
PeopleSoft PeopleTools 8.62 Deployment Packages Installation

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PeopleSoft PeopleTools 8.62 Deployment Packages Installation

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About this Documentation

This preface discusses:

- Understanding This Documentation
- Audience
- Typographical Conventions
- Products
- Related Information
- Comments and Suggestions

Understanding This Documentation

This documentation is designed to guide you through the deployment of the Oracle's PeopleSoft Deployment Packages. It is not a substitute for the documentation provided for PeopleSoft PeopleTools or PeopleSoft applications.

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 environment, including operating system, hardware, and RDBMS, and have the necessary skills, permissions, and access 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, Linux or UNIX

Oracle recommends that you complete training, particularly a PeopleSoft administration and installation course, before performing an installation.

The PeopleSoft Training Center includes various choices for training, including instructor-led training offered by Oracle partners.

See PeopleSoft Information Portal, https://docs.oracle.com/cd/E52319_01/infoportal/training.html.

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.
<i>Italics</i>	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 <i>O</i>. Italics are also used to indicate user-supplied information. For example, the term <i>domain</i> is used as a placeholder for the actual domain name in the user's environment. When two such placeholders are used together, they may be set apart with angle brackets. For example, the path <code><PS_CFG_HOME>/appserv/<domain></code> includes two placeholders that require user-supplied information.
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 <i>See</i> 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 <i>See Also</i> refer you to additional documentation that has more information regarding the subject.
⇒ (line-continuation arrow)	A line-continuation arrow inserted at the end of a line of code indicates that the line of code has been wrapped at the page margin. The code should be viewed or entered as a continuous line of code, without the line-continuation arrow.
" " (quotation marks)	Indicate chapter titles in cross-references and words that are used differently from their intended meaning.

Convention	Description
Note. Note text.	Text that begins with <i>Note</i> , 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 <i>Important!</i> is crucial and includes information about what you need to do for the system to function properly.
Warning! Warning text.	A note that begins with <i>Warning!</i> 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® 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 Enterprise Learning Management
- Oracle's PeopleSoft Enterprise Performance Management
- Oracle's PeopleSoft Financial Management
- Oracle's PeopleSoft Human Capital Management
- Oracle's PeopleSoft Interaction Hub
- Oracle's PeopleSoft Pay/Bill Management
- Oracle's PeopleSoft PeopleTools
- Oracle's PeopleSoft Staffing Front Office
- Oracle's PeopleSoft Supply Chain Management

See the Products area on the Oracle web site, <https://www.oracle.com/products/oracle-a-z.html>.

Related Information

Oracle provides reference information about PeopleSoft PeopleTools and your particular PeopleSoft Application. You can access documentation for recent releases of PeopleSoft PeopleTools and PeopleSoft Applications at the PeopleSoft page in the Oracle Help Center. You can also find documentation by searching for the product name on My Oracle Support.

- PeopleSoft on the Oracle Help Center

You can access PeopleSoft Online Help, or download the PeopleBooks PDFs, from the PeopleSoft page in the Oracle Help Center. Select PeopleTools or your PeopleSoft application from the navigation list on the left. On the page for the selected product application, select the PeopleTools release or image number at the top and go to the Online Help and PeopleBooks section.

See Oracle Help Center, <https://docs.oracle.com/en/applications/peoplesoft/index.html>.

- *PeopleTools: Getting Started with PeopleTools* for your release.

This documentation provides a high-level introduction to PeopleTools technology and usage.

See PeopleTools on the Oracle Help Center,
<https://docs.oracle.com/en/applications/peoplesoft/peopletools/index.html>.

- PeopleSoft Application Fundamentals for your PeopleSoft Application and release

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

See Oracle Help Center, <https://docs.oracle.com/en/applications/peoplesoft/index.html>.

- Installation guides

You can find the installation guides for PeopleSoft PeopleTools and your PeopleSoft application on the appropriate Oracle Help Center page. Select your release or update image at the top and then go to the Install and Upgrade section.

- My Oracle Support

This support platform requires a user account to log in. Contact your PeopleSoft representative for information.

See My Oracle Support, <https://support.oracle.com>.

You can find several pages which compile documentation, links, and known issues for various PeopleSoft product areas. For a list of many of the PeopleSoft pages, select the PeopleSoft tab on the Oracle Information Center Catalog.

See Oracle Information Center Catalog, My Oracle Support, Doc ID 50.2.

To install additional component software products for use with PeopleSoft products, including those products that are packaged with your PeopleSoft products as well as products from other vendors, you should refer to the documentation provided with those products, as well as this documentation. For those additional components that are offered by Oracle, such as Oracle Middleware products, see the documentation on the Oracle Help Center.

