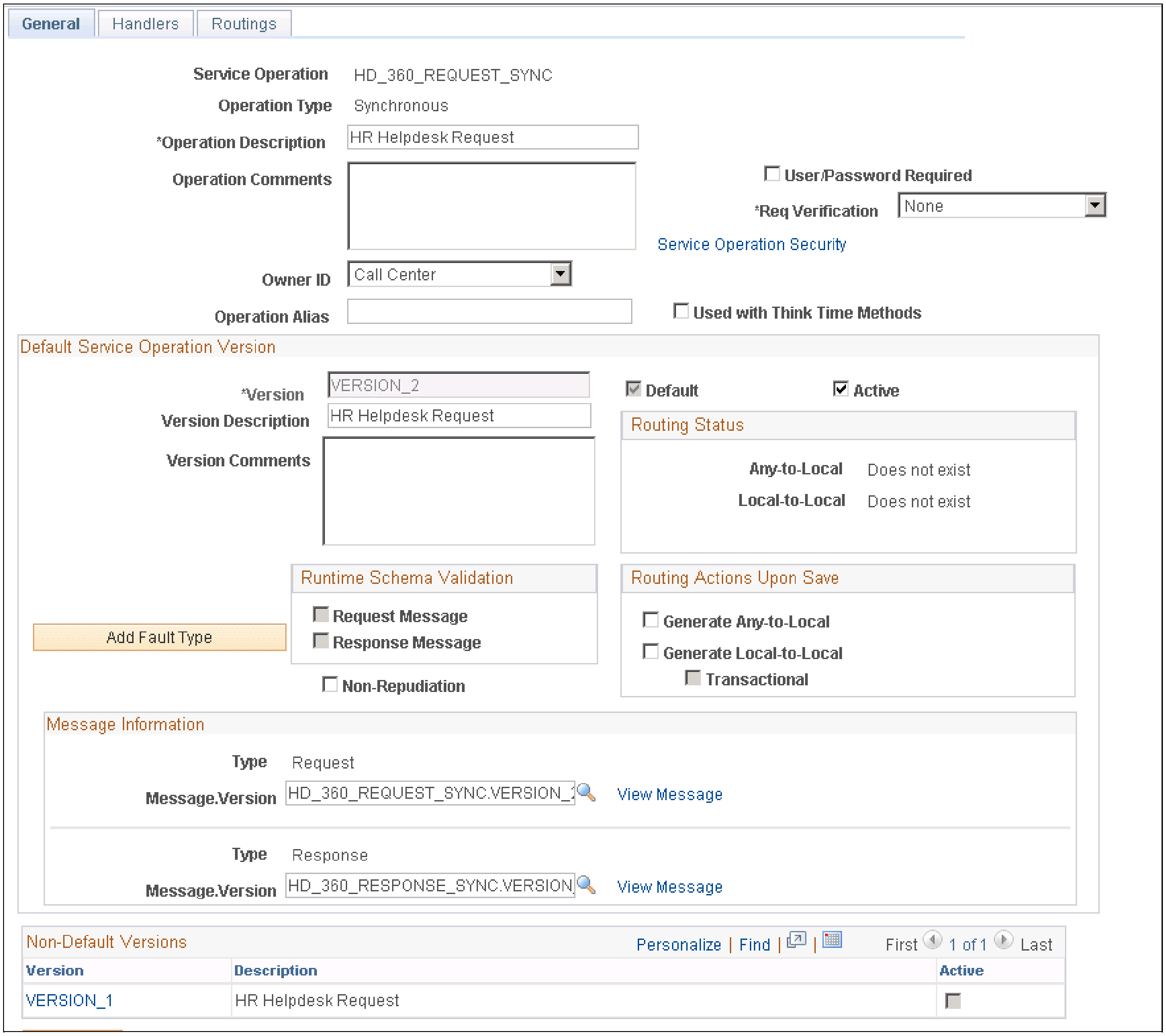
Task 7-1-5: Accessing HD_360_REQUEST_SYNC Service Operation

Implement the following steps in PeopleSoft HCM database.

To access the HD_360_REQUEST_SYNC Service Operation:

1. Select PeopleTools, Integration Broker, Integration Setup, Service Operation, and then search for the service operation HD_360_REQUEST_SYNC.

2. Select Service Operation to access the General Service Operation Page, as shown in the following example:



Service Operations page

3. In the Default Service Operation Version section, select the Active check box.
4. Click Save.

5. Select the Handlers tab to access the Handlers page, as shown in the following example:

Handlers page

6. In the Status column for the REQUESTHDLR, select *Active* from the drop-down list.
7. Click Save.

Task 7-1-6: Adding a PeopleSoft HCM Active Routing for Version 2

Implement the following steps in PeopleSoft HCM database.

To add an active routing for version 2 for the PeopleSoft HCM database:

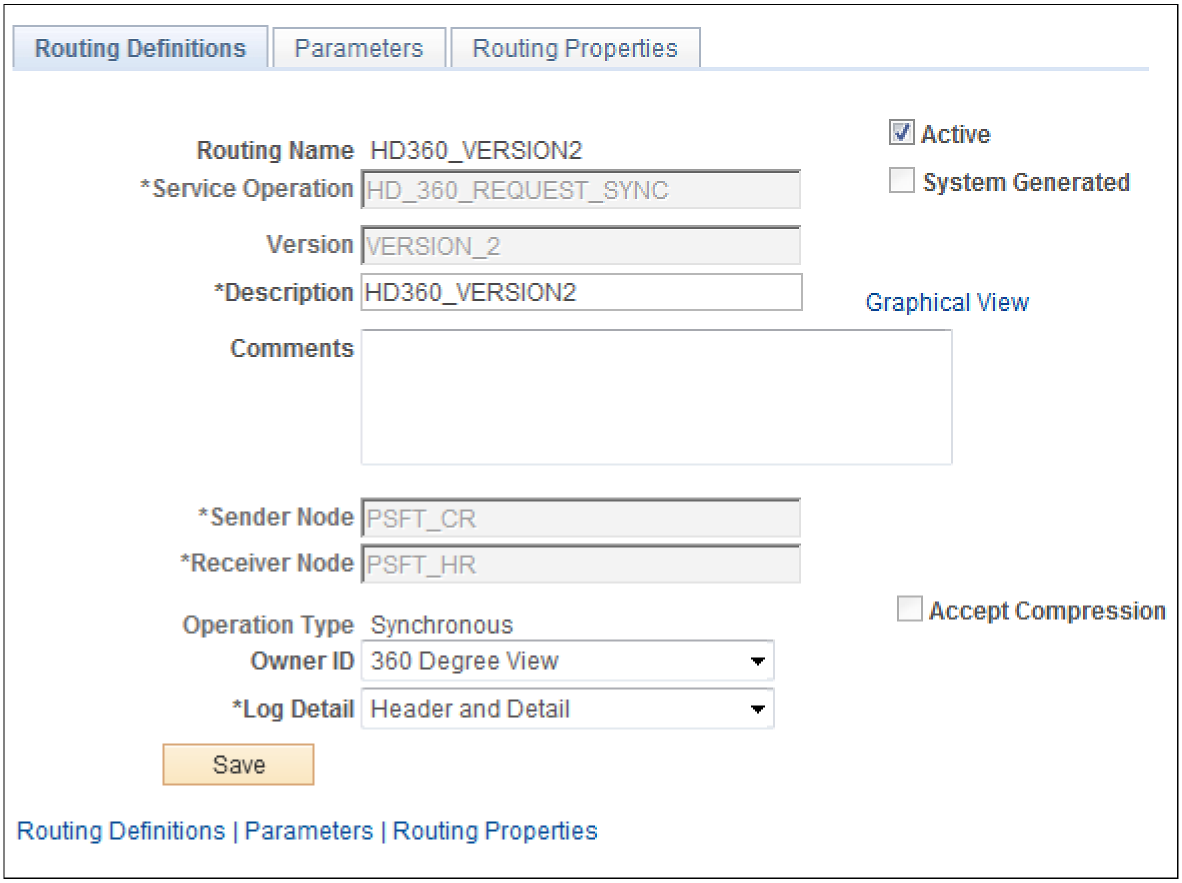
1. Select Home, PeopleTools, Integration Broker, Integration Setup, Routings.

   The Routing Definitions Search page appears.
2. Click the Add a New Value tab.
3. In the Routing Name field, enter *HD360_VERSION2*.

4. Click the Add button.

Note. Duplicate routing definitions are not allowed. Use the existing routing definition, if it is already present instead of creating a new one.

The Routing Definitions page for HD360_VERSION2 appears, as shown in the following example:



Routing Definitions page

5. Use this example to complete the Routing Definitions page:
   a. In the Routing Name field, enter *HD360_VERSION2*.

   Note. For new routings, you must enter or select the information for all fields, as in this example.

   For existing routings, the Sender Node populates as the CRM local node (PSFT_CR), and the Receiver Node populates as the HCM local node (PSFT_HR).

   b. In the Service Operation field, enter or select the service operation. For example, HD_360_REQUEST_SYNC.

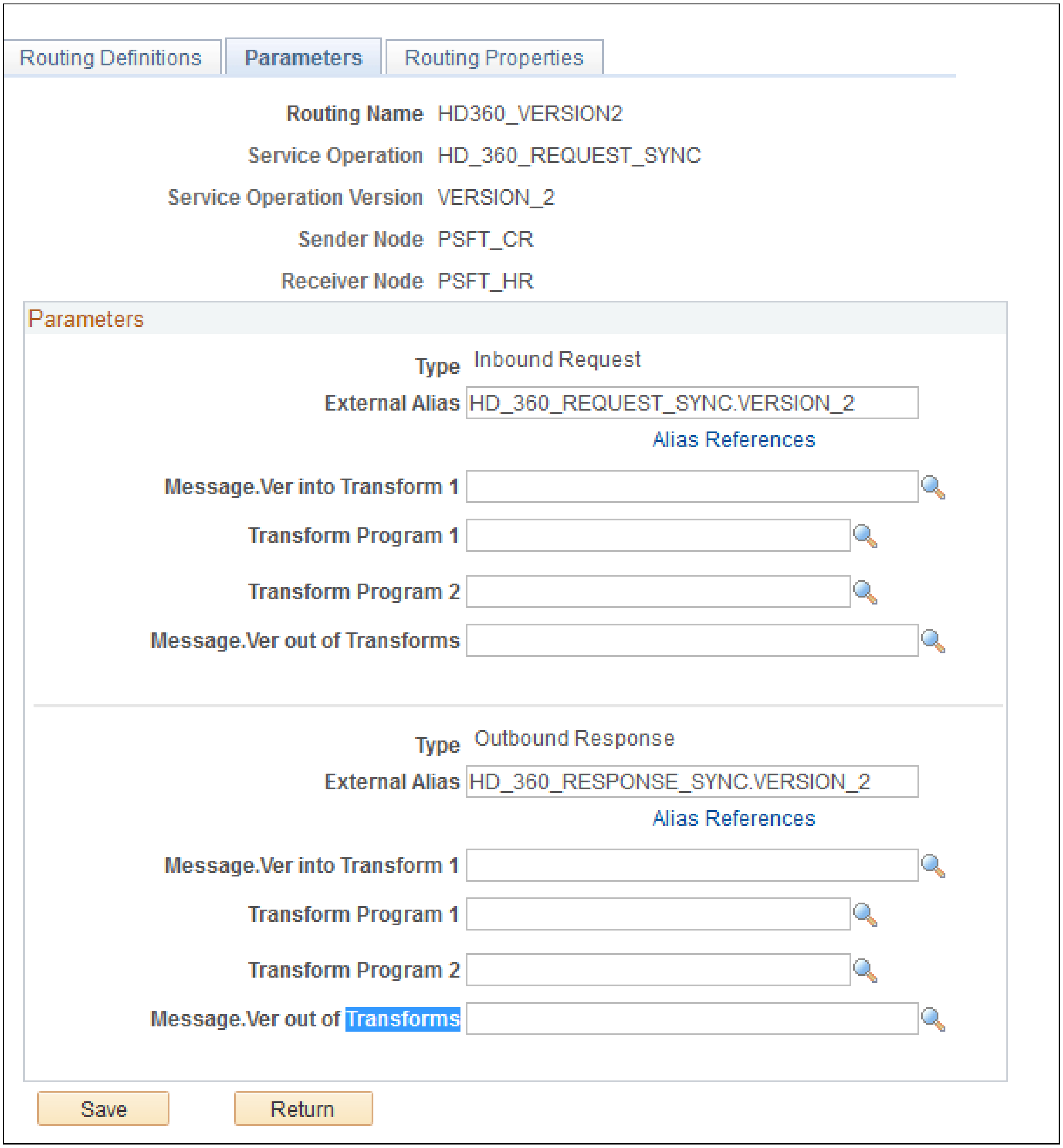
   When you enter or select a service operation, the Version field automatically populates. For example, VERSION_2.
   c. In the Description field, enter a description. For example, HD360_VERSION2.
   d. In the Sender Node field, enter or select the sender node. For example, PSFT_CR.
   e. In the Receiver Node field, enter or select a receiver node. For example, PSFT_HR.
   f. In the Object Owner ID field, select *360 Degree View* from the drop-down list.

g. In the Log Detail field, select *Header and Detail* from the drop-down list.

h. Select the Active check box.

i. Click Save.

6. Select the Parameters tab to access the Parameters page, as shown in the following example:



Routing Definitions - Parameters page

7. Use this example to complete the Parameters page:

a. For Inbound Request in the External Alias field, enter *HD_360_REQUEST_SYNC.VERSION_2*

b. For Outbound Response in the External Alias field, enter *HD_360_RESPONSE_SYNC.VERSION_2*

c. Click Save.

Note. There are no transformations because the PeopleSoft CRM database is sending Version 2 message and the PeopleSoft HCM database is expecting Version 2 message.

The routings tab on the service operation should show the new routing as *Active,* and any other routing should show as *Inactive.*

Task 7-1-7: Running Row Level Security in PeopleSoft HCM

To run the row level security process in the PeopleSoft HCM database:

1. Select Home, Setup HCM, Security, Core Row Level Security, and then Refresh SJT_OPR_CLS.
2. Select existing Run Control ID or create a new one.
3. Select the Refresh All Rows check box and run the process.
4. Ensure that the process runs and displays a message of *Success* in the process monitor.

Task 7-2: Setting Up the PeopleSoft CRM 9.2 Database

This section discusses:

- Accessing the PeopleSoft CRM Local Node Definition
- Accessing the PeopleSoft HCM Local Node Definition
- Adding PeopleSoft HCM Trusted Node for PeopleSoft Single SignOn
- Activating Service Operations
- Adding a PeopleSoft CRM Active Routing for Version 2

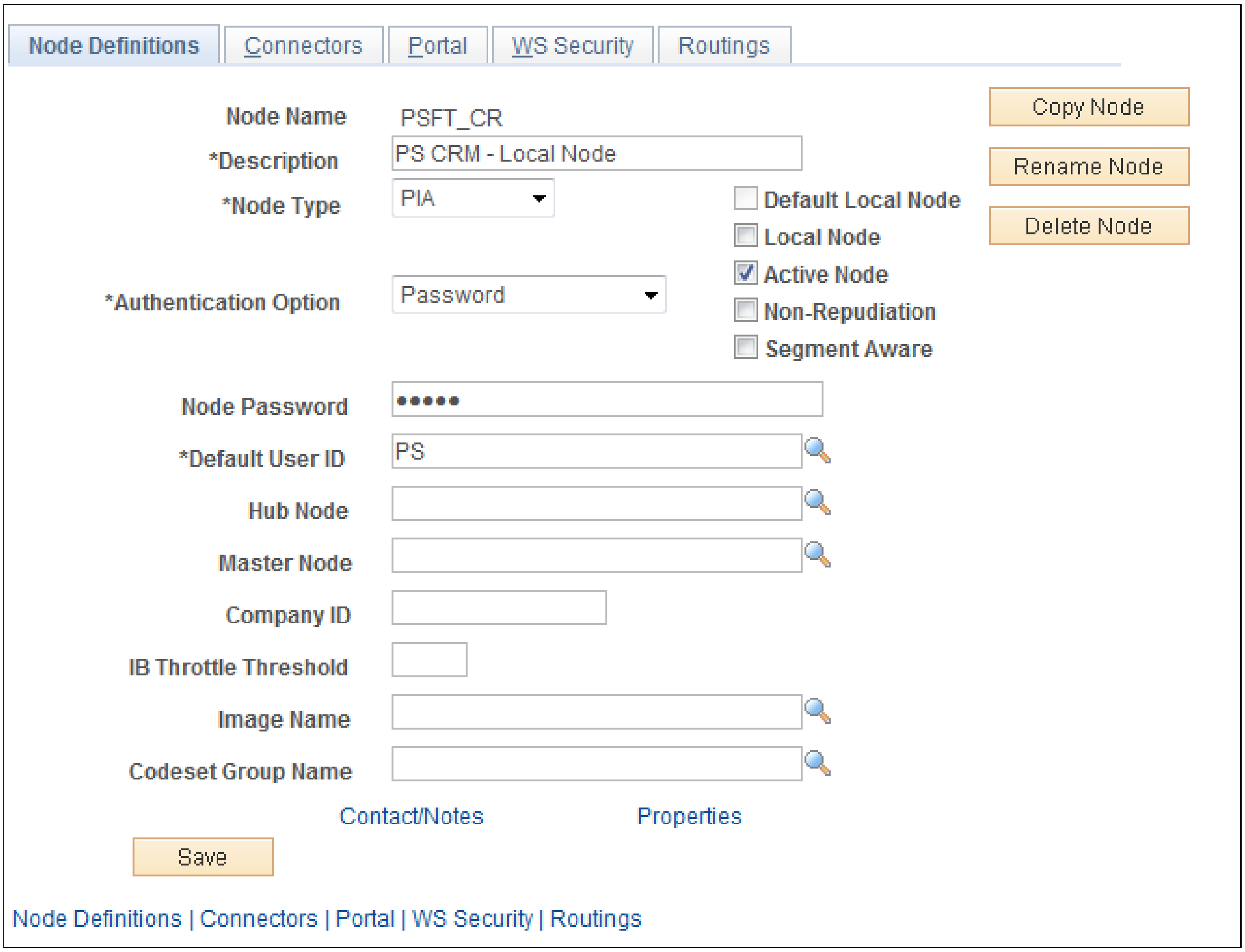
Task 7-2-1: Accessing the PeopleSoft CRM Local Node Definition

To access the PeopleSoft CRM local node definition:

Implement all the following steps to setup PeopleSoft CRM 9.2 database in the PeopleSoft CRM system.

1. Select PeopleTools, Integration Broker, Integration Setup, Nodes, and then search for the CRM local node (for example, PSFT_CR).

2. Select the Node Definitions tab to access the Node Definitions page, as shown in the following example:



Node Definitions page

3. Use this example to complete the Node Definitions page:

Note. The data you enter will differ and be specific to your system and set up.

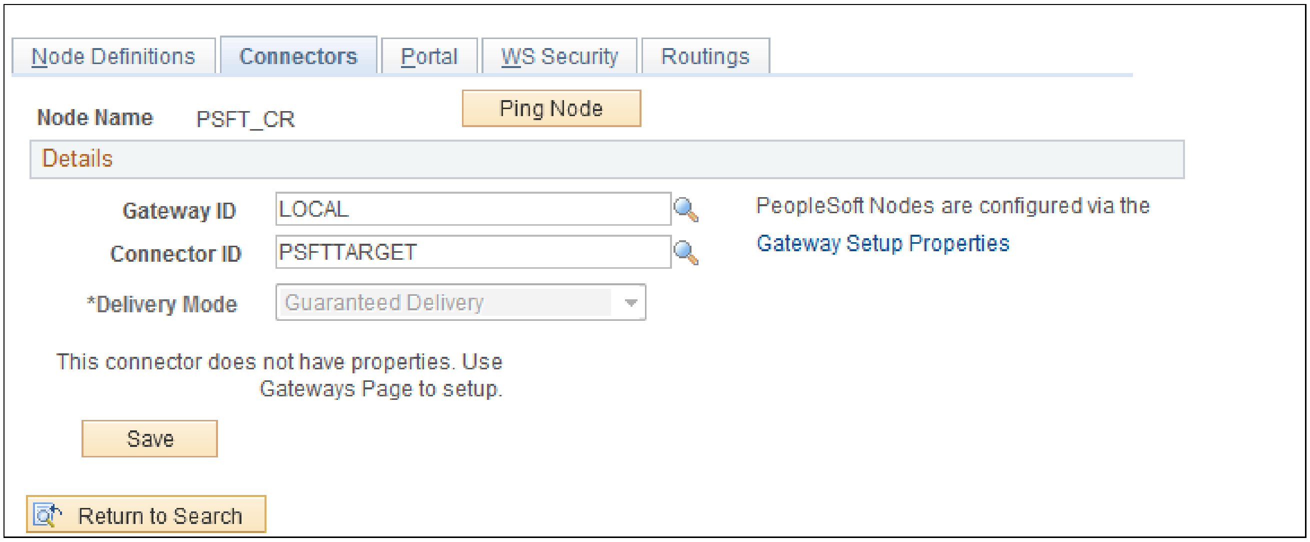
a. In the Authentication Option field, select *Password* from the drop-down list.

Note. Any nodes with an Authentication Option of Password must have the same password for node PSFT_HR across PeopleSoft CRM and PeopleSoft HCM. The default password is *PSOFT*.

b. In the Password field, enter a password.

c. Click Save.

4. Select the Connectors tab to access the Connectors page, as shown in the following example:



Connectors page

5. In the Connector ID field, verify that *PSFTTARGET* is selected.
6. Click the Gateway Setup Properties link to access and set up the Gateway Properties as necessary.
7. Click Save.

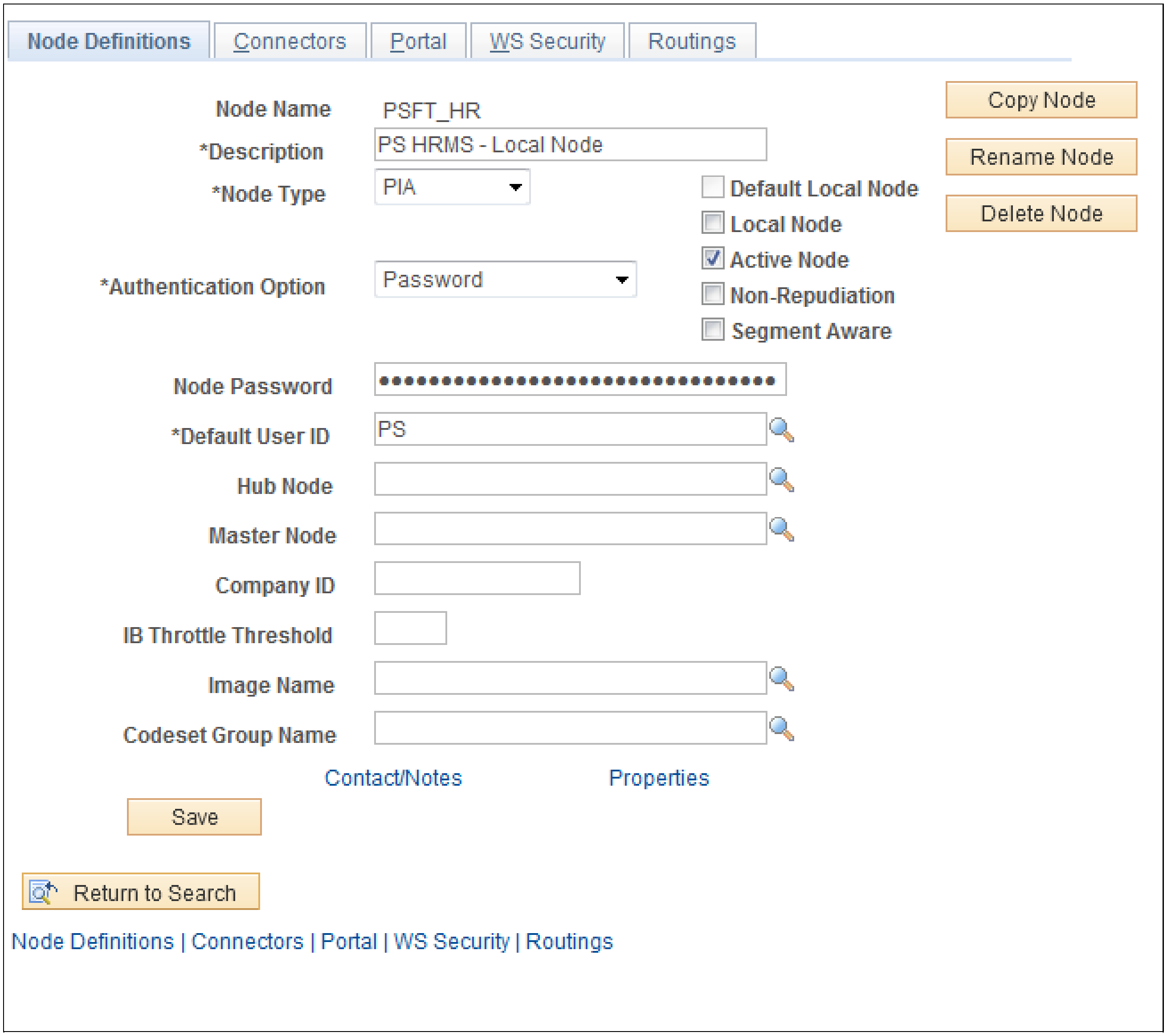
Task 7-2-2: Accessing the PeopleSoft HCM Local Node Definition

Implement the following steps in PeopleSoft CRM database.

To access the PeopleSoft HCM local node definition:

1. Select PeopleTools, Integration Broker, Integration Setup, Nodes, and then search for the HCM local node.

2. Select the Node Definitions tab to access the Node Definitions page, as shown in the following example:



Node Definitions page

3. Use this example to complete the Node Definitions page:

Note. The data you enter will differ and be specific to your system and set up.

---

a. In the Authentication Option field, select *Password* from the drop-down list.

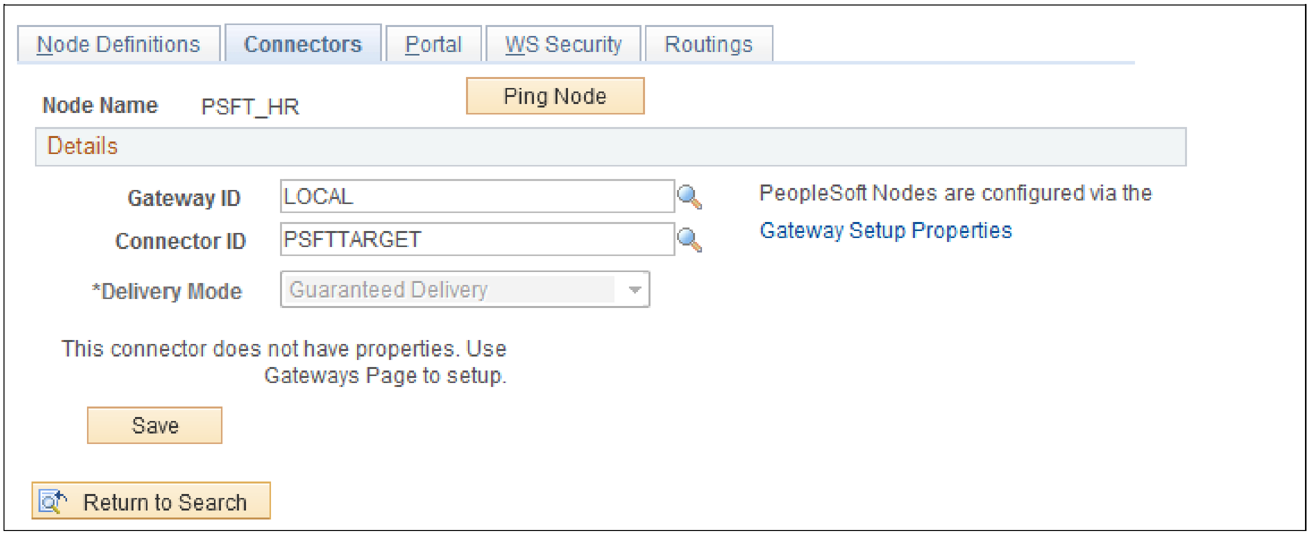
Note. Any nodes with an Authentication Option of Password must have the same password across PeopleSoft CRM and PeopleSoft HCM. The default password is *PSOFT.*

---

b. In the Password field, enter a password.

c. Click Save.

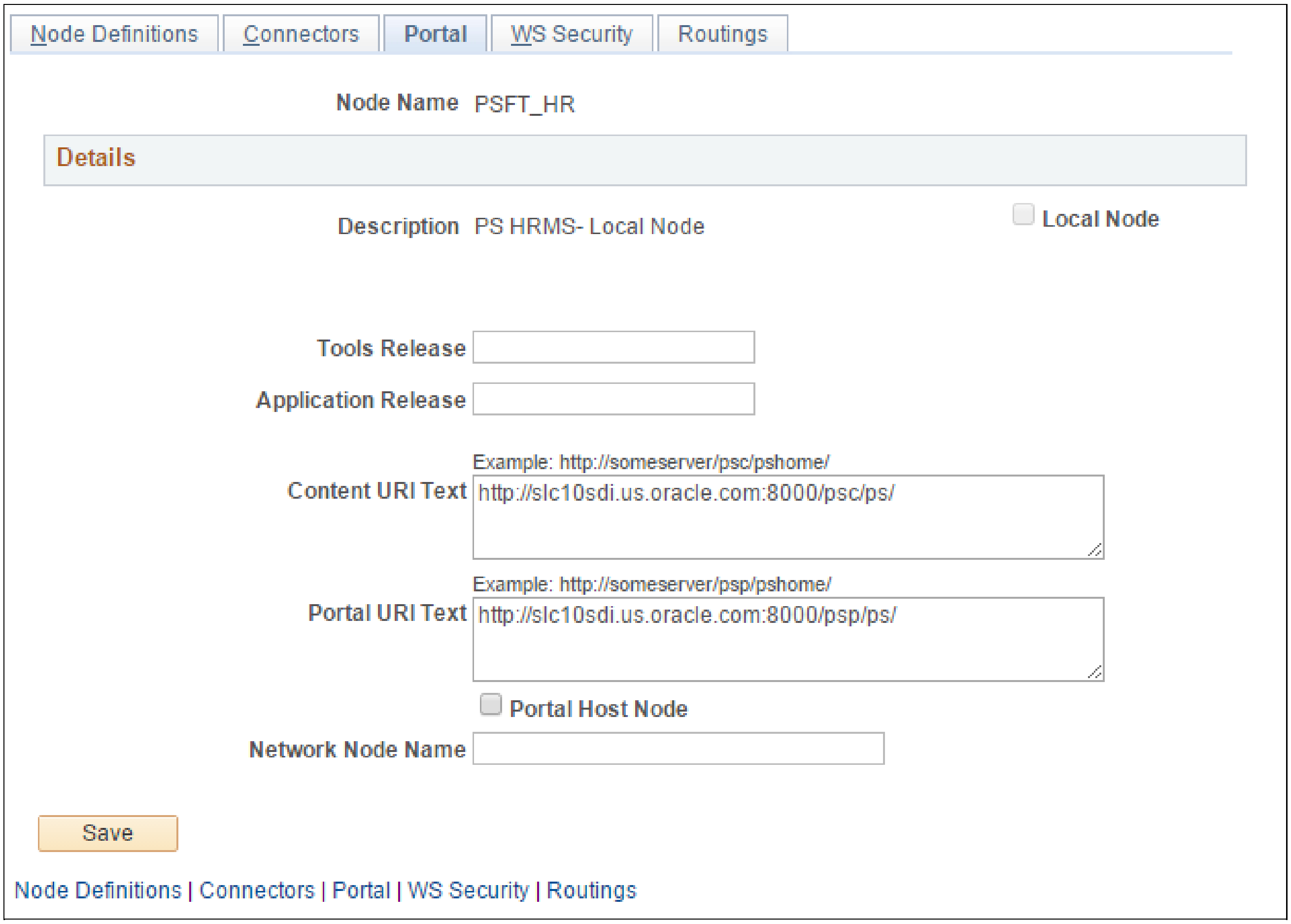
4. Select the Connectors tab to access the Connectors page, as shown in the following example:



Connectors page

5. In the Connector ID field, verify that *PSFTTARGET* is selected.
6. Click the Gateway Setup Properties link to access and set up the Gateway Properties as necessary.

7. Select the Portal tab to access the Portal page, as shown in the following example.



Portal Definitions page

Note. The data you enter will differ and will be specific to your system and set up.

---

8. Use this example to complete the Portal Definitions page:
   - In the Content URI Text field, enter the URI as shown in the above example.
   - In the Portal URI Text field, enter the URI as shown in the above example.

   Note. The URLS should point to your HR environment.

   ---

9. Click Save.

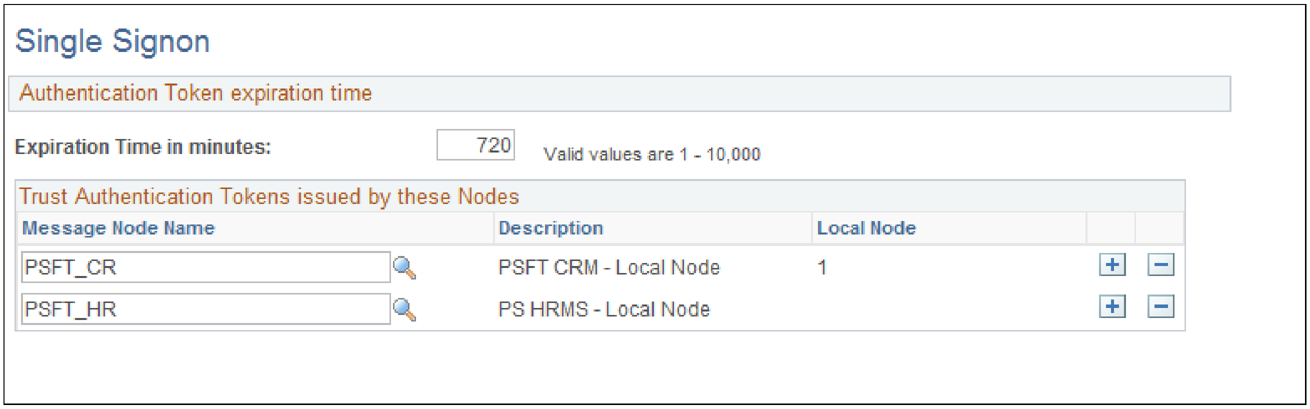
Task 7-2-3: Adding PeopleSoft HCM Trusted Node for PeopleSoft Single SignOn

Implement the following steps in PeopleSoft CRM database.

To add the PeopleSoft HCM trusted node to enable PeopleSoft Single SignOn:

1. Select Home, PeopleTools, Security, Security Objects, Single SignOn.

   The PeopleSoft Single SignOn page appears, as shown in the following example:

   Single Sign-On page

2. Add a row for the PeopleSoft HCM local node.

   For example, *PSFT_HR*
3. Click Save.

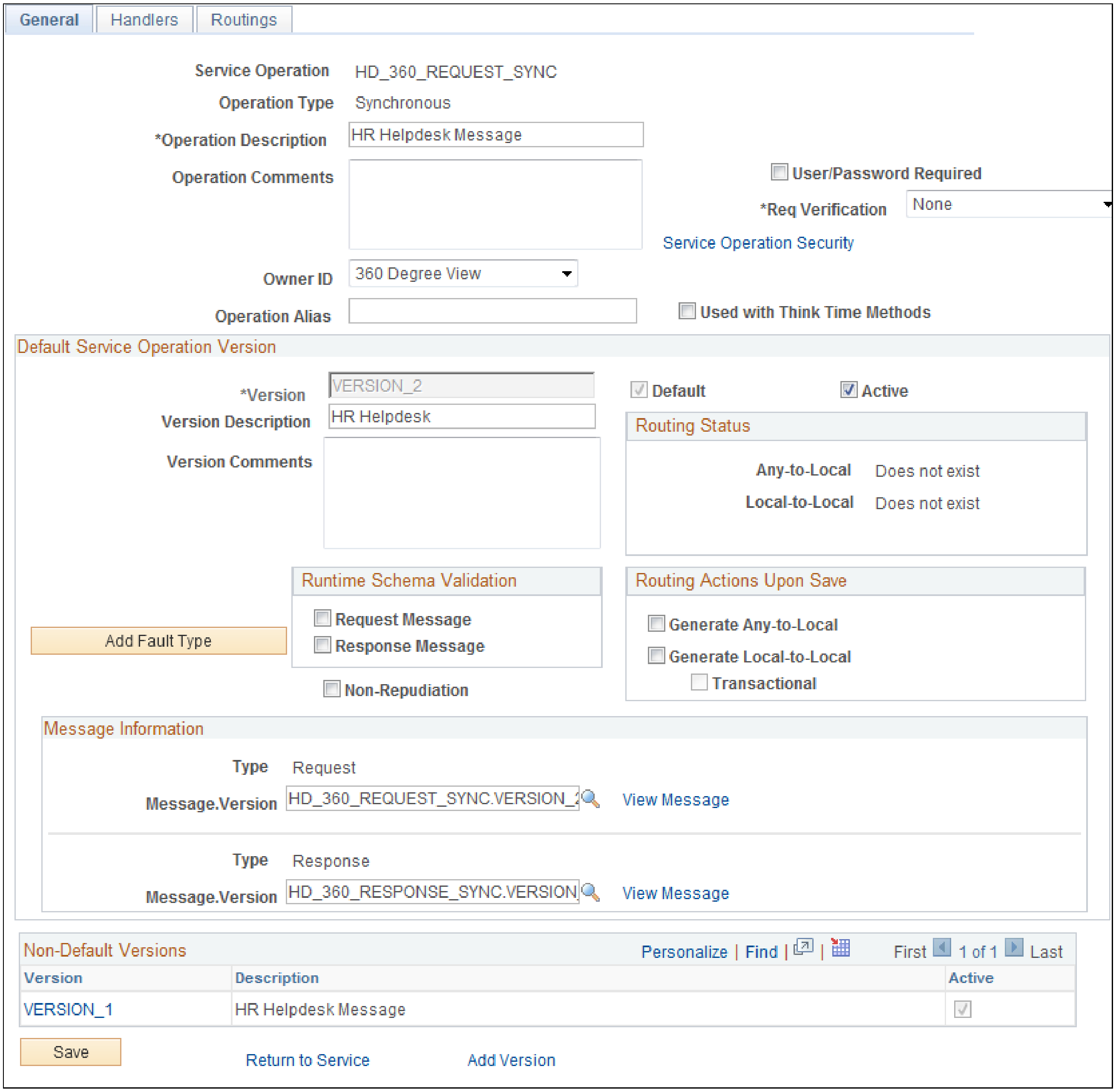
Task 7-2-4: Activating Service Operations

Implement the following steps in PeopleSoft CRM database.

To activate service operations:

1. Select PeopleTools, Integration Broker, Integration Setup, Service Operations, and then search for service operation HD_360_REQUEST_SYNC.

2. Select the General tab to access the General page, as shown in the following example:



Service Operations - General page

3. In the Default Service Operation Version section, verify that the Active check box is selected.
4. Click Save.

Task 7-2-5: Adding a PeopleSoft CRM Active Routing for Version 2

Implement the following steps in PeopleSoft CRM database.

To add an active routing for version 2 for the PeopleSoft CRM database:

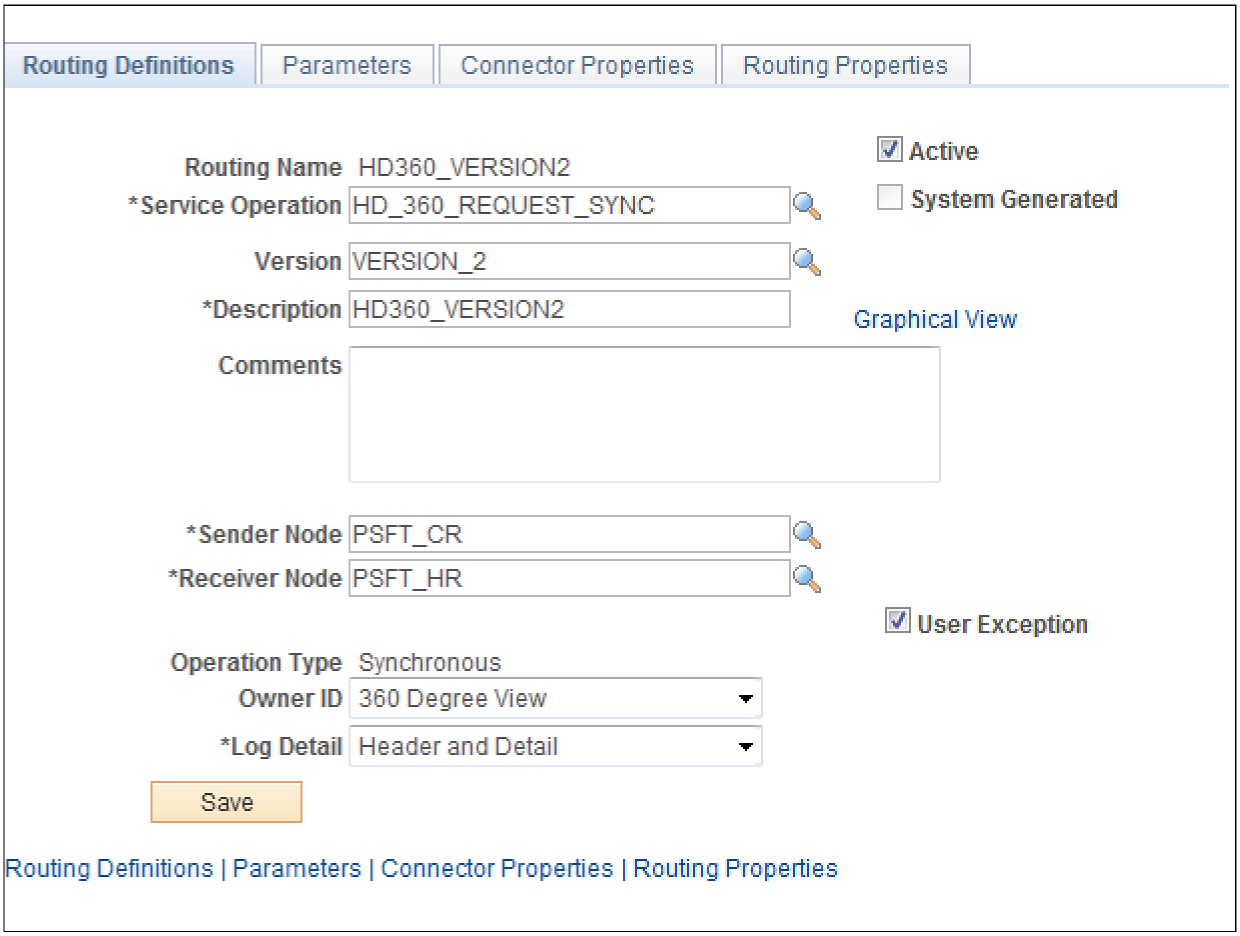
1. Select Home, PeopleTools, Integration Broker, Integration Setup, Routings.

The Routing Definitions Search page appears.

2. Click the Add a New Value tab.
3. In the Routing Name field, enter *HD360_VERSION2.*
4. Click the Add button.

Note. Duplicate routing definitions are not allowed. Use the existing routing definition, if it is already present instead of creating a new one.

The Routing Definitions page for HD360_VERSION2 appears, as shown in the following example:



Routing Definitions page

5. Use this example to complete the Routing Definitions page:
   a. In the Service Operation field, enter or select a service operation. For example, *HD_360_REQUEST_SYNC.*
   b. In the Description field, enter *HD360_VERSION2.*

   Note. The Sender Node should be selected as the CRM local node (PSFT_CR), and the Receiver Node should be selected as the HCM local node (PSFT_HR).

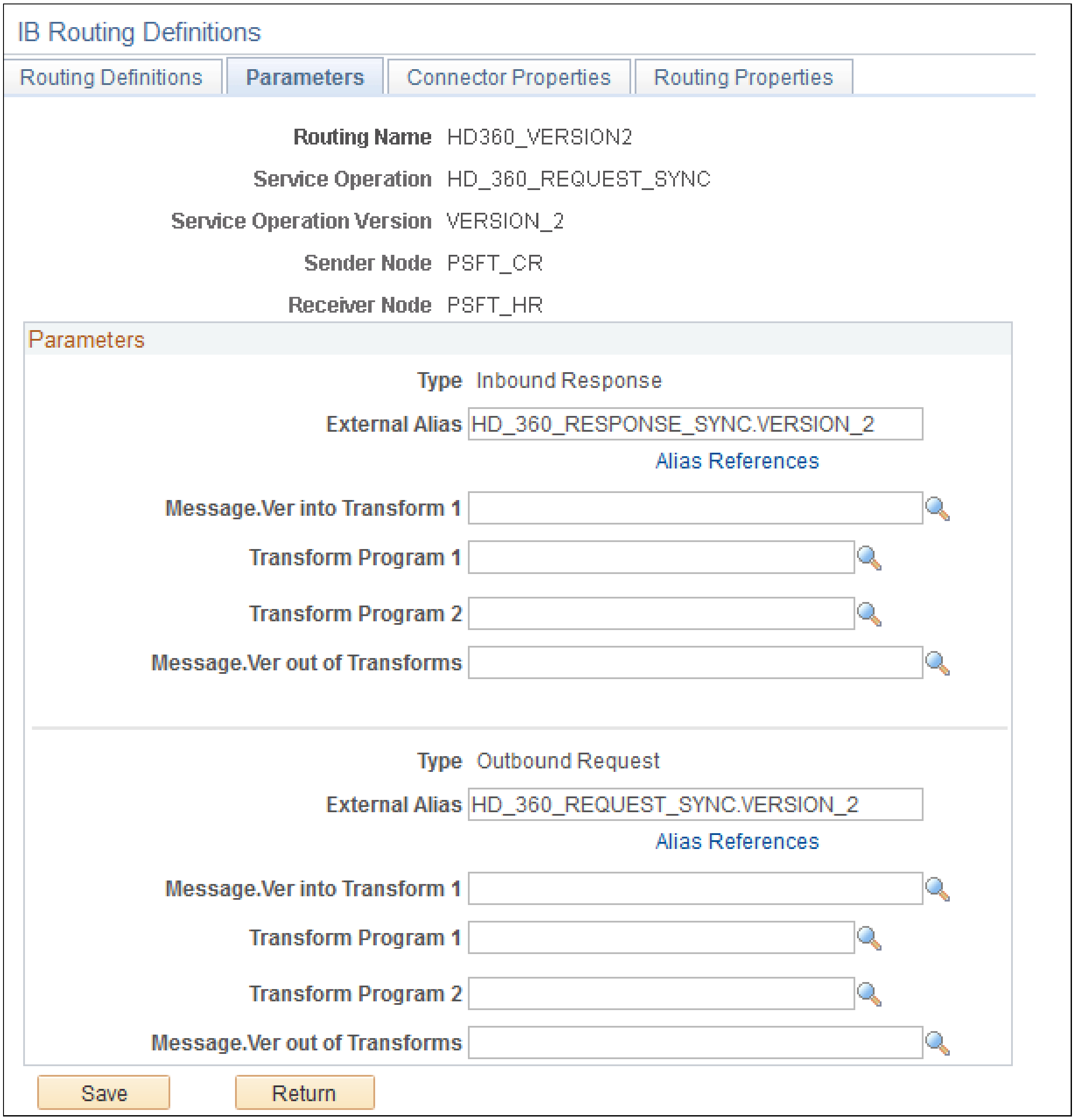
   ---

   c. In the Owner ID field, select *360 Degree View* from the drop-down list.
   d. In the Log Detail field, select *Header and Detail* from the drop-down list.

e. Select the Active check box.

f. Click Save.