See Oracle Help Center, <https://docs.oracle.com/en/>.

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 PeopleSoft documentation 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

Preparing for the Installation

This chapter discusses:

- Reviewing the PeopleSoft DPKs Uses and Contents
- Understanding the PeopleSoft PeopleTools Deployment Packages
- Reviewing Hardware Requirements
- Reviewing Software Requirements
- Cataloging the Database for Db2 z/OS
- Reviewing the System Parameters on Linux, AIX, or Solaris
- Reviewing the Oracle Central Inventory File Location and Permissions on Linux, AIX, or Solaris

Reviewing the PeopleSoft DPKs Uses and Contents

The PeopleSoft Deployment Packages (DPKs) are the delivery method for many PeopleSoft installation and maintenance products. Here is a summary of the available DPKs.

DPKs	Description	References
PeopleTools Patches	Update the PeopleSoft PeopleTools software or install mid-tier components for an existing database. Comprised of four zip files. Available for Linux, IBM AIX, Oracle Solaris, and Microsoft Windows.	PeopleTools 8.62 Deployment Packages Installation (this documentation), PeopleSoft PeopleTools on Oracle Help Center. PeopleSoft PeopleTools Patches Home Page, My Oracle Support, Doc ID 2062712.2.

DPKs	Description	References
PeopleSoft Update Images (PIs)	Apply maintenance or perform a fresh installation. Comprised of eleven or twelve zip files. Available for Linux, Microsoft Windows, and VirtualBox.	PeopleSoft Deployment Packages for Update Images Installation, PeopleSoft application pages (HCM, FSCM, CS, CRM, EPM, IH) on Oracle Help Center. PeopleSoft Update Manager (PUM) Home Page, My Oracle Support, Doc ID 1641843.2. PeopleSoft 9.2 Application Installation, PeopleSoft application pages (HCM, FSCM, CS, CRM, EPM, IH) on Oracle Help Center. PeopleSoft 8.62 Home Page, My Oracle Support, Doc ID 3076202.2.
OpenSearch, OpenSearch Dashboards, and Logstash DPK	Install software used for the PeopleSoft Search Framework, as well as monitoring and analytics. One zip file. Available for Linux and Microsoft Windows.	PeopleSoft Deployment Packages Installation for Search Components, PeopleSoft PeopleTools on Oracle Help Center. PeopleSoft Search and Insights Home Page, My Oracle Support, Doc ID 2205540.2.
Infrastructure (PT-INFRA) DPK	Install up-to-date critical patch updates (CPUs) for Oracle WebLogic, Oracle Tuxedo, Java, and Oracle Database Client, for new or existing installations. Comprised of two zip files. Available for Linux, IBM AIX, Oracle Solaris, and Microsoft Windows.	PT-INFRA Deployment Package Installation, PeopleSoft PeopleTools on Oracle Help Center
Db2 z/OS DPK	Install the utilities required to set up a batch environment for Db z/OS on Microsoft Windows. One zip file. Available for Microsoft Windows.	PeopleSoft Deployment Packages for DB z/OS Batch Setup, PeopleSoft PeopleTools on Oracle Help Center

See Oracle's PeopleSoft Virtualization Products, My Oracle Support, Doc ID 1538142.1

Understanding the PeopleSoft PeopleTools Deployment Packages

The PeopleSoft PeopleTools deployment packages (DPKs) enable you to install the PeopleSoft PeopleTools server and client software, application server, Process Scheduler, and PeopleSoft Pure Internet Architecture (PIA) domains, as well as required supporting software, for use with an existing PeopleSoft database. For details about the PeopleTools DPKs, see the following sections in this documentation:

For information about this topic:	See this section:
How to obtain the DPKs from My Oracle Support or Oracle Software Delivery Cloud	"Deploying the PeopleSoft PeopleTools Deployment Packages," Obtaining the PeopleSoft PeopleTools DPKs
Using the DPKs to install PeopleSoft application server, Process Scheduler, and PIA domains (referred to as a mid-tier environment)	"Deploying the PeopleSoft PeopleTools Deployment Packages," Running the DPK Setup Script for Mid-Tier Deployment
Using the DPKs to install only the installation directory for the PeopleSoft PeopleTools server software (<i>PS_HOME</i>)	"Deploying the PeopleSoft PeopleTools Deployment Packages," Running the DPK Setup Script to Install PS_HOME Only
Using the DPK to install PeopleTools Client software	"Deploying the PeopleTools Client DPK," Deploying the PeopleTools Client DPK
How to customize the DPK installation for your environment	"Completing the DPK Initialization with Customizations"
Install updated supporting software, such as Oracle WebLogic and others, using the PT-INFRA DPK.	"Deploying the PeopleSoft PeopleTools Deployment Packages," Using the PT-INFRA DPK for Additional Component Software
Methods for using the DPKs for patching a PeopleSoft PeopleTools 8.62 release	"Applying PeopleTools Patches Using DPKs"
How to perform a PeopleTools-only upgrade to PeopleSoft PeopleTools 8.62.xx, using the PeopleSoft PeopleTools DPKs.	"Performing a PeopleTools-Only Upgrade Using the PeopleSoft PeopleTools DPKs"
Using the DPKs for other selective installations, such as an application server domain alone.	"Deploying the PeopleSoft PeopleTools Deployment Packages," Reviewing the DPK Setup Script Options
Using the DPKs to deploy PeopleSoft environments in containers.	"Deploying PeopleSoft DPKs in Containers" "Deploying PeopleSoft Containers on Oracle Kubernetes Engine"
The terminology used with DPK deployment, and the contents of the DPKs	"Learning About the PeopleSoft Deployment Process," Reviewing the Deployment Packages
Descriptions of the available DPKs.	"Learning About the PeopleSoft Deployment Process," Defining the Types of Deployment Packages

For information about this topic:	See this section:
The PeopleSoft components installed by the DPK deployment	"Learning About the PeopleSoft Deployment Process," Understanding PeopleSoft Components
The Puppet open-source software used in DPK development	"Learning About the PeopleSoft Deployment Process," Understanding Puppet and the PeopleSoft Puppet Modules

Task 1-1: Reviewing Hardware Requirements

This section discusses:

- Reviewing Hardware Requirements for Microsoft Windows
- Reviewing Hardware Requirements on AIX, Linux, or Solaris

Task 1-1-1: Reviewing Hardware Requirements for Microsoft Windows

You can install the PeopleSoft Application Image deployment packages (DPKs) or PeopleSoft PeopleTools DPKs directly on a system running a Microsoft Windows operating system. The PeopleSoft Application Images and PeopleSoft PeopleTools DPKs are certified to run on those Microsoft Windows operating systems that are certified for the current PeopleSoft PeopleTools release. The Microsoft Windows system can be a physical computer (sometimes called "bare-metal") or a virtual machine.

Oracle strongly recommends that you dedicate a Microsoft Windows machine for the PeopleTools client. This should be a machine that is not used for other PeopleSoft purposes.

See "Deploying the PeopleTools Client DPK," Deploying the PeopleTools Client DPK in Standalone Mode, for information on installing the PeopleTools client utilities.

- *Host computer:* The PeopleSoft DPKs can be deployed directly on any supported Microsoft Windows host, bare-metal or virtual.
If you deploy on a virtual host computer, you are responsible for provisioning the virtual machine before beginning the deployment.
- *Host operating system:* The host operating system (OS) must be a 64-bit platform that is certified by Oracle for PeopleSoft systems.

Note. My Oracle Support Certification notes include information about the PeopleSoft PeopleTools components that are certified for each operating system. Some OSs are certified only for browsers and clients. If you want to deploy a full PeopleSoft environment, verify that the OS you want to use is certified for server installation.

See My Oracle Support, Certifications.

See PeopleSoft PeopleTools Certifications, My Oracle Support, Doc ID 747587.1, for help searching PeopleSoft Certifications.

- *RAM (Memory):* A minimum of 8 GB RAM is required to run a PeopleSoft environment.
- *CPU Capabilities for the PeopleTools Client:* To run Change Assistant on a Microsoft Windows server requires a virtual machine with a 4-core CPU or a physical machine with a 2-core CPU.
- *Disk space:* The disk space requirements vary depending upon the type of environment you set up.

See "Preparing to Deploy," Understanding PeopleSoft Components.

- 25–35 GB free disk space for the downloaded DPK zip files

You may remove these files after you have successfully initialized your PeopleSoft environment.

- 150 GB free disk space is required to deploy and set up a full tier PeopleSoft environment.
- 25 GB free disk space is required to deploy and set up a mid-tier PeopleSoft environment.

Note. You may remove some of the downloaded DPK zip files after you have successfully initialized your PeopleSoft environment. This documentation uses *DPK_INSTALL* to refer to the directory holding the downloaded DPK zip files. It is important that you retain the *DPK_INSTALL*\setup directory because it holds all the scripts required when you use the DPK setup script commands to deploy a PeopleSoft environment and when you remove a deployed PeopleSoft environment using the DPK setup script with the cleanup option.