6. Select the Parameters tab to access the Parameters page, as shown in the following example:



Node Definitions - Parameters page

7. Use this example to complete the Parameters page:

a. For Outbound Request in the External Alias field, enter *HD_360_REQUEST_SYNC.VERSION_2.*

b. For Inbound Response in the External Alias field, enter *HD_360_RESPONSE_SYNC.VERSION_2.*

c. Click Save.

Note. There are no transformations because the PeopleSoft CRM database is sending Version 2 of the message and the PeopleSoft HCM database is expecting Version 2 of the message.

The Routings tab on the service operation should now show this new routing as *Active,* and any other routings should show as *Inactive.*

Task 7-3: Integrating with PRE 8.51 People Tools

This section discusses:

- Integrating PeopleSoft HCM system with PRE 8.51 PeopleTools version

Task 7-3-1: Integrating PeopleSoft HCM system with PRE 8.51 PeopleTools version

If you are integrating PeopleSoft CRM with PeopleSoft HCM system that uses a pre-8.51 PeopleTools version, and if you are unable to ping the HCM node from the CRM system, then you need to perform the following steps.

On the PeopleSoft CRM database:

1. Select PeopleTools, Integration Broker, Configuration, Gateways.
2. Add a new gateway with a unique name, such as *PT850GTWY.*
3. Specify the Integration Gateway URL using the following syntax:

   http://<webserver machine name><port>/PSIGW/PeopleSoftListeningConnector

   Note. The <webserver machine name><port> refers to the PeopleSoft HCM system.

4. Continue the gateway setup by following the instructions in the section, *Setting Up the Gateway for PeopleSoft CRM and PeopleSoft HCM.*

   See "Integrating PeopleSoft CRM 9.2 and PeopleSoft HCM 9.0/9.1/9.2 with HRHD: " Setting Up the Gateway for PeopleSoft CRM and PeopleSoft HCM, in this installation guide.
5. Select PeopleTools, Integration Broker, Integration Setup, Nodes and open the HCM local node, such as *PSFT_HR.*
6. Click the Connectors tab.
7. In the Connector ID field, select the new gateway. For example, *PT850GTWY* .
8. Save the node.

On the PeopleSoft HCM database:

1. Select PeopleTools, Integration Broker, Configuration, Gateways.
2. Add a new gateway with a unique name, such as *PT853GTWY.*
3. Specify the Integration Gateway URL using the following syntax:

   http://<webserver machine name><port>/PSIGW/PeopleSoftListeningConnector

   Note. The <webserver machine name><port> refers to the PeopleSoft CRM system.

4. Continue the gateway setup by following the instructions in the section, *Setting Up the Gateway for PeopleSoft CRM and PeopleSoft HCM.*

See "Integrating PeopleSoft CRM 9.2 and PeopleSoft HCM 9.0/9.1/9.2 with HRHD: " Setting Up the Gateway for PeopleSoft CRM and PeopleSoft HCM, in this installation guide.

5. Select PeopleTools, Integration Broker, Integration Setup, Nodes and open the CRM local node, such as *PSFT_CR.*
6. Click the Connectors tab.
7. In the Connector ID field, select the new gateway. For example, *PT853GTWY* .
8. Save the node.

Chapter 8

Integrating PeopleSoft HCM with HRHD

This chapter discusses:

- Understanding Integrating PeopleSoft HCM and HRHD
- Prerequisites
- Activating PeopleSoft CRM 9.2 and HCM 9.0/9.1/9.2 Service Operations
- Setting Up Portal Content Links
- Activating Link Category for PeopleSoft HCM

Understanding Integrating PeopleSoft HCM and HRHD

This chapter provides instructions for setting up the 360-Degree View Enterprise Integration Point (EIP). The EIP enables access to the PeopleSoft HelpDesk for Human Resources (HRHD) Worker 360-Degree View from PeopleSoft CRM.

Note. Before proceeding with your installation, consult My Oracle Support, to ensure that you have the latest version of the following documents: PeopleSoft PeopleTools Installation guide for your database platform for both the PeopleSoft CRM and PeopleSoft HCM applications.

Note. In addition, consult the PeopleSoft CRM 9.2 Product-to- PeopleSoft Online Help (PeopleBooks) Index found on My Oracle Support, to determine which PeopleSoft Online Help (PeopleBooks) you should include in your installation for the PeopleSoft CRM products that you are implementing.

Prerequisites

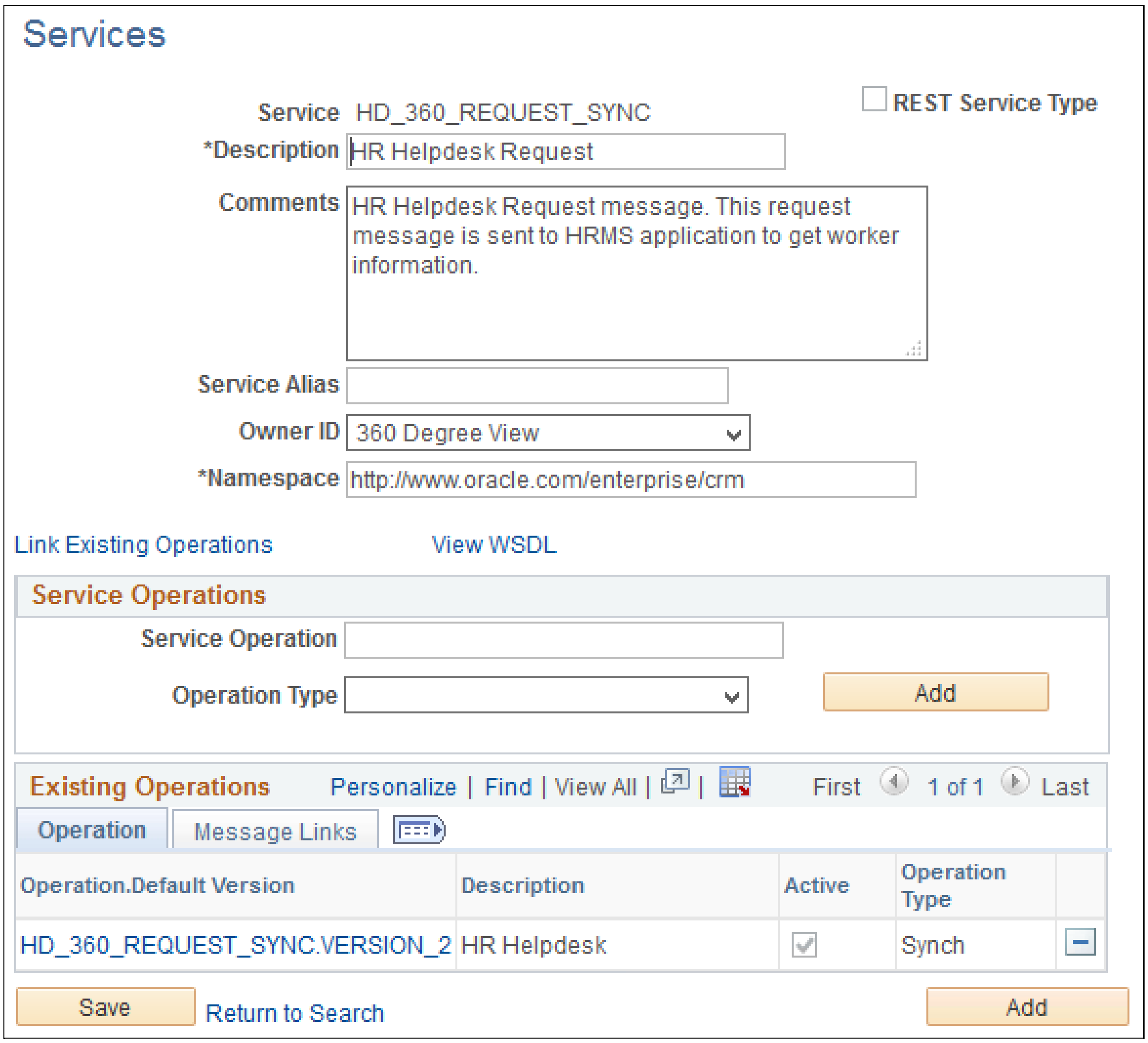
Before you can begin the PeopleSoft CRM and PeopleSoft HCM integration tasks in this chapter, you must complete these requirements:

1. Install and configure a PeopleSoft CRM 9.2 database.
2. Install and configure a PeopleSoft HCM 9.0, 9.1 or 9.2 database.
3. Setting Up the Gateway for PeopleSoft CRM and PeopleSoft HCM
4. Accessing the PeopleSoft CRM Local Node Definition
5. Accessing the PeopleSoft HCM Local Node Definition
6. Pinging the PeopleSoft CRM and PeopleSoft HCM Nodes to Verify Configuration
7. Adding PeopleSoft CRM Trusted Node for Single Sign-On

Task 8-1: Activating PeopleSoft CRM 9.2 and HCM 9.0/9.1/9.2 Service Operations

To activate the 360-Degree View service operations in both the PeopleSoft CRM and the HCM 9.0/9.1/9.2 systems.

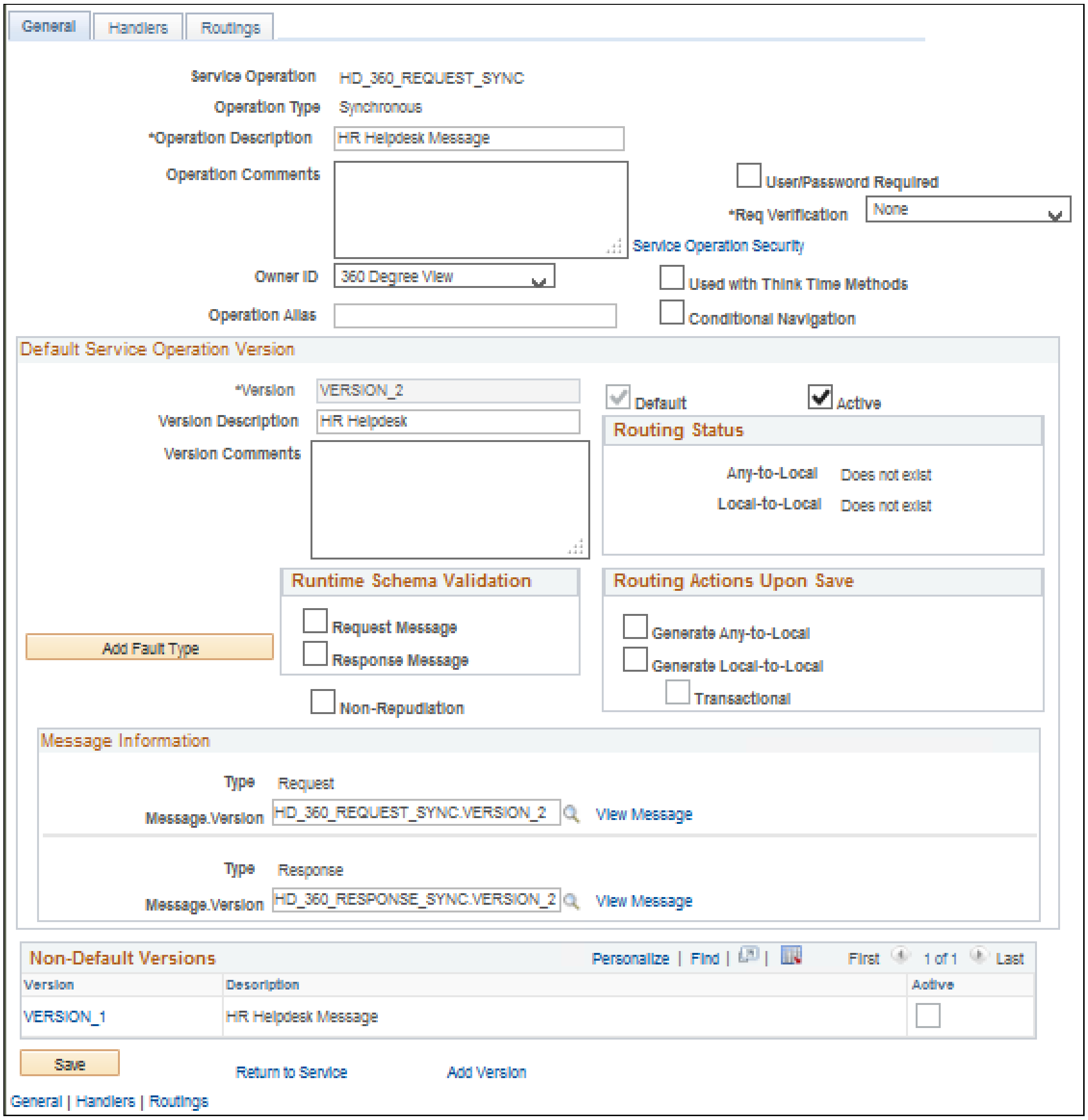
1. Select PeopleTools, Integration Broker, Integration Setup, Services and search for the service HD_360_REQUEST_SYNC, as shown in the following example:



Services page

2. Select HD_360_REQUEST_SYNC.VERSION_2 from the Existing Operations section to open the Operations page.

3. To activate HD_360_REQUEST_SYNC.VERSION_2, select the Active check box under Default Service Operation Version for VERSION_2 on the General tab and click Save as shown in the following example:



General page

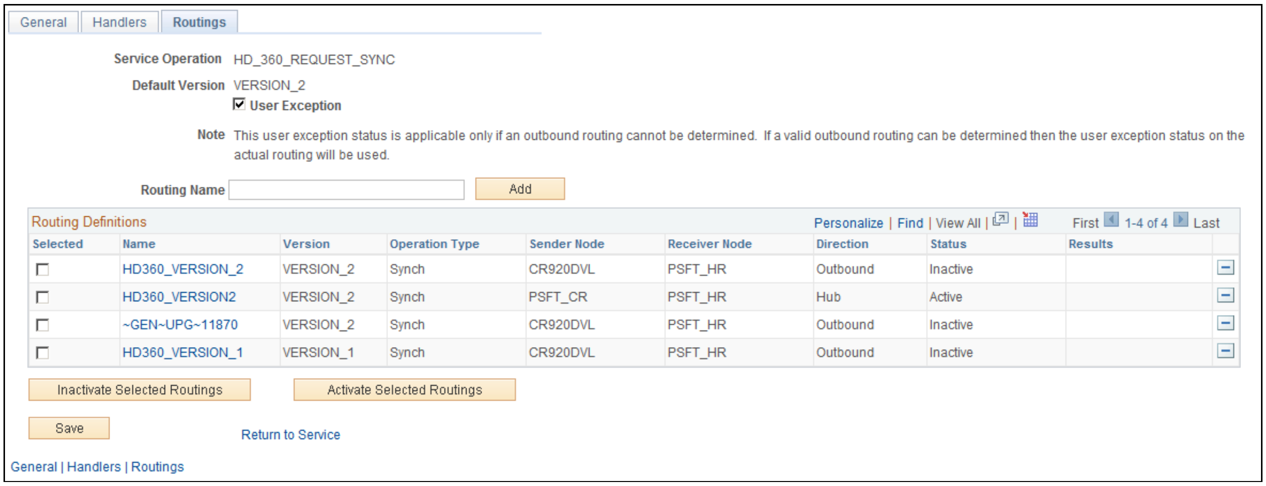
4. To activate the routing for HD360_VERSION_2:

   a. Select PeopleTools, Integration Broker, Integration Setup, Services and search for the service HD_360_REQUEST_SYNC.

   b. Select HD_360_REQUEST_SYNC.VERSION_2 from the Existing Operations section to open the Operations page.

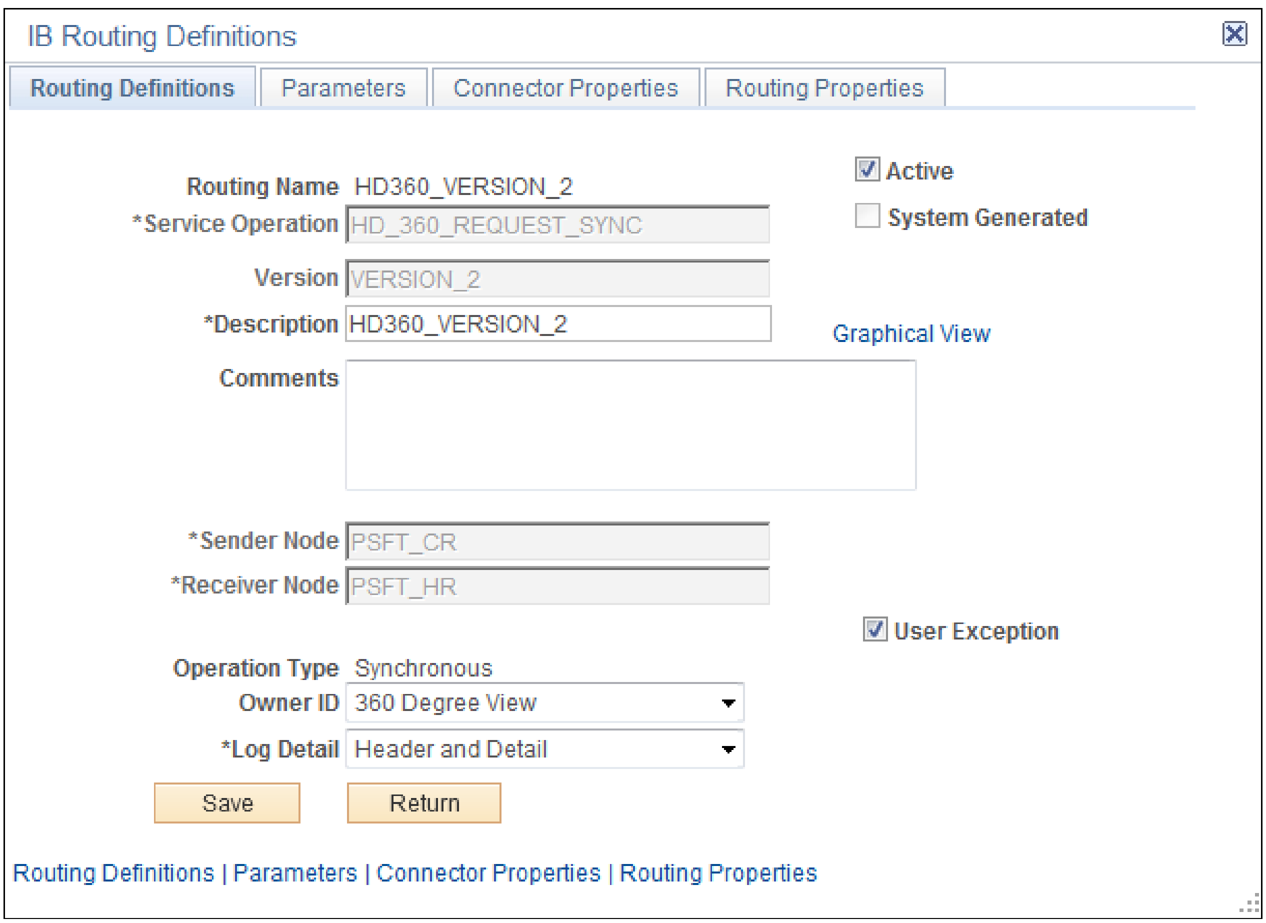
c. Select the Routings tab and click HD360_VERSION2.

Note. Ensure that other routings are set to Inactive, as shown in the following example:



Routings page

d. On the Routing page and the Routing Definitions page, select the Active check box, as shown in the following example:



Routing Definitions page

e. On the Routing page and the Routing Definitions page, if the User Exception check box appears, verify that it is selected.

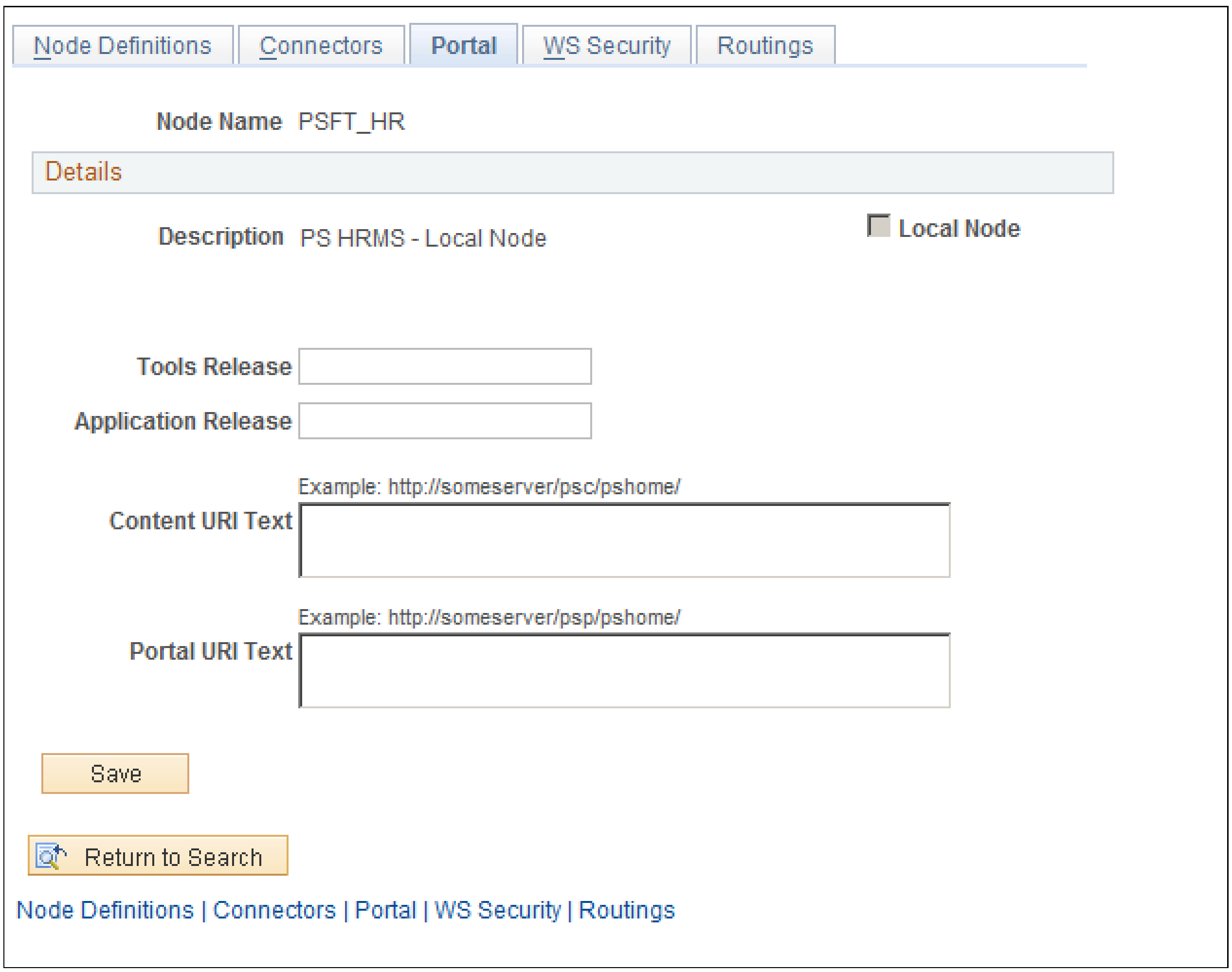
f. Click Save.

Task 8-2: Setting Up Portal Content Links

You must define the portal content to enable the link from the case in PeopleSoft HelpDesk for Human Resources to the 360-Degree View.

To define portal content:

1. In PeopleSoft CRM, access the PeopleSoft HCM node in the Node Definitions component.
2. Select PeopleTools, Portal, Node Definitions and specify the PeopleSoft HCM node.
3. In the Node definition component, select the Portal tab, as shown in the following example:



Node Definitions - Portal page

Note. This enables the links on the Case page to directly transfer from PeopleSoft CRM to PeopleSoft HCM; this must be set up in the Node Definitions under Portal menu folder, *not* in the Integration Broker folder.

---

4. On the Portal page, enter the content URI text and portal URI text to define how PeopleSoft HCM system

users transfer to and from the PeopleSoft CRM system.

- Content URI:

  http://<webserver_machine_name>:<Port>/psc/<PIA website name>/

- Portal URI:

  http://<webserver_machine_name>:<Port>/psp/<PIA website name>/

  The <webserver_machine_name> refers to the PeopleSoft HCM system and the <Port> value should be an HTTP port.

5. Click Save.

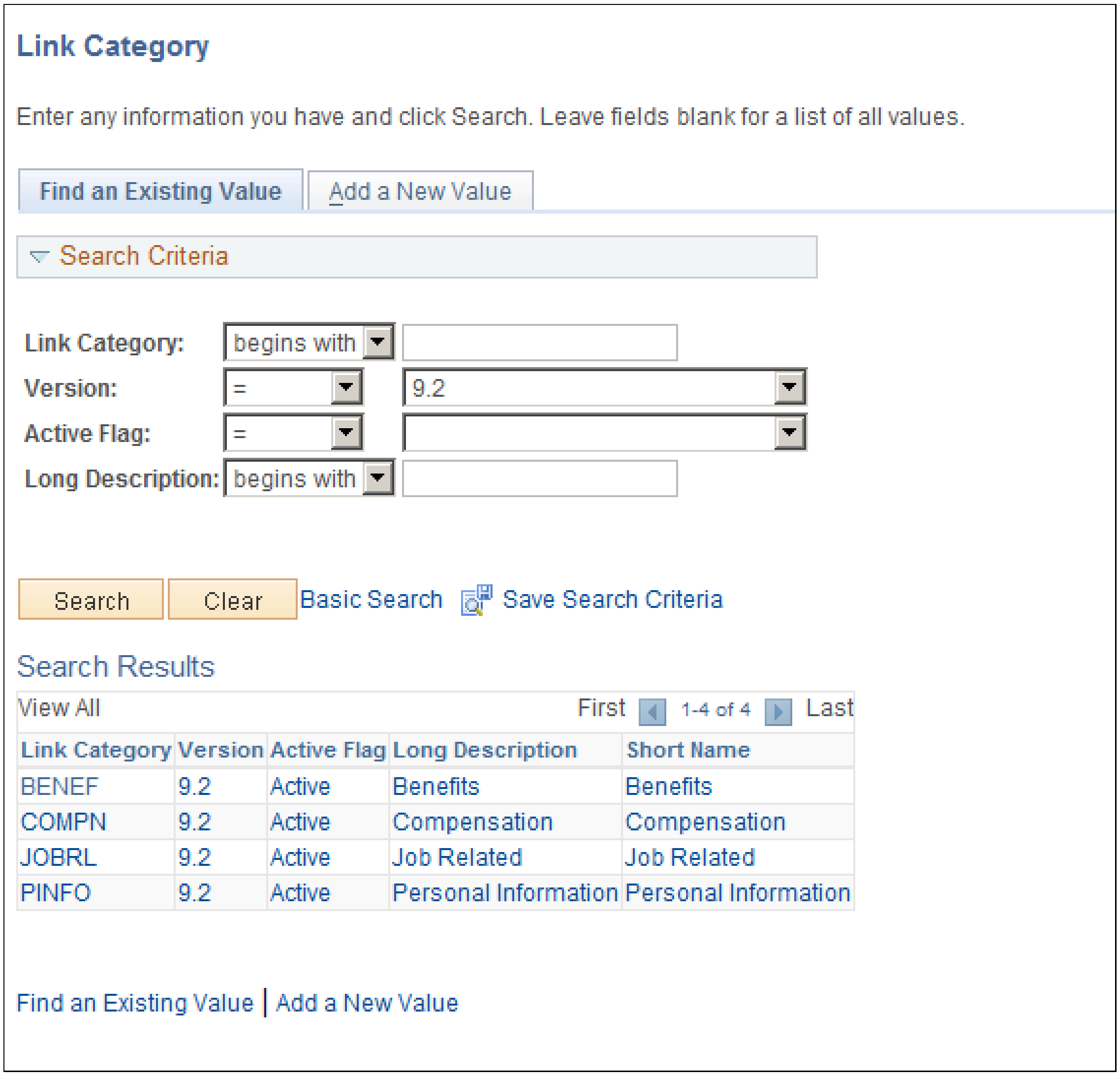
Task 8-3: Activating Link Category for PeopleSoft HCM

In PeopleSoft CRM 9.2, the delivered active links are for PeopleSoft HCM 9.2. If you are integrating to a PeopleSoft HCM release prior to HCM 9.2, you must de-activate the 9.2 links and activate the links for your HCM release in the PeopleSoft CRM database.

To activate the link category definition for a PeopleSoft HCM release prior to HCM 9.2:

1. Select Home, Set Up CRM, Product Related, Call Center, Link Category.

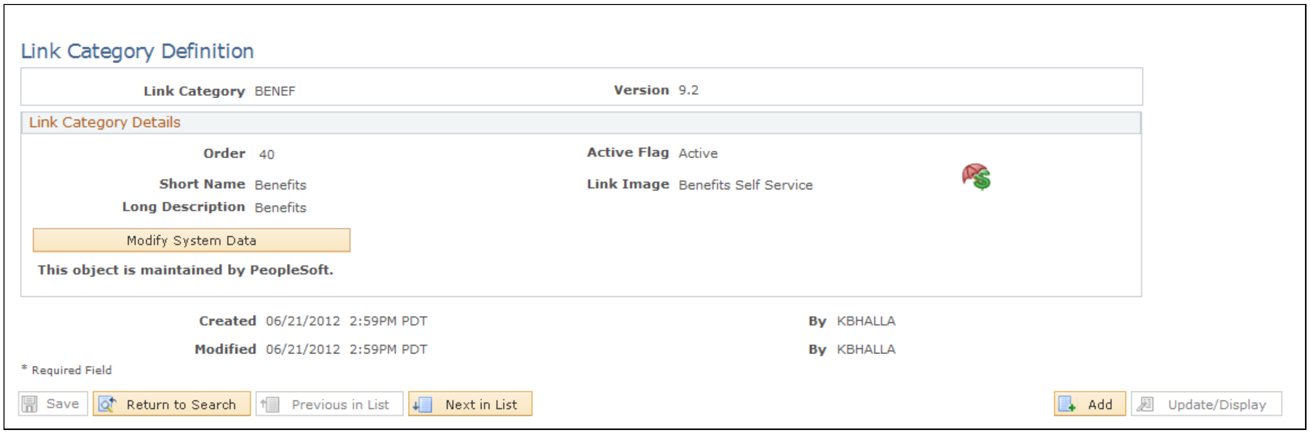
2. Search for the version number that is same as your current HCM release number, as shown in the following example:



Link Category search page

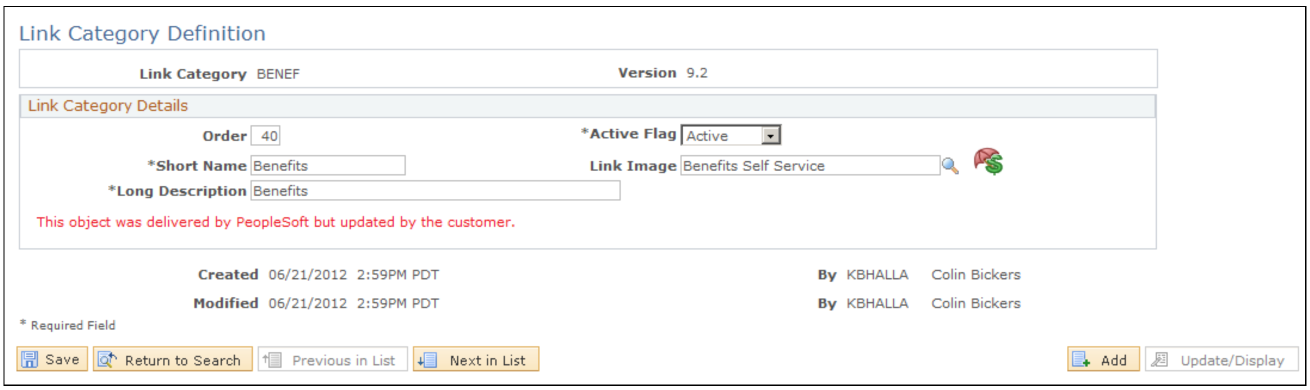
Perform the following steps to activate each link category.

3. Click the Modify System Data button, as shown in the following example:



Link Category Definition page

4. Select *Active* from the Active Flag drop-down list box, as shown in the following example:

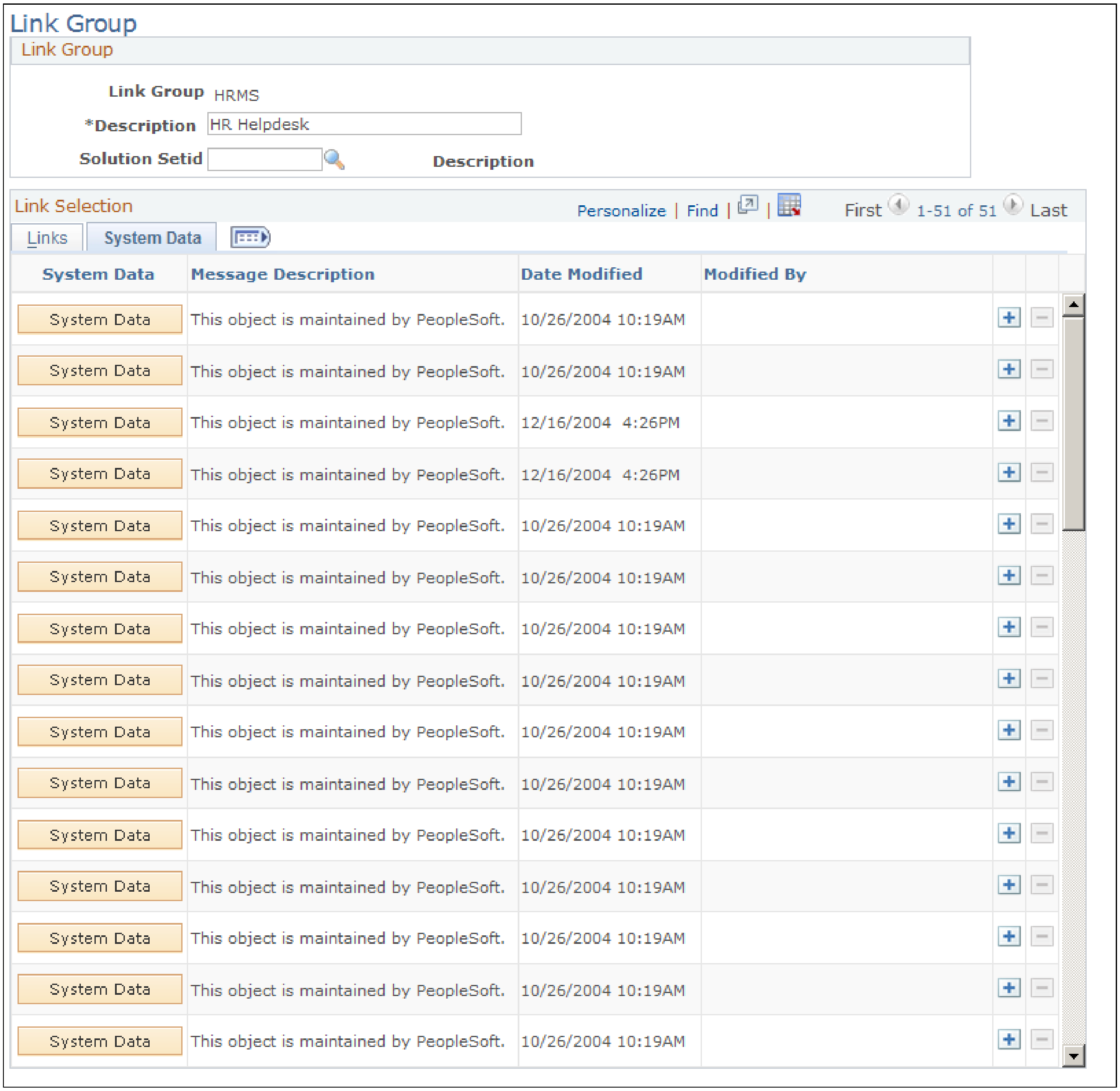


Updated Link Category Definition page

5. Click Save.
6. Repeat steps 3 through 5 for each link category.
7. For delivered active 9.2 action link categories, perform the same steps to deactivate.
8. Select Home, Set Up CRM, Product Related, Call Center, Link Group.
9. Open Link Group HCM. The data delivered here is for HCM 9.2. Since version 9.2 is delivered as active links, you must update the links for version prior to HCM 9.2.

10. Select the System Data tab, and then click the System Data button to modify the system data, as shown in the first few rows of the example that follows. Perform this for *all* rows.

    This example shows the first two rows of the System Data as modified:



System Data	Message Description	Date Modified	Modified By
System Data	This object is maintained by PeopleSoft.	10/26/2004 10:19AM	
System Data	This object is maintained by PeopleSoft.	10/26/2004 10:19AM	
System Data	This object is maintained by PeopleSoft.	12/16/2004 4:26PM	
System Data	This object is maintained by PeopleSoft.	12/16/2004 4:26PM	
System Data	This object is maintained by PeopleSoft.	10/26/2004 10:19AM	
System Data	This object is maintained by PeopleSoft.	10/26/2004 10:19AM	
System Data	This object is maintained by PeopleSoft.	10/26/2004 10:19AM	
System Data	This object is maintained by PeopleSoft.	10/26/2004 10:19AM	
System Data	This object is maintained by PeopleSoft.	10/26/2004 10:19AM	
System Data	This object is maintained by PeopleSoft.	10/26/2004 10:19AM	
System Data	This object is maintained by PeopleSoft.	10/26/2004 10:19AM	
System Data	This object is maintained by PeopleSoft.	10/26/2004 10:19AM	
System Data	This object is maintained by PeopleSoft.	10/26/2004 10:19AM	
System Data	This object is maintained by PeopleSoft.	10/26/2004 10:19AM	
System Data	This object is maintained by PeopleSoft.	10/26/2004 10:19AM	

System Data tab showing the system data for the link groups being modified

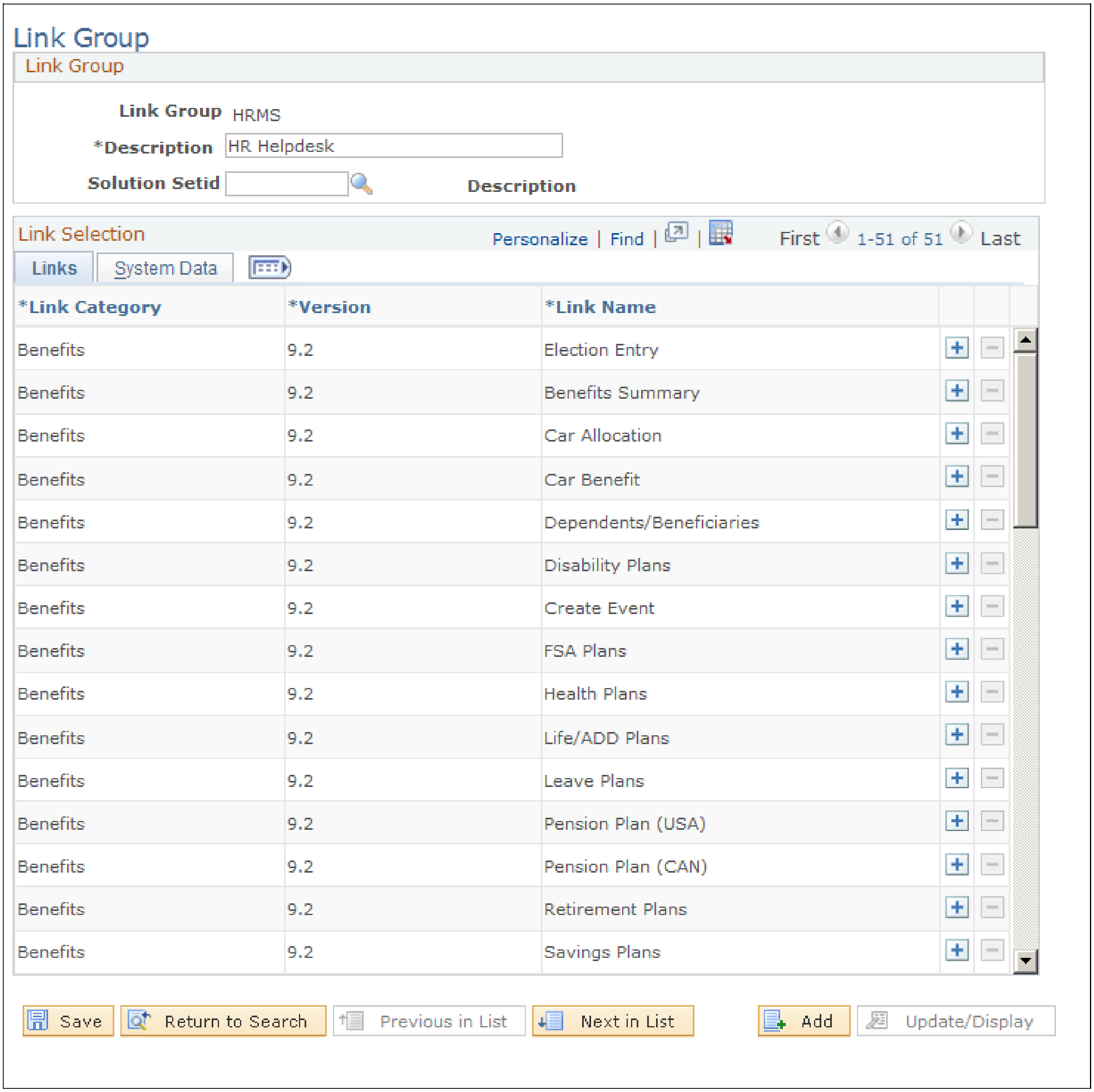
11. Select the Links tab; all rows become editable. The 9.2 version becomes invalid in the version drop-down list box.
12. As all of the links delivered are for 9.2, you must evaluate which links are applicable for your release of HCM.

    Based on your business needs, do one of the following:

    - Change the version to the same number as your HCM release number if it is applicable.
    - Delete the row by clicking the Delete (–) button at the end of the row.

- Add new links for your release of HCM by clicking the Add (+) button.

The following example shows the Links tab as the version for the link groups is being modified:



Links tab

Chapter 9

Integrating PeopleSoft CRM and PeopleSoft CS for Higher Education 360-Degree View

This chapter discusses:

- Prerequisites
- Activating the PeopleSoft Higher Education 360 Service Operation and Routing
- Configuring PeopleSoft CS to Define Integration Data
- Setting Up Portal Content Links for Action Links

Prerequisites

This chapter provides instructions for setting up 360-Degree View enterprise integration points (EIP) that are used to enable access to the Higher Education (HE) 360-Degree View from PeopleSoft Customer Relationship Management (CRM).

Before you perform the tasks in this chapter, you must complete these requirements:

- A PeopleSoft Customer Relationship Management (CRM) 9.2 database.
- CRM 9.2 integrated to Campus Solutions 9.0 Feature Pack 2 or Campus Solutions 9.2 provides additional features over CRM 9.2 integrated to earlier versions of Campus Solutions. For more information about this integration, refer to "Appendix B: Getting Started with CRM for Higher Education," in this documentation.

  Important! Oracle recommends that you apply service packs or application bundles as they become available to benefit from the latest product level, as well as application and integration requirements. You can access the latest updates, service packs and bundles on My Oracle Support. Consult My Oracle Support before proceeding with your installation.

  Note. Refer the chapter "Integrating PeopleSoft CRM 9.2 and PeopleSoft HCM 9/9.1/9.2 with HRHD" for instructions to complete the remaining prerequisites.

- Setting Up the Gateway for PeopleSoft CRM and PeopleSoft CS
- Accessing the PeopleSoft CRM Local Node Definition
- Accessing the PeopleSoft CS Local Node Definition
- Pinging the PeopleSoft CRM and PeopleSoft CS Nodes to Verify Configuration
- Adding PeopleSoft CRM Trusted Node for Single Sign-On

Note. From Campus Solutions 9.2 onwards, default local node of CS application is PSFT_CS, *not* PSFT_HR.