See Also

Tech Update - Main Page, My Oracle Support, Doc ID 764222.1

Task 1-1-2: Reviewing Hardware Requirements on AIX, Linux, or Solaris

You can install the PeopleSoft Application Image deployment packages (DPKs) directly on a system running an Oracle Linux operating system. You can install the PeopleSoft PeopleTools deployment packages (DPKs) directly on a system running an IBM AIX, Linux, or Solaris operating system. The PeopleSoft Application Images and PeopleSoft PeopleTools DPKs are certified to run on those operating systems that are certified for the current PeopleSoft PeopleTools release. The AIX, Linux, or Solaris system can be a physical computer (sometimes called "bare-metal") or a virtual machine.

- *Host computer:* The PeopleSoft DPKs can be deployed on any supported AIX, Linux, or Solaris host, either a physical computer or virtual machine. The PeopleSoft DPKs can also be deployed on Oracle Exalogic Elastic Cloud.

If you deploy on a virtual host computer, you are responsible for provisioning the virtual machine before beginning the deployment.

- *Host operating system:* The host operating system must be a 64-bit platform that is certified by Oracle for PeopleSoft systems.

For full-tier installations on Linux, the minimum version is Oracle Linux 8.

See My Oracle Support, Certifications.

See PeopleSoft PeopleTools Certifications, My Oracle Support, Doc ID 747587.1, for help searching PeopleSoft Certifications.

- *RAM (Memory):* A minimum of 8 GB RAM is required to run a PeopleSoft environment.
- *Disk space:* The disk space requirements vary depending upon the type of environment you set up.

See "Preparing to Deploy," Understanding PeopleSoft Components.

- 25–35 GB free disk space for the downloaded DPK zip files

You may remove these files after you have successfully initialized your PeopleSoft environment.

- 150 GB free disk space is required to deploy and set up a full tier PeopleSoft environment.
- 25 GB free disk space is required to deploy and set up a mid-tier PeopleSoft environment.

Note. You may remove some of the downloaded DPK zip files after you have successfully initialized your PeopleSoft environment. This documentation uses *DPK_INSTALL* to refer to the directory holding the downloaded DPK zip files. It is important that you retain the *DPK_INSTALL\setup* directory because it holds all the scripts required when you use the DPK setup script commands to deploy a PeopleSoft environment and when you remove a deployed PeopleSoft environment using the DPK setup script with the cleanup option.

See Also

My Oracle Support, Certifications.

Tech Update - Main Page, My Oracle Support, Doc ID 764222.1

Task 1-2: Reviewing Software Requirements

This section discusses:

- Reviewing Software Requirements on Microsoft Windows
- Reviewing Software Requirements on Linux
- Reviewing Software Requirements on AIX
- Reviewing Software Requirements on Solaris
- Using the Correct PeopleTools DPKs

Task 1-2-1: Reviewing Software Requirements on Microsoft Windows

Here are the software requirements for using the PeopleSoft Deployment Packages on a Microsoft Windows machine:

- Administrative permission
- Read, write, and execute permission on the default temporary folder.

The deployment of a PeopleSoft environment by the DPKs installs required supporting software, such as Oracle WebLogic and Oracle Tuxedo. The DPK process to install this software uses the default temporary folders, as specified by the environment variable for the operating system. The user running the DPK setup script must have read/write/execute permission to these default temporary folders for successful DPK installation, or the deployment steps that install these components will fail.

- The DPK setup script can be run from any drive, regardless of the drive where the Windows operating system is installed.

If you run the DPK setup script from one drive and specify the installation location in another drive, it is a good idea to also specify where to save the installation log.

By default, the DPK setup script generates an installation log under the directory where the DPKs reside. If you want the log to be saved in a different location, use the DPK setup script `log_file` option. For example, if you stage the DPKs in the directory *DPK_INSTALL*, and use the same set of DPKs for different deployments to different installation locations, the log files for all the deployments will be generated in the same place, *DPK_INSTALL\setup*, and will overwrite each other. To avoid this, direct the log files for each deployment to different locations, such as the deployment directory. For example:

```
Run 1: psft-dpk-setup.bat --env_type midtier --log_file d:\psft_run1\logs
Run 2: psft-dpk-setup.bat --env_type midtier --log_file e:\psft_run2\logs
```


See "Deploying the PeopleSoft PeopleTools Deployment Packages," Reviewing the DPK setup Script Options.

- Web Browser

You need a version certified for the current PeopleSoft PeopleTools release for end-users.

See PeopleSoft Update Manager (PUM) Home Page, My Oracle Support, Doc ID 1641843.2.

See My Oracle Support, Certifications.

- Zip utility

You need a utility that is able to extract (unzip) the DPK zip files for your operating system.

- Verify that the PATHEXT environment variable includes the extension .bat.