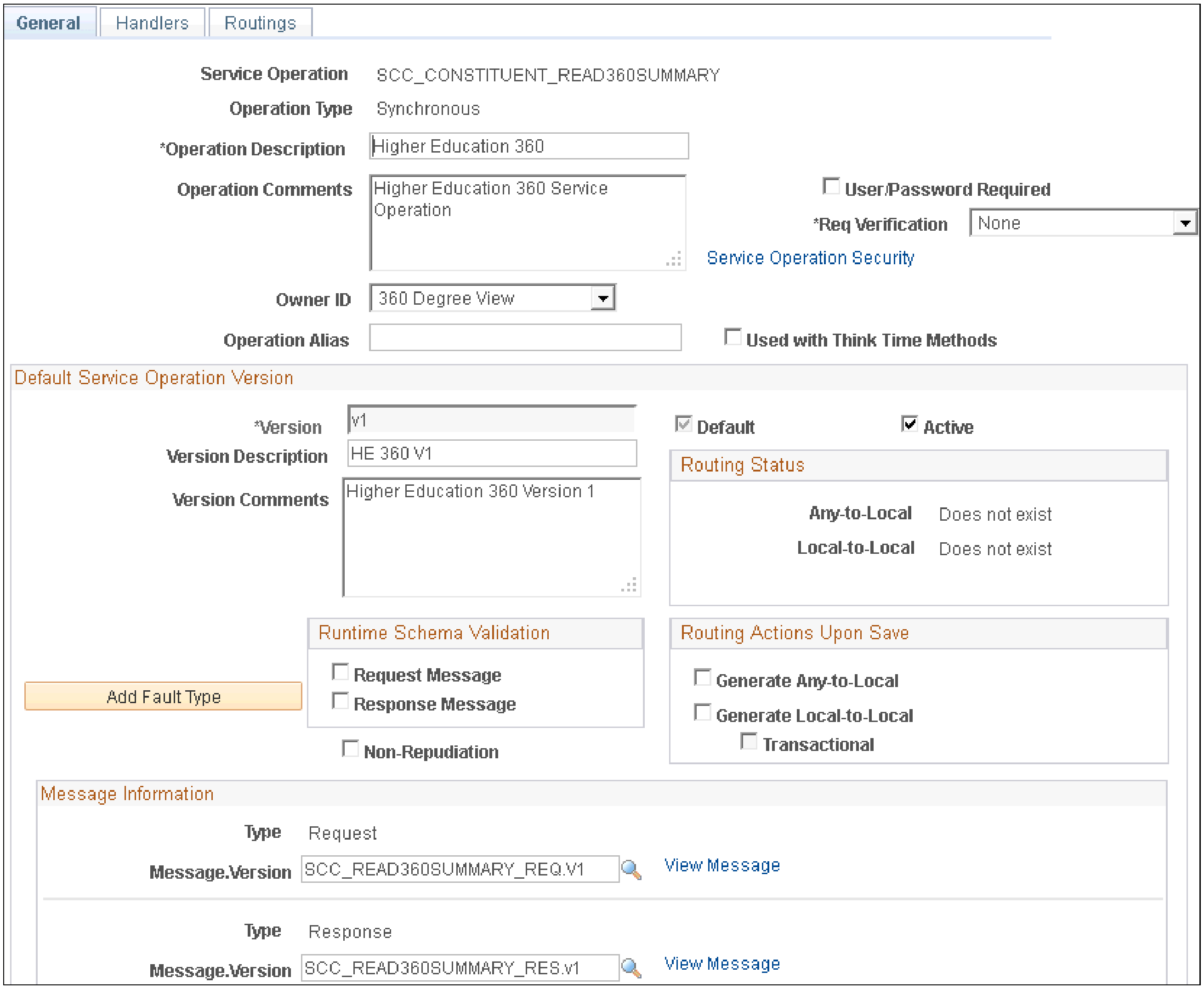
Task 9-1: Activating the PeopleSoft Higher Education 360 Service Operation and Routing

In the PeopleSoft CRM and the PeopleSoft CS systems, activate both the service operation and the routing for PeopleSoft Higher Education (HE) 360–Degree View.

To activate the HE 360-Degree View service operation and routing:

1. In the PeopleSoft CRM system, select PeopleTools, Integration Broker, Integration Setup, Service Operations to access the Service Operations pages.

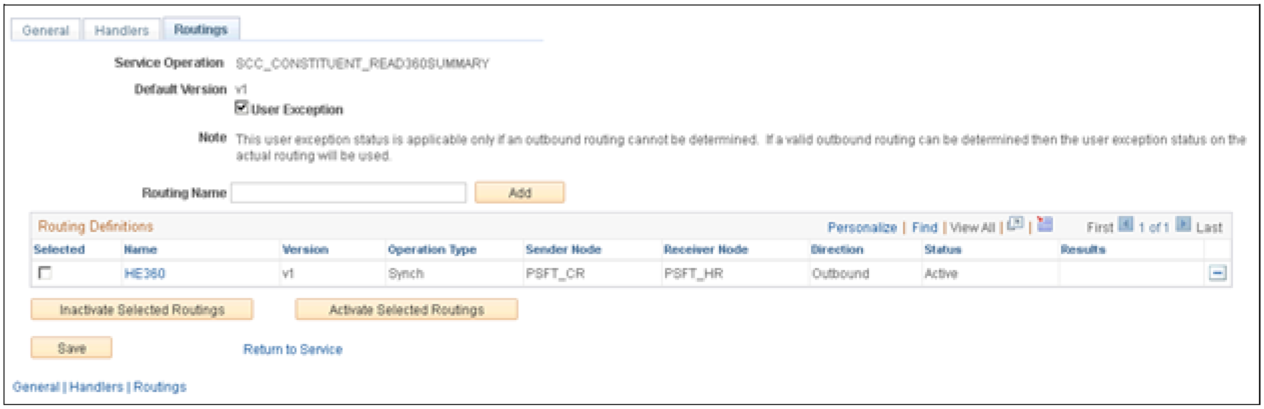
2. Search for and open service operation *SCC_CONSTITUENT_READ360SUMMARY*, as shown in the following example:



PeopleSoft Integration Broker - Service Operations: General page

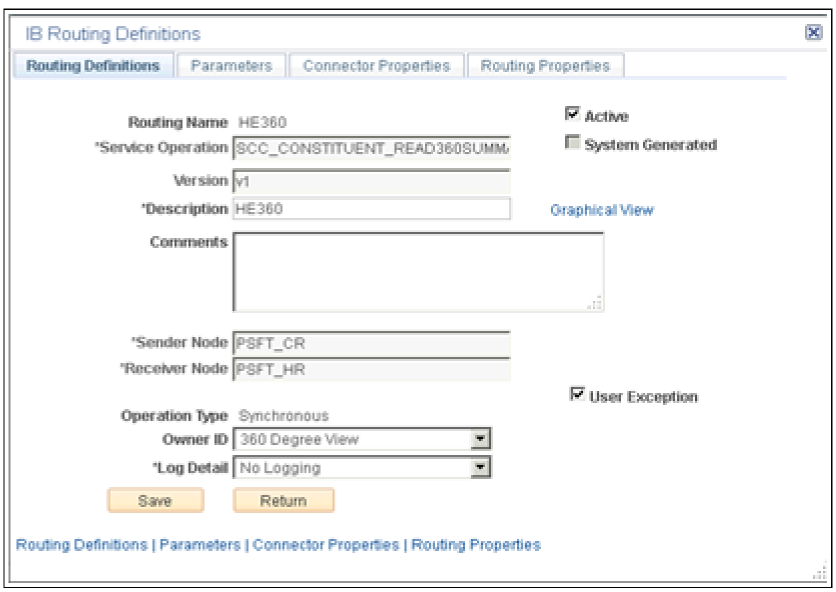
3. On the General page, ensure that the Active check box is selected.

4. Click the Routings tab to access the Routings page, as shown in the following example:



PeopleSoft Integration Broker - Service Operations: Routings page

5. In the Status column, verify that only one routing shows as *Active* from sender node PSFT_CR to receiver node PSFT_HR.
6. On the Routings page, verify that the User Exception check box is selected.
7. In the Routing Definitions section, click the HE360 link to access the Routings Definition page, as shown in the following example:



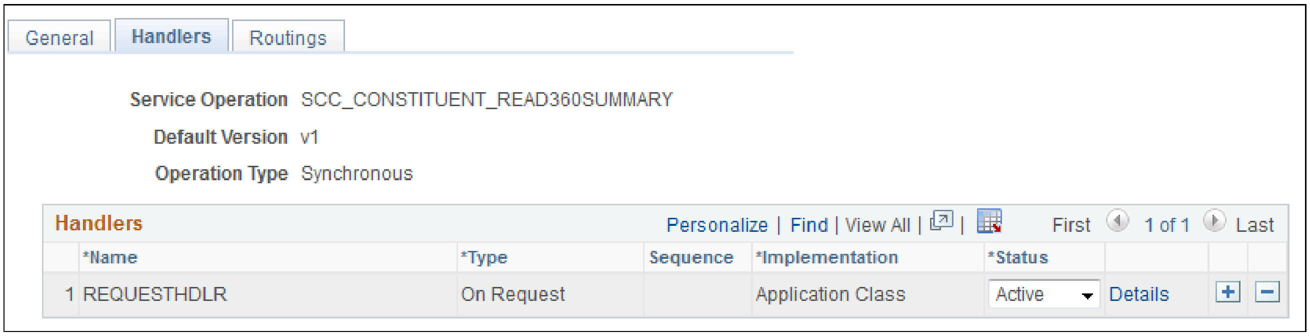
Routings Definition page

8. On the Routings Definition page, verify that the User Exception check box is selected.

Note. This step must be performed on the PeopleSoft CS system (CS db).

9. Access the PeopleSoft CS system and repeat the same steps in this task to activate service operation and routing for PeopleSoft HE 360.

Important! While in the PeopleSoft CS system, click the Handlers tab to access the Handlers page and verify that the handler Status is set to *Active,* as shown in the following example:



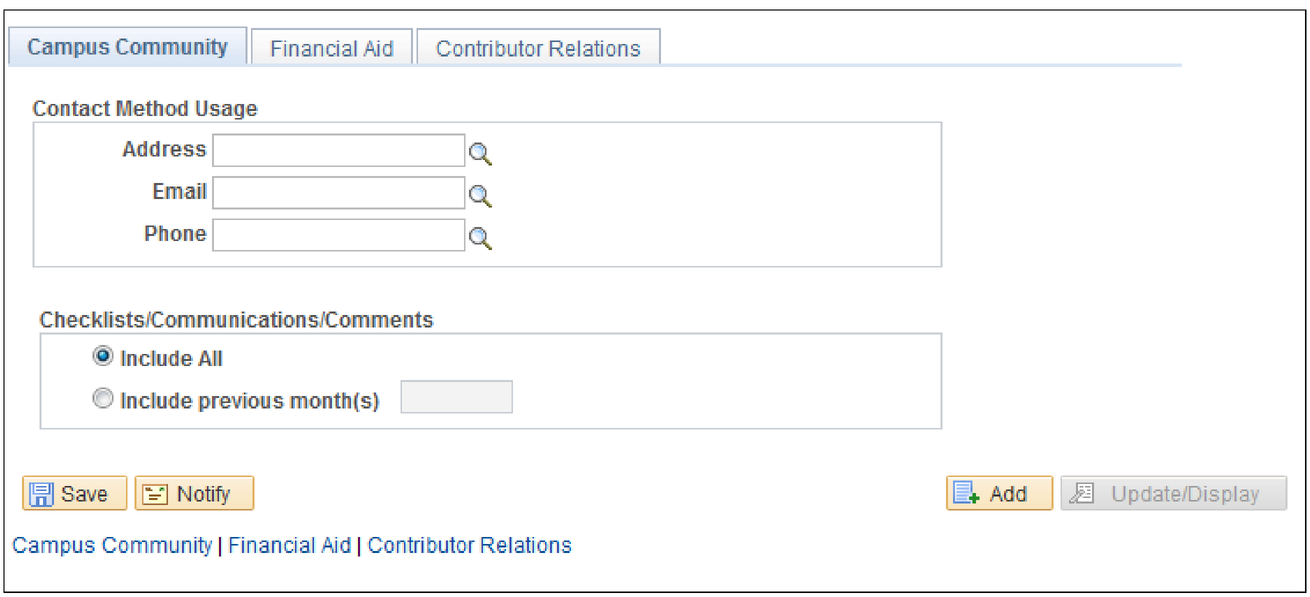
PeopleSoft Integration Broker - Service Operations: Handlers page

Task 9-2: Configuring PeopleSoft CS to Define Integration Data

After you complete the PeopleSoft HE 360-Degree View EIP setup, you can set up the configuration in PeopleSoft CS to define the integration data, based on your business requirements.

Use the Campus Community configuration pages to define the integration parameters for the PeopleSoft CS Campus Community, Financial Aid, and Contributor Relations pages, based on your particular user base and business requirements.

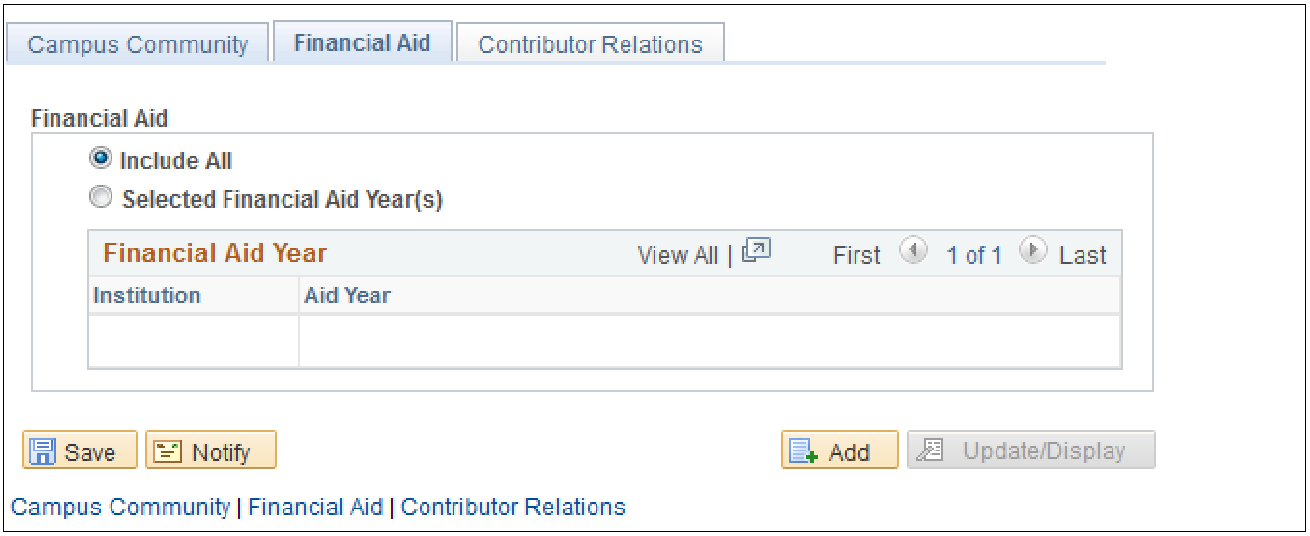
1. Select Setup SACR, System Administration, Integrations, Configure Integrations.
2. Click the Campus Community tab to access the Campus Community page, as shown in the following example:



PeopleSoft Campus Solutions - Campus Community page

3. In the Contact Method Usage section of the Campus Community page, specify the type of Address,Email, and Phone that the system will use to retrieve PeopleSoft CS data for the PeopleSoft HE 360 profile.
4. In the Checklists/Communications/Comments section, specify the amount of 3C data that the system will retrieve from PeopleSoft CS.

   The default value is *3* months for performance concerns.
5. Click the Financial Aid tab to access the Financial Aid page, as shown in the following example:



PeopleSoft Campus Solutions - Financial Aid page

6. On the Financial Aid page, do one of the following:
   - Select the Include All option to retrieve all financial aid information for PeopleSoft HE 360.
   - Select the Selected Financial Aid Year(s) option, and then select the Institution and Aid Year from which you want the system to retrieve the information.
7. Click the Contributor Relations tab to access the Contributor Relations page, as shown in the following example:

PeopleSoft Campus Solutions - Contributor Relations page

8. . On the Contributor Relations page, do one of the following:

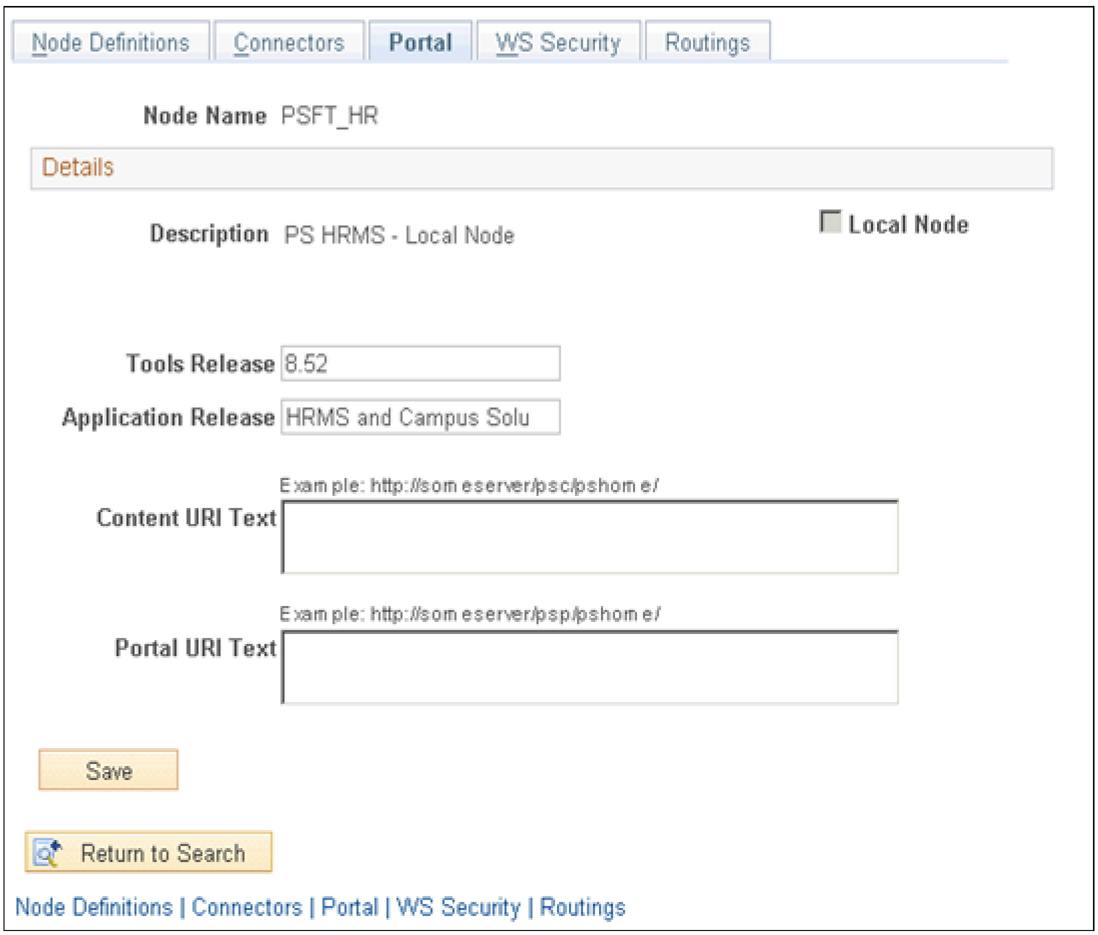
- Select the Include All Relationships option to retrieve all relationships for contributor relations.
- Select the Relationship(s) option to specify the relationship types (ID Type and Person Description) to be retrieved for PeopleSoft HE 360.

Task 9-3: Setting Up Portal Content Links for Action Links

To enable action links of Higher Education Case to access PeopleSoft CS, you must define the portal content. Oracle delivers all action links as defined under the portal node HCM.

To define portal content:

1. In the PeopleSoft CRM system, select PeopleTools, Portal, Node Definitions.
2. Search for and open the *HCM* node to access the Node Definitions page.
3. Select the Portal tab to access the Portal Content page, as shown in the following example:



PeopleSoft Portal - Node Definitions: Portal page showing the Content URI Text and Portal URI Text defined

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Note. This is for action links on PeopleSoft CRM Case page to access PeopleSoft CS. This is only necessary for action links. The Node Definition required for this step is under the Portal menu, not the Integration Broker menu.

---

4. In the Content URI Text and Portal URI Text fields, enter the URI text to define the PeopleSoft CS system that users will transfer to from the PeopleSoft CRM system.

For example:

- Content URI: http://<webserver machine name>:<Port>/psc/<PIA website name>/
- Portal URI: http://<webserver machine name>:<Port>/psp/<PIA website name>/

5. Click Save.

Chapter 10

Deploying and Configuring the PeopleSoft Connector and the Oracle Enterprise Manager Console

This chapter discusses:

- Prerequisites
- Copying the JAR File
- Deploying and Registering the PeopleSoft Connector
- Troubleshooting the PeopleSoft Connector Registration
- Configuring the PeopleSoft Connector

Prerequisites

To enable integration between the PeopleSoft Connector and the Oracle Enterprise Manager Console you must:

- Copy the JAR file to the Oracle Enterprise Manager (EM) server.
- Deploy, register, and configure the PeopleSoft Connector.

Important! Some existing connectors may be delivered with the Oracle EM installation; for example, the Remedy Connector. Before you deploy the PeopleSoft Connector, ensure that you remove the Remedy Connector or any other existing connectors. Oracle EM does not support multiple active connectors simultaneously.

To remove the Remedy Connector, or any other existing connectors:

1. Login to the Oracle EM Console and select Setup, Management Connectors.

   Here you can access a list of all connectors currently registered in the system.
2. Select the Remedy or other existing connector and click the Remove button.
3. Click Save.

Note. Before proceeding with your installation, consult My Oracle Support, to ensure that you have the latest version of the following documents: PeopleSoft PeopleTools 8.5 Installation guide for your database platform and PeopleSoft PeopleTools 8.55 Online Help (PeopleBooks).

Note. Consult the PeopleSoft CRM 9.2 Product-to- PeopleSoft Online Help (PeopleBooks) Index found on My Oracle Support, to determine which PeopleSoft Online Help (PeopleBooks) you should include in your installation for the PeopleSoft CRM products that you are implementing.

Note. Before you begin your deployment and configuration of the PeopleSoft Connector and the Oracle Enterprise Manager Console, consult the PeopleSoft CRM 9.2 Hardware and Software Requirements Guide available on My Oracle Support for the latest supported platform information.

Note. The deployment commands that are used in this installation guide are applicable for Oracle EM 10gR3 and 10gR4.

Task 10-1: Copying the JAR File

Oracle delivers the JAR file *PSFTConnector.jar* that includes the Oracle EM Event Model XML, the PeopleSoft Connector Descriptor XML, and the sample template XSLT files that are discussed in this documentation.

Copy the PSFTConnector.jar file from *<PS_APP_HOME>*\src\xml\enterprise manager\ to the Oracle EM server.

For Oracle EM 10gR3 and 10gR4 the file should be copied to: $ORACE_HOME\sysman\connector\

This depends upon where you install Oracle home. $ORACLE_HOME can be: *c:\oracleHomes\oms10g*

Task 10-2: Deploying and Registering the PeopleSoft Connector

Several Oracle EM Command-Line Utility (emctl) commands are used to deploy and register the PeopleSoft Connector.

To extract the JAR file into $ORACLE_HOME/sysman/connector/<connector_name_wo_space>directory:

1. Enter this command: `emctl extract_jar connector <jar_file_name> <connector_name> <oracle_home>`

   For example:

   C:\OracleHomes\oms10g\bin\emctl extract_jar connector C:\OracleHomes\oms10g\sysman\connector\PSFTConnector.jar "Peoplesoft Connector"C:\OracleHomes\oms10g

   Note. The connector name is the name specified in the connector descriptor XML file. The command replaces the spaces in the connector name with underscores (_) in connector_name_wo_space.

   For example, a connector named Peoplesoft Connector will have a directory of Peoplesoft_Connector under the directory of the Oracle home connector. If the Peoplesoft_Connector directory already exists, the extract_jar command will extract files to this directory. Otherwise, it will create a new directory called Peoplesoft_Connector and copy the files to this new directory.

2. Register the connector by entering this command: `emctl register_connector connector <PSFTConnectorDescriptor.xml> <serverName> <port> <databaseSid> <username> <password> <oracle_home>`

   Note. The Username for the register connector must be *sysman.*

   For example:

   C:\OracleHomes\oms10g\BIN>emctl register_connector connector C:\OracleHomes\oms10g\sysman\connector\Peoplesoft_Connector\PSFTConnectorDescriptor.xml adnttp39.peoplesoft.com 1521 EMREPDEV sysman sysman C:\OracleHomes\oms10g

3. Oracle delivers two templates:

- The PeopleSoft Sample Template: Used to create or update a case.
- The PeopleSoft Auto-Close Template: Automatically closes out an open case with a solvable EM action.

  Register the delivered templates by entering this command: `emctl register_ticket_template connector <PSFTSampleTicketTemplate.xsl> <serverName> <port> <databaseSid> <username> <password> <connectorTypeName> <connectorName> <templateName> <templateDescription>`

  The <connectorTypeName> <connectorName> <templateName> <templateDescription> are quoted strings. The <templateName> and <templateDescription> can have spaces in them.

  The template name and description are displayed on the Oracle EM console.

  For example:

  C:\OracleHomes\oms10g\BIN>emctl register_ticket_template connector c:\OracleHomes\oms10g\sysman\connector\Peoplesoft_Connector\PSFTSampleTicketTemplate.xsl adnttp39.peoplesoft.com 1521 EMREPDEV sysman sysman "Peoplesoft Connector" "Peoplesoft Connector" "Sample Ticket" "Sample Ticket Template"

  Note. Because the Oracle EM Connector can only support one active connector, ensure that you delete the connector from the console. After you redeploy a connector, you must re-register the templates, even if they have not changed. This is because the templates are disconnected at the time the connector is deleted.

The following table lists the values for the parameters:

Parameters	**Description**
connector_name_wo_space	Specify *Peoplesoft Connector*. The command will replace the spaces in the connector name with underscores (_) in connector_name_wo_space. A new directory called Peoplesoft_Connector will be created and copy the files to this new directory under $Oracle_Home/connector. If the Peoplesoft_Connector directory already exists, the extract_jar command will extract files to this directory.
PSFTConnectorDescriptor.xml	The file resides in the Peoplesoft_Connector directory home upon successful extraction: i.e: $ORACLE_HOME/connector/Peoplesoft_Connector/
PSFTSampleTicketTemplate.xls	A sample ticket template that is used to create or update a case.
server	Host name of the Oracle Enterprise Manager repository. For example: *adnttp39.peoplesoft.com*
port	Oracle Listener port of the repository. For example: *1521*
database sid/ Service Name	Repository database instance ID. For example: *EMREPDEV*
username	Specify *SYSMAN*.
password	Password for SYSMAN.

Parameters	Description
connectorTypeName	Specify "Peoplesoft Connector". The double quotes ("") are mandatory. The connector is case sensitive and should match the name specified in the PSFTConnectorDescriptor.xml.
connectorName	Specify "Peoplesoft Connector". The double quotes ("") are mandatory.
templateName	An intuitive name for the ticket template that will be displayed in the Oracle Enterprise Manager. The double quotes ("") are mandatory. For example: *"Sample Ticket"*
description	A short description for the ticket template. This description is also displayed in the Oracle Enterprise Manager. The double quotes ("") are mandatory. For example: *"Sample Ticket Template"*

Task 10-3: Troubleshooting the PeopleSoft Connector Registration

If an incorrect template is registered that is tied to a invalid connector, and the template cannot be deleted from the Oracle EM console, do the following:

1. Connect to the EM repository as SYSMAN.
2. SELECT prop_name, value_id FROM mgmt_cntr_config WHERE config_name = 'TicketTemplates';

   You can retrieve the template name (prop_name) from this query. This should be the same name as the name of the file that you registered as the template.

   :prop_name and *: value_id* that you get here will be used in the following commands:

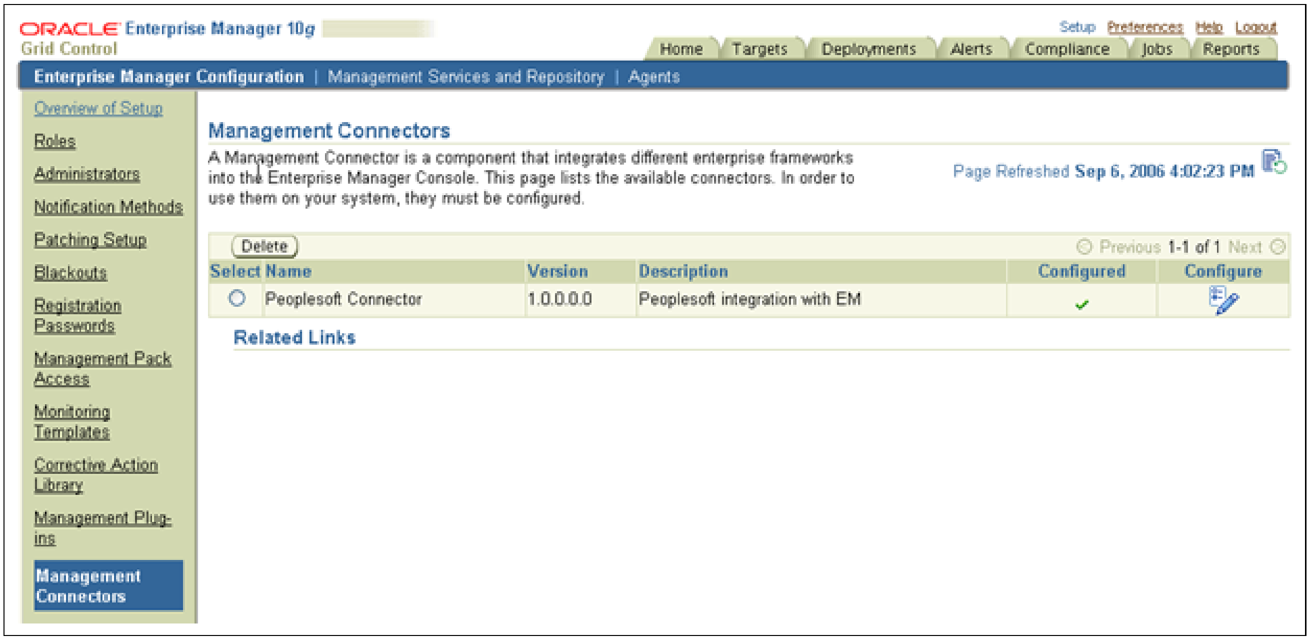
   a. `DELETE FROM mgmt_cntr_l_val WHERE value_guid = :value_id;`
   b. `DELETE FROM mgmt_cntr_s_val WHERE value_guid IN (SELECT value_id FROM mgmt_cntr_config WHERE config_name = :prop_name);`
   c. `DELETE FROM mgmt_cntr_config WHERE prop_name = :prop_name OR config_name = :prop_name;`
   d. `EXEC mgmt_notification.delete_device ('SYSMAN', ':prop_name');`

Task 10-4: Configuring the PeopleSoft Connector

After the PeopleSoft Connector is successfully deployed:

1. Click the EM Console URL and login to the Oracle EM console.

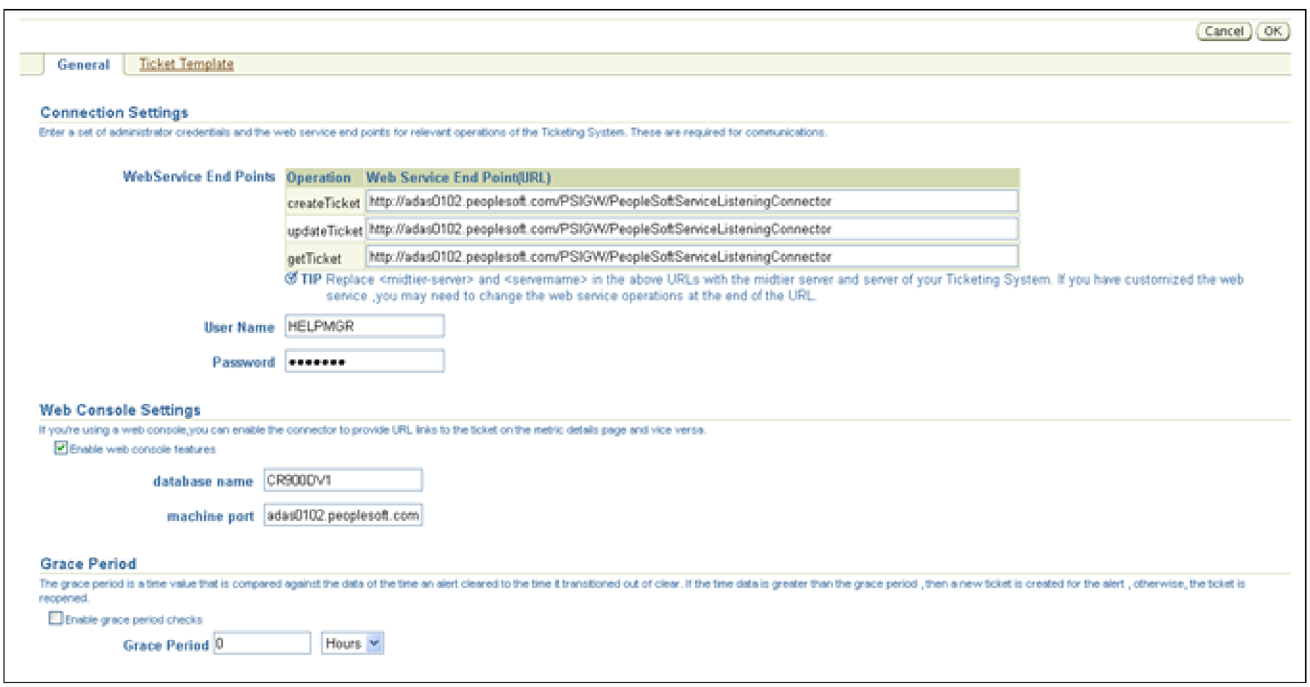
2. From the Oracle EM console, selectSetup, Management Connectors, to access the Management Connectors page, as shown in the following example:



Oracle Enterprise Manager - Management Connectors page

3. On the Oracle EM Management Connections page, select the Peoplesoft Connector option, and then click the Configure button.

   The Oracle EM Configure Management Connector - Peoplesoft Connector: General page appears, as shown in the following example:



Oracle Enterprise Manager Configure Management Connector - PeopleSoft Connector: General page

4. Use the Oracle EM Configure Management Connector - Peoplesoft Connector General page to configure the

Peoplesoft Connector:

a. WebService End Points: Specify WebService End Points for createTicket, updateTicket, and getTicket web service operations.

b. WebService Credentials: User ID and password to log in to the PeopleSoft CRM system for adding or updating a case.

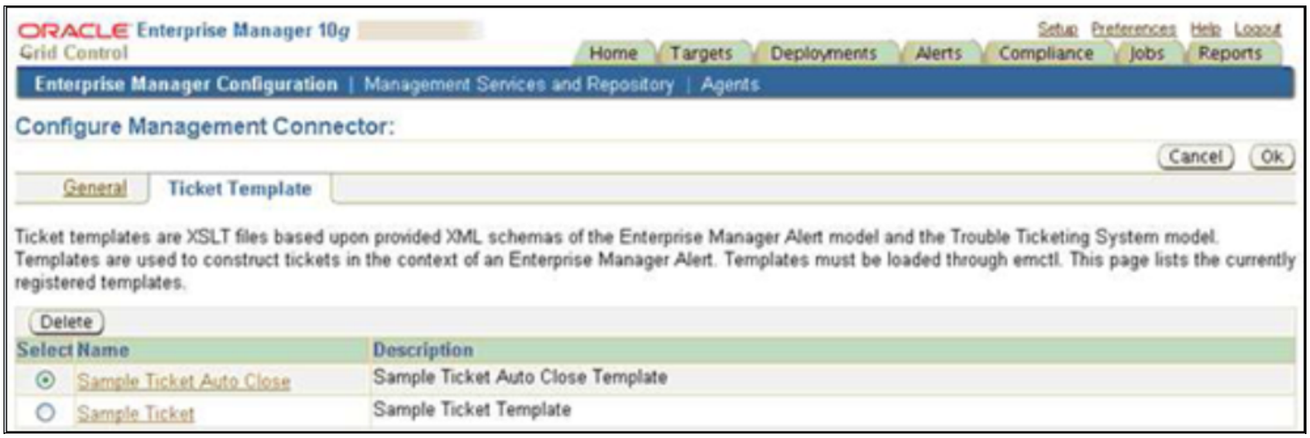
c. Web Console Settings: A URL that can transfer to the PeopleSoft CRM case from the Oracle EM system.

   This is used on the Oracle EM metric detail page to drill into the case.

d. Grace Period: A time value that is compared against the data when an alert is cleared to the time when it has transitioned out of clear.

   If this span of time is greater than the grace period, a new ticket is created for the alert. Otherwise, the ticket is reopened. The idea is not to create the case for the same alert within a defined time period.

5. Click the Ticket Template tab to access the Oracle EM Configure Management Connector - Peoplesoft Connector: Ticket Template page, as shown in the following example:

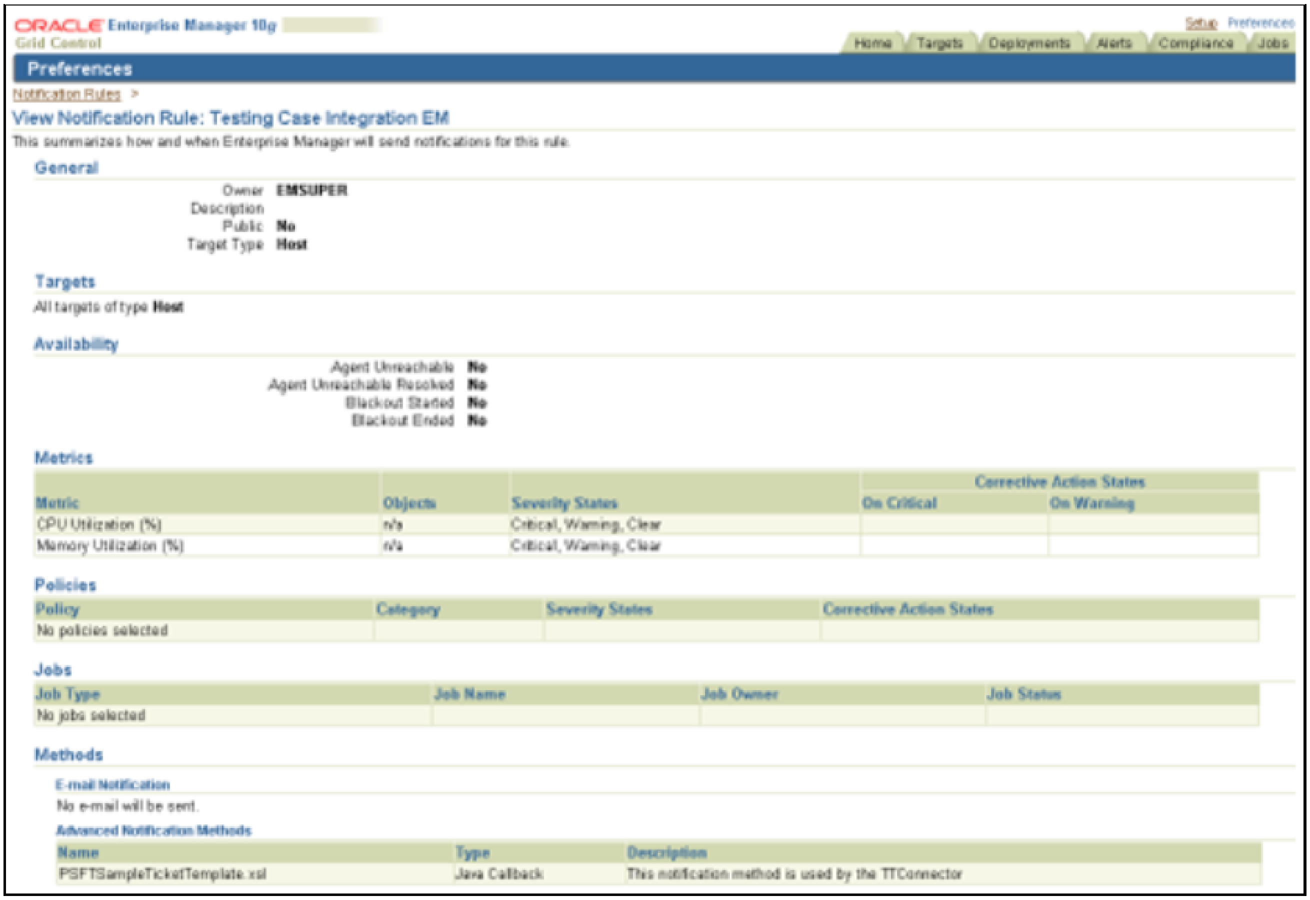


Oracle Enterprise Manager Configure Management Connector - PeopleSoft Connector: Ticket Template page

The Oracle EM Configure Management Connector - Peoplesoft Connector Ticket Template page lists all registered templates for the PeopleSoft Connector.

6. From the Oracle EM Configure Management Connector - Peoplesoft Connector Ticket Template page, select Preferences, Notification Rules.

   The Oracle Enterprise Manager - Notification Rules: View Notification page appears, as shown in the following example:



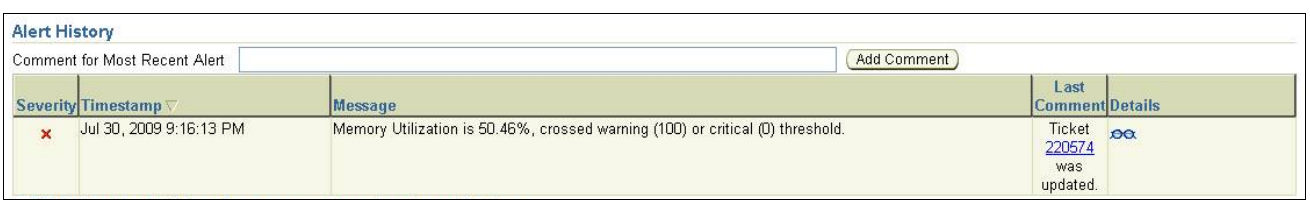
Oracle Enterprise Manager - Notification Rules: View Notification page

7. Set up your desired rules to use the registered template to create a case in the PeopleSoft HelpDesk system.

   After a case is created or updated, the user can drill into a case from the Oracle EM Metric Detail page.

   Your navigation to the Oracle EM Metric Detail page is dependent upon how you set up your alert.

   The following shows an example of the Alert History page:



Alert History page

Chapter 11

Installing the PeopleSoft CRM 9.2 Portal Pack

This chapter discusses:

- Understanding PeopleSoft Portal Pack Installation
- Granting PeopleSoft Portal Pack Personalization
- Accessing PeopleSoft CRM from PeopleSoft Portal Solutions

Understanding PeopleSoft Portal Pack Installation

This chapter provides instructions for the installation and setup of the PeopleSoft CRM Portal Pack and related components.

If you use PeopleSoft CRM Portal Pack without the Portal Solutions product, you must enable users to personalize their Portal Pack homepage. If you have implemented the PeopleSoft Portal Solutions product and want to access PeopleSoft CRM 9.2 from within the Portal Solutions database, you must set up a link to PeopleSoft CRM 9.2 and enable Single Sign on.

Note. All tasks in this chapter must be completed for both the System and Demo databases, unless otherwise indicated in the task.

Note. Before proceeding with the installation, consult My Oracle Support, to ensure that you have the latest version of the following documents: PeopleSoft PeopleTools Installation guide for your database platform and PeopleSoft PeopleTools 8.55 Online Help (PeopleBooks).

Note. In addition, consult the PeopleSoft CRM 9.2 Product-to- PeopleSoft Online Help (PeopleBooks) Index found on My Oracle Support, to determine which PeopleSoft Online Help (PeopleBooks) you should include in your installation for the PeopleSoft CRM products that you are implementing.

Task 11-1: Granting PeopleSoft Portal Pack Personalization

This section discusses:

- Adding the Portal User Role to the User IDs

Task 11-1-1: Adding the Portal User Role to the User IDs

To add the Portal User Role to the User IDs:

1. Sign on with PeopleSoft Data Mover to the PeopleSoft CRM 9.2 database.
2. Open the PeopleSoft Data Mover script <*PS_APP_HOME*>`\scripts\ PORTAL_ADD_ROLE.DMS`.
3. Run this script against the PeopleSoft CRM 9.2 database.
4. Close PeopleSoft Data Mover.

Note. The PAPP_USER and PeopleSoft Guest role should be granted to all new User IDs for access to the Homepage personalization and left pane navigation menu. After running this script, manually remove the role PAPP_USER from any GUEST User ID, since the GUEST user should not be personalizing the common homepage.

Task 11-2: Accessing PeopleSoft CRM from PeopleSoft Portal Solutions

The installation phase of your PeopleSoft application should only entail setting up a single link to the application content provider, PeopleSoft CRM 9.2.

Note. Perform this task only if you own the PeopleSoft Interaction Hub product and want to access your application from within the PeopleSoft Portal Solutions database.

To set up the link and the Single Sign on, see the PeopleSoft Portal Solutions installation document on My Oracle Support. See the table of contents for chapters about Installing PeopleSoft Single Sign on to your application database and accessing the PeopleSoft content providers.

Chapter 12

Integrating PeopleSoft Online Marketing 9.2 and PeopleSoft Student Administration 8.9 and 9.0

This chapter discusses:

- Understanding PeopleSoft Online Marketing 9.2 and PeopleSoft Student Administration 8.9 and 9.0
- Prerequisites
- Setting Up PeopleSoft SA Database for PeopleSoft OLM Integration
- Setting Up PeopleSoft OLM for PeopleSoft SA Integration

Understanding PeopleSoft Online Marketing 9.2 and PeopleSoft Student Administration 8.9 and 9.0

This chapter provides instructions for integrating Oracle's PeopleSoft Online Marketing (OLM) 9.2 and PeopleSoft Student Administration 8.9 and 9.0 (SA 8.9/9.0).

Important! CRM 9.2 integrated to Campus Solutions 9.0 Feature Pack 2 or Campus Solutions 9.2 provides additional features over CRM 9.2 integrated to earlier versions of Campus Solutions. For more information about this integration, refer to "Appendix B: Getting Started with CRM for Higher Education", in this documentation.

Note. Before proceeding with your installation, consult My Oracle Support to ensure that you have the latest version of the following documents: "PeopleSoft PeopleTools Installation" guide for your database platform, release 8.55 or higher, and *PeopleSoft PeopleTools Online Help (PeopleBooks)* for your current release.

Note. Consult Oracle's PeopleSoft CRM 9.2 Product-to- PeopleSoft Online Help (PeopleBooks) Index that can be found on My Oracle Support, to determine which PeopleSoft Online Help (PeopleBooks) you should include in your installation for the PeopleSoft CRM products that you are implementing.

Prerequisites

Before you begin PeopleSoft OLM and PeopleSoft SA installation and integration, ensure that these requirements are met:

- Install and configure a PeopleSoft CRM 9.2 database.
- Install and configure a PeopleSoft SA database (PeopleSoft SA 8.9 and 9.0 are now part of Human Capital Management 8.9/9.0).

- Ensure that the following items are verified in the PeopleSoft CRM and the PeopleSoft SA databases:
  1. The service operation for a particular message must be set to *Active.*
  2. The handler and routing that correspond to the service operation must be set to *Active.*
  3. Queue corresponding to service operation must be in *Run* status.

Note. Configuring the PeopleSoft SA database for integration to a PeopleSoft CRM database requires that you carry out tasks on *both* the PeopleSoft CRM database and the PeopleSoft SA database. The task *Setting Up the Student Administration Database for OLM Integration,* describes the steps that you must perform on the PeopleSoft SA database. The task *Setting Up Online Marketing for PeopleSoft Student Administration Integration,* describes the steps that you must perform on the PeopleSoft CRM database.

Complete this task for both the PeopleSoft CRM database and the PeopleSoft SA database:

Setting Up the FTP Server for the PeopleSoft Student Administration Database.

Task 12-1: Setting Up PeopleSoft SA Database for PeopleSoft OLM Integration

This section discusses:

- Setting Up and Testing the EIP Configuration
- Defining Full Data Publish Rules
- Setting Service Operations Security
- Granting Security for Application Engine Processes and New Pages
- Using the ADCRMPST Job Definition
- Using the SAD_CRM_SYN2 Process Definition

Note. Complete the steps in this section on the PeopleSoft SA database.

Task 12-1-1: Setting Up and Testing the EIP Configuration

This section discusses:

- Verifying the Local Gateway Properties
- Setting Up PeopleSoft CRM External Node Connector
- Testing the PeopleSoft CRM Node
- Activating the Domain

Verifying the Local Gateway Properties

To verify the local Gateway properties:

1. Select PeopleTools, Integration Broker, Configuration, Gateways.
2. Search for the Integration Gateway ID.

   URL format: http://*<SA machine_name>:<port>*/PSIGW/PeopleSoftListeningConnector

Note. Local Gateway properties are set up during the PeopleSoft SA 9 installation.

Setting Up PeopleSoft CRM External Node Connector

To set up the PeopleSoft CRM external node connector:

1. Select People Tools, Integration Broker, Integration Setup, Nodes.
2. Search for the node PSFT_CR.
3. Ensure that the Active Node check box is selected.
4. Configure the node connection as follows:
   a. Select the Connectors tab, and ensure that the Connection ID is set to *PSFTTARGET*.

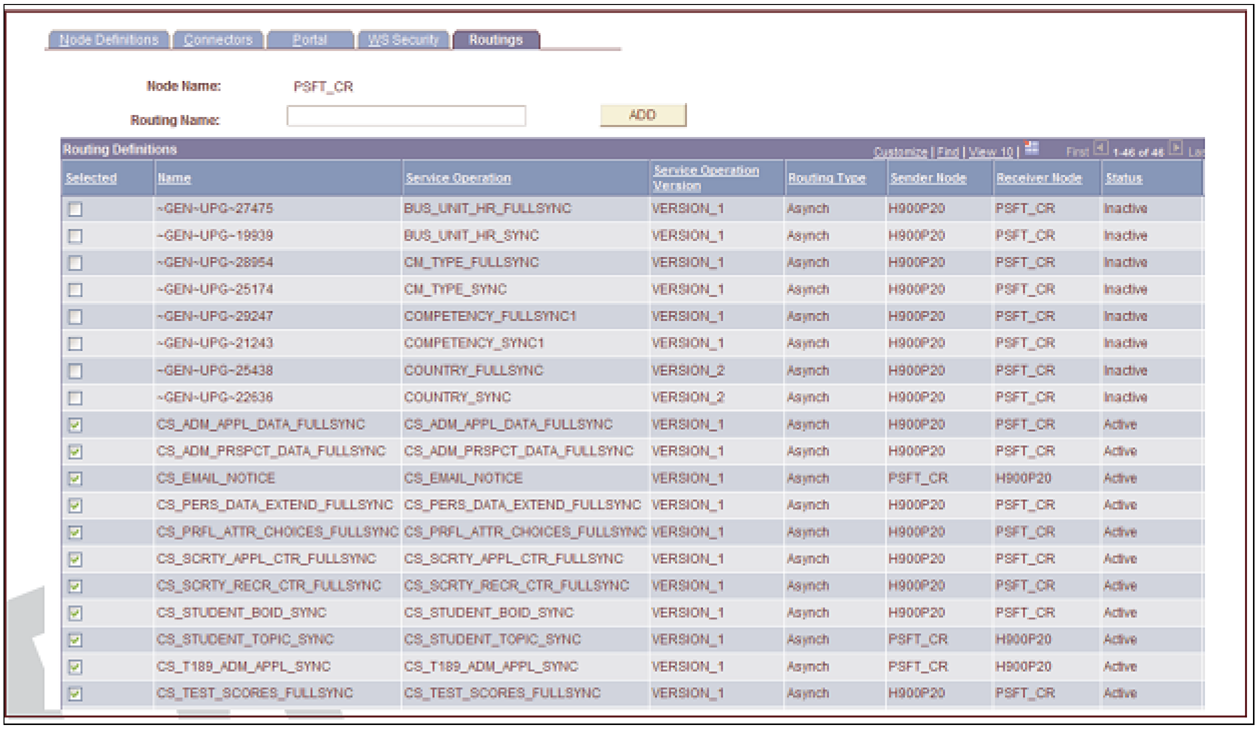
      The following is an example of the Connectors tab:

PSFT_CR_Node_Connectors page

   b. Click the Gateway Setup Properties link, enter the user ID and password, and click OK.
   c. Copy App Server URL value of PeopleSoft CRM local gateway to the App Server URL field of PSFT_CR node.
   d. The URL format is // *<CRM_machinename>:<port>*.
5. Click OK.
6. Click Save.
7. Click the Routings tab to ensure that all of the following routings are defined, and set to the *Active* status, for this PeopleSoft CRM node:
   - CS_ADM_APPL_DATA_FULLSYNC
   - CS_ADM_PRSPCT_DATA_FULLSYNC
   - CS_EMAIL_NOTICE
   - CS_PERS_DATA_EXTEND_FULLSYNC
   - CS_PRFL_ATTR_CHOICES_FULLSYNC
   - CS_SCRTY_APPL_CTR_FULLSYNC
   - CS_SCRTY_RECR_CTR_FULLSYNC

- CS_STUDENT_BOID_SYNC
- CS_STUDENT_TOPIC_SYNC
- CS_T189_ADM_APPL_SYNC
- CS_TEST_SCORES_FULLSYNC

The following is an example of the Routings page for this PSFT_CRM node, showing an *Active* status:



Selected	Name	Service Operation	Service Operation Version	Routing Type	Sender Node	Receiver Node	Status
☐	~GEN~UPG~27475	BUS_UNIT_HR_FULLSYNC	VERSION_1	Asynch	H900P20	PSFT_CR	Inactive
☐	~GEN~UPG~19939	BUS_UNIT_HR_SYNC	VERSION_1	Asynch	H900P20	PSFT_CR	Inactive
☐	~GEN~UPG~28954	CM_TYPE_FULLSYNC	VERSION_1	Asynch	H900P20	PSFT_CR	Inactive
☐	~GEN~UPG~25174	CM_TYPE_SYNC	VERSION_1	Asynch	H900P20	PSFT_CR	Inactive
☐	~GEN~UPG~29247	COMPETENCY_FULLSYNC1	VERSION_1	Asynch	H900P20	PSFT_CR	Inactive
☐	~GEN~UPG~21243	COMPETENCY_SYNC1	VERSION_1	Asynch	H900P20	PSFT_CR	Inactive
☐	~GEN~UPG~25438	COUNTRY_FULLSYNC	VERSION_2	Asynch	H900P20	PSFT_CR	Inactive
☐	~GEN~UPG~22636	COUNTRY_SYNC	VERSION_2	Asynch	H900P20	PSFT_CR	Inactive
☑	CS_ADM_APPL_DATA_FULLSYNC	CS_ADM_APPL_DATA_FULLSYNC	VERSION_1	Asynch	H900P20	PSFT_CR	Active
☑	CS_ADM_PRSPCT_DATA_FULLSYNC	CS_ADM_PRSPCT_DATA_FULLSYNC	VERSION_1	Asynch	H900P20	PSFT_CR	Active
☑	CS_EMAIL_NOTICE	CS_EMAIL_NOTICE	VERSION_1	Asynch	PSFT_CR	H900P20	Active
☑	CS_PERS_DATA_EXTEND_FULLSYNC	CS_PERS_DATA_EXTEND_FULLSYNC	VERSION_1	Asynch	H900P20	PSFT_CR	Active
☑	CS_PRFL_ATTR_CHOICES_FULLSYNC	CS_PRFL_ATTR_CHOICES_FULLSYNC	VERSION_1	Asynch	H900P20	PSFT_CR	Active
☑	CS_SCRTY_APPL_CTR_FULLSYNC	CS_SCRTY_APPL_CTR_FULLSYNC	VERSION_1	Asynch	H900P20	PSFT_CR	Active
☑	CS_SCRTY_RECR_CTR_FULLSYNC	CS_SCRTY_RECR_CTR_FULLSYNC	VERSION_1	Asynch	H900P20	PSFT_CR	Active
☑	CS_STUDENT_BOID_SYNC	CS_STUDENT_BOID_SYNC	VERSION_1	Asynch	H900P20	PSFT_CR	Active
☑	CS_STUDENT_TOPIC_SYNC	CS_STUDENT_TOPIC_SYNC	VERSION_1	Asynch	PSFT_CR	H900P20	Active
☑	CS_T189_ADM_APPL_SYNC	CS_T189_ADM_APPL_SYNC	VERSION_1	Asynch	PSFT_CR	H900P20	Active
☑	CS_TEST_SCORES_FULLSYNC	CS_TEST_SCORES_FULLSYNC	VERSION_1	Asynch	H900P20	PSFT_CR	Active

Routings page

Testing the PeopleSoft CRM Node

To test (ping) the PeopleSoft CRM node:

1. Select PeopleTools, Integration Broker, Service Operations Monitor, Administration, Node Status.
2. In the Message Node Name field, enter the PeopleSoft CRM default local node (for example, *PSFT_CR*).
3. Click the Ping Node button and verify that *Success* appears in the Message Text column.

Activating the Domain

To activate the domain:

1. Select PeopleTools, Integration Broker, Service Operations Monitor, Administration, Domain Status.
2. In the Domains grid, ensure that the Domain Status of the machine of gateway is set to *Active.*

   If it is not, select *Active,* click the Update button, and then click Refresh.

Task 12-1-2: Defining Full Data Publish Rules

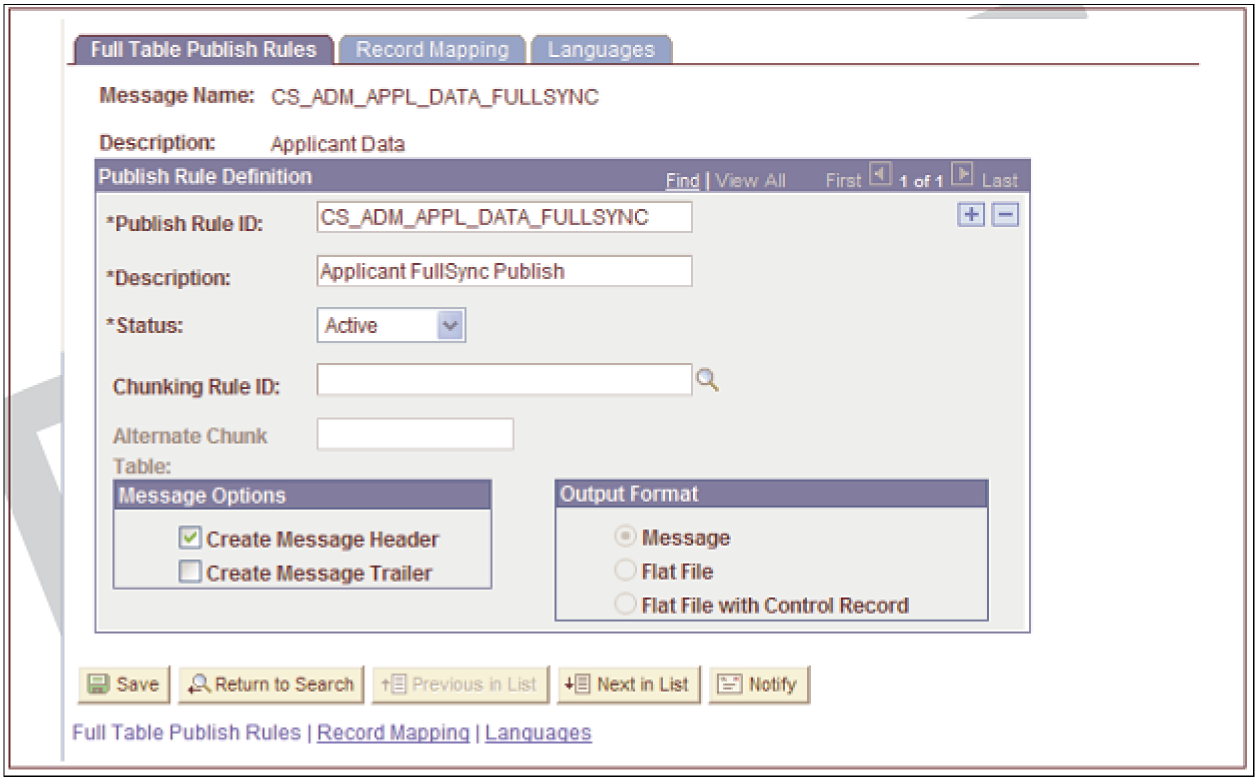
You must define a rule for each full sync message that is defined in your system.

Note. In this task you configure full table publish rules for PERSON_BASIC_FULLSYNC. The first full publish sync that you perform using PERSON_BASIC_FULLSYNC will publish all EMPLIDs in your PeopleSoft HCM database to PeopleSoft CRM. This is necessary to populate the appropriate PeopleSoft CRM tables that may later be updated by subsequent incremental personal data updates using PERSON_BASIC_SYNC.

To define full data publish rules:

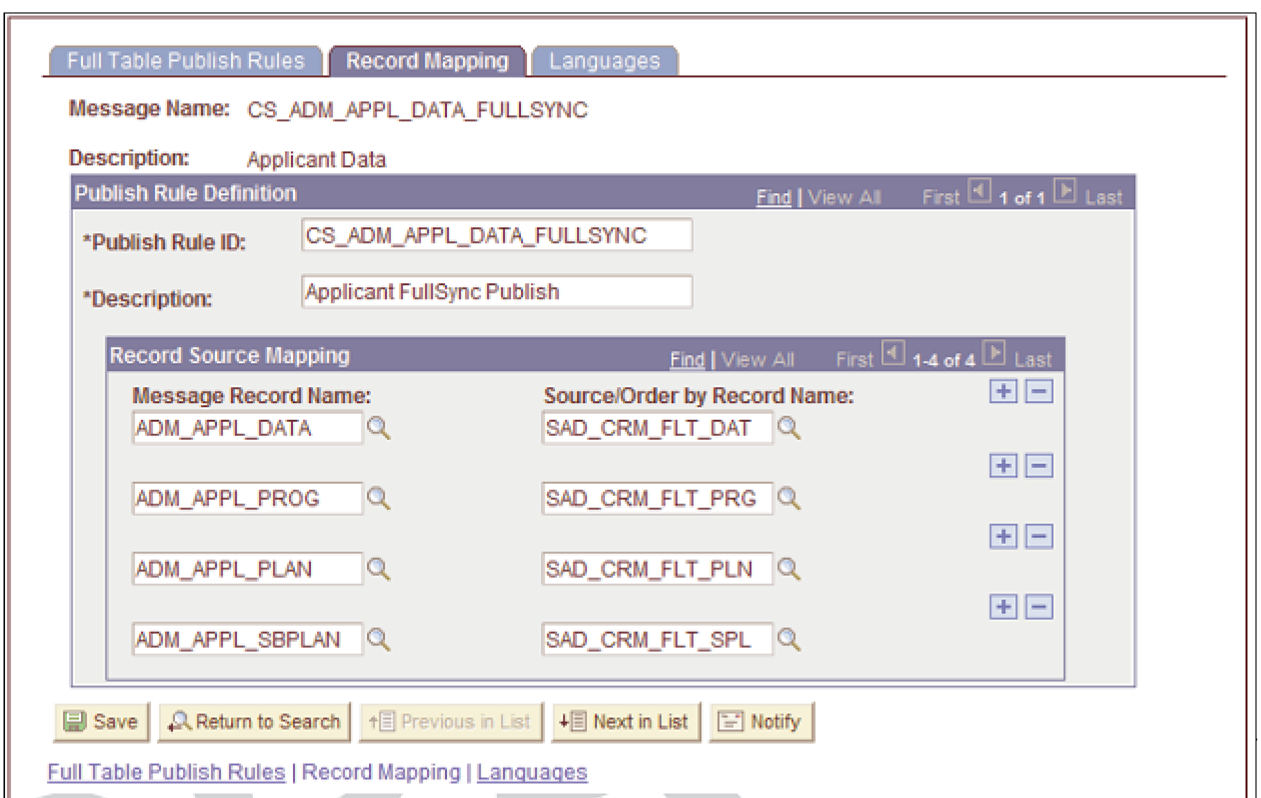
1. Select Enterprise Components, Integration Definitions, Full Data Publish Rules.

2. Create full data publish rules for the message CS_ADM_APPL_DATA_FULLSYNC as shown in the following example:



Example of Full Table Publish Rules page

a. Select the Full Table Publish Rules tab and enter a Publish Rule ID and a Description.
b. Select *Active* from the Status drop-down list.
c. In the Message Options section, select the Create Message Header check box.
d. Select the Record Mapping tab and enter the information, as shown in the following example:



Example of Record Mapping page

This table lists the Message Record Name and corresponding Source/Order by Record Name:

Message Record Name	Source/Order by Record Name
ADM_APPL_DATA	*SAD_CRM_FLT_DAT*
ADM_APPL_PROG	*SAD_CRM_FLT_PRG*
ADM_APPL_PLAN	*SAD_CRM_FLT_PLN*
ADM_APPL_SBPLAN	*SAD_CRM_FLT_SPL*

3. Create a rule for each of the messages listed in the following table:

Message Name	Message Record Name	Source/Order by Record Name
CS_ADM_PRSPCT_DATA_FULLSYNC	ADM_PRSPCT_CAR	SAD_CRM_FLT_PRS
CS_PERS_DATA_EXTEND_FULLSYNC	ADM_INTERESTS	SAD_CRM_FLT_ADM
	DISABILITY	SAD_CRM_FLT_DIS
	SCC_DIVERS_VW	SAD_CRM_FLT_DIV
	EXTRACUR_ACTVTY	SAD_CRM_FLT_EXT
	EXT_ACAD_DATA	SAD_CRM_FLT_ACD
	EXT_ACAD_SUM	SAD_CRM_FLT_ACS
	PERSONAL_DATA	SAD_CRM_FLT_PER
	SRVC_IND_DATA	SAD_CRM_FLT_SRV
CS_SCRTY_APPL_CTR_FULLSYNC	No mapping required	
CS_SCRTY_RECR_CTR_FULLSYNC	No mapping required	
CS_TEST_SCORES_FULLSYNC	STDNT_TEST	SAD_CRM_FLT_TST

Note. Ensure that you select the Header option for each message.

4. Create publish rules for PERSON_BASIC_FULLSYNC.
   a. Select the Full Table Publish Rules tab and enter a Publish Rule ID and a Description (for example,

Person_Basic_Full).

b. Select *Active* from the Status drop-down list.
c. In the Message Options section, select the Create Message Header check box.
d. Click the + icon to add a new row for Publish Rule definition.
e. Select the Full Table Publish Rules tab and enter a Publish Rule ID and a Description (for example, *Person_Basic_Inc*).
f. Select *Inactive* from the Status drop-down list.
g. In the Message Options section, select the Create Message Header check box.
h. Select the Record Mapping tab and enter the following:

   In the Message Record Name field, enter *PERSON*.

   In the Source/order by Record name field, enter *SAD_CRM_FLT_BAS*.

   Note. You can use this new row to perform incremental full sync publishes that are based on the last run date of the process.

The first row is active for the first full publish sync that you perform and does not use a filtering view. All EMPLIDS in your PeopleSoft HCM database will be published by this full sync.

After the first run, you can switch the first row to inactive and then activate the second row. The second row uses a view based on PS_SAD_CRM_FLT_BAS to filter the integration, based on EMPLIDs that exist in the PS_SAD_CRM_ EMPLIDS table, and has a PERS_DATA_EFFDT that is greater than or equal to the last run date of the process.

5. Load profile choices for the message CS_PRFL_ATTR_CHOICES_FULLSYNC:
   a. Select the Full Table Publish Rules tab to create a new row for each of the choice types that are listed in Step 5e.
   b. Create a unique Publish Rule ID and Description for each.
   c. Set the status to *Active*.
   d. Clear the Create Message Header and Create Message Trailer options.

e. Select the Record Mapping tab. For the Message Record Name of SAD_CRM_ACH_WRK, configure using the values listed in the following table:

Publish Rule ID	Description	Source/Order by Record Name
ACTIONS	Program Actions	SAD_CRM_ACTN_VW
APP_CENTERS	Application Centers	SAD_CRM_ACTR_VW
ACTIVITIES	Extracurricular Activities	SAD_CRM_ACTV_VW
ADMIT_TERMS	Admit Terms	SAD_CRM_ATRM_VW
ADMIT_TYPES	Admit Types	SAD_CRM_ATYP_VW
CAMPUS	Campus	SAD_CRM_CAMP_VW
EXT_SUBJECTS	External Subjects	SAD_CRM_ESUB_VW
EXT_TERMS	External Terms	SAD_CRM_ETRM_VW
EXP_GRAD_TERMS	Expected Graduation Terms	SAD_CRM_GTRM_VW
GPA_TYPES	GPA Types	SAD_CRM_GTYP_VW
INSTITUTIONS	Institutions	SAD_CRM_INST_VW
PLANS	Academic Plans	SAD_CRM_PLAN_VW
PROGRAMS	Academic Programs	SAD_CRM_PROG_VW
RECRUIT_CAT	Recruiting Categories	SAD_CRM_RCAT_VW
REC_CENTERS	Recruiting Centers	SAD_CRM_RCTR_VW
ACTN_REASONS	Academic Program Action Reasons	SAD_CRM_RSN_VW
REFERRAL_SOURCE	Referral Source	SAD_CRM_RSRC_VW
REQ_TERMS	Requirement Terms	SAD_CRM_RTRM_VW
SUMM_TYPES	Summary Types	SAD_CRM_SMTP_VW
SUB_PLANS	Academic Sub-Plans	SAD_CRM_SPLN_VW
SRVC_IND	Service Indicators	SAD_CRM_SRVC_VW
TERMS	Terms	SAD_CRM_STRM_VW
TEST_COMP	Test Components	SAD_CRM_TCMP_VW

Publish Rule ID	Description	Source/Order by Record Name
TEST_ID	Test IDs	SAD_CRM_TEST_VW

Task 12-1-3: Setting Service Operations Security

To set Service Operations Security:

1. Select People Tools, Security, Permissions and Roles, Permissions Lists.
2. Select the appropriate permission list (for example, *HCSPSERVICE*).
3. Select the Web Services tab.
4. Verify that FULL access is granted for the following messages:
   - CS_ADM_APPL_DATA_FULLSYNC
   - CS_ADM_PRSPCT_DATA_FULLSYNC
   - CS_EMAIL_NOTICE
   - CS_PERS_DATA_EXTEND_FULLSYNC
   - CS_PRFL_ATTR_CHOICES_FULLSYNC
   - CS_SCRTY_APPL_CTR_FULLSYNC
   - CS_SCRTY_RECR_CTR_FULLSYNC
   - CS_STUDENT_BOID_SYNC
   - CS_STUDENT_TOPIC_SYNC
   - CS_T189_ADM_APPL_SYNC
   - CS_TEST_SCORES_FULLSYNC
   - PERSON_BASIC_FULLSYNC
   - PERSON_BASIC_SYNC

Task 12-1-4: Granting Security for Application Engine Processes and New Pages

To grant security for Application Engine (AE) processes and new pages:

1. Select People Tools, Security, Permissions and Roles, Permissions Lists.
2. Select the appropriate Permission List.
3. Select the Pages tab.
4. Add the menus SAD_CRM_INTEGRATION, EVALUATE_APPLICANTS, and LOAD_EXTERNAL_DATA.
5. Click the Edit Pages link for the SAD_CRM_INTEGRATION, EVALUATE_APPLICANTS, and LOAD_EXTERNAL_DATA menus that you just added.
6. Click the Select All button for each menu.
7. Click OK.
8. Click OK again.
9. Click Save.

Note. You may need to sign out and sign back in to access the menu items.

The system delivers two methods for running the Application Engine process that posts the File Attachment Locator and Long Text Responses to the PeopleSoft SA Recruiting and Admissions transaction tables:

- You can use a *Job* that automatically runs the existing TS189 People Search/Match/Post SQR first, followed by the new PeopleSoft CRM Post File Attachments/Long Text application engine process.
- Alternatively, you can use the delivered Process Definition that runs only the PeopleSoft CRM Post File Attachments/Long Text application engine process.

This Application Engine process also publishes the CS_STUDENT_BOID_SYNC message to provide EMPLID to BO_ID mapping to PeopleSoft CRM 9.2.

Task 12-1-5: Using the ADCRMPST Job Definition

To use the job definition:

1. Select Home, PeopleTools, Process Scheduler, Jobs.
2. In the Process Job field, enter *ADCRMPST*.
3. Select the Job Definition Options tab.
4. Enter the appropriate Process Groups for the users who can run the process.

Note. If the user decides to use the Job Definition, you should delete the Process Groups for the previous EDI TS189 People Search/Match/Post (ADAPPPST).

Task 12-1-6: Using the SAD_CRM_SYN2 Process Definition

To access the process definition:

1. Select Home, PeopleTools, Process Scheduler, Processes.
2. Enter the Process Name = *SAD_CRM_SYN2*.
3. Select the Process Definition Options tab.
4. Enter the appropriate Process Groups for the users who can run the process.

The setup tasks for the installation on the PeopleSoft SA side are now complete.

Task 12-2: Setting Up PeopleSoft OLM for PeopleSoft SA Integration

This section discusses:

- Prerequisites
- Setting Up and Testing the EIP Configuration
- Setting Up the Web Template URL in the PeopleSoft CRM Database
- Assigning Valid Mailbox Email Addresses
- Defining SETID for Inbound EIP Data
- Setting Up the FTP Server for the PeopleSoft SA Database
- Populating Profile Attribute Choices from PeopleSoft SA to PeopleSoft CRM

- Cleaning Up and Resetting Profile-Related Data Integrity in the PeopleSoft CRM Database
- Populating Student Data from PeopleSoft SA to PeopleSoft CRM
- Deploy CS_ Dialogs to Start Dialog Execution
- Running the TS189 Processes to Post Data (Optional)
- Posting Dialog Questions from PeopleSoft CRM to PeopleSoft SA in the PeopleSoft CRM Database (Optional)

Prerequisites

Ensure that the following requirements are met before you begin setting up PeopleSoft SA integration:

- A fully functional PeopleSoft CRM Online Marketing (OLM) environment is installed.

  See "Installing PeopleSoft Online Marketing 9.2."
- Security Enterprise Integration Point (EIP) settings for the Person Basic Fullsync are set.

  See "Installing PeopleSoft Online Marketing 9.2, " Improving Online Marketing Transaction Performance.

Task 12-2-1: Setting Up and Testing the EIP Configuration

This section discusses:

- Setting Up the JOLT Connect String for Application Servers
- Verifying the Local Gateway Properties
- Verifying the Required Routings if Defined in Local Node
- Setting Up the Student Administration External Node and Connector
- Testing the PeopleSoft CRM Default Local Node
- Testing the PeopleSoft SA Node
- Activating the Domain

Setting Up the JOLT Connect String for Application Servers

Add the following properties in <*PS_CFG_HOME*>\webserv\peoplesoft\applications\peoplesoft\PSIGW\WEB-INF\integrationGateway.properties:

```
ig.isc.CRMNODENAME.serverURL=//CRMAppServerMachine:9000
ig.isc.CRMNODENAME.userid= opuserId
ig.isc.CRMNODENAME.password= opuserIPwd (encrypted password)
ig.isc.CRMNODENAME.toolsRel=CRM Tools version (8.48 for CRM 9)
```

CRMNODENAME is the PeopleSoft CRM default local node name (for example, *PSFT_CR*).

Verifying the Local Gateway Properties

To verify the local Gateway properties:

1. Select PeopleTools, Integration Broker, Configuration, Gateways.
2. Search for the Integration Gateway ID.

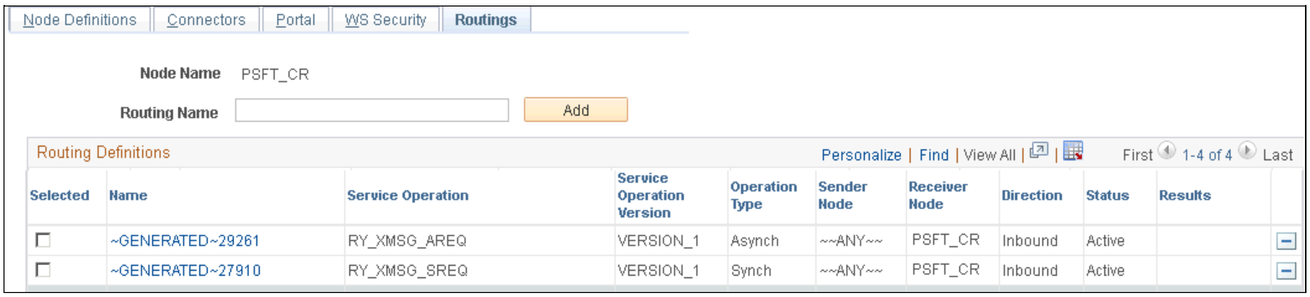
   URL format: `http://`*<CRM machine_name>:<port>*/PSIGW/PeopleSoftListeningConnector

Note. Local Gateway properties are set up during the PeopleSoft CRM 9.2 installation.

Verifying the Required Routings if Defined in Local Node

To verify the required routings:

1. Select PeopleTools, Integration Broker, Integration Set up, Nodes.
2. Search for the default local node (for example, *PSFT_CR*).
3. Select the Routings tab and ensure that the routings shown in the Default Local Node page are defined and active, as shown in the following example:



Default Local Node page

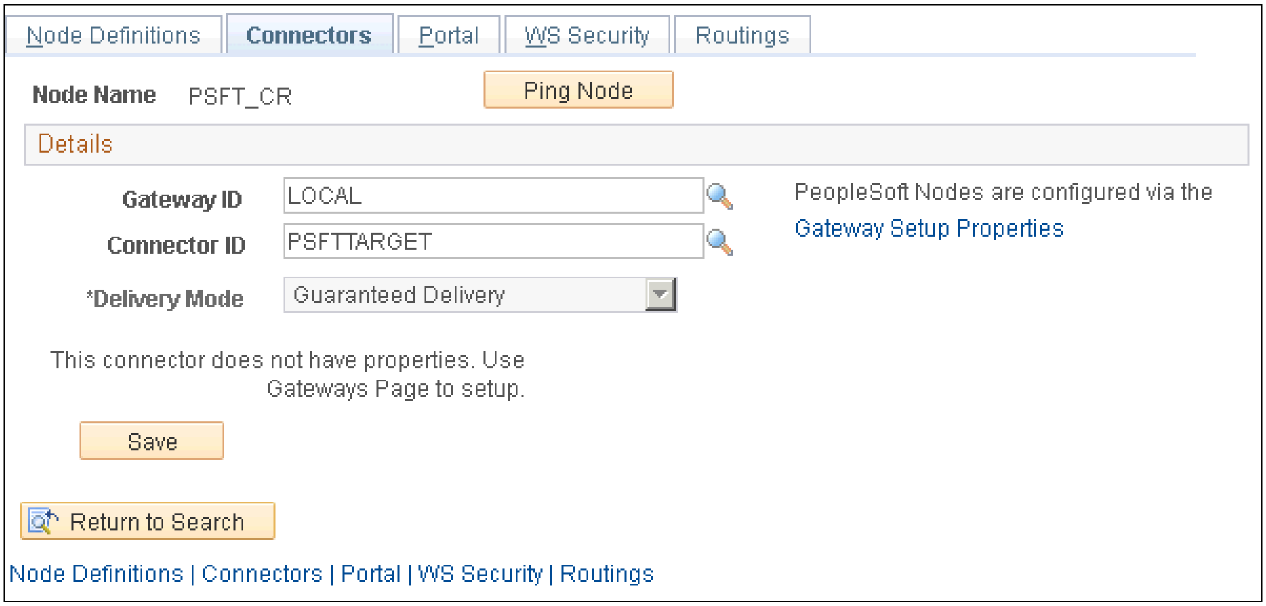
Setting Up the Student Administration External Node and Connector

To set up the PeopleSoft SA external node and connector:

1. Select PeopleTools, Integration Broker, Integration Set up, Nodes.
2. Search for the node PSFT_HR.
3. Ensure that the Active Node check box is selected.
4. Configure the node connection as follows:

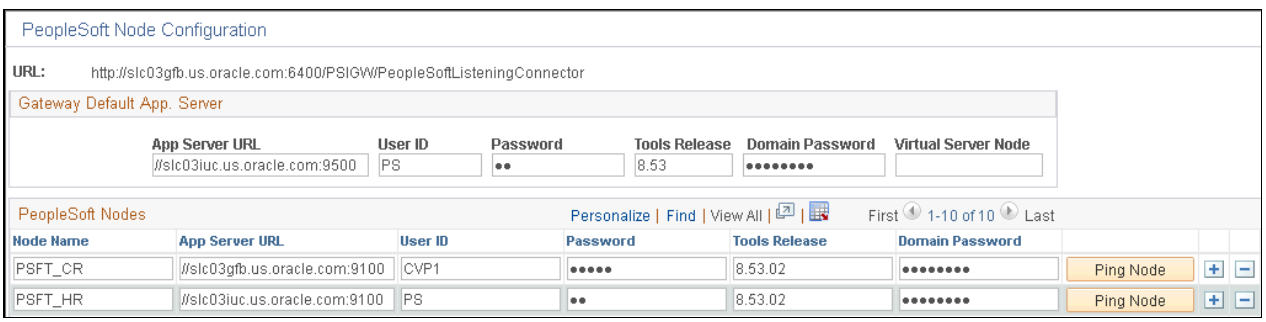
a. Select the Connectors tab, and ensure that the Connection ID is set to *PSFTTARGET* for PeopleSoft SA 8.9/9.0.

   Example of the Connectors tab:



   Connectors page

b. Click the Gateway Setup Properties link to access the PeopleSoft Node Configuration page, as shown in the following example:



   PeopleSoft Node Configuration page

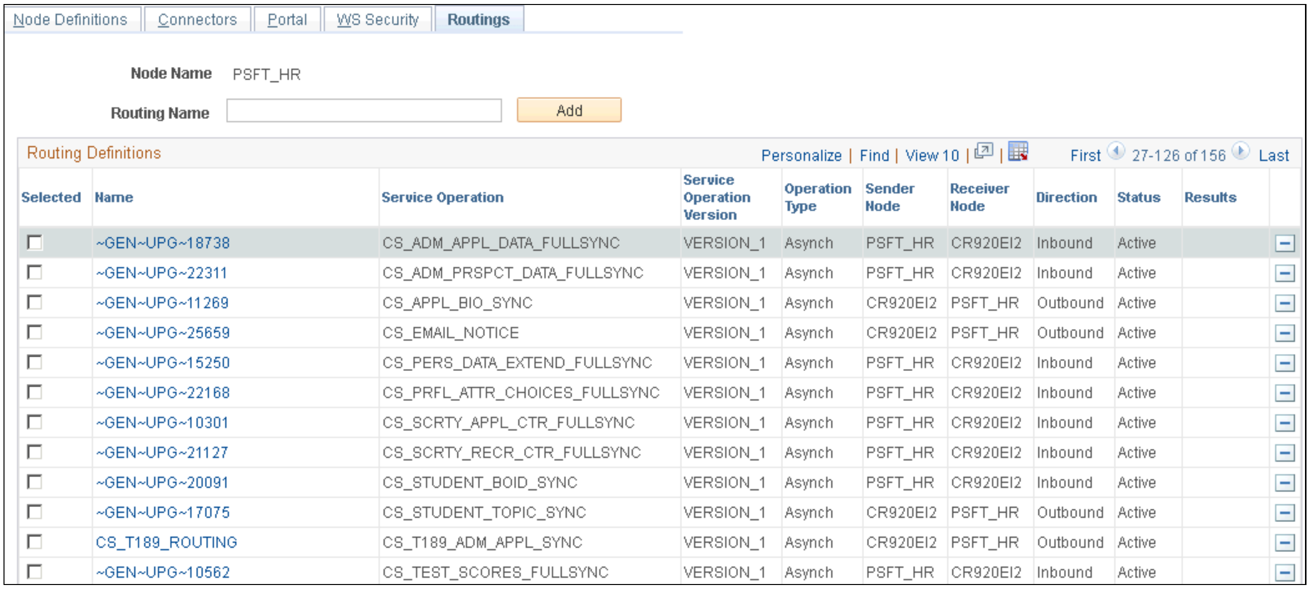
c. Enter the user ID and password, and click OK.

d. Set the SA server and port for node PSFT_HR.

5. Click OK.

6. Click Save.

7. Click the Routings tab to ensure that all of the routings are active and verify that the required routings are defined for this PeopleSoft SA node, as shown in the following example:



Node Definitions | Connectors | Portal | WS Security | Routings

Node Name PSFT_HR

Routing Name [ ] Add

Routing Definitions — Personalize | Find | View 10 | First 27-126 of 156 Last

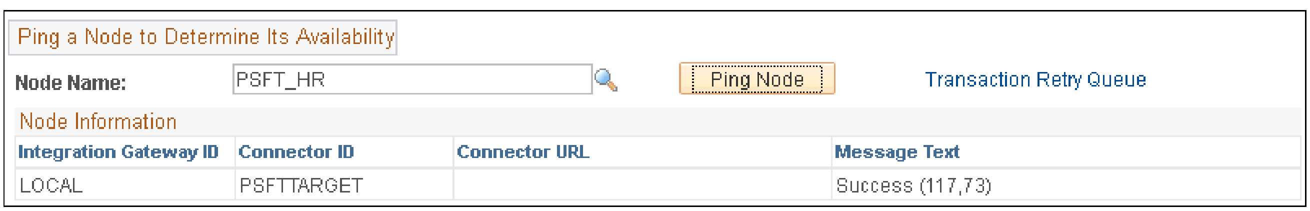
Selected	Name	Service Operation	Service Operation Version	Operation Type	Sender Node	Receiver Node	Direction	Status	Results
☐	~GEN~UPG~18738	CS_ADM_APPL_DATA_FULLSYNC	VERSION_1	Asynch	PSFT_HR	CR920EI2	Inbound	Active	
☐	~GEN~UPG~22311	CS_ADM_PRSPCT_DATA_FULLSYNC	VERSION_1	Asynch	PSFT_HR	CR920EI2	Inbound	Active	
☐	~GEN~UPG~11269	CS_APPL_BIO_SYNC	VERSION_1	Asynch	CR920EI2	PSFT_HR	Outbound	Active	
☐	~GEN~UPG~25659	CS_EMAIL_NOTICE	VERSION_1	Asynch	CR920EI2	PSFT_HR	Outbound	Active	
☐	~GEN~UPG~15250	CS_PERS_DATA_EXTEND_FULLSYNC	VERSION_1	Asynch	PSFT_HR	CR920EI2	Inbound	Active	
☐	~GEN~UPG~22168	CS_PRFL_ATTR_CHOICES_FULLSYNC	VERSION_1	Asynch	PSFT_HR	CR920EI2	Inbound	Active	
☐	~GEN~UPG~10301	CS_SCRTY_APPL_CTR_FULLSYNC	VERSION_1	Asynch	PSFT_HR	CR920EI2	Inbound	Active	
☐	~GEN~UPG~21127	CS_SCRTY_RECR_CTR_FULLSYNC	VERSION_1	Asynch	PSFT_HR	CR920EI2	Inbound	Active	
☐	~GEN~UPG~20091	CS_STUDENT_BOID_SYNC	VERSION_1	Asynch	PSFT_HR	CR920EI2	Inbound	Active	
☐	~GEN~UPG~17075	CS_STUDENT_TOPIC_SYNC	VERSION_1	Asynch	CR920EI2	PSFT_HR	Outbound	Active	
☐	CS_T189_ROUTING	CS_T189_ADM_APPL_SYNC	VERSION_1	Asynch	CR920EI2	PSFT_HR	Outbound	Active	
☐	~GEN~UPG~10562	CS_TEST_SCORES_FULLSYNC	VERSION_1	Asynch	PSFT_HR	CR920EI2	Inbound	Active	

PeopleSoft Routings page

Testing the PeopleSoft CRM Default Local Node

To test (ping) the PeopleSoft CRM default local node:

1. Select PeopleTools, Integration Broker, Service Operations Monitor, Administration, Node Status.
2. In the Message Node Name field, enter the PeopleSoft CRM default local node (for example, *PSFT_CR*).
3. Click the Ping Node button and verify that *Success* appears in the Message Text column, as shown in the following example:



Ping a Node to Determine Its Availability

Node Name: PSFT_HR Ping Node Transaction Retry Queue

Node Information

Integration Gateway ID	Connector ID	Connector URL	Message Text
LOCAL	PSFTTARGET		Success (117,73)

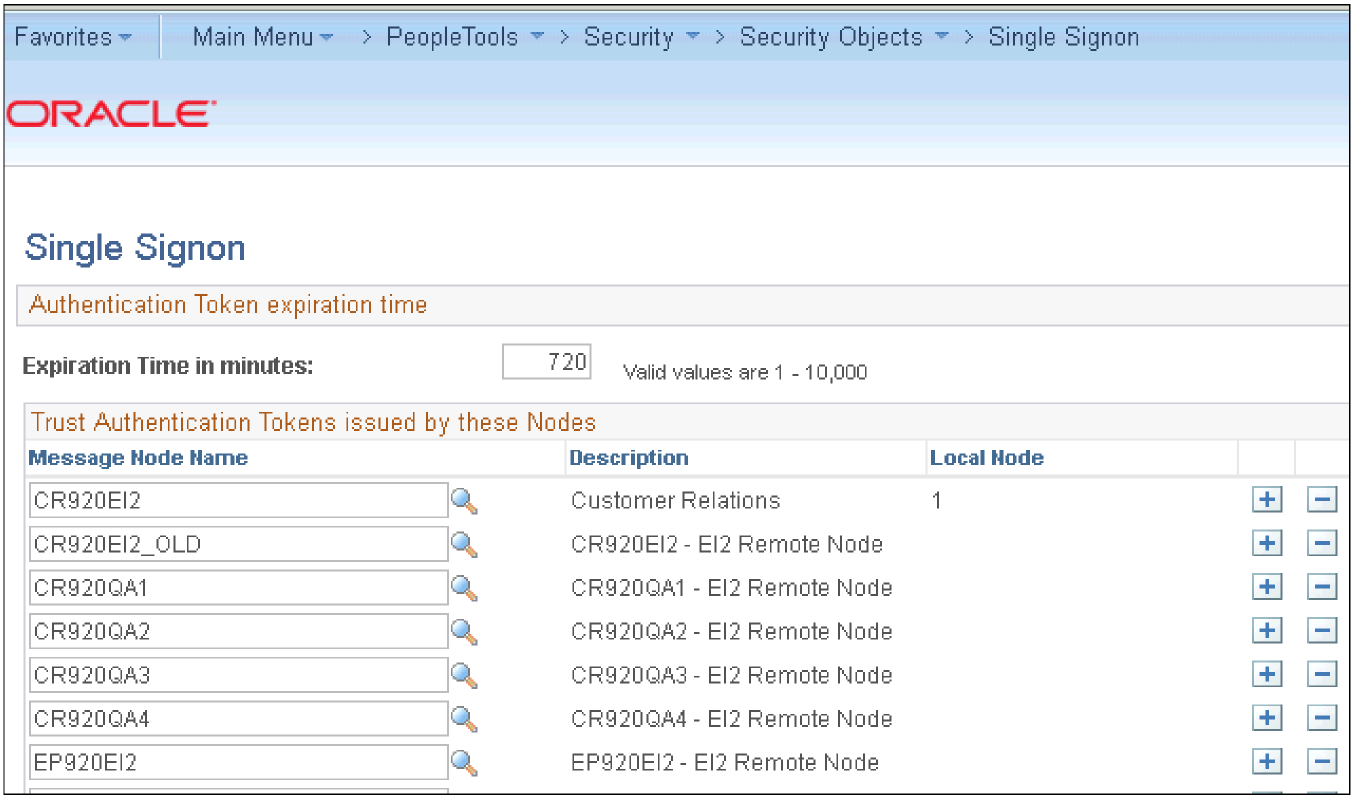
Node Status page - PeopleSoft CRM local node

Important! During the PeopleSoft SA integration set up, on the PeopleSoft CRM side, the instructions prompt you to set up and ping the local nodes. However, if these local nodes are not set up in PeopleSoft Single Sign on, the ping will fail with the following error:

"Authentication Failed for Node<Node Name> (158,454)."