This is a requirement for running Puppet. For example:

```
PATHEXT=.COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;.JSE;.WSF;.WSH;.MSC
```

- Check for the USERPROFILE environment variable.

If USERPROFILE is set, verify that there is full access to the location set by this environment variable.

- These Puppet components are included with the DPKs.

The DPK setup script installs open-source Puppet software that has been modified for the PeopleSoft installation. This modification allows the Puppet software to be installed in the location specified by the DPK setup script. You may see this referred to as the "Relocatable Puppet."

- Puppet Agent 8.3.1 (open source, and stand-alone architecture)
- Facter 4.5.1
- Hieria 5
- Ruby 3.2.4

- Python 3.12.3 is included with the DPKs.

- Microsoft Visual C++ Redistributable files

The current PeopleSoft PeopleTools release was developed using Microsoft Visual Studio 2022. PeopleSoft PeopleTools programs require Microsoft Visual C++ Redistributable for Visual Studio 2022 files to be present or the programs will not run. The required Visual C++ Redistributable for Visual Studio 2022 packages are installed by the DPK setup script. After you have completed the PeopleSoft installation, if necessary, you can install the files from *PS_HOME\setup\psvcrt*.

- Java JDK 21 is included with the DPKs.

JDK 21 is used by the application server, Process Scheduler, web server, and life-cycle management processes. Note that Java 21 includes only JDK, not JRE.

- Specifying PS_APP_HOME

The DPK setup script creates the installation location for the PeopleSoft application files, *PS_APP_HOME*, in a default location. If you want to use an existing *PS_APP_HOME*, or specify a non-default location, follow the instructions to perform the deployment using the DPK customizations.

See "Completing the DPK Initialization with Customizations," Preparing the Customization File for the PeopleSoft Homes.

- Specifying PS_CUST_HOME

If you wish to use a *PS_CUST_HOME* location to store your site's custom files, you must perform the deployment using the DPK customizations, and specify the *PS_CUST_HOME* location.

See "Completing the DPK Initialization with Customizations," Preparing the Customization File for the PeopleSoft Homes.

Task 1-2-2: Reviewing Software Requirements on Linux

Here are the software requirements for using the PeopleSoft Deployment Packages on a Linux machine:

- You must have root access to deploy the PeopleSoft DPKs.
See "Deploying the PeopleSoft PeopleTools Deployment Packages," Deploying as a Non-Root User on Linux, AIX, or Solaris.
- Read, write, and execute permission on the default temporary folder.
The deployment of a PeopleSoft environment by the DPKs installs required supporting software, such as Oracle WebLogic and Oracle Tuxedo. The DPK process to install this software uses the default temporary folders, as specified by the environment variable for the operating system. The user running the DPK setup script must have read, write, and execute permission to these default temporary folders for successful DPK installation, or the deployment steps that install these components will fail.
- Execute permission for /tmp.
Deployments carried out by the root user require the /tmp directory. If the /tmp directory is mounted, ensure that execute permissions for the directory are seen in /etc/fstab. If not, remount /tmp with exec permissions.
- Verify the umask value.
For a default deployment (that is, with no customizations) run by the root user, the DPK setup script uses the system umask value when it creates users (for example, psadm1, psadm2, and psadm3) and user home directories. Be sure that the umask value allows the DPK-created users the necessary access to the user home directories and other directories they need to use.
See Using the PeopleSoft Installation.
- If you are installing the PeopleSoft DPKs on a supported version of Oracle Linux with Unbreakable Enterprise Kernel (UEK), apply the latest UEK kernel from the Oracle YUM repository at <http://public-yum.oracle.com/index.html>.
- Zip utility
You need a utility that is able to extract (unzip) the DPK zip files for your operating system; for example, tar or unzip.
- Specifying PS_APP_HOME
The DPK setup script creates the installation location for the PeopleSoft application files, *PS_APP_HOME*, in a default location. If you want to use an existing *PS_APP_HOME*, or specify a non-default location, follow the instructions to perform the deployment using the DPK customizations.
See "Completing the DPK Initialization with Customizations," Preparing the Customization File for the PeopleSoft Homes.
- Specifying PS_CUST_HOME
If you wish to use a *PS_CUST_HOME* location to store your site's custom files, you must perform the deployment using the DPK customizations, and specify the *PS_CUST_HOME* location.
See "Completing the DPK Initialization with Customizations," Preparing the Customization File for the PeopleSoft Homes.
- These Puppet components are included with the DPKs.
The DPK setup script installs open-source Puppet software that has been modified for the PeopleSoft installation. This modification allows the Puppet software to be installed in the location specified by the DPK setup script. You may see this referred to as the "Relocatable Puppet."
 - Puppet Agent 8.3.1 (open source, and stand-alone architecture)
 - Facter 4.5.1

- Hiera 5
- Ruby 3.2.4
- Python 3.12.3 is included with the DPKs.
- Java JDK 21 is included with the DPKs.