To resolve this, use your left pane navigation to select PeopleTools, Security, Security Objects, Single Sign on, to access the PeopleSoft Single Sign on page. On the PeopleSoft Single Sign on page, add the nodes and then click Save. You can now ping the local nodes and receive a successful response.

Refer to the following example of the PeopleSoft Single Sign on page showing the PeopleSoft CRM node CR910QA1 listed as the Local Node:

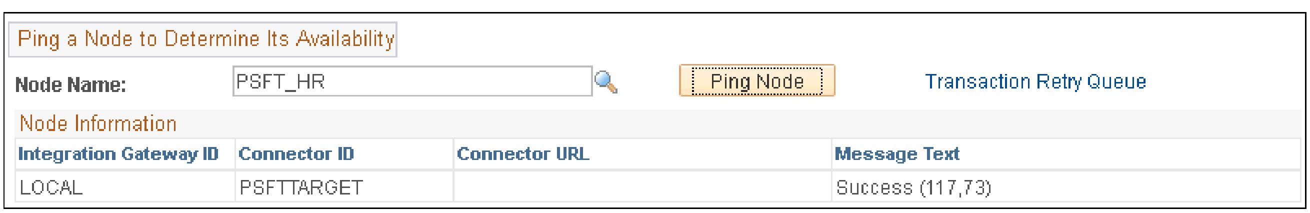


PeopleSoft Single Sign on page

Testing the PeopleSoft SA Node

To test (ping) the PeopleSoft SA node:

1. Select PeopleTools, Integration Broker, Service Operations Monitor, Administration, Node Status.
2. In the Message Node Name field, enter the PeopleSoft SA default local node (for example, *SA890CR2* or *SA801CR2).*
3. Click the Ping Node button and verify that *Success* appears in the Message Text column, as shown in the following example:



Node Status page - PeopleSoft SA local node

Activating the Domain

To activate the domain:

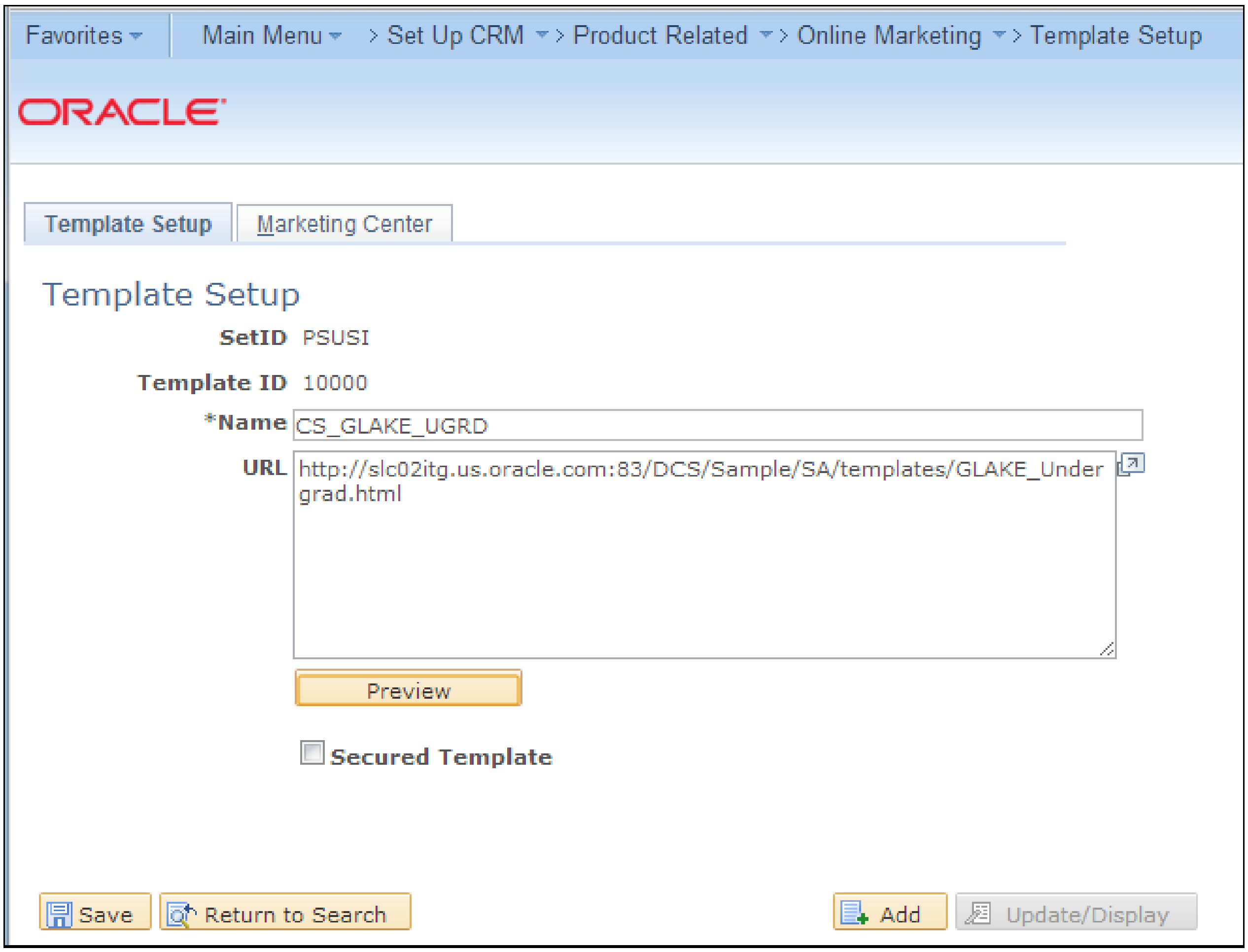
1. Select PeopleTools, Integration Broker, Service Operations Monitor, Administration, Domain Status.
2. In the Domains grid, ensure that the Domain Status of the machine of gateway is set to *Active.*

If it is not, select *Active*, click the Update button, and then click Refresh.

Task 12-2-2: Setting Up the Web Template URL in the PeopleSoft CRM Database

To set up the web template URL to a valid template file location in the PeopleSoft CRM database:

1. Select Set Up CRM, Product Related, Online Marketing, Template Setup.
2. Enter *PSUSI* in the SETID field and click the Search button.
3. For each Template ID with prefix CS in the description field, do the following:
   a. Open the template.
   b. Replace the *<DES Server>:<port>* with the valid DES server in the URL.
   URL format: http://*<DES Server>:<port>*/DCS/Sample/SA/templates/GLAKE_Undergrad.html



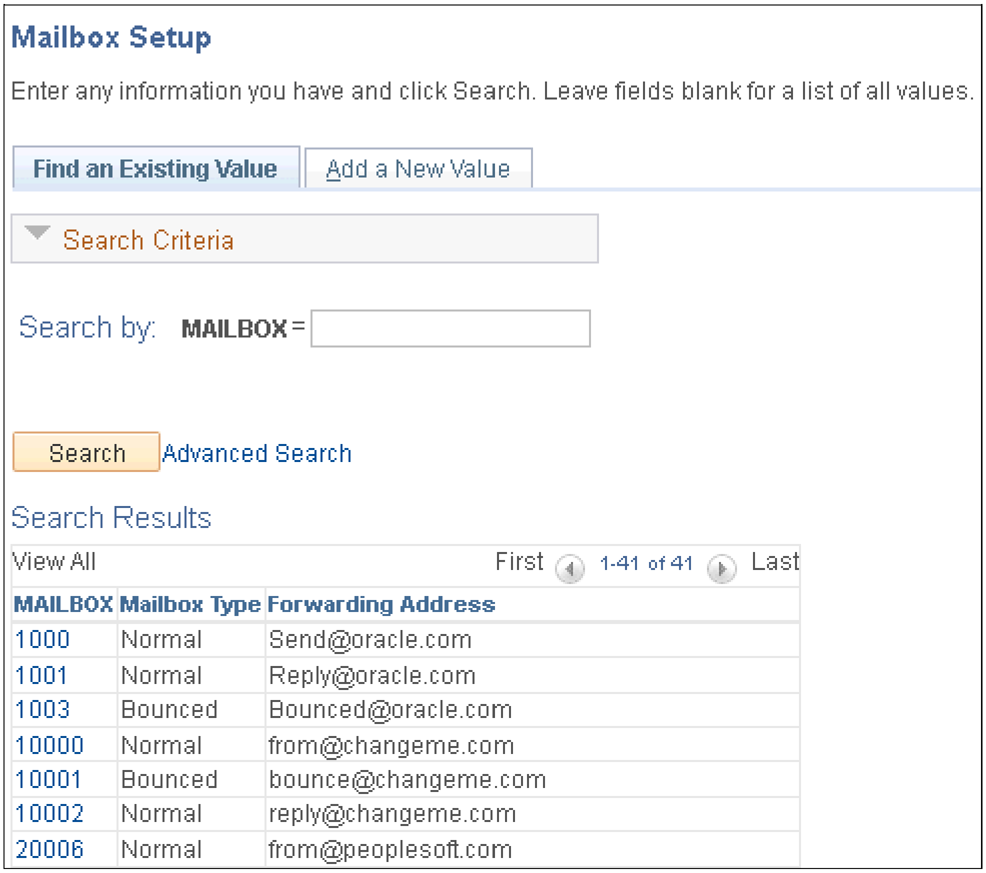
DES Server URL Page

Task 12-2-3: Assigning Valid Mailbox Email Addresses

To assign valid mailbox email addresses:

1. Select Set Up CRM, Product Related, Online Marketing, Mailbox Setup.

2. Assign valid email addresses to each of the mailboxes, as shown in the following example:



Mailbox Setup Search page

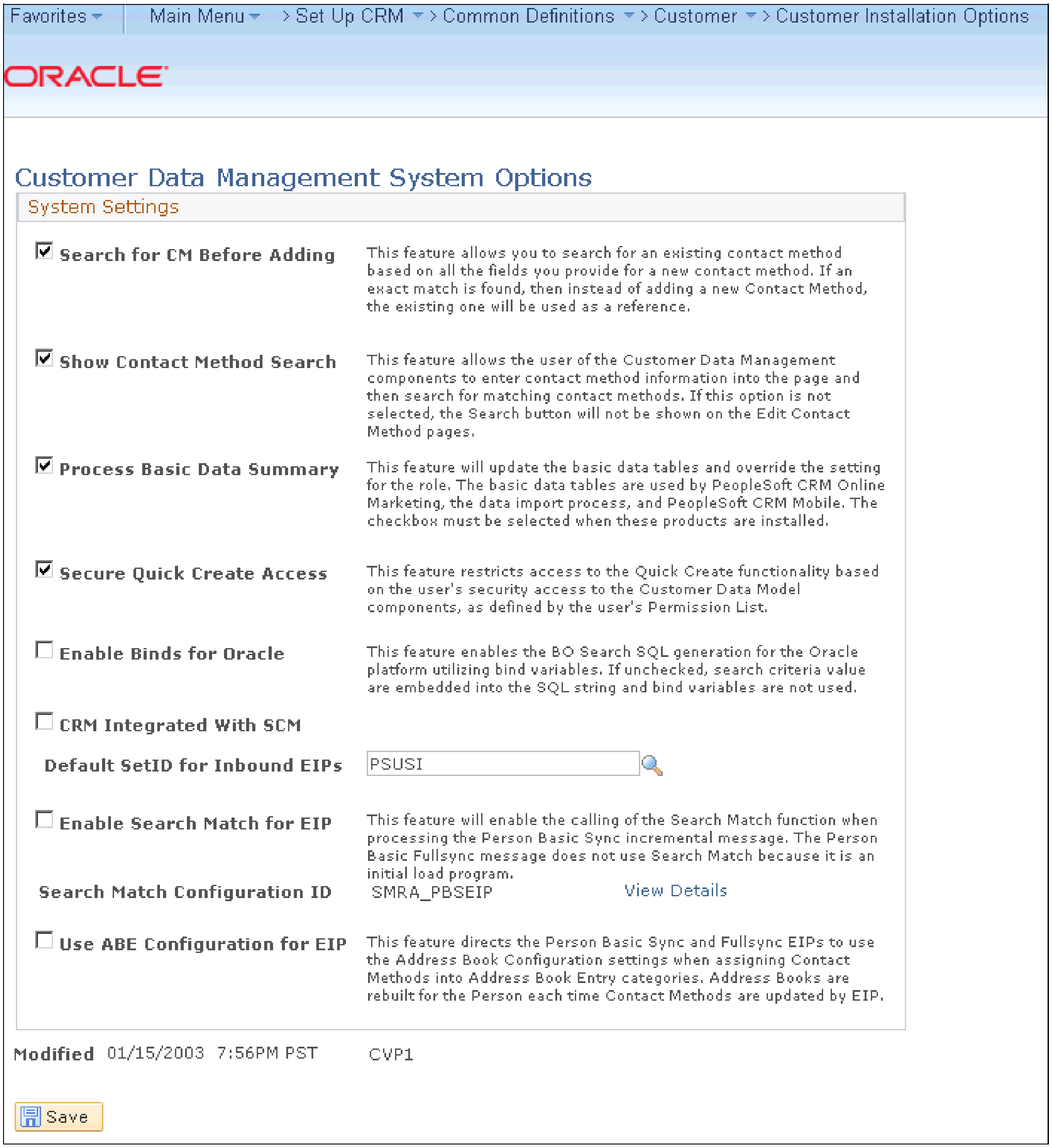
Mailbox	**Mailbox Type**	**Forwarding Address**
10000	Normal	from@changeme.com
10001	Bounced	bounce@changeme.com
10002	Normal	reply@changeme.com

Task 12-2-4: Defining SETID for Inbound EIP Data

To define inbound data SETID:

1. Select Main Menu, Set Up CRM, Common Definitions, Customer, Customer Installation Options.

   The Customer Data Management System Options page appears, as shown in the following example:



Customer Data Management System Options page

2. Enter *PSUSI* in the Default SetID for Inbound EIPs field, and then click Save.

Task 12-2-5: Setting Up the FTP Server for the PeopleSoft SA Database

Understanding the FTP Server Setup

When the applicant uploads a file attachment to the PeopleSoft CRM system, it is stored on an FTP server that is defined in the PeopleSoft CRM system. The (student-side) PeopleSoft CRM Post File Attachment/Long Text Application Engine process gets the address of the PeopleSoft CRM system FTP server from the URL table and copy that file to a PeopleSoft SA system FTP server, that also must be defined in the URL table.

Important! Complete all of the steps in this section on the PeopleSoft SA database.

Defining the PeopleSoft CRM FTP Server

To define the PeopleSoft CRM FTP Server:

1. Select Home, PeopleTools, Utilities, Administration, URLs.
2. Click Add a New Value.
3. Specify the URL Identifier, for example, *CRM_SERVER* (this identifier can be any value).
4. Click Add.
5. Enter *CRM FTP Server* in the Description field.
6. Enter the URL of the FTP server. For example: *ftp://user2:pword2@ftp.crmserver.com/files/*

Defining the PeopleSoft Student Administration FTP Server

To define the PeopleSoft SA FTP server:

1. Select Home, PeopleTools, Utilities, Administration, URLs.
2. Select Add a New Value.
3. Specify the URL identifier.

   For example: *SA_SERVER* (This identifier can be any value.)
4. Click Add.
5. Enter *SA FTP Server* in the Description field.
6. Enter the URL: *ftp://user2:pword2@ftp.saserver.com/files/.*

   Note. The previous FTP address is an example of a valid FTP address. The actual value depends on the FTP address and login information for the Student-side FTP server.

Defining New URL IDs on the Application Center Table

Two new fields in the Application Center table identify the PeopleSoft CRM FTP Server URL ID and the PeopleSoft SA FTP Server URL ID. Repeat this procedure for each Application Center that is loaded on the PeopleSoft CRM system side.

To define new URL IDs on the Application Center table:

1. Select Set Up SACR, Product Related, Recruiting and Admissions, Applicants, Application Center Table.

2. Enter the Application Center, for example, *UGRD.*

   URGD is an example of an Application Center. This value is dependent on the user setup data and the application centers that are being used by the applications that are loaded through the PeopleSoft CRM system.

3. Enter the Student FTP Server ID as *SA_SERVER* (or the URL_ID that was created in the URL table for the student-side server).

   See Defining the PeopleSoft Student Administration FTP Server, in this installation guide.

4. Enter the PeopleSoft CRM FTP Server ID as *CRM_SERVER* (or the URL_ID that was created in the URL table for the CRM-side server).

   See the previous section Defining the PeopleSoft CRM FTP Server, in this installation guide.

Task 12-2-6: Populating Profile Attribute Choices from PeopleSoft SA to PeopleSoft CRM

To run the process in the PeopleSoft SA database:

Note. Complete the procedure in this task on the PeopleSoft SA database.

---

1. Select Enterprise Components, Integration Definitions, Initiate Processes, Full Data Publish.
2. Enter a run control ID.
3. Enter a request ID.
4. Enter a description.
5. Select Process Frequency, *Once.*
6. Select Message Name *CS_PRFL_ATTR_CHOICES_FULLSYNC.*

Task 12-2-7: Cleaning Up and Resetting Profile-Related Data Integrity in the PeopleSoft CRM Database

After populating the profile attribute choices from PeopleSoft SA to PeopleSoft CRM, you must confirm data integrity. Run the PeopleSoft Data Mover scripts to clean up the attribute choice IDs.

To run the PeopleSoft Data Mover scripts to clean up the attribute choice IDs:

1. Open the PeopleSoft Configuration Manager.
2. Select the Profile tab and click the Edit button for the Default profile.
3. Select the Common tab.
4. Set the Input Directory in PeopleSoft Data Mover Directories to <*PS_APP_HOME*>\data (for example, *c:\Tools\data,* or *\\networkmachine\Tools\data,* or *//unixMountDir/Tools/data*).
5. Click OK.
6. Click OK again.
7. Save the configuration setting.
8. Open the script file `olmsaresetids.dms` from <*PS_APP_HOME*>\scripts in PeopleSoft Data Mover.
9. Select File, Run Script.
10. Recycle the application server and clear the application server cache.
11. Recycle the Dialog Execution Server (DES).

Task 12-2-8: Populating Student Data from PeopleSoft SA to PeopleSoft CRM

Creating Run Control for Student Data

To create Run Control for student data:

Note. Complete this task on the PeopleSoft SA database.

1. For PeopleSoft SA 8.9/9.0, select Main Menu, Enterprise Components, Integration Definitions, Initiate Processes, Full Data Publish.
2. Enter the run control ID. For example: *SAD_CRM_INTEGRATION*
3. For PeopleSoft SA 8 SP1, enter a row (using the Add/+ button) with the values listed in the following table:

Request ID	Description	Process Frequency	Message Name
001	Person Basic Data	Once	CS_PERSON_BASIC_FULLSYNC

4. For SA 8.9/9.0, enter a row (using Add/+ button) with the values listed in the following table:

Request ID	Description	Process Frequency	Message Name
001	Person Basic Data	Once	PERSON_BASIC_FULLSYNC

5. For both SA 8 SP1 and SA 8.9/9.0, enter rows (using Add/+ button) with the values listed in the following table:

Request ID	Description	Process Frequency	Message Name
002	Extend Pers Data	Once	CS_PERS_DATA_EXTEND_FULLSYNC
003	Applicant Data	Once	CS_ADM_APPL_DATA_FULLSYNC
004	Prospect Data	Once	CS_ADM_PRSPCT_DATA_FULLSYNC
005	Test Score Data	Once	CS_TEST_SCORES_FULLSYNC
006	Application Center Security	Once	CS_SCRTY_APPL_CTR_FULLSYNC
007	Recruiting Center Security	Once	CS_SCRTY_RECR_CTR_FULLSYNC

6. Save the run control.

Running the Integration

To run the PeopleSoft SA to PeopleSoft CRM Full Sync Integration:

Note. Complete this task on the PeopleSoft SA database.

---

1. For PeopleSoft SA 8.9/9.0, select Set Up SACR, Product Related, Recruiting and Admissions, Manage CRM Integration, Populate ID Control Table.
2. Enter a run control ID.
3. Enter the lower limit date for applicant data.
4. Enter the lower limit date for prospect data.
5. Enter the lower limit date for test scores.

   The dates that you enter on this page are used to create a control list of EMPL IDs that are integrated with PeopleSoft CRM. Only applicants and prospects that you create on or after the dates specified are considered for integration with PeopleSoft CRM. In addition, only test scores loaded on or after the test score as-of date are loaded into PeopleSoft CRM.

Monitoring Service Operations

After the integration process runs and the control table loads, the FULLSYNC messages publish to the PeopleSoft CRM node. You can monitor these service operation details from the Service Operations Monitor.

To monitor service operations:

1. For PeopleSoft SA 8.9/9.0, select Home, People Tools, Integration Broker, Service Operations Monitor, Monitoring, Asynchronous Services.
2. From the Publication Contracts tab, you can monitor these messages by clicking the Details link next to each message:
   - PERSON_BASIC_FULLSYNC (PeopleSoft SA 8.9/9.0 only)
   - CS_PERS_DATA_EXTEND_FULLSYNC
   - CS_ADM_APPL_DATA_FULLSYNC
   - CS_ADM_PRSPCT_DATA_FULLSYNC
   - CS_TEST_SCORES_FULLSYNC
   - CS_SCRTY_APPL_CTR_FULLSYNC
   - CS_SCRTY_RECR_CTR_FULLSYNC

Task 12-2-9: Deploy CS_ Dialogs to Start Dialog Execution

To execute the dialog, you must first deploy all of the CS_ Dialogs to *live.* After the dialogs are live, the invitation emails are sent to prospects and applicants. After prospects and applicants respond and complete the Student/Applicant Application Dialog, the system sends the Student Person Data from PeopleSoft CRM to PeopleSoft SA TS189 Staging tables.

Task 12-2-10: Running the TS189 Processes to Post Data (Optional)

After data loads into the PeopleSoft SA TS189 Staging tables, along with the Application Messages from the PeopleSoft CRM system, the data must be run through the existing TS189 Org Search, TS189 People Search/Match/Post, and PeopleSoft CRM Post File Attachments/Long Text Responses processes.

Important! This step is *optional*; however, if you run this step, run it on the PeopleSoft SA database.

To run the TS189 processes to post data:

1. For PeopleSoft SA 8.9/9.0, select Main Menu, Student Admissions, Application/Transcript Loads, Organization Search Process.
2. Enter a Run Control ID.
3. Click Run.
4. Verify that the Process Name is *ADAPPORG.*
5. Click OK.
6. For PeopleSoft SA 8.9/9.0, select Main Menu, Student Admissions, Application/Transcript Loads, Search/Match/Post Process.
7. Enter a Run Control ID.
8. Enter appropriate values for the EDI TS189 People Search/Post processes.
9. Click Run.
10. Depending on whether the user has set up security to enable the Job Definition or the Process Definition, select the process or job to be run: ADAPPPST, SAD_CRM_SYN2 (new Application Engine), or ADCRMPST (Job for both processes).

    Note. The SAD_CRM_SYN2 process must be run after the ADAPPPST process, regardless of whether it is run as an individual process or as the Job.

Task 12-2-11: Posting Dialog Questions from PeopleSoft CRM to PeopleSoft SA in the PeopleSoft CRM Database (Optional)

To post a current active dialog topic to PeopleSoft SA:

Note. This process is *optional* and can be run as often as necessary. Perform this step on the PeopleSoft CRM database.

---

1. Select Enterprise Components, Integration Definitions, Initiate Processes, Full Data Publish.
2. Create a new run control ID.
3. For the Message Name, enter *CS_STUDENT_TOPIC_SYNC.*
4. For the Request ID, enter a value.
5. For Process Request, select *Once,* and click Run.
6. Select the row for Process Name *EOP_PUBLISHT* and click OK.
7. Verify the process from the Process Scheduler Monitor and Message Monitor.

Chapter 13

Installing PeopleSoft Unified Agent Desktop

This chapter discusses:

- Understanding PeopleSoft Unified Agent Desktop
- Prerequisites
- Configuring the Oracle Proxy-Enabled Server
- Validating PeopleSoft MultiChannel Framework REN
- Configuring a User as a PeopleSoft UAD Voice Agent
- Configuring a User as a PeopleSoft UAD MCF Agent
- Configuring Agent Presence Codes
- Overriding Presence Text of System-Defined Entries (Optional)
- Configuring Action Buttons for PeopleSoft UAD
- Defining Task Category Codes
- Configuring Status Codes
- Enabling PeopleSoft UAD Pagelet for the Home Page (Optional)
- Enabling PeopleSoft CRM UAD

Understanding PeopleSoft Unified Agent Desktop

This chapter provides instruction for enabling PeopleSoft Unified Agent Desktop (UAD) within Oracle Enterprise CRM applications. The following installation related tasks must be performed to leverage the features provided in PeopleSoft UAD. These features are:

- Enabling users as computer telephony integration (CTI) agents to receive phone calls.
- Processing customer transactions that relate to the calls.
- Making outbound calls.

In addition, these features enables users to receive other media channel tasks such as agent-to-customer chats, agent-to-agent chats, emails and other generic business tasks.

Note. The PeopleSoft Universal Agent Desktop (UAD) requires MultiChannel Framework (MCF) and is not associated to any PeopleSoft CRM Product (for example, PeopleSoft Call Center).

Note. Oracle recommends that you consult the PeopleSoft CRM 9.2 Product-to- PeopleSoft Online Help (PeopleBooks) Index found on My Oracle Support, to determine which PeopleSoft Online Help (PeopleBooks) you should include in your installation for the PeopleSoft CRM products that you are implementing.

Prerequisites

Before you begin the PeopleSoft UAD installation for PeopleSoft CRM, ensure that these requirements are met:

PeopleSoft MultiChannel Framework (MCF) is installed.

See *PeopleTools: MultiChannel Framework,*" PeopleSoft MultiChannel Framework Implementation."

Task 13-1: Configuring the Oracle Proxy-Enabled Server

If the Oracle proxy setting is enabled on the Application Server where the REN Server is configured, you must specify a fully qualified domain to properly establish the connection to the REN Server.

To configure the REN Server for the Oracle proxy-enabled application server:

1. Select PeopleTools, REN Server Configuration, REN Server Cluster.
2. In the REN Server Cluster URL field, enter the URL in the following syntax format:

   ```
   http://<REN Server machine name>.<domain token name>:<port #>
   ```

3. Click Save.

Note. For the non-Oracle proxy enabled application server, the domain token name is not required.

Task 13-2: Validating PeopleSoft MultiChannel Framework REN

To receive and process tasks such as chats, emails and other generic business tasks, the user session must establish a valid connection to the PeopleSoft MultiChannel Framework (MCF) REN Server. Otherwise, the user is unable to send or receive PeopleSoft MCF tasks.

The connection validation consists of two tests:

- The Buffer Test.
- The Ping Test.

To validate connection to the PeopleSoft MCF REN Server:

1. Using the Administrator login ID and the password, login to the Oracle PeopleSoft CRM session.
2. Select PeopleTools, REN Server Configuration, REN Server Cluster.
3. Search for the current REN Server Cluster and open the definition.
4. Verify that the State flag is set to *Active.*
5. Click the Buffer Test button.

   A new pop-up browser window with the page title Buffer Test for REN Server should have been launched with 50,000 bytes successfully processed; otherwise, there is a problem with the REN Server and the issue should be reported to the System Administrator.
6. With the 50,000 bytes correctly processed, the Buffer Test is passed and you can close the Buffer Test browser window.
7. Click the Ping Test button.

   A new pop-up browser window with the page title *Ping Test for REN Server* should launch successfully;

otherwise, there is a problem with the REN Server and the issue should be reported to your System Administrator.

8. Click the Run Ping Test button from the new Ping Test window.

   Verify that 10 Events have been sent and received; otherwise, there is a problem with the REN Server and the issue should be reported to the System Administrator.

See Also

PeopleTools: MultiChannel Framework,"Configuring REN Servers. "

Task 13-3: Configuring a User as a PeopleSoft UAD Voice Agent

The same installation steps for configuring a CTI agent apply for configuring a user as a PeopleSoft UAD voice agent.

See *PeopleTools: MultiChannel Framework,*" Configuring Peoplesoft Computer Telephony Integration."

Note. Presence and Reason Code found under Tools configurations are not used by the PeopleSoft UAD functionality since PeopleSoft UAD manages its agent presence and reason codes.

With PeopleSoft UAD enabled, the user is given an extra level of tracing capability via the Application Dispatcher logging mechanism. The Application Dispatcher is a new browser window which remains open throughout the PeopleSoft UAD session to handle all events between the agent and the JSMCAPI (Java Server MultiChannel Application Programming Interface). With the new PeopleSoft UAD enabled, the current trace level option provides the following debugging capability, as listed in this table:

Trace level	Non-UAD CTI Agent	UAD CTI Agent
0 — None	None	None
I — Info	J	A, J
2 — Debug	J	A, J

A = Apps Dispatcher Trace Browser window

J = JSMCAPI Trace Browser window

As soon as the PeopleSoft UAD agent logs into a PeopleSoft CRM session, either the Application Dispatcher, the JSMCAPI or both, trace browser windows automatically launch depending on the type of trace level option configured for the PeopleSoft UAD agent.

To configure the trace level option:

1. Select PeopleTools, MultiChannel Framework, CTI Configure, Agent and add or search the user you need to configure.
2. Select the Trace Level from the drop-down list.

To configure Tools enabled CTI agent as a PeopleSoft UAD CTI agent:

1. Select Set Up CRM, Product Related, MultiChannel Definitions, Unified Agent Desktop, Agent Configuration.
2. Enter a valid User ID and click Add a New Value to create a new PeopleSoft UAD agent configuration

definition.

3. Click the Add button.
4. In the CTI parameters section, enter the agent's default extension number. The system uses the default *Extension 1* to automatically establish the connection to the CTI server upon initial agent session login.
    - Extension 1: Enter Agent's default extension number.
    - Extension 2 (if so configured): Enter Agent's 2nd Extension number .

    Note. Number of lines and extensions are configured by the Tools setup. Currently there are only two CTI Configurations currently allowed by tools: 1 Line/2 Extensions or 2 Lines/1 Extension.

    - Number of Recently Dialed Numbers to Remember: The system stores and remembers the last Number of recently dialed numbers for future use as specified in this field. The default is 10 numbers.
5. Configure the following parameters specific to the agent, using the tables that follow:
    - Warning

Parameter	Description
Minute/Second	This is the time threshold when the system warns the PeopleSoft UAD agent by displaying specially rendered time values. There is no special event taking place; however, the system notifies the agent that the task processing is taking too long.
Style	PSTIMEWARNING (default) This can be customized by user to use different styles for the warning time.
Display Image	The image displays to the right of the time value. The default is the exclamation mark in a triangle.

    - Expired

Parameter	Description
Minute/Second	This is the time threshold when the system warns the PeopleSoft UAD agent that the time allowed to process the customer call has exceeded the time limit allowed by the call center limit.
Style	PSTIMEEXPIRED (default) This can be customized by the user to apply different styles for the warning time.
Display Image	This image displays to the right of the time value. The default is the red exclamation mark.

6. Click Save to save the PeopleSoft UAD agent configuration.

Task 13-4: Configuring a User as a PeopleSoft UAD MCF Agent

The same installation steps for configuring an MCF agent apply for configuring a user as an PeopleSoft UAD MCF agent.

See *PeopleTools: MultiChannel Framework,* " Configuring Peoplesoft MCF Agents."

With the new PeopleSoft UAD enabled, the current Trace Level option provides the following debugging capability, as listed in this table:

Trace Level	**Non-UAD MCF Agent**	**UAD MCF Agent**
0 — None	None	None
1— Information	J	A, J
2 — Debug	J	A, J

A = Application Dispatcher Trace Browser window

J = JSMCAPI Trace Browser window

As soon as the PeopleSoft UAD agent is logged into an Oracle PeopleSoft CRM session, either the Application Dispatcher or JSMCAPI or both, trace browser windows are launched depending on the type of Trace Level option configured for the PeopleSoft UAD MCF agent.

To configure the trace level option:

1. Select PeopleTools, MultiChannel Framework, Universal Queue, Administration, Agents and add or search the user you need to configure.
2. Go to Miscellaneous tab and select the Trace Level from the drop-down list.

To configure Tools enabled MCF agent as a PeopleSoft UAD MCF agent:

1. Select Set Up CRM, Product Related, MultiChannel Definitions, Unified Agent Desktop, Agent Configuration.
2. Enter a valid User ID and click Add a New Value to create a new PeopleSoft UAD agent configuration definition.

   If the Agent definition already exits, search and open the existing definition. Otherwise, click the Add button to add a new agent definition.
3. In the Default Agent Queue section, enter the agent's default queue to which the agent automatically logs in upon initial session login.
4. The same Warning and Expired settings are used for voice calls and other MCF tasks.

   Refer to the task *Configuring a User as a PeopleSoft UAD Voice Agent* for instructions on how to configure these parameters.
5. Click Save to save the PeopleSoft UAD agent configuration.

Task 13-5: Configuring Agent Presence Codes

Presence Codes are the value of text strings that are predefined and used internally by the JSMCAPI framework to determine the state of PeopleSoft UAD agents. JSMCAPI, based on the current state of the agent, manages and decides how to best route the MultiChannel tasks to the most appropriate agent to handle the incoming tasks. The Presence Text displays on the PeopleSoft UAD console with respect to the corresponding Agent state.

In a typical installation, there is no need to configure presence codes for Agent because the system defined entries are sufficient for the PeopleSoft UAD operations.

To configure Agent Presence codes:

1. Select Set Up CRM, Product Related, MultiChannel Definitions, Unified Agent Desktop, Agent Configuration.
2. Select the PeopleSoft UAD Presence Codes tab.

   This table lists the delivered, system-defined default entries:

Channel	Presence State	Presence Text	Reason code
Voice	Not Ready	Not Ready	Unavailable
Voice	Ready	Ready	(not applicable)
Voice	Work Not Ready	Work Not Ready	(not applicable)
Voice	Work Ready	Work Ready	(not applicable)
Multichannel Queue	Available	Available	(not applicable)
Multichannel Queue	Unavailable	Unavailable	(not applicable)
Multichannel Queue	Assumed Unavailable	Assumed Unavailable	(not applicable)

3. To add a system default presence code entry, click the Add System Default button and perform the following tasks:
   - Select a Channel; either Voice or Multichannel Queue.
   - Select a Presence State from the drop-down list.
   - Enter a Presence Text.

   Note. The Reason Code is used only for the Unavailable or Not Ready Presence State in Multichannel Queue or Voice channel respectively.

Task 13-6: Overriding Presence Text of System-Defined Entries (Optional)

This task is optional. The PeopleSoft UAD always uses the presence text of the system-defined entries, unless they are redefined as Agent Default.

To override the system-defined entries:

1. Click the Add Agent Default button.
2. Specify the following values:
   - Select a Channel; either Voice or Multichannel Queue.
   - Select a Presence State from the drop-down list.
   - Enter a Presence Text.
   - Enter a Reason code if the Presence State selected is either Not Ready for the Voice channel or Unavailable for the Multichannel Queue channel.
3. Click Save to save the PeopleSoft UAD Agent Configuration.

Task 13-7: Configuring Action Buttons for PeopleSoft UAD

All of the PeopleSoft UAD management tasks are performed and managed by clicking a button or a text short-cut key. The configuration of the PeopleSoft UAD console is highly customizable. The look-and-feel of the console can be easily modified to meet the requirement of a user site.

In a typical installation, there is no need to configure action buttons because the system-defined entries are sufficient for the PeopleSoft UAD operations.

To configure action buttons for the PeopleSoft UAD console:

1. Login to the PeopleSoft CRM session as Administrator.
2. Select Set Up CRM, Product Related, MultiChannel Definitions, Unified Agent Desktop, Console Definition.
3. Select a Display Option. The default is *Image*.

   Note. Action buttons on the PeopleSoft UAD console can be rendered as an image or as text. The *Text* option renders all action buttons with the text label; the *Image* option renders the corresponding image icons for each button.

4. Click the Add Button to add an Action button definition.
   - Button Name—Name of the action button.
   - Call Action—Action that clicking the button executes.
   - Disabled—If selected, the button is not used.
   - Label—Text label of the button used when the text display option is selected.
   - Enabled Button Image—Name of the button image.
5. Click Save to save the button definition.

Note. To support a comprehensive set of existing CTI functionalities, the following button entries are required and delivered as default system data. Removing any of the system default button entries will break the CTI functionalities and is *not* recommended.

This table lists system-defined default action buttons:

Button Name	Call Action	Disabled	Label	Enabled Button Image
COMPLETE	Complete	No	CP	PS_UAD_CALL_COMPLETE_ICN
CONFERENCE	Conference	No	CF	PS_UAD_CONFERENCE_ICN
CONSULT	Consult	No	CS	PS_UAD_CONSULT_ICN
CONSULT TRANSFE	Consultive Transfer	No	CT	PS_UAD_CONSULT_TRANSFER_ICN
CTI AVAILABLE	Make CTI Available	No	A	PS_UAD_VOICE_AVAILABLE_ICN
DIAL OUT	Dial Out	No	D	PS_UAD_MAKE_CALL_ICN
HOLD	Hold	No	H	PS_UAD_HOLD_ICN
RECONNECT	Reconnect	No	RC	EOPP_LINK_NODE_ICN
RELEASE	Release	No	X	PS_UAD_RELEASE_ICN
RETRIEVE	Retrieve Hold	No	RH	PS_UAD_RETRIEVE_ICN
TRANSFER	Transfer	No	T	PS_UAD_TRANSFER_ICN

Task 13-8: Defining Task Category Codes

Task category codes are codes that are selected by the task processing PeopleSoft UAD agent to categorize MCF tasks at the time of their completion. The following task scenarios trigger the task categorization that the PeopleSoft UAD agent requires:

- Terminating a customer voice call (Releasing or Transferring to another internal PeopleSoft UAD CTI agent).
- Terminating a customer chat.
- Closing an email.

The list of Task categories is presented on the PeopleSoft UAD console as drop-down entries.

To define Category Codes:

1. Login to a PeopleSoft CRM session as *Administrator*.

2. Select Set Up CRM, Product Related, MultiChannel Definitions, Unified Agent Desktop, Console Definition.
3. Click the Category Codes page tab.
4. Click the Add Category Code button to add a new category code entry as follows:
    - Order — Displays the order of the category code. The lower number entry appears first vertically in the drop-down field.
    - Code — The category code that is used internally by the PeopleSoft UAD framework.
    - Description — Provides a description of the category. The description is displayed in the category drop-down field.
5. Click Save to save the category code definition.

Task 13-9: Configuring Status Codes

Status codes are definition entries used in the PeopleSoft UAD status popup windows to help the PeopleSoft UAD agent change his/her state. In conjunction with action buttons defined for the PeopleSoft UAD console, they together dictate the behavior of how agents receive MCF and CTI tasks accordingly. In a typical installation, there is no need to configure status codes because the system defined entries are sufficient for the PeopleSoft UAD operations.

To add new CTI Status Codes:

1. Login to a PeopleSoft CRM session as Administrator.
2. Select Set Up CRM, Product Related, MultiChannel Definitions, Unified Agent Desktop, Console Definition.
3. Select the Status Codes tab.
4. Click the Add CTI Status Code button to add a new status code for the CTI channel.
    - Order — Displays the order of the Status code in the Status pop-up window. The lower number entry appears first vertically in the status window.
    - Status Label — The text string value of the status that appears in the status window.
    - Event — The corresponding event action that is being executed upon selecting the status.
    - Image Name — The name of the Image icon that is being rendered.
    - Image — A preview of the Image icon selected.
    - Reason Code — The reason code for the Unavailable event status.
5. Click Save to save the new CTI Status code.

To add a new Multichannel Queue Status Code:

1. Login to a PeopleSoft CRM session as Administrator.
2. Select Set Up CRM, Product Related, MultiChannel Definitions, Unified Agent Desktop, Console Definition.
3. Select the Status Codes tab.
4. Click the Add Multichannel Queue Code button to add a new status code for the MCF channel.

    Multichannel Queue Status code definitions are as follows:
    - Order—the display order of the Status code in the Status pop-up window.

      The lower number entry appears first vertically in the status window.
    - Status Label—the text string value of the status that appears in the status window.

- Event—the corresponding event action being executed upon selecting the status.
- Image Name—the name of the image icon being rendered.
- Image—the preview of the image icon selected.

5. Click Save to save the new Multichannel Queue Status code.

This table lists the default CTI Status codes that are delivered as system data:

Order	Status Label	Event	Image Name	Reason Code
1	Available	Available	PS_UAD_VOICE_AVAILABLE_ICN	(not applicable)
2	Unavailable	Unavailable	PS_UAD_VOICE_UNAVAILABLE_ICN	Unavailable
3	Do Not Disturb	Do Not Disturb	PS_UAD_VOICE_BUSY_ICN	Do Not Disturb
4	Busy	Busy	PS_UAD_VOICE_BUSY_ICN	Busy
5	At Lunch	At Lunch	PS_UAD_VOICE_UNAVAILABLE_ICN	At Lunch
6	On Break	On Break	PS_UAD_VOICE_UNAVAILABLE_ICN	On Break
7	Away	Away	PS_UAD_VOICE_UNAVAILABLE_ICN	Away
8	In Wrap-Up Mode	In Wrap-Up Mode	PS_UAD_VOICE_UNAVAILABLE_ICN	In Wrap-Up Mode

This table lists the default MultiChannel Queue Status codes that are delivered as system data:

Order	Status Label	Event	Image Name
1	Available	Available	PS_UAD_MC_AVAILABLE_ICN
2	Unavailable	Unavailable	PS_UAD_MC_UNAVAILABLE_ICN
3	Busy	Busy	PS_UAD_MC_BUSY_ICN
4	At Lunch	At Lunch	PS_UAD_MC_UNAVAILABLE_ICN
5	On Break	On Break	PS_UAD_MC_UNAVAILABLE_ICN

Order	Status Label	Event	Image Name
6	Away	Away	PS_UAD_MC_UNAVAILABLE_ICN

Task 13-10: Enabling PeopleSoft UAD Pagelet for the Home Page (Optional)

This task is optional. The content on the user's home page for the Oracle PeopleSoft CRM applications is rendered via pagelets. To allow users to render PeopleSoft UAD console in a pagelet, the agent must enable the MultiChannel Toolbar option from the Content Personalization menu.

To enable the PeopleSoft UAD Console for the Home page:

1. Login as a PeopleSoft UAD agent.
2. Click the Content personalize link.
3. In the CRM pagelet section, select the MultiChannel Toolbar check box.
4. Click the Personalize Layout link to Arrange pagelets.
5. In the right column, click the MultiChannel Toolbar entry once to highlight it.
6. Click the up arrow button near the Delete Pagelet button to move the MultiChannel Toolbar entry to the top of the right column.

   Note. This step is recommended only when the PeopleSoft UAD agent has other main menu pagelets that are too large to view the PeopleSoft UAD console without scrolling vertically to the end of the page.

7. Click Save.

Task 13-11: Enabling PeopleSoft CRM UAD

This section discusses:

- Disabling Fluid Mode of Web Profiles
- Editing the PeopleSoft MultiChannel Toolbar
- Editing the PeopleSoft PeopleTools 8.50 Default Template

Task 13-11-1: Disabling Fluid Mode of Web Profiles

In People Tools 8.55 release, you need to edit the properties of some web profiles so that they don't appear in Fluid mode.

To disable:

1. Identify the web profile that need to be edited, for example *PROD,* by reviewing the web profile information available in the configuration.Properties file of Portal.war file.
2. Select PeopleTools, Web Profile, Web Profile Configuration, and search for the web profile that you identified in step 1 (for example: *PROD*).

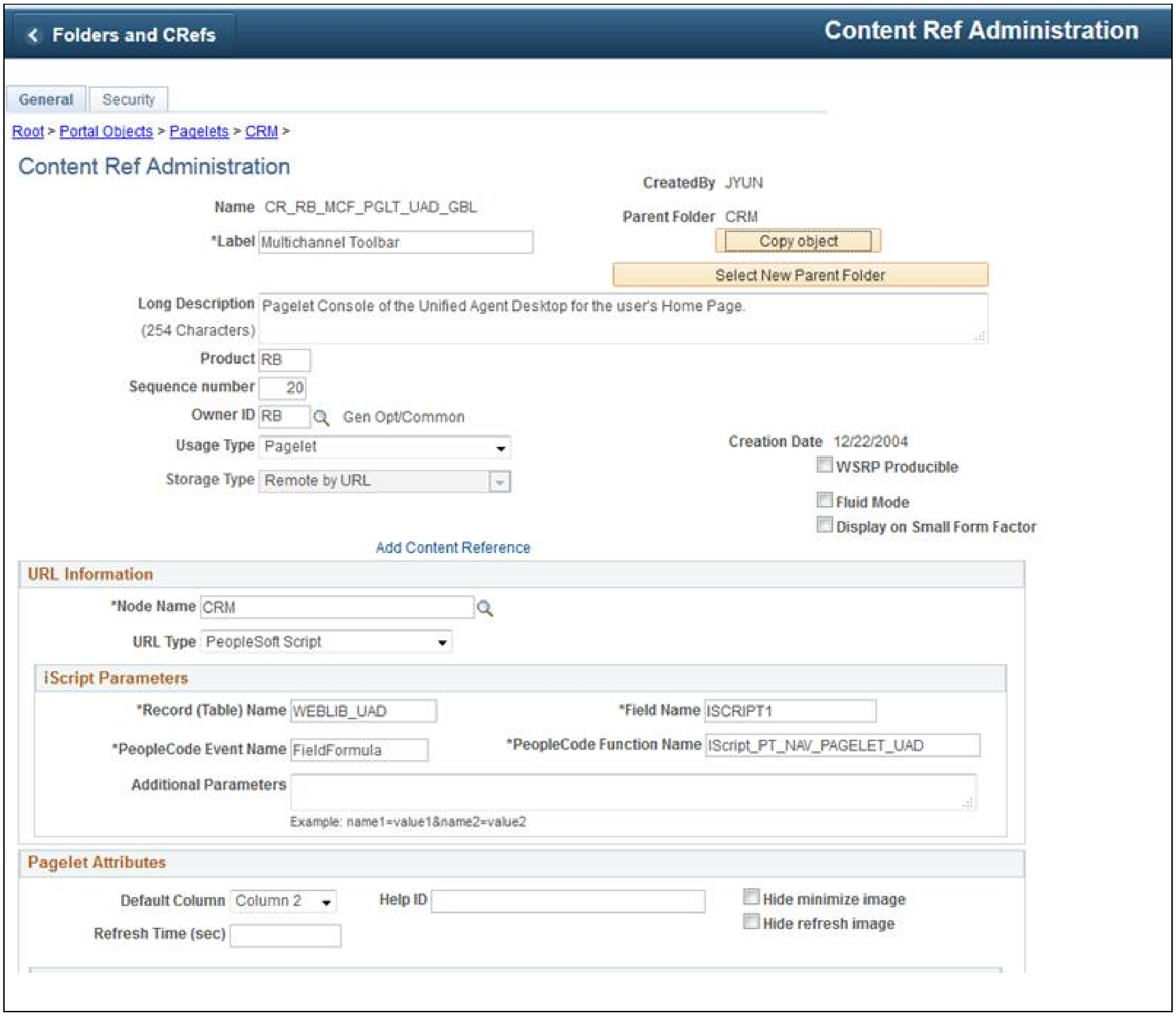
3. In the Web Profile Configuration page, click the Custom Properties tab. Enter the following values for each field:
   - Enter the value (case sensitive) of Property Name field as *DisableFluid.*
   - Enter the value of Validation Type field as *String.*
   - Enter the value of Property Value field as *True.*
4. Restart the PIA.

Task 13-11-2: Editing the PeopleSoft MultiChannel Toolbar

To edit the PeopleSoft MultiChannel toolbar:

1. Select PeopleTools, Portal, Structure and Content.
2. Click the Portal Object link.
3. Click the Pagelets link.
4. Click the CRM link.
5. Edit the MultiChannel Toolbar as follows:
   a. In the Record (Table) Name field, enter *WEBLIB_UAD.*
   b. In the PeopleSoft Function Name field, enter *IScript_PT_NAV_PAGELET_UAD.*

c. Accept the default values for the remaining fields on the Structure and Content page, as shown in the following example:



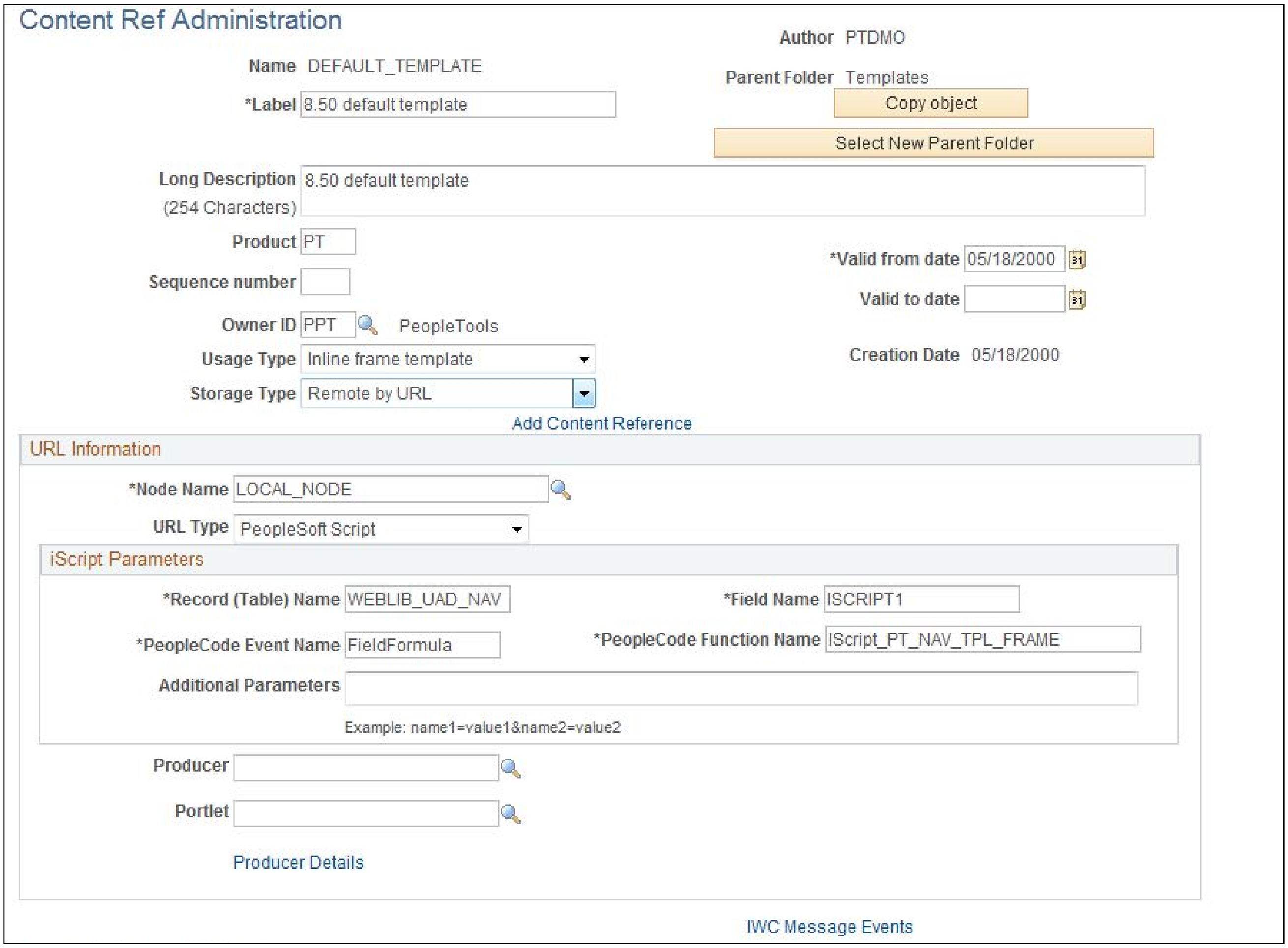
Structure and Content page

Task 13-11-3: Editing the PeopleSoft PeopleTools 8.50 Default Template

To edit the PeopleSoft PeopleTools 8.50 default template:

1. Select PeopleTools, Portal, Structure and Content.

   The Content Ref Administration page appears, as shown in the following example:



Content Ref Administration page

2. Click the Portal Objects link.

   The Portal Objects page appears.

3. Click the Template link.

4. Click the Edit of 8.50 Default Template.

   The DEFAULT_TEMPLATE page appears.

   a. In the Record (Table) Name field, enter *WEBLIB_UAD_NAV*.

   b. Accept the default values for the remaining fields.

Chapter 14

Integrating PeopleSoft CRM and PeopleSoft HCM Using Query Access Service

This chapter discusses:

- Understanding PeopleSoft CRM and PeopleSoft HCM Integration Using Query Access Service
- Setting Up PeopleSoft CRM
- Setting Up PeopleSoft HCM
- Planning for Unit Test

Understanding PeopleSoft CRM and PeopleSoft HCM Integration Using Query Access Service

This section discusses:

- Defining Settings
- Defining the PeopleSoft PeopleTools Release

PeopleSoft CRM and PeopleSoft HCM integration, using the Query Access Service (QAS) framework that is provided by PeopleSoft PeopleTools and utilizes the PeopleSoft Integration Broker, allows remote systems to access data in PeopleSoft applications through PSQuery. This integration allows queries that are defined in PeopleSoft HCM to be used to populate audiences in PeopleSoft CRM Marketing.

The tasks and steps in this chapter are required to set up PeopleSoft CRM and PeopleSoft HCM for integration using QAS and to prepare QAS and PeopleSoft Integration Broker for this unique implementation.

Defining Settings

Before proceeding with the set up steps, obtain and verify the following:

- Name of the Default Local Node on PeopleSoft CRM (the default is *PSFT_CR*).
- Name of the Default Local Node on PeopleSoft HCM (the default is *PSFT_HR*).
- Authentication Option *(None*), Node Password *(N/A),* and Default User ID for each (HCM=*PS*, CRM=*VP1*).
- Application Server URL, User ID and Password *(VP1/VP1),* and Tools release for PeopleSoft CRM.
- Application Server URL, User ID and Password *(PS/PS),* and Tools release for PeopleSoft HCM.
- Gateway Properties User ID and Password for PeopleSoft CRM (the default is *administrator/password*).
- Service Configuration Target Location.

Defining the PeopleSoft PeopleTools Release

To use PeopleSoft CRM and PeopleSoft HCM integration using QAS, you must be using PeopleSoft PeopleTools 8.55 or higher.

See *PeopleSoft Customer Relationship Management 9.2 Hardware and Software Requirements guide.*

See *PeopleSoft PeopleTools 8.55 Installation guide, for your database platform.*

Task 14-1: Setting Up PeopleSoft CRM

This section discusses:

- Understanding Setting Up PeopleSoft CRM
- Setting Up Security for PeopleSoft CRM
- Setting up Nodes for PeopleSoft CRM
- Setting Up the Gateway for PeopleSoft CRM
- Setting Up Single Signon for PeopleSoft CRM
- Verifying or Modifying Service Configurations for PeopleSoft CRM
- Modifying Service Operations for PeopleSoft CRM
- Purging the Domain Status for PeopleSoft CRM

Understanding Setting Up PeopleSoft CRM

All of the steps in this section pertain to the PeopleSoft CRM application and must be performed while logged in to the PeopleSoft CRM application.

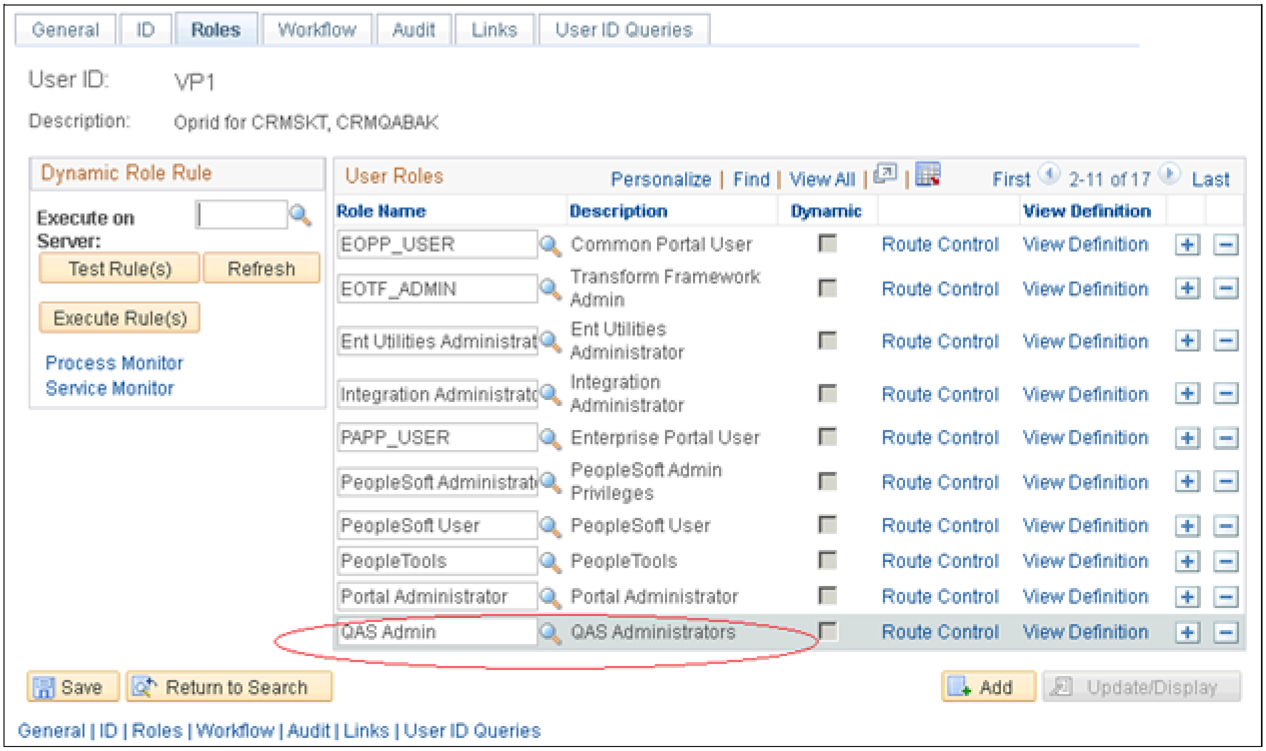
Task 14-1-1: Setting Up Security for PeopleSoft CRM

The user VP1 must have the QAS Administrator role.

To assign the QAS Administrator role:

1. Select PeopleTools, Security, User Profiles, User Profiles.
2. In the User ID field, enter *VP1* and click the Search button.

3. On the User Profiles page, select the Roles tab to access the Roles page, as shown in the following example:



Roles page - User ID VP1 with user role QAS Admin

4. On the Roles page in the User Roles grid, if QAS Admin does not exist, click the Add button and add user role *QAS Admin.*
5. Click Save.

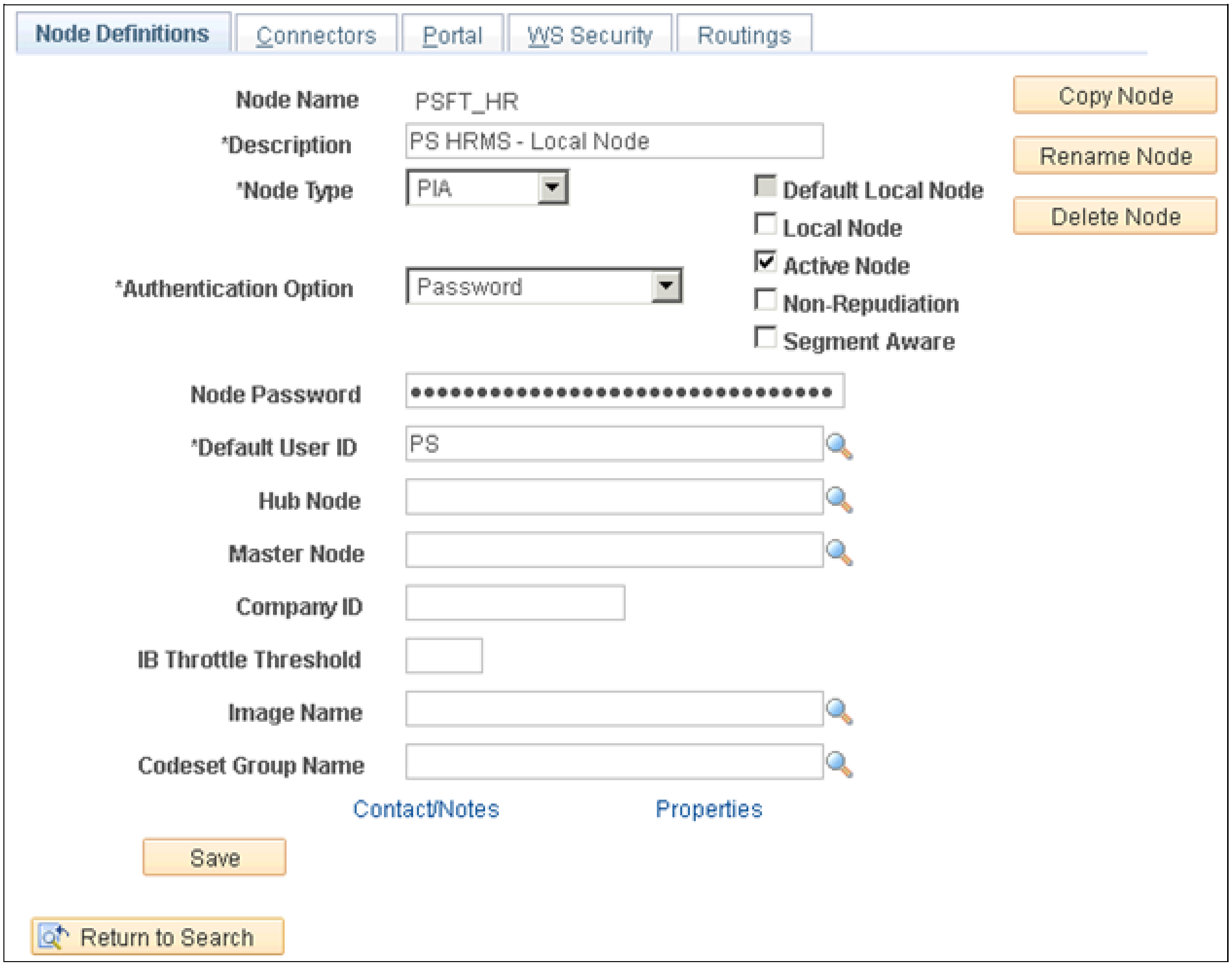
Task 14-1-2: Setting up Nodes for PeopleSoft CRM

The PeopleSoft HCM default local node must exist in PeopleSoft CRM as an active node.

To set up the PeopleSoft HCM default local node:

1. Select PeopleTools, Integration Broker, Integration Setup, Nodes.
2. In the Node Name field, enter the node name (the default is *PSFT_HR*), and click the Search button.
3. If this node does not exist, you must create it.

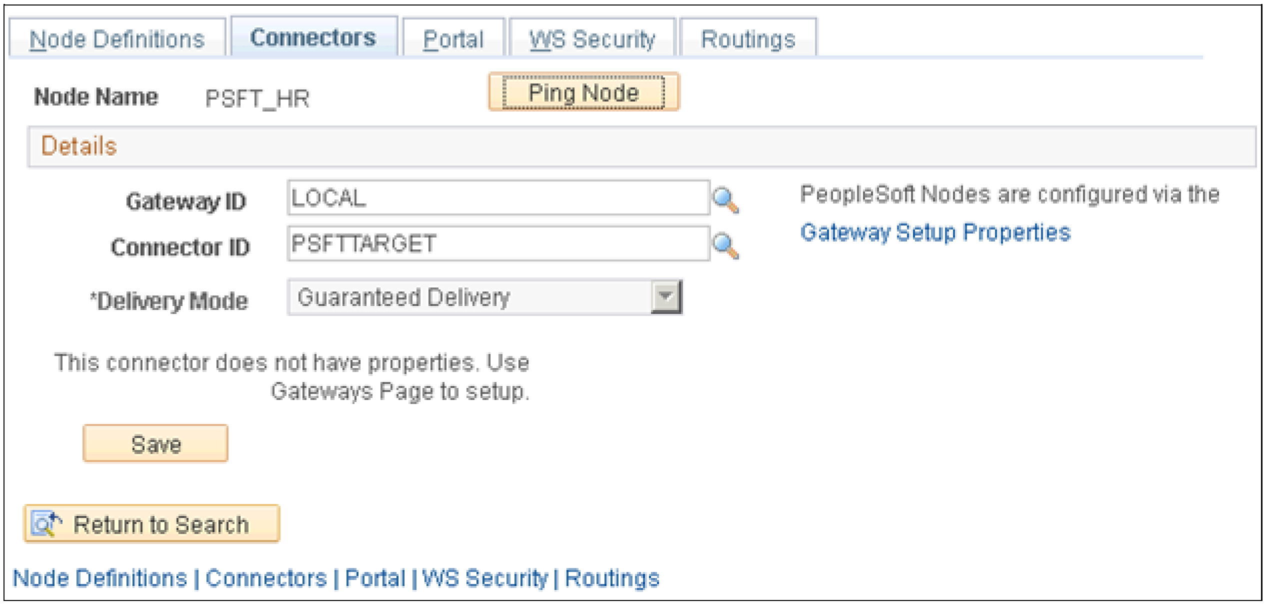
4. Select the Node Definitions tab to access the Node Definitions page, as shown in the following example.



Node Definitions page - PSFT_HR node with node type PIA

5. On the Node Definitions page, verify that *PIA* is selected in the Node Type field or select it now.
6. The Authentication Option, Node Password, and Default User ID should match what is defined on the PeopleSoft HCM system for this node.

7. Select the Connectors tab to access the Connectors page, as shown in the following example:



Connectors page - PSFT_HR node with connector ID PSFTTARGET

8. On the Connectors page, verify that *PSFTTARGET* is selected in the Connector ID field, or select it now.
9. Click Save.

Task 14-1-3: Setting Up the Gateway for PeopleSoft CRM

In this task you use the PeopleSoft Integration Broker Configuration page to add the PeopleSoft HCM local node to the PeopleSoft CRM side of the PeopleSoft Integration Broker Gateway Configuration page.

To add the PeopleSoft HCM local node to the PeopleSoft CRM side:

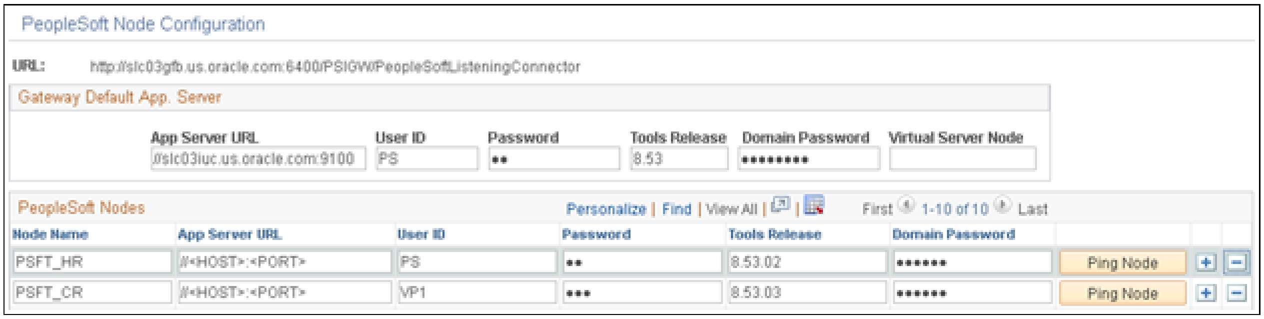
1. Select PeopleTools, Integration Broker, Configuration, Gateways.
2. Click the Search button. This should take you directly into the local gateway, unless other gateways are defined.

   If this is the case, select the local gateway to proceed.
3. Click the Gateway Setup Properties link.

   The Gateway Properties login page appears.

4. Enter the User ID and Password (defaults are *administrator* and *password*) to sign in to the Gateway Properties - Gateway Default App. Server page.

   The Gateway Properties - Gateway Default App. Server page appears, as shown in the following example:



Gateway Default App. Server - PeopleSoft Nodes

5. On the Gateway Default App. Server page, if the PeopleSoft HCM node does not exist, click the Add button to add the HCM Node Name, App Server URL, User ID, Password and Tools Release.
6. Click Save.

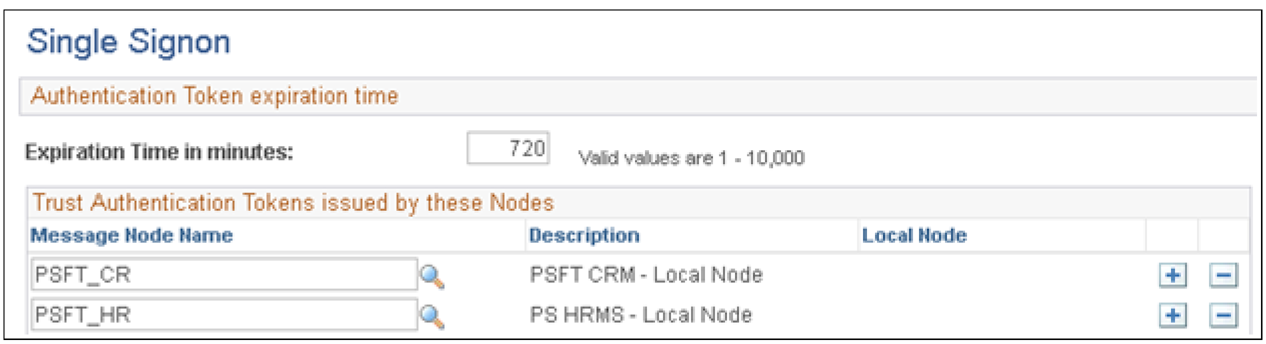
Task 14-1-4: Setting Up Single Signon for PeopleSoft CRM

In this task you add the PeopleSoft CRM default local node and the PeopleSoft HCM Default local node to the PeopleTools Single Signon page.

To add the PeopleSoft CRM and PeopleSoft HCM Default local nodes to the PeopleTools Single Signon page:

1. Select PeopleTools, Security, Security Objects, Single Signon.

   The Single Signon page appears, as shown in the following example:



Single Signon - Trust authentication tokens and nodes

2. On the Single Signon page, if the PeopleSoft CRM and PeopleSoft HCM default local nodes do not exist, click the Add button to add the PeopleSoft CRM default local node and then the PeopleSoft HCM default local node in the Message Node Name fields.
3. Click Save.

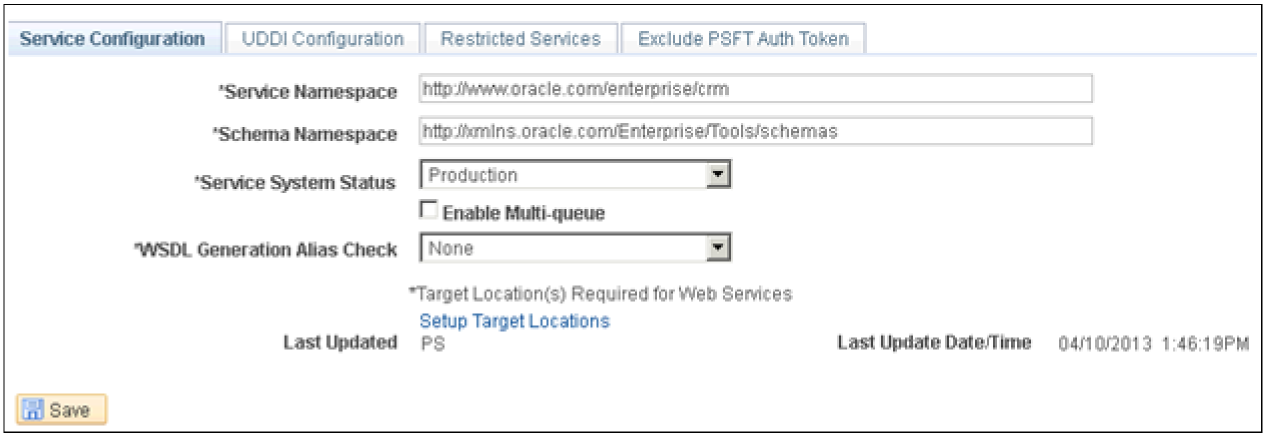
Task 14-1-5: Verifying or Modifying Service Configurations for PeopleSoft CRM

QAS is delivered as a restricted service.

To verify or modify this service configuration:

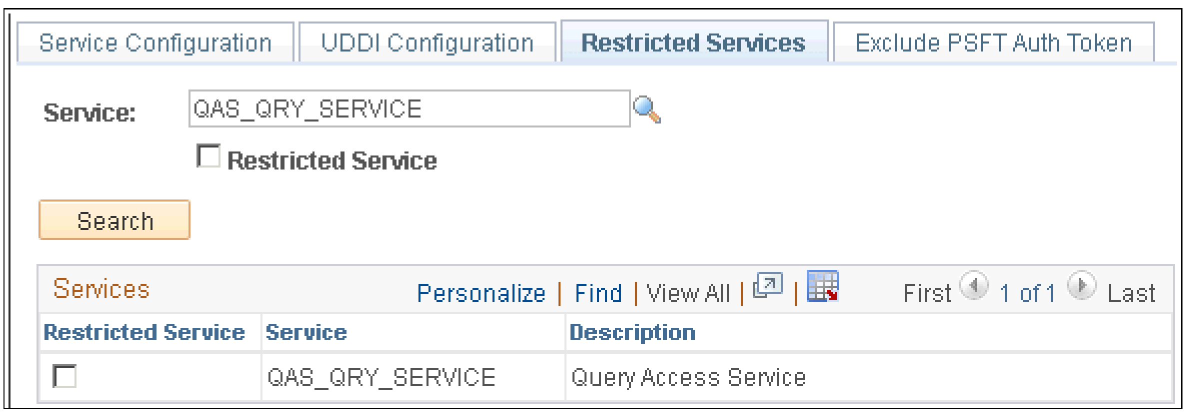
1. Select PeopleTools, Integration Broker, Configuration, Service Configuration.

   The Service Configuration page appears, as shown in the following example:



Service Configuration page

2. On the Service Configuration page, verify the path in the Target Location field or modify it now.
3. Select the Restricted Services tab to access the Restricted Services page, as shown in the following example:



Restricted Services page

4. On the Restricted Services page, in the Services search field, enter *QAS* and click Search.
5. Verify that the QAS_QRY_SERVICE check box is *not* selected, or deselect it now.
6. Click Save.

Task 14-1-6: Modifying Service Operations for PeopleSoft CRM

The following three Service Operations must be modified to set the Security Verification, Service Operation Security, and Routings. You must do this for *each* of the Service Operations in the following table:

Reference Number	**Service Operations**
1	QAS_EXECUTEQRYSYNC_OPER

Reference Number	Service Operations
2	QAS_LISTQUERY_OPER
3	QAS_LISTQUERYPROMPTS_OPER

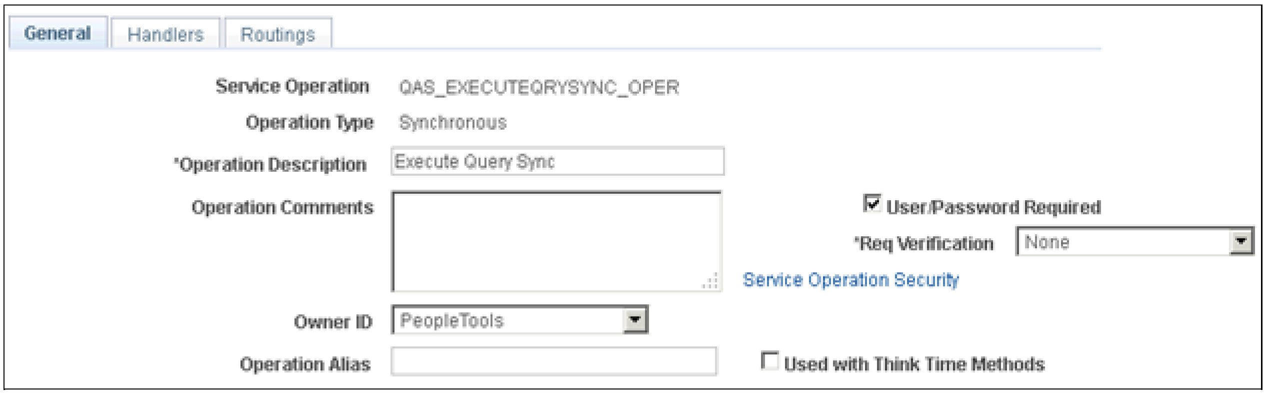
To modify the three required service operations:

1. Select PeopleTools, Integration Broker, Integration Setup, Service Operations.

   The Service Operations - General page appears.
2. On the Service Operations - General page, in the Service field, enter *QAS_QRY_SERVICE*.
3. In the Service Operations field, enter the value from one of the Service Operations in the preceding table.

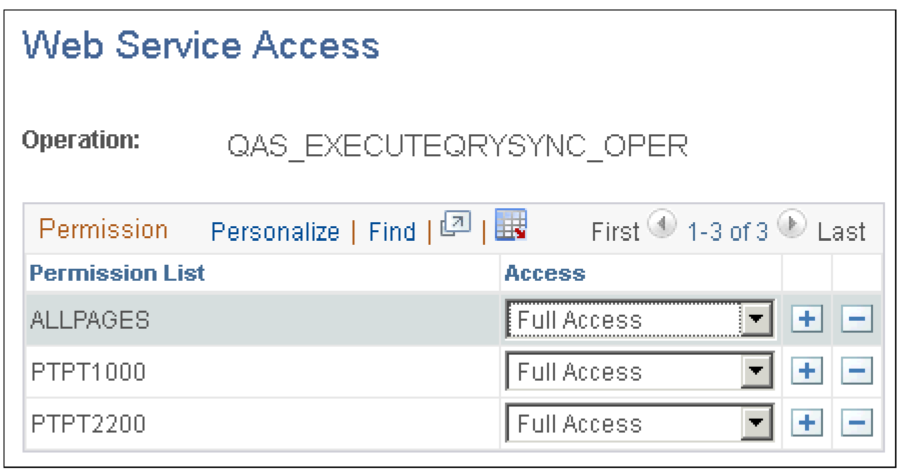
   For example: QAS_EXECUTEQRYSYNC_OPER

   The Service Operations - General page for QAS_EXECUTEQRYSYNC_OPER appears, as shown in the following example:



Service Operations - General page

4. In the Security Verification field, select *None* from the drop-down list.
5. Click Save.
6. Click the Service Operation Security link to access the Web Service Access - QAS_EXECUTEQRYSYNC_OPER page, as shown in the following example:



Web Service Access - QAS_EXECUTEQRYSYNC_OPER page

7. Click the Add button to add the permission lists in the following table:

Permission Lists	**Access**
ALLPAGES	Full Access
PTPT1000	Full Access
PTPT2200	Full Access

8. Click Save.
9. Return to the Security Operations page (select PeopleTools, Integration Broker, Integration Setup, Service Operations) and select the Routings tab to access the Routings page.

10. On the Routings page, enter any missing routings from the following table. This table contains the necessary Routings and their corresponding Sender Node and Receiver Node names:

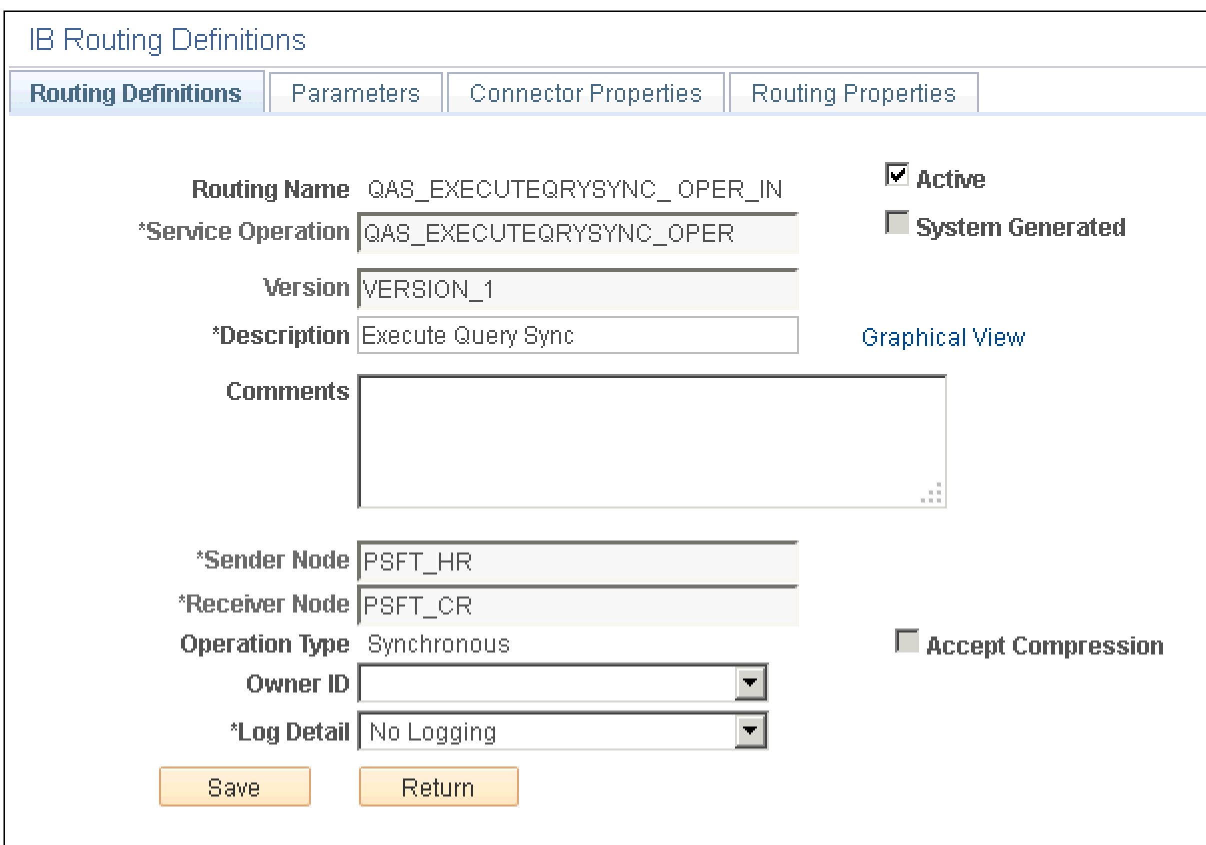
Reference Number	Service Operations	Routing Name	Sender Node	Receiver Node
1	QAS_EXECUTEQRYSYNC_OPER	QAS_EXECUTEQRYSYNC_OPER_IN	PSFT_HR	PSFT_CR
1	QAS_EXECUTEQRYSYNC_OPER	QAS_EXECUTEQRYSYNC_OPER_OUT	PSFT_CR	PSFT_HR
2	QAS_LISTQUERY_OPER	QAS_LISTQUERY_OPER_IN	PSFT_HR	PSFT_CR
2	QAS_LISTQUERY_OPER	QAS_LISTQUERY_OPER_OUT	PSFT_CR	PSFT_HR
3	QAS_LISTQUERYPROMPTS_OPER	QAS_LISTQUERYPROMPTS_OPER_IN	PSFT_HR	PSFT_CR
3	QAS_LISTQUERYPROMPTS_OPER	QAS_LISTQUERYPROMPTS_OPER_OUT	PSFT_CR	PSFT_HR

Important! The Routing Name is not significant except that it must be unique. The Sender Node and Receiver Node are important and determine whether the routing is inbound or outbound. Therefore, you should first verify if the routing already exists by Sender Node and Receiver Node (not by Routing Name).

To add the missing routings, do the following:

a. On the Service Operations page, enter a Routing Name and then click the Add button to add the missing routing (do this for each missing routing).

The Routing Definitions page appears, as shown in the following example:



Routing Definitions page

b. In the Sender Node field, enter the Sender Node.

c. In the Receiver Node field, enter the Receiver Node.

d. Click the Save button.

e. Click the Return button.

f. Click Save.

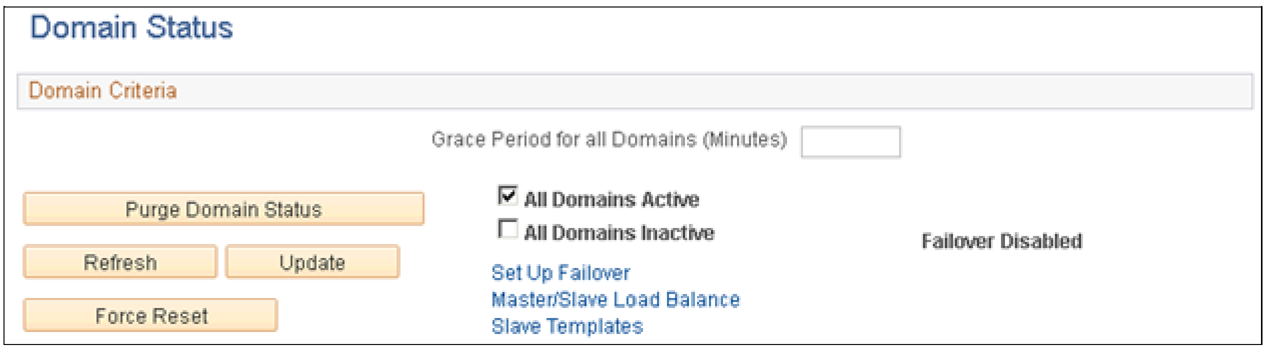
Task 14-1-7: Purging the Domain Status for PeopleSoft CRM

The Domain Status should be purged.

To purge the domain status:

1. Select PeopleTools, Integration Broker, Service Operations Monitor, Administration, Domain Status.

   The Domain Status page appears, as shown in the following example:



Domain Status page

2. Click the Purge Domain Status button.
3. Select the All Domains Active check box.
4. Click the Update button.

Task 14-2: Setting Up PeopleSoft HCM

This section discusses:

- Understanding Setting Up PeopleSoft HCM
- Setting Up Security for PeopleSoft HCM
- Setting up Nodes for PeopleSoft HCM
- Setting Up the Gateway for PeopleSoft HCM
- Setting Up Single Signon for PeopleSoft HCM
- Verifying or Modifying Service Configurations for PeopleSoft HCM
- Modifying Service Operations for PeopleSoft HCM
- Purging the Domain Status for PeopleSoft HCM

Understanding Setting Up PeopleSoft HCM

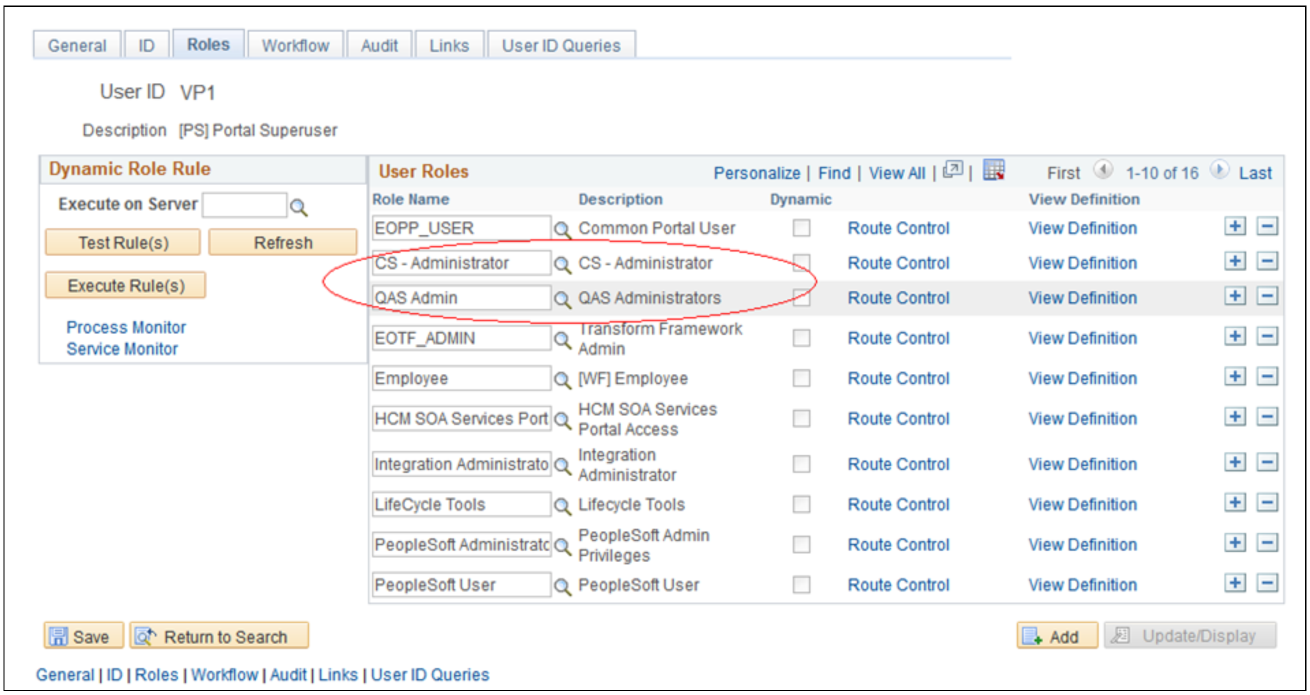
All of the steps in this section pertain to the PeopleSoft HCM application and must be performed while logged in to the PeopleSoft HCM application.

Task 14-2-1: Setting Up Security for PeopleSoft HCM

The user VP1 must have the QAS Administrator role.

To assign the QAS Administrator role:

1. Select PeopleTools, Security, User Profiles, User Profiles.
2. In the User ID field, enter *VP1* and click the Search button.
3. On the User Profiles page, select the Roles tab to access the Roles page, as shown in the following example:



User Profiles - Roles page

4. On the Roles page in the User Roles grid, if QAS Admin does not exist, click the Add button and add user role *QAS Admin.*
5. Click Save.