JDK 21 is used by the application server, Process Scheduler, web server, and life-cycle management processes. Note that Java 21 includes only JDK, not JRE.

Task 1-2-3: Reviewing Software Requirements on AIX

Here are the software requirements for using the PeopleSoft Deployment Packages on an IBM AIX machine:

- You must have root access to deploy the PeopleSoft DPKs.
See "Deploying the PeopleSoft PeopleTools Deployment Packages," Deploying as a Non-Root User on Linux, AIX, or Solaris.
- Read, write, and execute permission on the default temporary folder.
The deployment of a PeopleSoft environment by the DPKs installs required supporting software, such as Oracle WebLogic and Oracle Tuxedo. The DPK process to install this software uses the default temporary folders, as specified by the environment variable for the operating system. The user running the DPK setup script must have read, write, and execute permission to these default temporary folders for successful DPK installation, or the deployment steps that install these components will fail.
- Verify the umask value.
For a default deployment (that is, with no customizations) run by the root user, the DPK setup script uses the system umask value when it creates users (for example, psadm1, psadm2, and psadm3) and user home directories. Be sure that the umask value allows the DPK-created users the necessary access to the user home directories and other directories they need to use.
See Using the PeopleSoft Installation.
- Utilities for extracting the DPK zip files
You need both the gunzip and unzip utilities for your operating system in order to extract the DPK zip files, and the PATH for the root user must include the gunzip and unzip locations.
- OpenSSL
Obtain the latest version of OpenSSL for your AIX operating system from your IBM support contact, and install it on the host.
- JDK 11
You must manually install JDK 11 from the IBM web site. The minimum supported version is IBM Semeru Certified Edition JDK 11.0.12.1 or later.
Ensure that the JDK 11 location has read and execute permissions (755).
To obtain 64-bit IBM JDK for IBM AIX:
 1. Go to the IBM JDK download and service site.
<https://www.ibm.com/support/pages/java-sdk>

Note. You need a user name and password for downloading IBM JDK. If you don't have the required credentials, contact IBM AIX support.

 2. Select Downloads.
 3. Select the link for IBM Semeru Runtime Certified Edition, Version 11.

4. Provide the required information to sign in.
5. Install the JDK on the AIX computer where you will install the PeopleSoft AIX DPK.
6. Make a note of the installation location.

For the AIX DPK installation, you must perform the deployment using the DPK customizations, and specify the AIX JDK installation location.

See "Completing the DPK Initialization With Customizations," Preparing the Customization File for JDK on AIX.

- IBM XL C++ Runtime 17.1.1 or later

Ensure that IBM XL C++ Runtime 17.1.1 or later is present on the system.

For example, use this command to check for the presence of IBM XL C++ Runtime 17.1.1 or later.

```
bash-4.2$ lslpp -l libc++.rte
```

You should see version 17.1.1 or later listed in the results; for example:

Fileset	Level	State	Description
Path: /usr/lib/objrepos			
libc++.rte	17.1.1.4	COMMITTED	IBM XL C++ Runtime for
AIX 7.1			and later

Also, ensure that a symlink is present that points to libc++.a from the xlc installed location. For example, use this command to verify the symlink:

```
bash-5.1$ ls -l /usr/lib/libc++.a
```

The result should indicate a symlink.

```
lrwxrwxrwx 1 bin bin 25 Feb 06 2024 /usr/lib/libc++.a -> /usr/lpp/xlc/C/lib/libc++.a
bash-5.1$
```

Note. The line-continuation arrow (=>) is part of this document and would not be seen in the results.

- Specifying PS_APP_HOME

The DPK setup script creates the installation location for the PeopleSoft application files, *PS_APP_HOME*, in a default location. If you want to use an existing *PS_APP_HOME*, or specify a non-default location, follow the instructions to perform the deployment using the DPK customizations.

See "Completing the DPK Initialization with Customizations," Preparing the Customization File for the PeopleSoft Homes.

- Specifying PS_CUST_HOME

If you wish to use a *PS_CUST_HOME* location to store your site's custom files, you must perform the deployment using the DPK customizations, and specify the *PS_CUST_HOME* location.

See "Completing the DPK Initialization with Customizations," Preparing the Customization File for the PeopleSoft Homes.

- These Puppet components are included with the DPKs.

The DPK setup script installs open-source Puppet software that has been modified for the PeopleSoft

installation. This modification allows the Puppet software to be installed in the location specified by the DPK setup script. You may see this referred to as the "Relocatable Puppet."