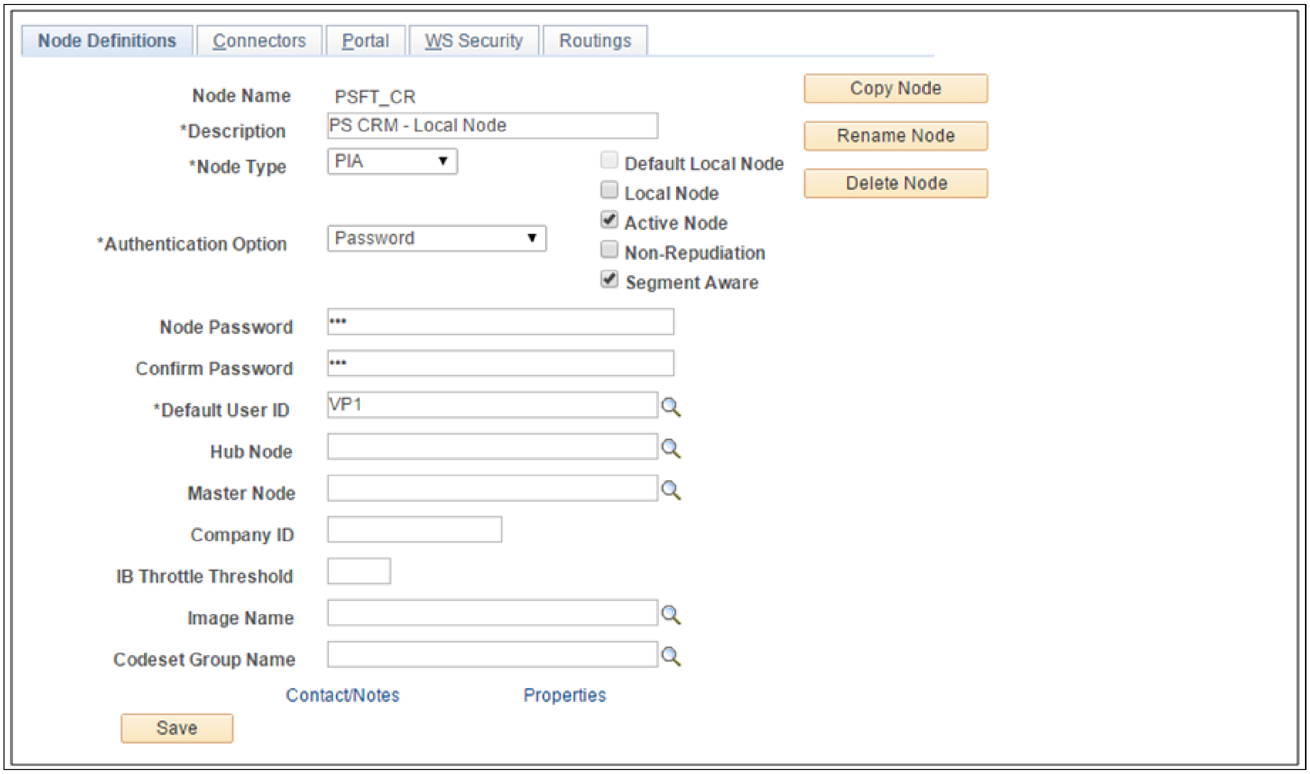
Note. Other roles may be required to execute queries in PeopleSoft HCM using user VP1 from PeopleSoft Manage Audiences. In this case, *CS_Administrator* has been added to allow access to certain Campus Solutions tables in PSQuery.

Task 14-2-2: Setting up Nodes for PeopleSoft HCM

The PeopleSoft CRM default local node must exist in PeopleSoft HCM as an active node.

To set up the PeopleSoft CRM default local node for PeopleSoft HCM:

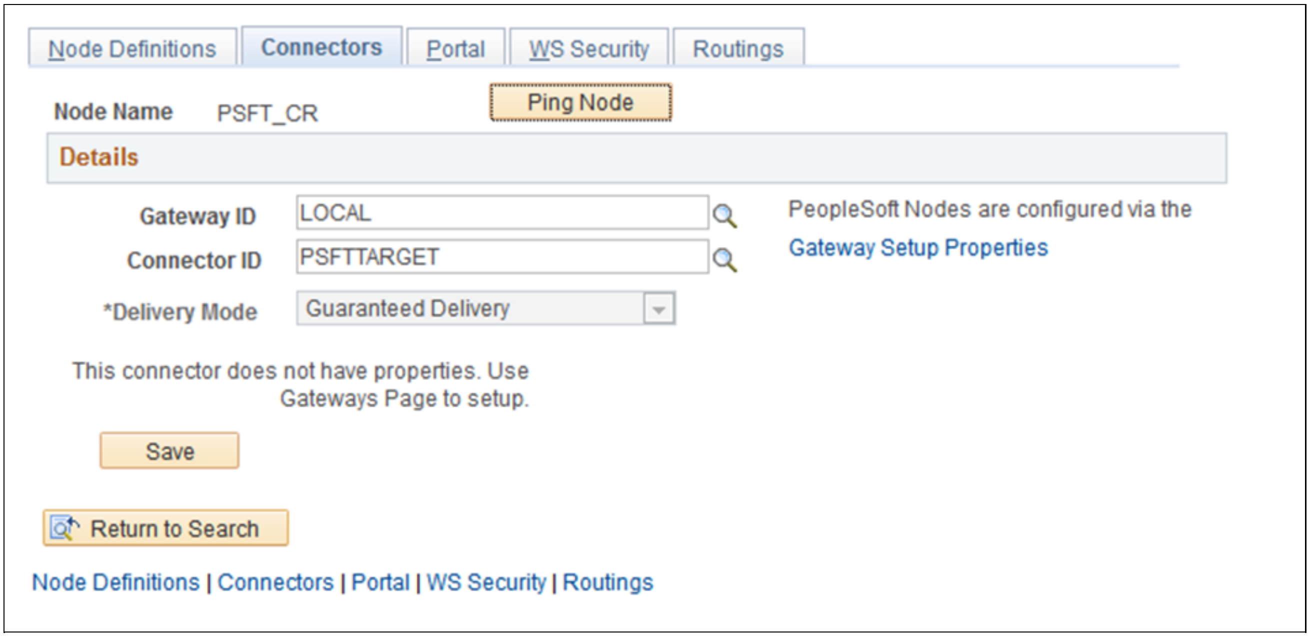
1. Select PeopleTools, Integration Broker, Integration Setup, Nodes.
2. In the Node Name field, enter the node name (the default is *PSFT_CR*), and click the Search button.
3. If this node does not exist, you must create it.
4. Select the Node Definitions tab to access the Node Definitions page, as shown in the following example:



Nodes Definition page - PSFT_CR node

5. On the Node Definitions page, verify that *PIA* is selected in the Node Type field or select it now.
6. The Authentication Option, Node Password, and Default User ID should match what is defined on the PeopleSoft CRM system for this node.

7. Select the Connectors tab to access the Connectors page, as shown in the following example:



Connectors page with connector ID PSFTTARGET

8. On the Connectors page, verify that *PSFTTARGET* is selected in the Connector ID field, or select it now.
9. Click Save.

Task 14-2-3: Setting Up the Gateway for PeopleSoft HCM

In this task you use the PeopleSoft Integration Broker Configuration page to add the PeopleSoft CRM default local node to the PeopleSoft HCM side of the PeopleSoft Integration Broker Gateway Configuration page.

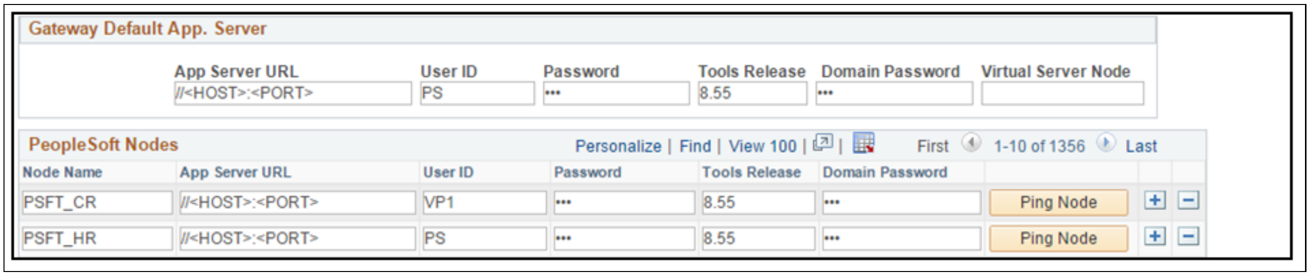
To add the PeopleSoft CRM default local node to the PeopleSoft HCM side:

1. Select PeopleTools, Integration Broker, Configuration, Gateways.
2. Click the Search button. This should take you directly into the local gateway, unless other gateways are defined.

   If this is the case, select the local gateway to proceed.
3. Click the Gateway Setup Properties link.

   The Gateway Properties login page appears.

4. Enter the User ID and Password (defaults are *administrator* and *password*) to sign in to the Gateway Properties - Gateway Default App. Server page, as shown in the following example:



Gateway Default App. Server - PeopleSoft Nodes

5. On the Gateway Default App. Server page, if the PeopleSoft CRM node does not exist, click the Add button to add a CRM node.
6. Click Save.

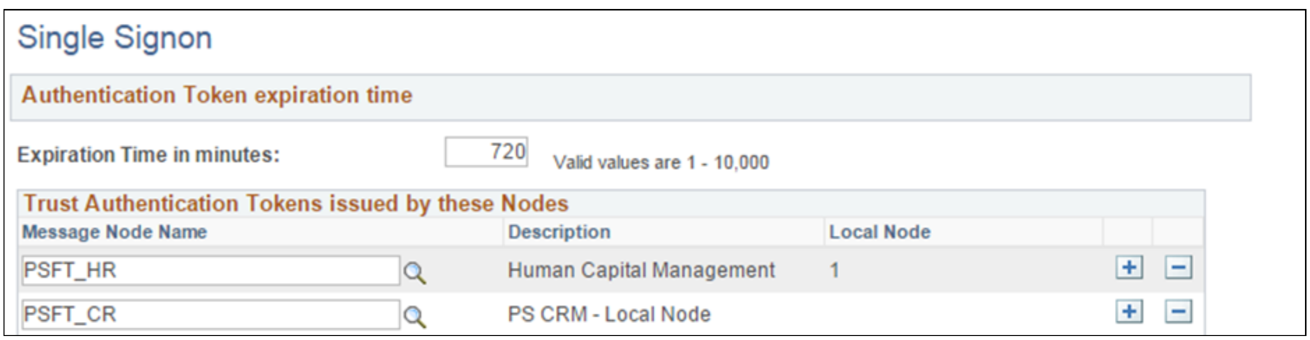
Task 14-2-4: Setting Up Single Signon for PeopleSoft HCM

In this task you add the PeopleSoft HCM default local node and the PeopleSoft CRM default local node to the PeopleTools Single Signon page.

To add the PeopleSoft HCM and PeopleSoft CRM default local nodes to the PeopleTools Single Signon page:

1. Select PeopleTools, Security, Security Objects, Single Signon.

   The Single Signon page appears, as shown in the following example:



Single Signon - Trust authentication tokens and nodes

2. On the Single Signon page, if the PeopleSoft HCM and PeopleSoft CRM default local nodes do not exist, click the Add button to add the PeopleSoft HCM default local node and then the PeopleSoft CRM default local node in the Message Node Name fields.
3. Click Save.

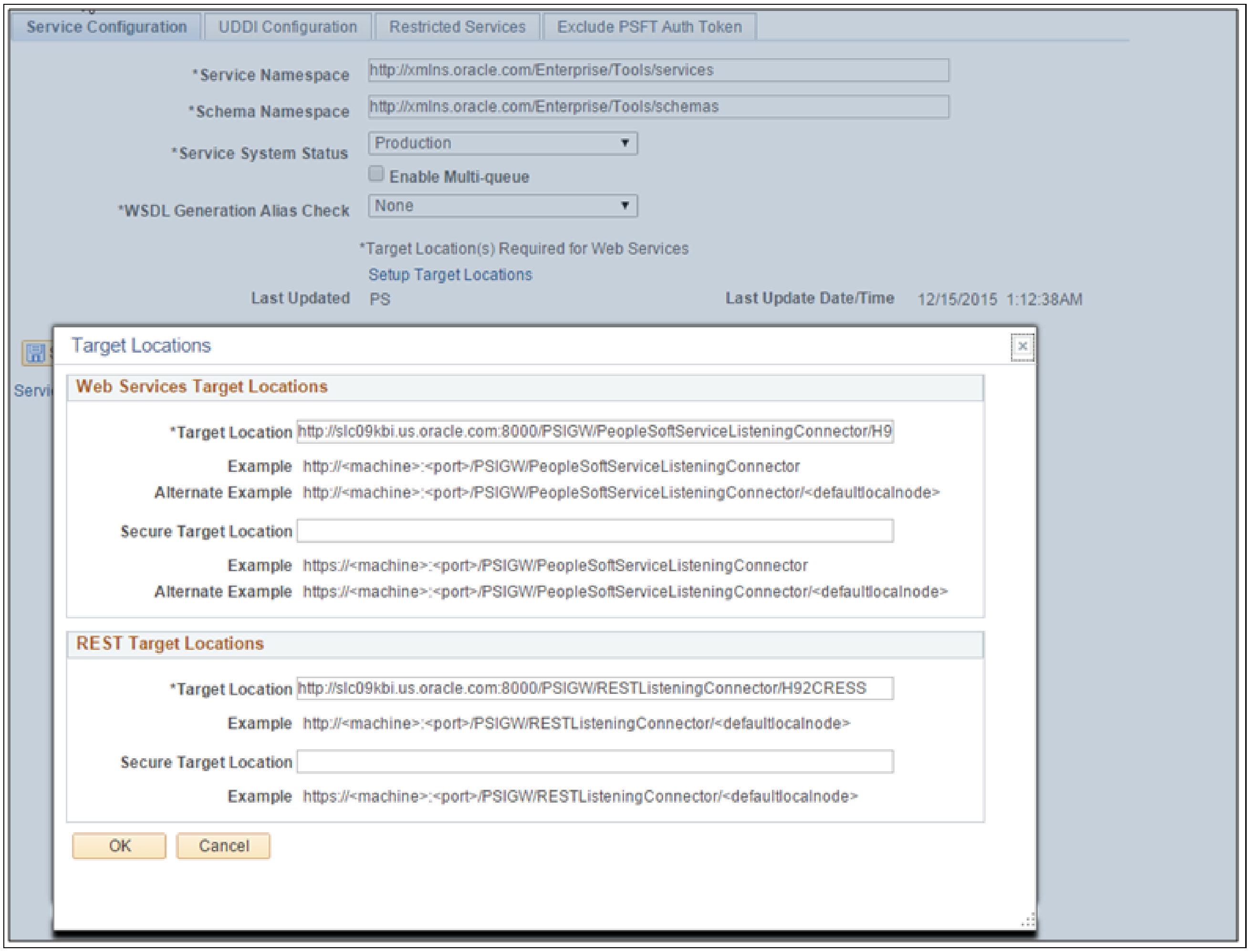
Task 14-2-5: Verifying or Modifying Service Configurations for PeopleSoft HCM

QAS is delivered as a restricted service.

To verify or modify this service configuration:

1. Select PeopleTools, Integration Broker, Configuration, Service Configuration.

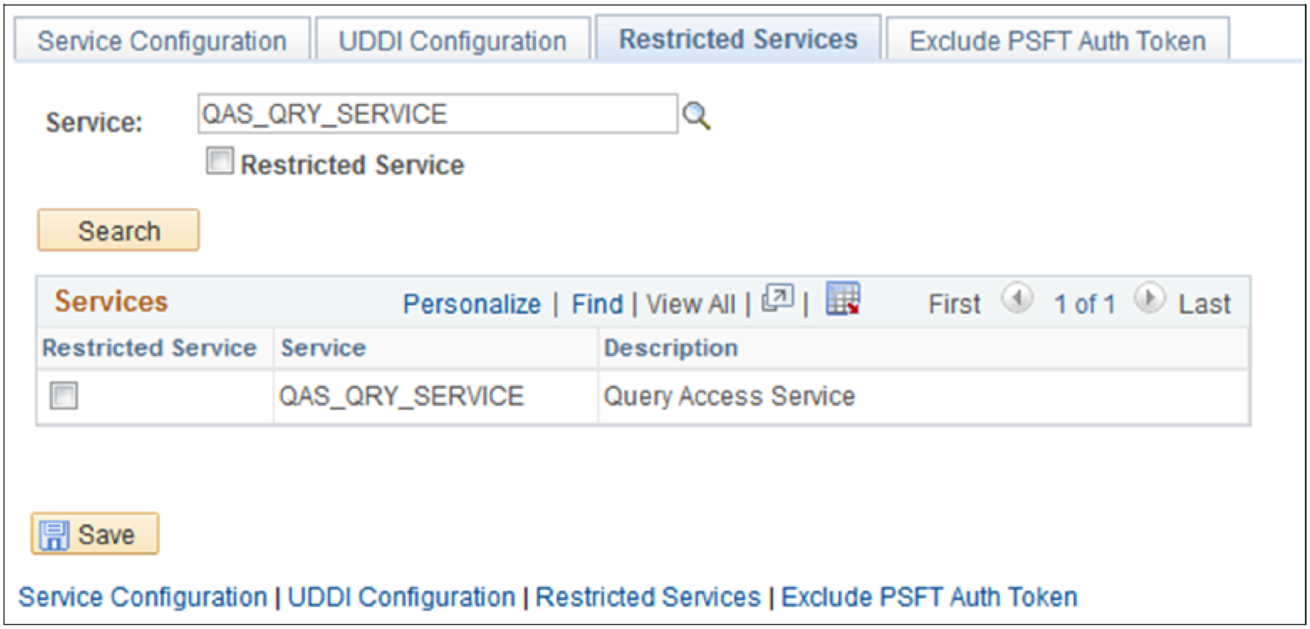
   The Service Configuration page appears, as shown in the following example:



Service Configuration page

2. On the Service Configuration page, click the Setup Target Locations link to verify the path in the Target Location field. You may modify the path, if required.

3. Select the Restricted Services tab to access the Restricted Services page, as shown in the following example:



Restricted Services page

4. On the Restricted Services page, in the Services search field, enter *QAS_QRY_SERVICE* and click Search.
5. Verify that the QAS_QRY_SERVICE check box is *not* selected, or deselect it now.
6. Click Save.

Task 14-2-6: Modifying Service Operations for PeopleSoft HCM

The following three Service Operations must be modified to set the Security Verification, Service Operation Security, and Routings. You must do this for *each* of the Service Operations in the following table:

Reference Number	Service Operations
1	QAS_EXECUTEQRYSYNC_OPER
2	QAS_LISTQUERY_OPER
3	QAS_LISTQUERYPROMPTS_OPER

To modify the three required service operations:

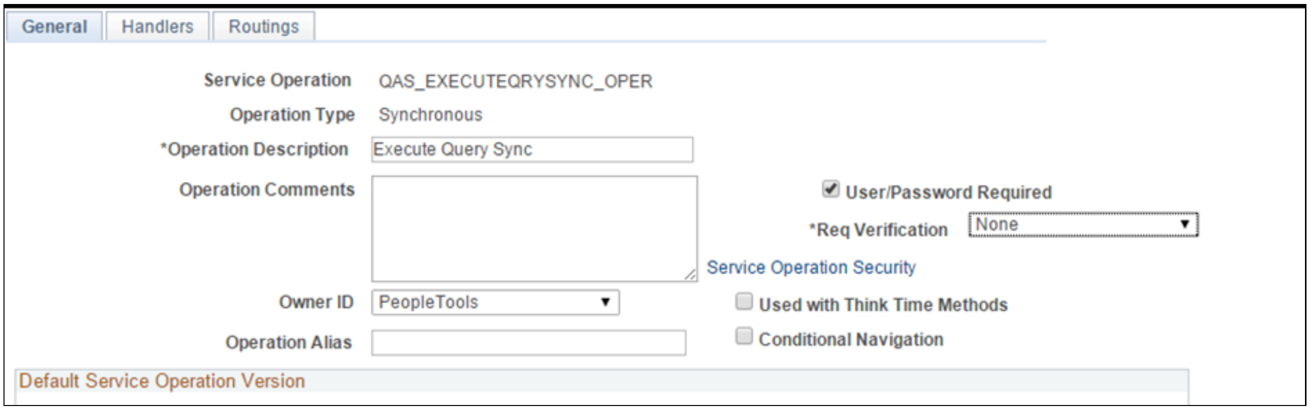
1. Select PeopleTools, Integration Broker, Integration Setup, Service Operations.

   The Service Operations - General page appears.
2. On the Service Operations - General page, in the Service field, enter *QAS_QRY_SERVICE*.

3. In the Service Operations field, enter the value of one of the Service Operations in the preceding table.

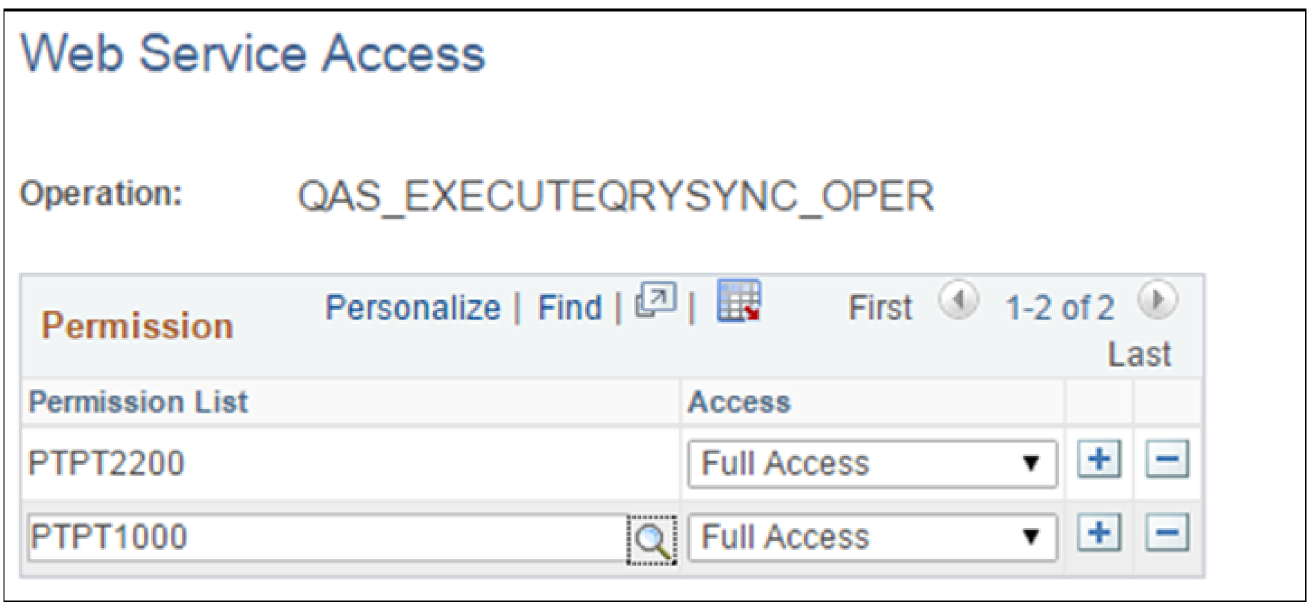
   For example: QAS_EXECUTEQRYSYNC_OPER

   The Service Operations - General page for QAS_EXECUTEQRYSYNC_OPER appears, as shown in the following example:



Service Operations - General page

4. In the Req Verification field, select *None* from the drop-down list.
5. Click Save.
6. Click the Service Operation Security link to access the Web Service Access - QAS_EXECUTEQRYSYNC_OPER page, as shown in the following example:



Web Service Access - QAS_EXECUTEQRYSYNC_OPER page

7. Click the Add button to add the permission lists in the following table:

Permission Lists	Access
PTPT1000	Full Access
PTPT2200	Full Access

8. Click Save.
9. Return to the Security Operations page (select PeopleTools, Integration Broker, Integration Setup, Service Operations) and select the Routings tab to access the Routings page.

10. On the Routings page, enter any missing routings from the following table. This table contains the necessary Routings and their corresponding Sender Node and Receiver Node names:

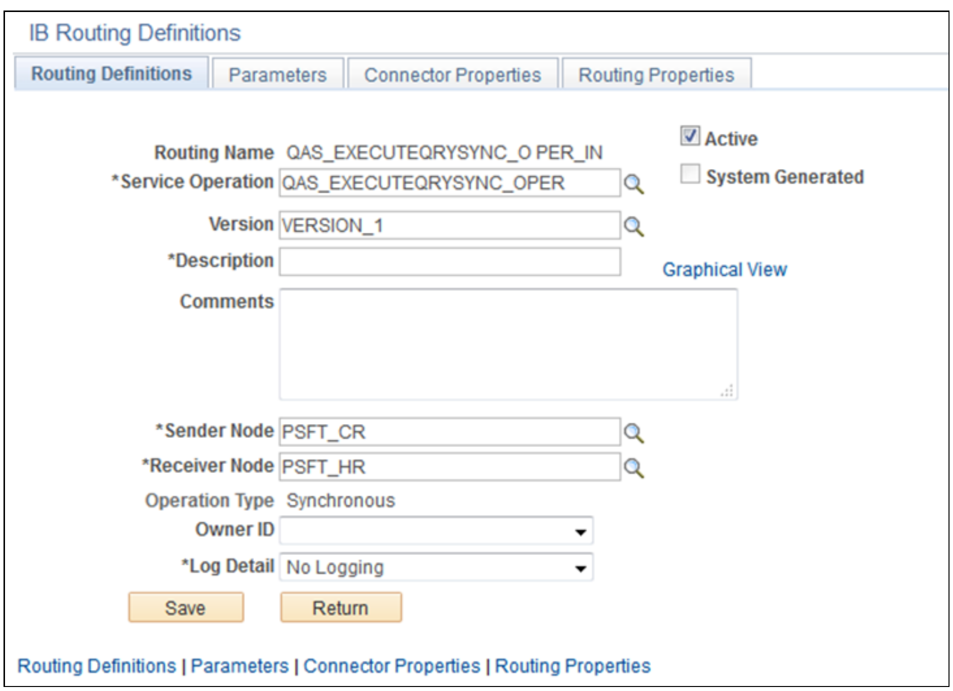
Reference Number	Service Operations	Routing Name	Sender Node	Receiver Node
1	QAS_EXECUTEQRYSYNC_OPER	QAS_EXECUTEQRYSYNC_OPER_IN	PSFT_HR	PSFT_CR
1	QAS_EXECUTEQRYSYNC_OPER	QAS_EXECUTEQRYSYNC_OPER_OUT	PSFT_CR	PSFT_HR
2	QAS_LISTQUERY_OPER	QAS_LISTQUERY_OPER_IN	PSFT_HR	PSFT_CR
2	QAS_LISTQUERY_OPER	QAS_LISTQUERY_OPER_OUT	PSFT_CR	PSFT_HR
3	QAS_LISTQUERYPROMPTS_OPER	QAS_LISTQUERYPROMPTS_OPER_IN	PSFT_HR	PSFT_CR
3	QAS_LISTQUERYPROMPTS_OPER	QAS_LISTQUERYPROMPTS_OPER_OUT	PSFT_CR	PSFT_HR

Important! The Routing Name is not significant except that it must be unique. The Sender Node and Receiver Node are important and determine whether the routing is inbound or outbound. Therefore, you should first verify if the routing already exists by Sender Node and Receiver Node (not by Routing Name).

To add the missing routings, do the following:

a. On the Service Operations page, enter a Routing Name and then click the Add button to add the missing routing (do this for each missing routing).

The Routing Definitions page appears, as shown in the following example:



Routing Definitions page

b. In the Sender Node field, enter the Sender Node.

c. In the Receiver Node field, enter the Receiver Node.

d. Click the Save button.

e. Click the Return button.

f. Click Save.

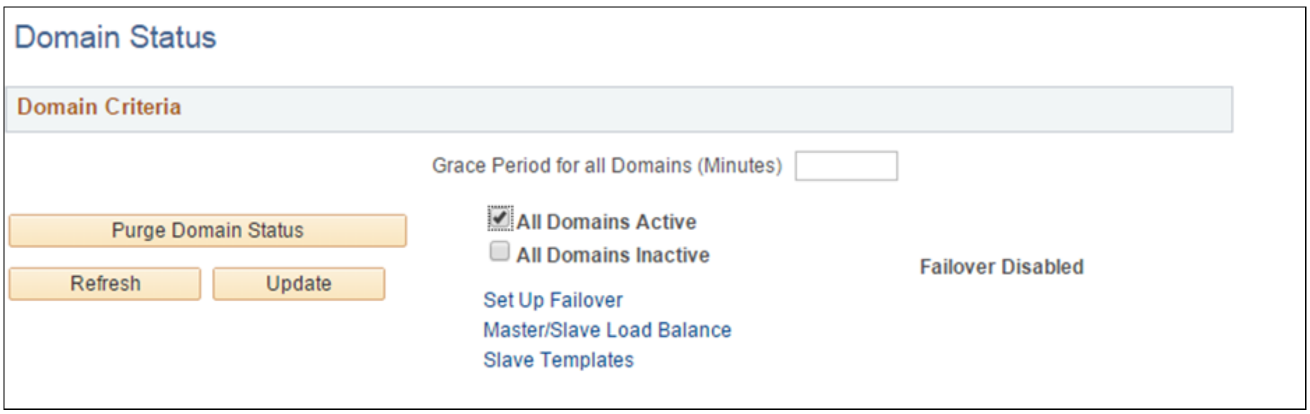
Task 14-2-7: Purging the Domain Status for PeopleSoft HCM

The Domain Status should be purged.

To purge the domain status:

1. Select PeopleTools, Integration Broker, Service Operations Monitor, Administration, Domain Status.

   The Domain Status page appears, as shown in the following example:



Domain Status page

2. Click the Purge Domain Status button.
3. Select the All Domains Active check box.
4. Click the Update button.

Task 14-3: Planning for Unit Test

This section discusses:

- Creating a Query in PeopleSoft HCM
- Creating an Audience in PeopleSoft CRM

Task 14-3-1: Creating a Query in PeopleSoft HCM

In this task you create a query in PeopleSoft HCM that creates a list of EMPLIDs.

To create a query:

1. Login to the PeopleSoft HCM application.

2. Select Reporting Tools, Query, Query Manager.

   The Query Manager search page appears.

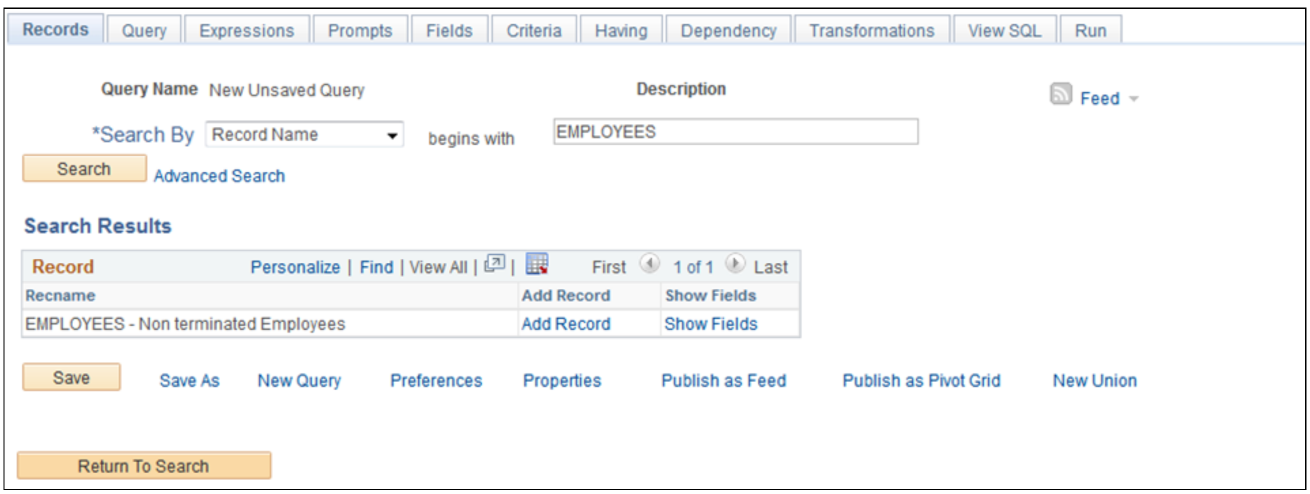
Query Manager search page

3. On the Query Manager search page, click the Create New Query link.

   The Query Manager page appears.

4. Select the Records tab to access the Records page.

   The Records page appears, as shown in the following example:

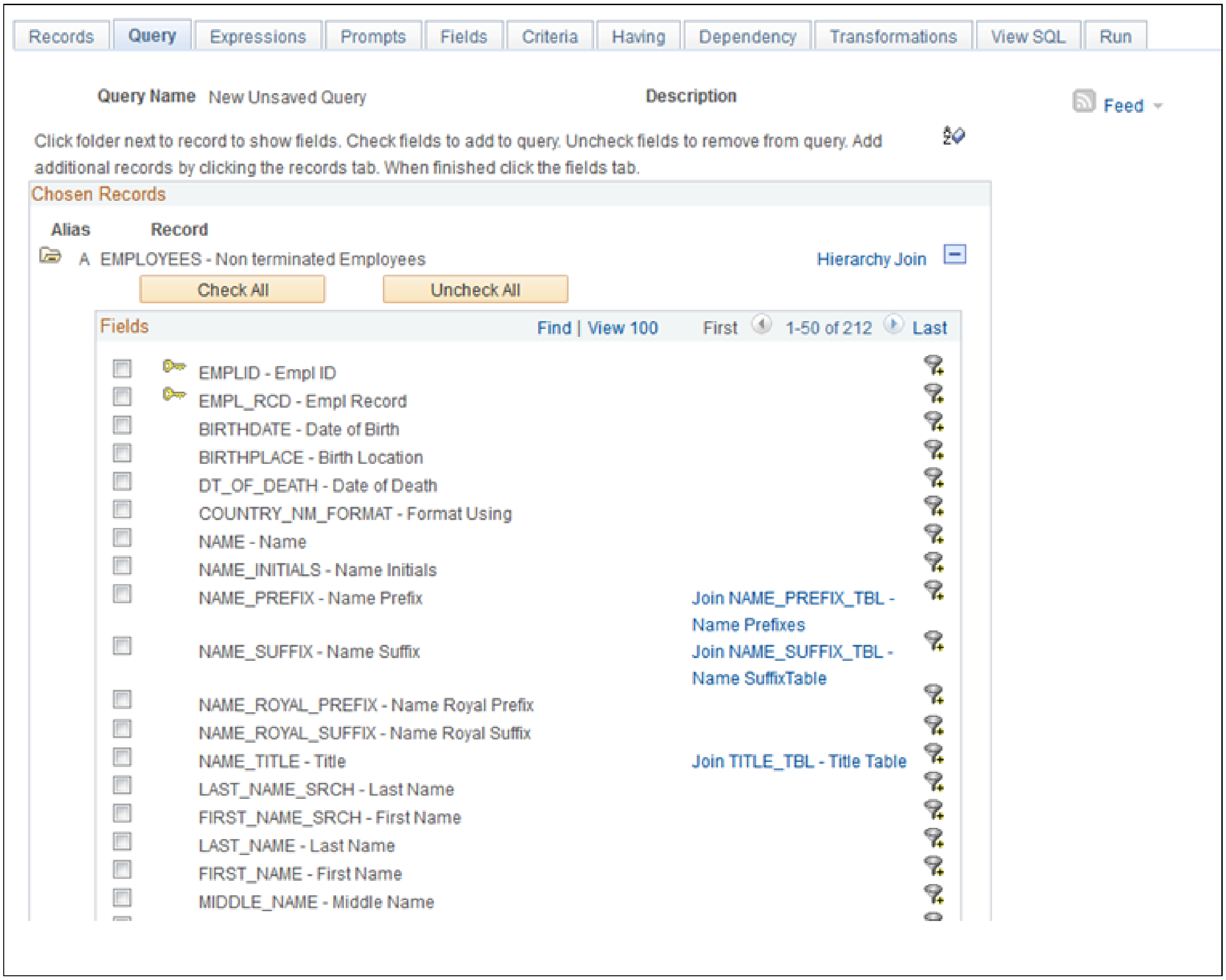


Records page

5. On the Records page, select Search By as Record Name and enter *EMPLOYEES,* and then click Search.

6. On the Records page, click the Add Record link of the record name EMPLOYEES- Non terminated Employees in the search results grid, as shown in the previous example.

   The Query page appears, as shown in the following example:

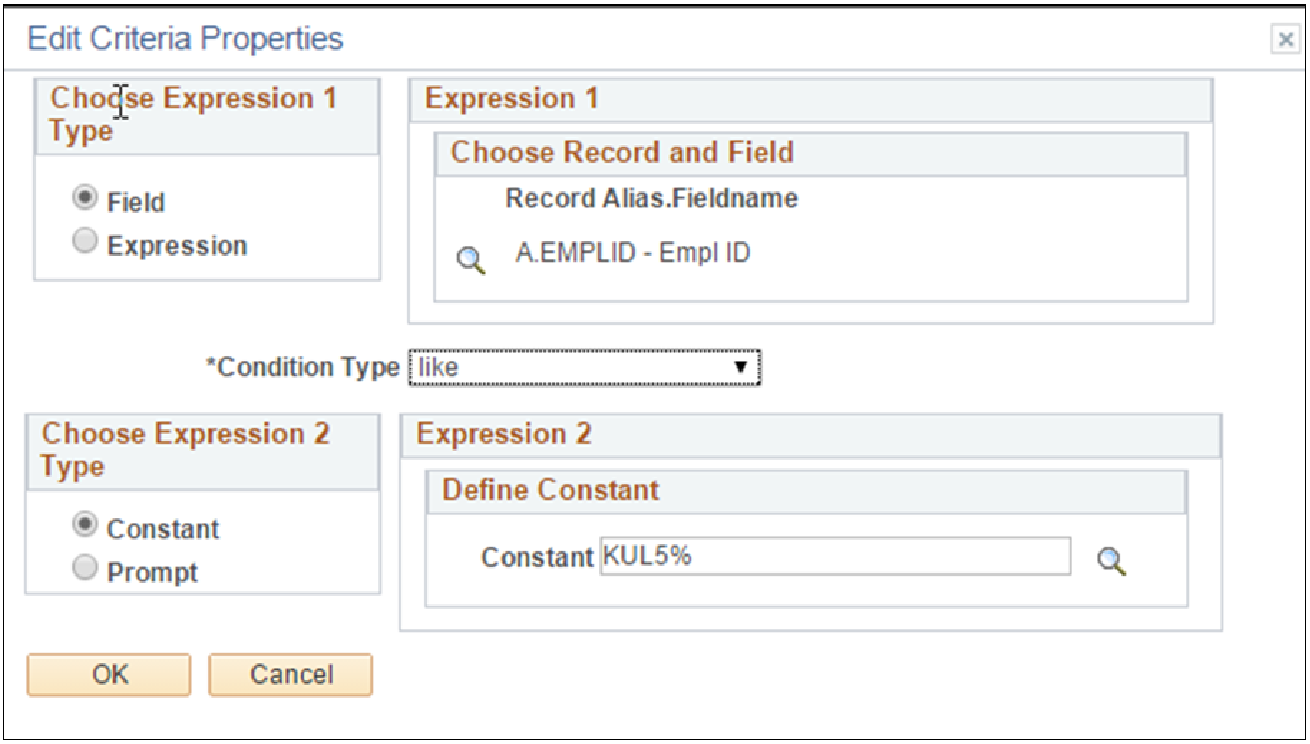


Query page

7. On the Query page in the Fields grid, select the EMPLID check box to include the EMPLID field in the results.

8. In the EMPLID Name field, click the filter icon.

   The Edit Criteria Properties page appears, as shown in the following example:

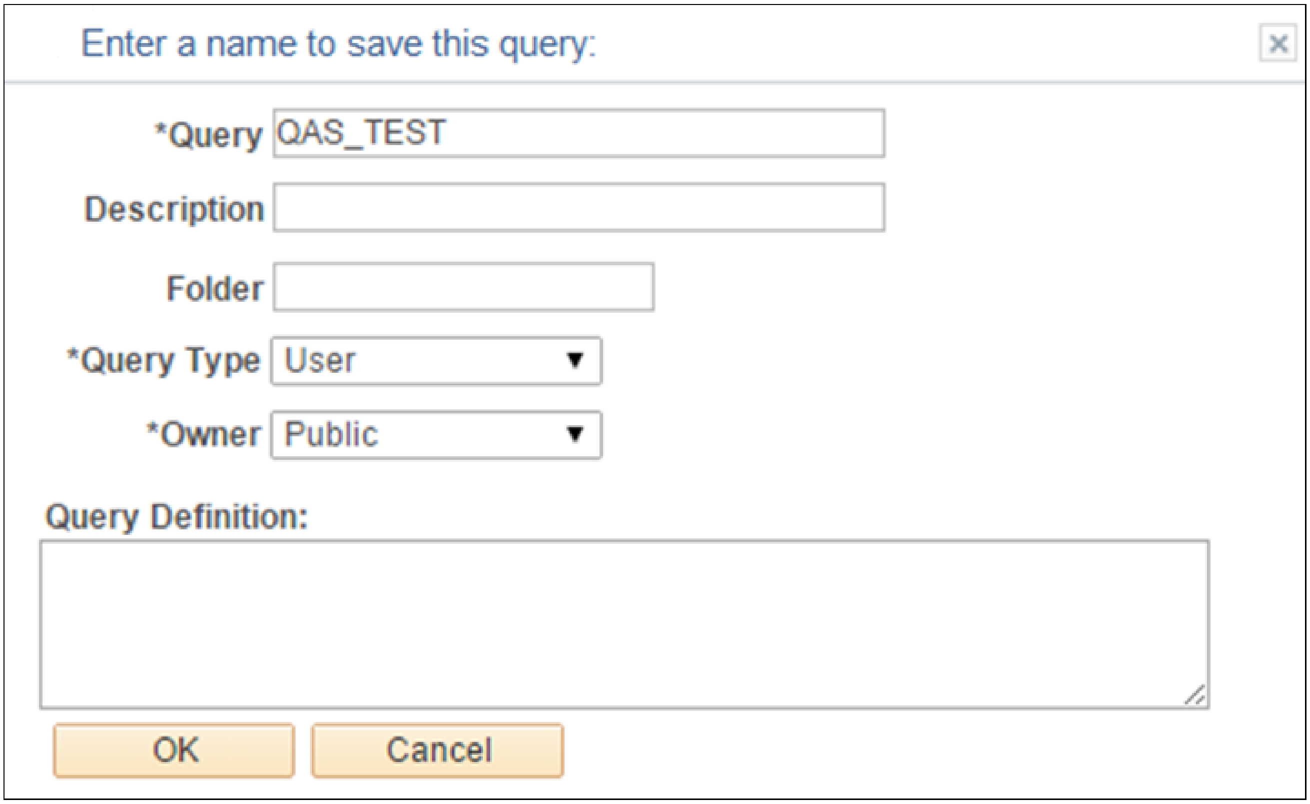


Edit Criteria Properties page

9. On the Edit Criteria Properties page, in the Condition Type field, select *like* from the drop-down list.
10. In the Constant field, enter *KUL5%*.
11. Click OK.

12. Click Save.

    The query Save page appears, as shown in the following example:



Save page

13. In the Query field, enter *QAS_TEST*.
14. In the Owner field, select *Public* from the drop-down list.
15. Click OK.

Task 14-3-2: Creating an Audience in PeopleSoft CRM

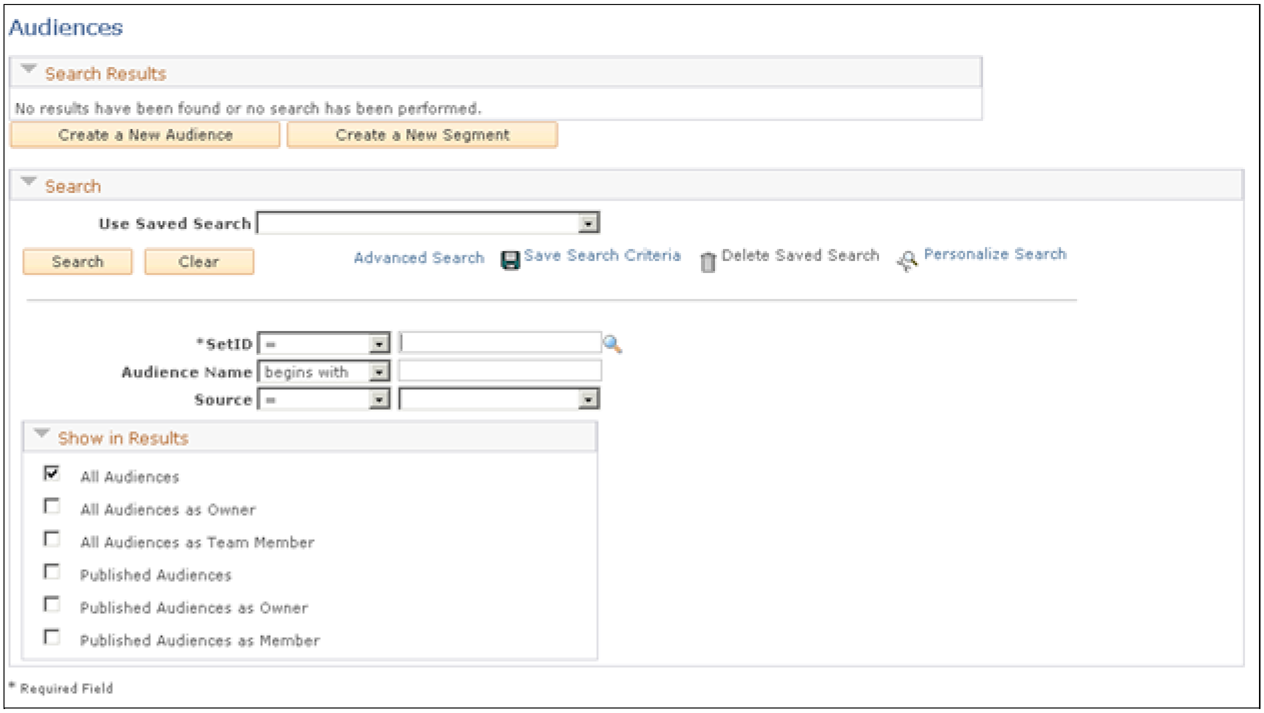
In this task you create an audience in PeopleSoft CRM.