- Puppet Agent 8.3.1 (open source, and stand-alone architecture)
- Facter 4.5.1
- Hiera 5
- Ruby 3.2.4
- Python 3.12.3 is included with the DPKs.

Task 1-2-4: Reviewing Software Requirements on Solaris

Here are the software requirements for using the PeopleSoft Deployment Packages on Solaris:

- You must have root access to deploy the PeopleSoft DPKs.
See "Deploying the PeopleSoft PeopleTools Deployment Packages," Deploying as a Non-Root User on Linux, AIX, or Solaris.
- Read, write, and execute permission on the default temporary folder.
The deployment of a PeopleSoft environment by the DPKs installs required supporting software, such as Oracle WebLogic and Oracle Tuxedo. The DPK process to install this software uses the default temporary folders, as specified by the environment variable for the operating system. The user running the DPK setup script must have read, write, and execute permission to these default temporary folders for successful DPK installation, or the deployment steps that install these components will fail.
- Verify the umask value.
For a default deployment (that is, with no customizations) run by the root user, the DPK setup script uses the system umask value when it creates users (for example, psadm1, psadm2, and psadm3) and user home directories. Be sure that the umask value allows the DPK-created users the necessary access to the user home directories and other directories they need to use.
See Using the PeopleSoft Installation.
- Zip utility
You need a utility that is able to extract (unzip) the DPK zip files for your operating system; for example, tar or unzip.
- OpenSSL
Obtain the latest version of OpenSSL for your operating system and install it on the host.
- Specifying PS_APP_HOME
The DPK setup script creates the installation location for the PeopleSoft application files, *PS_APP_HOME*, in a default location. If you want to use an existing *PS_APP_HOME*, or specify a non-default location, follow the instructions to perform the deployment using the DPK customizations.
See "Completing the DPK Initialization with Customizations," Preparing the Customization File for the PeopleSoft Homes.
- Specifying PS_CUST_HOME
If you wish to use a *PS_CUST_HOME* location to store your site's custom files, you must perform the deployment using the DPK customizations, and specify the *PS_CUST_HOME* location.
See "Completing the DPK Initialization with Customizations," Preparing the Customization File for the PeopleSoft Homes.
- These Puppet components are included with the DPKs.

The DPK setup script installs open-source Puppet software that has been modified for the PeopleSoft installation. This modification allows the Puppet software to be installed in the location specified by the DPK setup script. You may see this referred to as the "Relocatable Puppet."

- Puppet Agent 8.3.1 (open source, and stand-alone architecture)
- Facter 4.5.1
- Hieria 5
- Ruby 3.2.4
- Python 3.12.3 is included with the DPKs.
- Java JDK 11 is included with the DPKs.

JDK 11 is used by the application server, Process Scheduler, web server, and life-cycle management processes. Note that Java 11 includes only JDK, not JRE.

Task 1-2-5: Using the Correct PeopleTools DPKs

The DPKs are based on a specific PeopleTools release and patch number. Ensure that the entire set of downloaded DPKs you use for deployment is on the same PeopleTools patch release. The DPK zip file names include the PeopleTools release and patch number. For example, the "8.62.05" in the zip file name PEOPLETOOLS-WIN-8.62.05_1of4.zip refers to release 8.62 and patch 5.

See "Deploying the PeopleSoft PeopleTools Deployment Packages," Obtaining the PeopleSoft PeopleTools DPKs.

It is necessary to use downloaded DPKs with the same PeopleTools release and patch. If you mix DPKs with different PeopleTools release and patch, there may be issues with environment deployment or cleanup of a deployed environment.

Task 1-3: Cataloging the Database for Db2 z/OS

For all installations on Db2 z/OS, you must catalog the database before mid-tier deployment using DPKs. To catalog the database, see the documentation for Db2 z/OS for information.

Task 1-4: Reviewing the System Parameters on Linux, AIX, or Solaris

This section discusses:

- Understanding the System Parameters on Linux, AIX, or Solaris
- Reviewing the sysctl Parameters
- Reviewing the ulimit Parameters

Understanding the System Parameters on Linux, AIX, or Solaris

The generated YAML file for UNIX operating systems includes settings for certain system parameters. When you run the DPK setup script on Linux, AIX, or Solaris, the script overwrites existing system-level parameters that are different from the values in *BASE_DIR*/dpk/puppet/production/data/psft_unix_system.yaml.

It is possible to perform a deployment and make certain changes to the way that the DPK deployment handles these system parameters. Be aware, however, that the values listed in the `psft_unix_system.yaml` file are the minimum requirements for the DPK deployment.