To create an audience:

1. Login to the PeopleSoft CRM application.

2. Select Marketing, Manage Audiences.

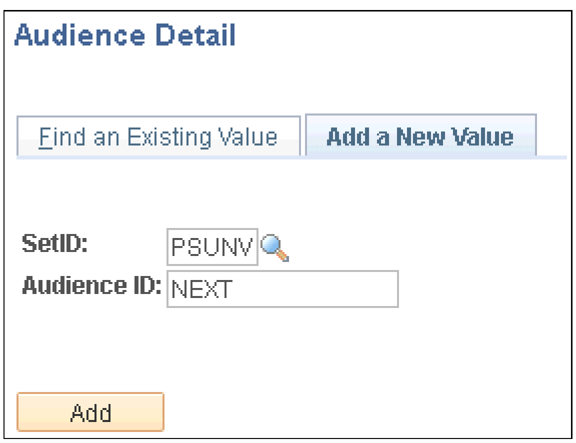
   The Audiences search page appears, as shown in the following example:



Audiences search page

3. Click the Create a New Audience button.

   The Audience Detail - Add a New Value page appears, as shown in the following example:

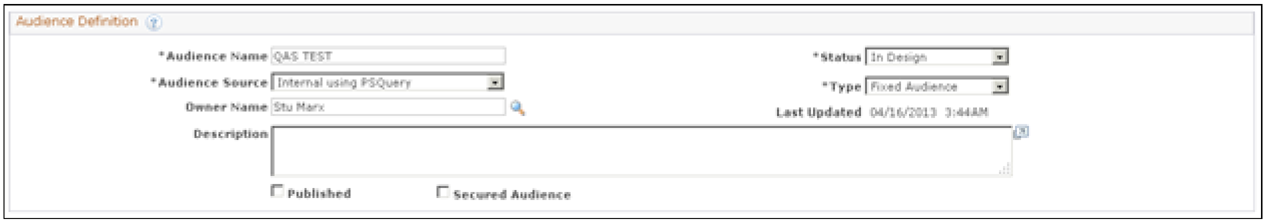


Audience Detail - Add a New Value page

4. On the Audience Detail - Add a New Value page, in the SetID field enter *PSUNV*.

5. Click the Add button to add a new audience.

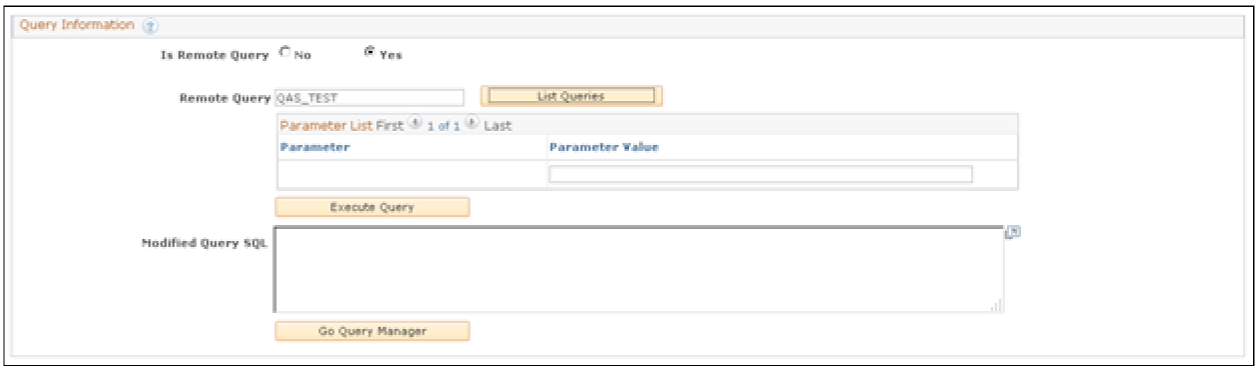
   The Audience Detail page appears. Move to the Audience Definition group box to define values, as shown in the following example:



   Audience Detail page - Audience Definition section

6. In the Audience Definition group box, in the Audience Name field, enter *QAS Test.*
7. In the Audience Source field, select *Internal using PSQuery* from the drop-down list.

   On the Audience Detail page, move to the Query Information group box to define values, as shown in the following example:

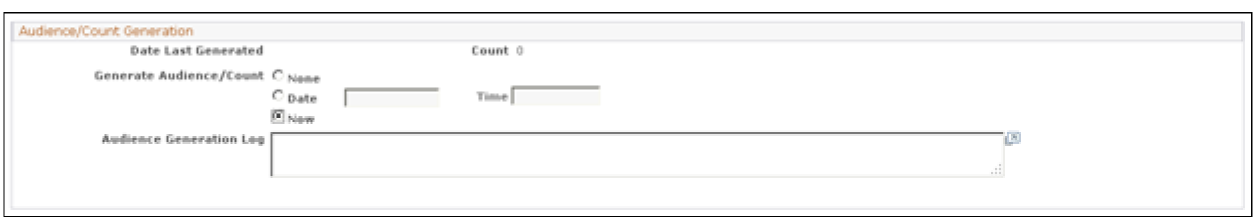


   Audience Detail page - Query Information section

8. In the Query Information group box, for the Is Remote Query option, select *Yes.*
9. In the Remote Query field, enter *QAS_TEST.*
10. Click the List Queries button.

    A list of queries displays that includes the QAS_TEST query.
11. From the query list, select the QAS_TEST query link to display that query.
12. Click the Execute Query button.

    On the Audience Detail page, move to the Audience/Count Generation group box to define values, as shown in the following example:



    Audience Detail page - Audience/Count Generation section

13. In the Audience/Count Generation group box, for the Generate Audience/Count option, select *Now*.

14. Click Save.
15. When the process scheduler indicates that the process is complete, you can view any added audience members on the Result List page.

Appendix A

Reviewing PeopleSoft Tablespaces and Parameters

This appendix discusses:

- Understanding PeopleSoft OLM Tablespaces
- Resizing within PeopleSoft Customer Data Model
- Changing Parameter Values
- Reviewing Parameter Descriptions
- Reviewing the PeopleSoft OLM Component Port List

Understanding PeopleSoft OLM Tablespaces

This table contains the PeopleSoft Online Marketing 9.2 tablespace names and a description of each tablespace.

OLM 9.2 Tablespace Name	Tablespace Description
RYAPP	General tablespace that stores most of the application-specific data.
RYWORK	Tablespace for PeopleSoft OLM dedup tables that Mailcaster uses to prepare broadcast emails on Oracle.
RYLARGE	Tablespace for the following tables: • PS_RY_EM_DAY_CNT_1 • PS_RY_EM_DAY_CNT_2 • PS_RY_FREQ_CNT • RY_FLOW_INST • RY_DOC_SER • Document transaction tables

OLM 9.2 Tablespace Name	Tablespace Description
RYLARG1	Tablespace for indexes on the following list of tables that contain email transaction history data: • PS_RY_BEMAIL_LOG • PS_RY_EMAIL_BOUNCE • PS_RY_EXP_EM_LOG • PS_RY_SMAIL_LOG • PS_RY_EMAIL_DISC • PS_RY_OPENMAIL_LOG • PS_RY_VC_EM_IMPR
RYLARG2	Tablespace for the following list of tables that contain web transaction history data: • PS_RY_WEB_LOG • PS_ RY_VC_WEB_IMP
PSINDEX	Tablespace for indexes of all OLM tables on Oracle.

Resizing within PeopleSoft Customer Data Model

In addition to the specific tablespaces that PeopleSoft OLM uses, some of the tablespaces within the PeopleSoft CRM Customer Data Model must be resized to handle the large growth of individuals and organizations. The following table lists the tablespaces that you must resize:

Tablespace Name	Tables Affected by OLM Growth	Comments
RBLARGE	RBLARGE related tables affected by PeopleSoft OLM growth: • PS_CM • PS_BO_CM • PS_BO_CM_USE • PS_BO_ROLE • PS_BO_REL • PS_BO • PS_BO_MKT_DATA • PS_BC • PS_BO_NAME • PS_BO_TRIGGER • PS_RD_PERSON • PS_RD_COMPANY	Other tables use this tablespace; however, PeopleSoft OLM transactions affect the RBLARGE tablespace significantly.

Tablespace Name	Tables Affected by OLM Growth	Comments
PSINDEX	PSINDEX related tables affected by PeopleSoft OLM growth: • PS_CM • PS_BO_CM • PS_BO_CM_USE	
RABLARGE	RABLARGE related tables affected by PeopleSoft OLM growth: • PS_BO_BASIC_IND • PS_BO_BASIC_ORG	
RABINDEX	RABINDEX related tables affected by PeopleSoft OLM growth: • PS_BO_BASIC_IND • PS_BO_BASIC_ORG	

Note. Ensure that each of the tablespaces in the preceding tables are properly sized and active.

Task A-1: Changing Parameter Values

If you change the value of any parameters from the PeopleSoft Pure Internet Architecture Settings page, or you change and overwrite the value of Settings in any of the components configuration file (for example, DES.config, MCR.config, WDG.config, and ERP.config), you must stop and restart the components that are affected by the parameter before the new settings can take effect.

Note. Script files for local use must be used to configure the Email Response Processor (ERP). The syntax of the scripting language is covered in the Email Response Processors Documentation.

Task A-2: Reviewing Parameter Descriptions

The following two tables describe the PeopleSoft OLM parameters. The first table includes parameters for DES, Mailcaster, and All. The second table includes parameters for Watchdog. The parameters are in alphabetical order within each table. These tables also indicate the PeopleSoft OLM component that uses each parameter.

Note. If you change the value of any parameters, you must stop and restart the components that are affected by the parameter before the new settings can take effect.

This table describes the PeopleSoft OLM parameters and includes parameters for DES, Mailcaster, and All:

Parameter Value	Components	Description
agingCacheLifeSpan	DES	For internal use only.

Parameter Value	Components	Description
agingObjectAgeLimitMins	DES	For internal use only.
allowOwnRmiRegistry	Mailcaster	Start own RMI registry if none is currently running.
automaticMailJobRecovery	Mailcaster	Specifies whether the Mailcaster tries to automatically recover a running job that has not been updated for a specific period of time. If set to *false,* the Mailcaster does not attempt to recover the mail job, and the administrator must do so manually by stopping and starting the job using the Control Center. If set to *true*, the Mailcaster recovers the job, which can result in the sending of duplicate emails. The Mailcaster uses the mail jobs recovery log table to reconstruct the job. However, because there is a gap between sending the mail and writing to the recovery log, it is possible that one duplicate message will be sent per send mail thread. The default value is *true*.
broadcastRequestDESTimeout	DES	Specifies the timeout in milliseconds for broadcast requests.
bulkMailerDropDedup	Mailcaster	Specifies whether to drop the Dedup table after mail job has completed successfully. The default is *true*.
bulkMailerMaxErrorRetryAttemps	Mailcaster	Specifies the number of attempts that the Mailcaster will make to connect to the SMTP server before raising an error. (Note that the misspelled word *Attemps* must be entered as shown in the parameter value column of this table.)
cgiProgramPath	All	Specifies the path of the web server gx.cgi program. The default is DCS. Also used by PeopleSoft OLM to tell the Campaign Server to clear cache, and to generate the Dialog Link Report. To ensure that the path information is read correctly at startup, you should set this value in the configuration files, rather than using the Settings feature in the Online Marketing Client.
clearCacheGracefully	DES	Specifies a method to clear cache.
clearCachePerObject	DES	Specifies a method to clear cache deeply.

Parameter Value	Components	Description
clearCacheThreads	DES	Specifies the number of threads that clear cache in the background.
clearCacheTimeoutSecs	DES	Specifies the time in seconds for a clear cache request to time-out.
clearCacheWait	DES	Specifies the time in milliseconds to wait for current clear cache requests to finish.
companyBasicsProfileName	DES	For internal use only.
contactBasicsCompanySysldElementName	DES	For internal use only.
contactBasicsProfileName	DES	For internal use only.
ConnectId	All	Specifies the DB User Name.
ConnectPswd	All	Specifies the DB User password.
contentTransferEncoding	Mailcaster	Allows the email header to support 8bit characters. The default for email header is 7bit. To change the default, add this parameter through the Online Marketing Client in Settings as: *contentTransferEncoding=8bit.*
createObjectsInExternalThread	DES/ERP	Specifies to create and destroy Jolt Connection in a separate thread.
dialogmoverOperationTimeout	DES	Specifies the Dialog Mover execution timeout. (60*1000=i minute)
dedupDisablePageLockMSSQL	DES	Avoids page locking on MSSQL while deduping (experimental).
dedupTableDeferredSegmentCreationbyDefault	DES	Default is Yes. For Oracle 11.2 or above version, set this parameter value to No.
debugFileSeverityThreshold	All	Specifies the debug log error severity level (not including trace lines).
dbServerURL	All	Specifies the path or address that the PeopleSoft OLM components use to connect to the database, for example: • MSSQL: jdbc:sqlserver://host:port;DatabaseName=instance;sql70=true;charset=Cp1252 • ORACLE: jdbc:oracle:thin:@host:port:instance • DB2LUW: jdbc:db2://host:port/instance

Parameter Value	**Components**	**Description**
dbVendor	All	Specifies the database that you are using, for example: • MSSQL • ORACLE • DB2UDB
dedupAllowDirtyReadMSSQL	DES	*(MSSQL only)* Specifies whether to allow dirty read on the PS_RY_BASIC_IND table during de-duping. The default value is *false.* When the parameter is set to *false*, the deduping process gets clean data, but can block other components from updating the basic individual table. When the parameter is set to *true*, the deduping process gets dirty data, allowing a higher level of concurrency on the basics individual table.
dedupIndexSpace	DES	Specifies the database tablespace in which the dedup index tables are created. This parameter can be used to improve the performance of the system. Contact your database administrator for more information.
dedupPickRecordWithMaxCompanySysID	DES	Takes effect only when de-duping on BO_ID (Unique System ID) and at least one of the audiences is of type Contact. The default value is *true.*
dedupTableSpace	DES	Specifies the database tablespace in which the dedup tables are created. This parameter can be used to improve the performance of the system. Contact your database administrator for more information.
defaultDateFormat	All	Default Date format with values such as *DD/MM/YYYY.*
defaultProcessSize	DES	Specifies the maximum number of actions that can be created in the Reach or Response side of the process tree. The default value is *200.*
DefaultTimeFormat	All	Specifies the Default Time format. Possible values are *HH:MM* or *HH:MM AM/PM.*
defaultURLBase	DES/Mailcaster	Specifies the base of the URL that the Campaign Server and Mailcaster adds to all links. The format is: defaultURLBase=<*URL of online dialog webserver*>

Parameter Value	**Components**	**Description**
delayForDBCheck		Specifies the number of seconds DES waits before attempting a database connection, to prevent starting before the database is available. This parameter applies only at database initialization. The default is *15 seconds.*
directURLBase	DES	Specifies the direct URL of the DES (http://< *hostname*>:port)
domainName	DES/Mailcaster	Specifies the domain name that identifies your site on the internet. For PeopleSoft OLM, this is *yourdomain*.domain.
doNotEMailDefault	DES/Mailcaster	Specifies the default value to be stored in the people profile (in the Do not email field) when a new contact record is added. If it is *true,* then new contacts will not be contacted through bulk email. If it is *false* (the default), then contacts can be contacted. This default value can be overridden by the dialog process or respondent input.
doNotEMailProfileElementName	DES/Mailcaster	For internal use only.
emailAddressProfileElementName	DES	Specifies the name of the Email Address profile field in the Individuals.People profile. The default value is *Email.*
errorFileSeverityThreshold	All	Specifies the error log severity level.
eventWireGifFileName	DES	Customize the DES default 1x1 clear gif file.
extensionsDir	DES/Mailcaster	Specifies the directory where the Live Extension servlet jar files exist.
extensionTimeout	DES	Specifies the extension execution timeout.
heartbeatInterval	DES	Lifecycle management heartbeat interval.
https	DES	Indicates whether connections to the Control Center must be secure. If you want to require secure connections, you must set *https=On.* Any other value, such as *on* using a lowercase *o* indicates that a secure connection is not required.
httpSessionTimeoutMins	DES	Specifies the logged-in session time out in minutes in the range of 1 to 60 mins.
jpmWaitForShutdownInMinutes		Specifies the delay from the last action when the Java Process Monitor will shut itself down.

Parameter Value	Components	Description
isDebugOutputToHTMLEnabled	DES	For internal use only.
isDESMultiInstance	DES	Indicates that the DES has multiple instances.
jmsContextFactory	DES	JMS Context Factory.
jmsProvider	DES	Specifies the vendors of web server software. Possible values are: *BEA-WLS* or *IBM-WAS*
jmsProviderUrl	DES	JMS Provider URL
jmsServiceLocator	DES	JMS Service Locator.
jmsTopicConnection	DES	JMS Topics Connection.
jmsUser	DES	JMS User.
jmsUserPassword	DES	JMS User Password.
jdbcDriver	DES/Mailcaster	This is the JDBC driver that the PeopleSoft OLM components use to access the database. Default values are: • MSSQL: com.microsoft.sqlserver.jdbc.SQLServerDriver • ORACLE: oracle.jdbc.driver.OracleDriver • DB2LUW: com.ibm.db2.jcc.DB2Driver
jobRecoveryExpireInHours	Mailcaster	Specifies the time period, in hours, after which mail jobs will not be recovered. The default is *96* and the parameter must be set to a value greater than 0. This parameter is useful in cases with time-sensitive audiences or time-sensitive content for a mailing.
joltSessionRecycleCount	DES	Specifies the number of requests for which the Jolt NetSession will be reused before it closes. After a Jolt NetSession closes, a new Jolt NetSession will be created as necessary. The default value is *0*, meaning that Jolt NetSessions never expire.
largeJobOnly	Mailcaster	If the mailcaster is a large mailcaster and the largeJobOnly value is set to *true*, then the mailcaster will only pickup large jobs. The default is *false* (should be in per mailcaster config file).
localHostName	DES/Mailcaster	Specifies the host name of the machine where Mailcaster is running and is used to communicate with the SMTP mail servers.

Parameter Value	Components	Description
logBaseName	All	Specifies the prefix for log and error files, for example DES, WDG, and so on (should be in per application config file).
logPath	DES/Mailcaster	Specifies the directory for the log file. The default is the current working directory.
numberFrequencyCheckThreads	Mailcaster	Specifies the number of threads to use to process frequency counter checking.
numberRenderingThreads	Mailcaster	Specifies the number of rendering threads.
mailCasterMaxGettransactionRetry	Mailcaster	Specifies the number of times to attempt to get a DB transaction (connection) before giving up.
maxBulkMailMessagesPerHour	Mailcaster	Specifies the number of emails each Mailcaster sends per hour when PeopleSoft OLM components share a mail server with other users. This enables you to limit the number of emails each Mailcaster sends per hour. For example, if you have 3 Mailcasters and you set this parameter to 100, each Mailcaster will send out a maximum of 100 messages per hour for a total maximum of 300. The default setting is *0*, which means NO limit.
maxDESInstances	DES	Specifies the number of DES servers in the cluster.
maxMailQueueSize	Mailcaster	Specifies the size of the mailcaster internal message queue.
maxFrequencyCheckQueueSize	Mailcaster	Specifies the maximum size that the queue of messages awaiting the frequency counter checking can grow to.
maxJobSize	Mailcaster	Specifies the maximum size for a child mailjob. The default value is *10000*, and the parameter must be set to a value greater than that set for minJobSize.
maxLogFileCount	DES/Mailcaster	Specifies the maximum number of log files to create. The default setting is *10.*
maxLogFileSize	DES/Mailcaster	Specifies the maximum size of the log files in bytes. The default setting is *10 MB.*
maxPooledGenericThreads	DES	Specifies the maximum number of Generic Threads that are used by Scheduler and Broadcaster.
maxRenderMailQueueSize	Mailcaster	Specifies the maximum number of messages in the rendering queue.

Parameter Value	Components	Description
maxRetriesForDBCheck	DES	Specifies the number of times DES tries to establish connection with the database, to prevent it from starting before the database is available. This parameter applies only at database initialization. The default is *8* times.
maxSendMailQueueSize	Mailcaster	Specifies the maximum number of mails in the send queue.
maxThreads	DES	Specifies the maximum size of the Live Extension pool.
maxUploadSize	DES	Specifies the maximum file upload size. You should consult your web server documentation when setting maximum file size, to ensure that the settings are compatible between the web server and PeopleSoft OLM. If the web server settings are significantly higher than those in PeopleSoft OLM, performance can be affected.
minJobSize	Mailcaster	Specifies the minimum size for a child mailjob. The default value is *2000*, and the parameter must be set to a value greater than 0 and less than maxJobSize.
OMKDESSecurityService	DES	JMS Security Service.
OMKDESDestination	DES	Specifies the JMS Destination (TOPIC/QUEUE) for DES.
orgRoleTypeIdProfileElementName	DES	Specifies the name of the organization role type profile element in base language.
PaymentProcessName	DES	Payment Process Name for Cybersource.
percentageJobSize	Mailcaster	Specifies the percentage of a large (parent) job to use as a child job size. The default value is *3* and the parameter must be set to a value greater than 0.
pollingInterval	Mailcaster	Specifies in minutes the frequency with which the Mailcaster checks the mail job queue. The default setting is *1*.

Parameter Value	Components	Description
preloadCampaign	DES	Specifies the names of dialogs to be loaded into memory at server startup, thus reducing the time the customer must wait to view the dialog. The format is: `preloadCampaign=Dialog1,dialog 2,Dialog33 for Staging` You can specify multiple dialogs by separating their names (including spaces) with commas. Do *not* include spaces before or after commas.
psAppServerURL	DES	Specifies the URL of the PeopleSoft Application Server and JOLT port where publish/subscribe is enabled. For failover, you can use a comma-separated list. For example: //mymachine1:9000,//machine2:9050 This parameter is usually set in the PeopleSoft Online Marketing Client Settings.
psAppHome	MCR, ERP, WDG	PS_APP_HOME Environment Variable
psHome	MCR, ERP, WDG	PS_HOME Environment Variable
psIBLocalNode	DES	Specifies the name of the PeopleSoft Integration Broker default local node for the Application Server.
psIBLocalNodePassword	DES	Specifies the password (if any) for the PeopleSoft Integration Broker local node. The value is encrypted in the configuration file.
psJoltSessionCount	DES	Specifies the maximum number of JOLT sessions. The DES will pre-allocate half at startup.
psJoltDomainConnectionPwd	DES	Jolt Domain Connection Password. The value needs to be encrypted.
psOperatorID	DES	Specifies the PeopleSoft user ID. Select a user ID with the PeopleSoft Administrator role, such as the OLM user.
psOperatorPassword	DES	Specifies the PeopleSoft user password.
psPIAServerURL	DES	Specifies the PeopleSoft CRM PIA Server URL: http:// <PIA web server:port>

Parameter Value	**Components**	**Description**
psPIAServerWebsiteName	DES	Specifies the PeopleSoft CRM PIA server website name.
psToolsRel	DES	Specifies the PeopleSoft PeopleTools version number. The default value is *8.48*, which is specified in the PeopleSoft Online Marketing Client Settings.
restoreCheckInterval	DES	Specifies the interval in milliseconds between checks to see whether an object is fully restored or not. The default is *100 ms.*
rmiPort	Mailcaster	Specifies the port on which RMI can be contacted. The default is *1099.*
roleTypeIdProfileElementName	DES	Specifies the name of the individual role type profile element in base language.
schedulerFailInterval	DES	Specifies the amount of time, in hours, the scheduler should wait before assigning a FAILED status to a mail job. The default is 24 hours. If a job is likely to take longer than 24 hours to dedup, this parameter should be added to the DES.config file with a longer duration.
schedulerServiceNumberOfJobs	DES	Specifies the number of jobs that can be run per scheduler wake-up.
schedulingTimeoutMins	DES	Specifies in minutes the time the scheduler recovers the timed out event and re-sends for processing. The maximum value is 30 mins and the minimum is 5 mins. If any event is being scheduled, that is, the state is SCHG (scheduling) for more than the set value, the scheduler recovers this event and re-sends for processing.
signatureAlgorithmKey	DES/Mailcaster	Specifies the encryption algorithm key used for the magic number. The key must be between 15 and 2^63 digits. If the key is not set, or is set incorrectly, a default value is used.
signatureLength	DES	Specifies the length of the signature in bits, from 0 to 48 (0 = no signature). The default length is *48.*
smallAudienceThreshold	DES	Specifies a threshold number of contacts in an audience. Below this number, PeopleSoft OLM uses a small Mailcaster to send email. The default is *100.*

Parameter Value	Components	Description
smallAudienceThreshold	Mailcaster	Specifies the threshold for the Mailcaster job priority. If the maxJobSize is larger than the smallAudienceThreshold, the Mailcaster will work on large jobs as its first priority. If the maxJobSize is less than or equal to the smallAudienceThreshold, the Mailcaster priority will be small jobs.
smallJobOnly	Mailcaster	Specifies whether the Mailcaster will only try to process small jobs (jobs below the threshold set by the smallAudienceThreshold parameter). If set to *True*, the Mailcaster will only process small jobs. This parameter is ignored if the maxJobSize parameter is greater than or equal to the smallAudienceThreshold parameter.
smtpServerNames	DES/Mailcaster	Specifies a semicolon-separated list of SMTP mail servers that are used by the PeopleSoft OLM server and the Mailcaster and contains the following format: `hostName[:portNumber][:threads=n][;...]` The normal SMTP port number is used if `portNumber` is not provided. `threadCount` is used only by the Mailcaster to determine how many internal threads will be used to send mail to smtp server. Examples: • `mail1.pscrm.com` Uses one mail server on mail1.pscrm.com • `mail1.pscrm.com;mail2.pscrm.com` Uses two mail servers, one on mail1.pscrm.com and the other on mail2.pscrm.com • `mail1.pscrm.com:1025;mail2.pscrm.com:1025` Uses two mail servers on port 1025, one on mail1.pscrm.com and the other on mail2.pscrm.com • `mail1.pscrm.com:threads=5` Uses five connections to mail1.pscrm.com. • `mail1.pscrm.com:25:threads=5;mail2.pscrm.com:25:threads=3` Uses five connections to mail1.pscrm.com on port 25 and three connections to mail2.pscrm.com on port 25.

Parameter Value	**Components**	**Description**
smtpThreadPollingInterval	Mailcaster	Specifies in minutes how long the Mailcaster threads wait before reconnecting to the SMTP server after being disconnected. The default is *10* minutes.
threads	Mailcaster	Specifies the number of send mail threads.
transactionPoolDelayInMinutes	DES/Mailcaster	Specifies how often the DES checks the thread pool for stale database connections (value in minutes). The default is 5; allowable values are 1 through 60.
transactionPoolMaxSize	DES/Mailcaster	Specifies the maximum number of database connections to be pooled. The number of connections may exceed this value, but those connections will not be pooled. The default is *20*; allowable values are 0 through 200. Setting this value to 0 means unlimited pool size.
transactionPoolMinSize	DES/Mailcaster	Specifies the initial database connection pool size. This value must be less than connectionPoolMaxSize. The default is *1*; allowable values are 0 through 199.
transactionPoolStaleInMinutes	DES/Mailcaster	Specifies the amount of time idle connections should remain in the pool (value in minutes). The default is *20*; allowable values are 0 through 1440 (24 hours).
trackBulkEmailDetail	MCR	Boolean flag to indicate whether Broadcast Email Service will track email transaction detail. The default value is false.
trackSingleEmailDetail	MCR	Boolean flag to indicate whether Single Email Service will track email transaction detail. The default value is false.
trimSpaces	DES	Allows the leading and trailing blanks to be stripped from text fields. The parameter applies to all text fields—either all or none are stripped. Valid values are *true* and *false*; the default value is *true.*
uploadInMemorySize	DES	Specifies the location of temporary storage for uploaded files.
uploadTempStorage	DES	Sets the size threshold beyond which upload files are written to the temporary disk storage location.
useAutoUndoOracle	DES/Mailcaster	Boolean flag to indicate whether the Oracle database is in automatic undo mode or not. The default value is *false.*

Parameter Value	Components	Description
useJoltRetry	DES	Tells netSession API to use Jolt retry. The default value is *false*. We recommend that you do not modify this value.
useSingleSignOn	DES	Boolean flag to indicate whether the Single Sign-On is enabled on DES. The default value is false.
HAS_FIREWALL	Mailcaster	If a firewall is in use between the DES server and the Mailcasters, two parameters can be used to force the mailcaster's RMI server object to listen on a specific port. This parameter must be set to *true* to add into the MCR.config file.
FIREWALL_PORT	Mailcaster	If a firewall is in use between the DES server and the Mailcasters, two parameters can be used to force the mailcaster's RMI server object to listen on a specific port. This parameter must be set to add into the MCR.config file.

This table describes the PeopleSoft OLM parameters and includes parameters for Watchdog:

Parameter Value	Components	Description
daysInThePast	Watchdog	The period of time Watchdog should monitor failed or stopped jobs and events
debug	Watchdog	Enable watchdog specific debugging. Values are *YES* or *NO*.
defaultHostName	Watchdog	The name of the machine Watchdog is running on.
defaultRecipient	Watchdog	Recipient to use when testing mail server.
defaultSender	Watchdog	The Sender to user on Watchdog mail reports.
demoCampaignMagicNumber	Watchdog	The magic number of the PeopleSoft Online Marketing Dialog to use as test that the DES is running properly. This should include the "p=" along with the magic number. A good demo campaign contains a landing page and a final page.
domainName	Watchdog	The domain name of the machine that is running Watchdog. For example, abc.com.
expectedResponseAfterGet	Watchdog	A string for Watchdog to look for in the server's response to a get. This would be part of the landing page.

Parameter Value	Components	Description
expectedResponseAfterPost	Watchdog	A string for Watchdog to look for in the server's response to a post. This would be the final page or a response to the submission of the landing page.
iAmAliveInterval	Watchdog	Time between *I am alive* messages.
iAmAliveMailList	Watchdog	A semicolon-separated list of email addresses to send *I am Alive* messages to. The *I am alive* message is to track that Watchdog is still running, even if no error reports are being sent.
iAmAliveSubject	Watchdog	The subject line to use for *I am Alive* messages.
instanceId	Watchdog	Specifies the instance ID of this Watchdog, a numeric value. No default value and does not allow null.
interval	Watchdog	Specifies the number of minutes that Watchdog sleeps between running system check. The default is *30 minutes.*
logFileMaximumSize	Watchdog	Specifies the maximum size of a log file before rolling over. Values can end in *K* for kilobytes or *M* for megabytes.
loops	Watchdog	Specifies the number of times that Watchdog will run loop. A *0* (zero) means indefinitely. The default is *0.*
machinesToPing	Watchdog	Specifies a colon (:) delimited list of machines to ping. All required servers (such as database servers, mail servers, and so on) should be included in the list.
mailJobLastModifiedHours	Watchdog	Specifies the maximum duration a mailcaster should take before updating the queued/sent counts (updated roughly every 50 mails). Hours, Minutes and Seconds are added up.
mailJobLastModifiedMinutes	Watchdog	Specifies the maximum duration a mailcaster should take before updating the queued/sent counts (updated roughly every 50 mails). Hours, Minutes and Seconds are added up.
mailJobLastModifiedSeconds	Watchdog	Specifies the maximum duration a mailcaster should take before updating the queued/sent counts (updated roughly every 50 mails). Hours, Minutes and Seconds are added up.
mailMax	Watchdog	Specifies the maximum number of attempts to send a report before giving up. The default is *5.*

Parameter Value	**Components**	**Description**
mailSendOutRate	Watchdog	Specifies the mailcaster send rate in mails per minute. If a mailcaster falls below this threshold, a warning is given.
mailSendOutRateCheckInterval	Watchdog	Specifies the interval in minutes for running the mailSendOutRate. This value must be an even multiple of the interval parameter. For example, if *interval=30,* then this value must be 30, 60, 90, and so on.
maxMemorySize	Watchdog	Specifies the maximum memory setting for the DES server (that is, the –Mx Java command line argument used). Values can end in *G* for gigabytes, *M* for megabytes, *K* for kilobytes, or nothing, in which case bytes are assumed (for example, 64M).
maxTargetListDedupTime	Watchdog	Maximum time in minutes for a dedup to run. This value must be an even multiple of the "interval" parameter. For example, if interval=30, then this needs to be 30, 60, 90, and so on.
memoryAlertPercentage	Watchdog	The percentage of max memory used before sending a warning. For example, if set to "50" and the maxMemorySize were 64M, then memory use over 32 megabytes would register as a failure.
numberOfBackUps	Watchdog	Specifies the number of backup log files.
numberOfObservers	Watchdog	Specifies the number of monitor threads for Watchdog. Always set to *1*.
ping	Watchdog	Enables a ping test in Watchdog. The ping validation tells you if a host is alive. Values are *YES* or *NO.* The default is *YES.*
pingCommand	Watchdog	Specifies the ping command for the system. Use the full path for this command and do not assume the use of the "PATH" variable.
pingCommandPostHost	Watchdog	Specifies the parameters for the ping command for this Watchdog system (default value is empty). To set Watchdog to test using "/usr/bin/ping machine_name-a", make the following settings: pingCommandPreHostto '/usr/bin/ping' and pingCommandPostHost '-a'
pingMax	Watchdog	Specifies the number of times that Watchdog will attempt to ping a server before giving up. The default is *20.*

Parameter Value	**Components**	**Description**
pingOkString	Watchdog	Specifies the beginning text of a successful response from the ping command. The default *Reply from* is used.
pingTimeoutCmdPosition	Watchdog	Specifies the relative position of the ping timeout to the host name. Values are *front* or *rear.* On Win/NT, use *front* for "ping –w 30 hostname" and on UNIX use *rear* for "ping hostname 30".
pingTimeoutCommand	Watchdog	Specifies the argument to pass to ping command to specify a timeout. On Win/NT, this should be "–w" to make the used ping command "ping –w 30 hostname". On UNIX, do not set this value.
pingTimeoutValue	Watchdog	Specifies the number of milliseconds ping will wait for a response (timeout done by ping command). The default is *30 milliseconds.*
pingWait	Watchdog	Specifies the number of milliseconds between consecutive ping commands. The default is *15000 milliseconds.*
qkLookPort	Watchdog	Specifies the port number that Watchdog will use for the quick status report. The default is *6700.* To get the report, open a connection from a browser to the URL `http://<host>:<qkLookPort>` (for example, `http://foo.abc.com:6700`). This will return a copy of the last report sent and will also wake the watchdog, if it was sleeping, to run the validation again.
queryToSubmit	Watchdog	Specifies a URL encoded query that watchdog will send to the web server. This would include form fields from the demo dialog's landing page. For example: "First$Name=foo&Last$Name=bar&johnDrake=xxx"
queuedEventMinusDays	Watchdog	Specifies the maximum duration a mail job should be in a queued state. The Days, Hours and Minutes are added together.
queuedEventMinusHours	Watchdog	Specify the maximum duration a mail job should be in a queued state. The Days, Hours and Minutes are added together.

Parameter Value	Components	Description
queuedEventMinusMinutes	Watchdog	Specifies the maximum duration a mail job should be in a queued state. The Days, Hours and Minutes are added together.
queuedMailcasterMinusDays	Watchdog	Specifies the maximum duration a mail job should be in a queued state. The Days, Hours and Minutes are added up.
queuedMailcasterMinusHours	Watchdog	Specifies the maximum duration a mail job should be in a queued state. The Days, Hours and Minutes are added up.
queuedMailcasterMinusMinutes	Watchdog	Specifies the maximum duration a mail job should be in a queued state. The Days, Hours and Minutes are added up.
returnPath	Watchdog	Specifies the return path for the Watchdog reports. This return path should be a valid mailbox, as bounced mails will come to this address.
rmi	Watchdog	Specifies if Watchdog should use RMI to check mailcaster process status.
rmiBasedCheck	Watchdog	Specifies whether to check the Bulk Mailer status using rmi. The value is *True* or *False.* Default values is *False.*
rmiPort	Watchdog	Specifies the port to use for RMI connections to the mailcasters. The default is *1099.*
runningEventMinusDays	Watchdog	Specifies the maximum time the scheduler should take to update a campaign event state. The Days, Hours and Minutes are added together.
runningEventMinusHours	Watchdog	Specifies the maximum time the scheduler should take to update a campaign event state. The Days, Hours and Minutes are added together.
runningEventMinusMinutes	Watchdog	Specifies the maximum time the scheduler should take to update a campaign event state. The Days, Hours and Minutes are added together.
sentOverQueuedRatio	Watchdog	Checks for the number of mails sent compared with the mails queued. This is used like "SentMessages < sentOverQueuedRatio * QueuedMessages". Due to bad email addresses, the number of mails sent should always be lower than that queued. However, a very high discrepancy may be a warning of poor data integrity or of failing mail servers.

Parameter Value	Components	Description
service	Watchdog	Writes debug information to a log file or the screen. Values are *YES* to write to a log file, or *NO* to write to the screen.
showMemoryUsageInErrorMsg	Watchdog	Shows memory use in the Watchdog report. Values are *YES* or *NO*. The default is *NO*. While more informative, this causes the Watchdog reports to be sent out more often, as reports are sent when the report contents change. When showing the actual memory in use, they will most likely change with each run.
socketTimeOut	Watchdog	Specifies the number of seconds before Watchdog stops waiting for a response on a socket. Timeout of *0* will never cause a connection to timeout. The default is *60 seconds.*
timeDifference	Watchdog	Specifies in milliseconds the waiting time for Watchdog between the launching of 2 series of tests. The default is *1000 milliseconds.*

Task A-3: Reviewing the PeopleSoft OLM Component Port List

Many communications exist between PeopleSoft OLM components. This table provides more detail:

Communication Direction	Port For:	DES Configuration Parameter	Value	Port Default Value
DES to PS Application Server	JOLT	psAppServerURL	//<appserv host>: <jolt port>	none
DES to PIA	PIA HTTP	psPIAServerURL	http:// <CRM PIA web server:port>	none
DES and PIA to FTP Server	FTP Site	PeopleTools->Administration->URLs ->URL Identifier: RY_ATTACHMENTS	ftp://[user ID:pwd@]<host name>[:port]/[path name]	21
PIA to DES	DES HTTP and HTTPS	URL for IB node PSFT_OLM	http://<des webserver>:port/DCS/DlgBroker	none
End User to DES		defaultURLBase	http://<des webserver>:port/DCS/mcp?p=...	none
DES Clustering	loadbalancer	jmsProviderUrl	t3://<loadbalancer ip : loadbalancer port>	none

Communication Direction	Port For:	DES Configuration Parameter	Value	Port Default Value
		directURLBase	http://<des webserver: not loadbalancer port>	none
DES to Mail Service or Process Scheduler to MCR, WDG and ERP	RMI	rmiPort	[number]	1099
DES to Mail Service or Process Scheduler	RMI	HAS_FIREWALL	true/false	false
		FIREWALL_PORT	[number]	none
DES, MCR, WDG and ERP to Database Server	Database	dbServerURL	MSSQL:jdbc:sqlserver://serverName:port;DatabaseName=instance;sql70=true;charset=Cp1252 ORACLE: jdbc:oracle:thin:@host:port:instanceDB2LUW: jdbc:db2://host:port/instance	MSSQL:1433
Mail Service to SMTP	SMTP	smtpServerNames	<SMTP hostName>[:portNumber]	25
	POP account			110
WDG	WDG	qkLookPort	http://<wdg_host>[:qkLookPort]	6700

Appendix B

Getting Started with PeopleSoft CRM for Higher Education

To fully benefit from the PeopleSoft CRM for Higher Education functionality, Oracle recommends that you integrate PeopleSoft CRM 9.2 with PeopleSoft Campus Solutions 9.0 Feature Pack 2 or higher.

The following lists the features that PeopleSoft CRM 9.2 integrates with PeopleSoft Campus Solutions 8.9 and 9.0:

- Limited Prospect Data is pushed from PeopleSoft Campus Solutions to PeopleSoft CRM.
- Full Sync only for a limited set of PeopleSoft Campus Solutions admissions data.
- Both full and incremental PersonBasic Sync.
- Search/Match duplicate prevention with PersonBasic Sync.
- 360 degree view with PeopleSoft CRM transactions only
- Full functionality of the PeopleSoft CRM System with respect to contact management, mass communications, campaign and event.
- Audience building using PeopleSoft PeopleTools Query Access Services provided that both PeopleSoft CRM and PeopleSoft Campus Solutions are running on PeopleTools 8.5 or higher.

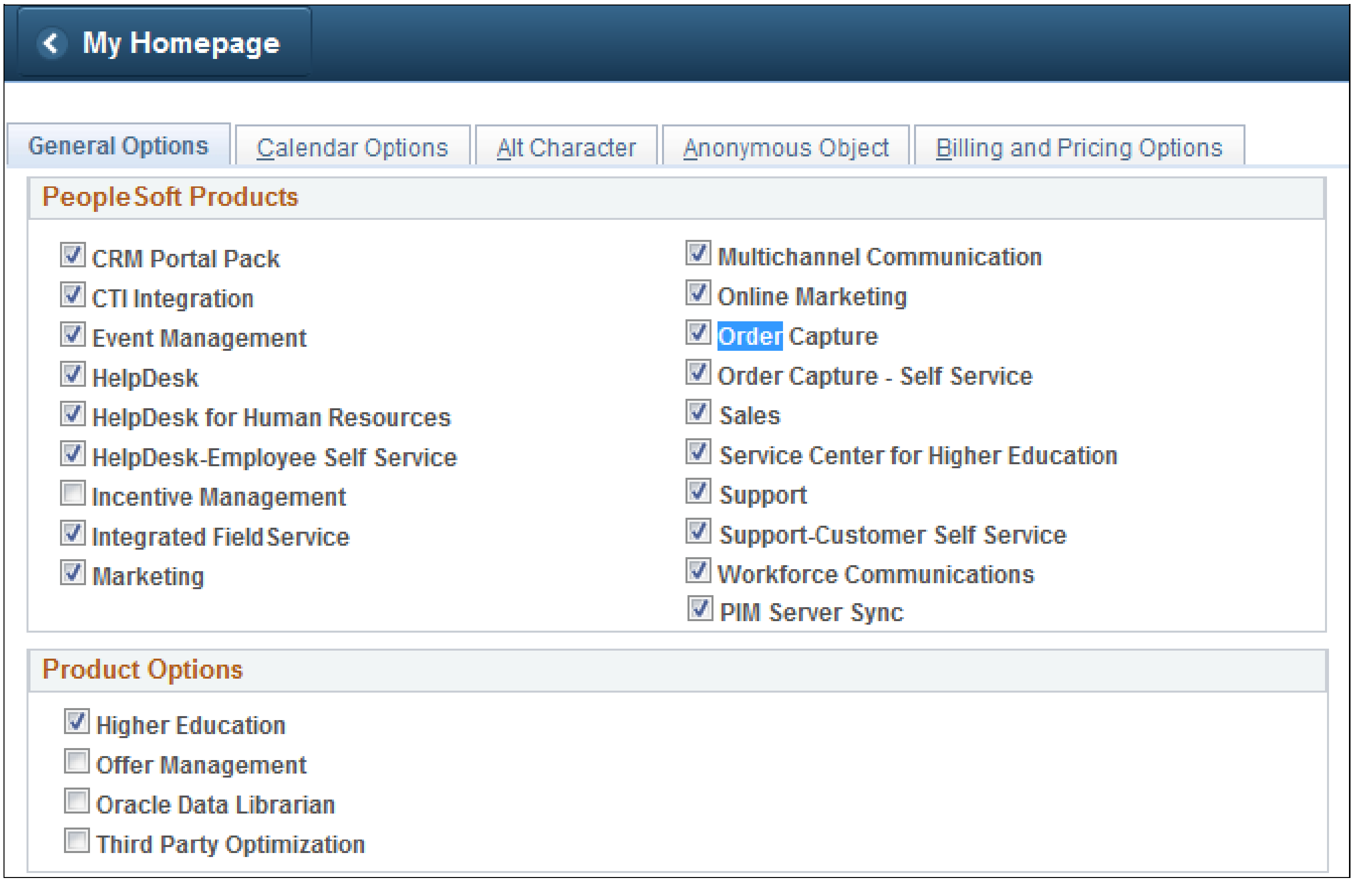
The following information details the features that the PeopleSoft CRM 9.2 integration with PeopleSoft Campus Solutions 9.0 Feature Pack 2 provides over the PeopleSoft CRM 9.2 integration with earlier versions of PeopleSoft Campus Solutions.

The following lists the features that PeopleSoft CRM 9.2 integrates with PeopleSoft Campus Solutions Feature Pack 2 (or higher):

- Control table loading (including Academic Structure, Test IDs, and Test components) synced over to PeopleSoft CRM.
- Security constructs (such as Test ID by User, Institution, Career, Program and Plan security by User, etc) synced over from PeopleSoft Campus Solutions to PeopleSoft CRM so that security in CRM is consistent with Campus Solutions.
- New Prospective Student Import feature allowing fast bulk loading of Suspect and Prospect data into PeopleSoft CRM from PeopleSoft Campus Solutions, Campus Solutions Test.
- Constituent 360 degree overall view of Student combining PeopleSoft CRM and PeopleSoft Campus Solutions data.
- Action links to select PeopleSoft Campus Solutions pages from Service Center for Higher Education and 360 degree view.
- Real time integration of Prospect, Applicant, and Student data from PeopleSoft Campus Solutions to PeopleSoft CRM, using incremental syncs.
- Full Constituent Lifecycle support from Suspect and Prospect through to Applicant, Student, and Alumnus.

When installing the PeopleSoft CRM products, deselect the Higher Education version to enable all the Higher Education specific display templates.

The following is an example of the General Options page that shows the Product Options for Higher Education:



General Options for Higher Education