Deployments by the root user

If the root user performs the entire deployment and does not want the system-level parameters to be updated by the DPK setup script, perform a customized deployment as described in the following two sections, *Reviewing the sysctl Parameters* and *Reviewing the ulimit Parameters*.

Non-root deployments

When a deployment is performed by a non-root user, the root user must first run a prereq step. If the root user does not want the system parameters to be updated by the DPK setup script, the root user should run the prereq step *without* the `syscfg` option.

See "Deploying the PeopleSoft PeopleTools Deployment Packages," *Running the DPK Setup Prerequisite Step for Linux, AIX, or Solaris*.

Task 1-4-1: Reviewing the sysctl Parameters

If you do not want the DPK setup script to overwrite the sysctl parameters, you can perform one of these customized deployments:

- If the existing sysctl settings on your system meet the DPK requirements, you can change the value of the parameter `setup_syscfg` from true to false.

This change will prevent the DPK setup script from overwriting the parameters.

See "Completing the DPK Initialization with Customizations," *Preparing the Customization File to Change the setup_sysctl Parameter*.

- If you want to allow the DPK setup script to change the sysctl settings on your system, retain the parameter `setup_syscfg: true`, and specify values for the following sysctl parameters that are greater than those given in the generated `psft_unix_system.yaml` file.

```
sysctl:
  kernel.msgmnb:      65538
  kernel.msgmni:      1024
  kernel.msgmax:      65536
  kernel.shmmax:      68719476736
  kernel.shmall:      4294967296
  kernel.core_uses_pid: 1
  net.ipv4.tcp_keepalive_time: 90
  net.ipv4.tcp_timestamps: 1
  net.ipv4.tcp_window_scaling: 1
  net.ipv4.ip_local_port_range: '10000 65500'
```

See "Completing the DPK Initialization with Customizations," *Preparing the Customization File to Overwrite the sysctl Parameters*.

Task 1-4-2: Reviewing the ulimit Parameters

The `psft_unix_system.yaml` file includes the following ulimit parameters. These are the minimum requirements for the deployment. If you do not want the DPK setup script to overwrite the ulimit parameters, you can perform a customized deployment and specify values for the ulimit parameters that are greater than those given in the generated `psft_unix_system.yaml` file.

```
ulimit:
group:
  hard.nofile: 65536
  soft.nofile: 65536
  hard.nproc: 65536
  soft.nproc: 65536
  hard.core: unlimited
  soft.core: unlimited
  hard.memlock: 500000
  soft.memlock: 500000
  hard.stack: 102400
  soft.stack: 102400

user:
  hard.nofile: 131072
  soft.nofile: 131072
  hard.nproc: 131072
  soft.nproc: 131072
  hard.core: unlimited
  soft.core: unlimited
  hard.memlock: 500000
  soft.memlock: 500000
```

See "Completing the DPK Initialization with Customizations," Preparing the Customization File to Overwrite the ulimit Parameters.

Task 1-5: Reviewing the Oracle Central Inventory File Location and Permissions on Linux, AIX, or Solaris

This section discusses:

- Understanding the Oracle Central Inventory File (oraInst.loc)
- Understanding the DPK Setup Script prereq Step
- Running as a Non-Root User

Understanding the Oracle Central Inventory File (oraInst.loc)

The installation of Oracle products on Linux, AIX, and Solaris creates a central inventory location file named oraInst.loc. If you have previously installed Oracle software on the system, the oraInst.loc file may already exist. The oraInst.loc file is installed by default under the /etc directory on Linux and AIX, and under /var/opt/oracle on Solaris.

This file identifies the name of the Oracle Inventory group, and the path of the Oracle central inventory directory. The Oracle Inventory group is an operating system group that has permission to write to the central inventory. The central inventory directory holds the Oracle inventory.xml file, which lists the installation locations for Oracle products. For a PeopleSoft installation, the Oracle 19c Database Server and Database Client will use this central inventory location. If the file is not set up correctly, or does not have the correct permissions, it may lead to problems with the installation of Oracle database software.

See *Database Installation Guide for Linux*, "Determining if an Oracle Inventory and Oracle Inventory Group Exist."

The oraInst.loc file contains only the following two lines:

```
inventory_loc=central_inventory_location
inst_group=Oracle_inventory_group
```

Understanding the DPK Setup Script prereq Step

Before a non-root user runs a mid-tier deployment, the root user must run the DPK setup script with the `--prereq` option. The script performs validations and sets up a default central inventory location with the correct permissions if none exists.

Note. If you are performing the entire DPK deployment as the root user, you do not need to run the DPK setup script with the `--prereq` option first.

- If oraInst.loc exists (/etc/oraInst.loc on Linux or AIX, or /var/opt/oracle/oraInst.loc on Solaris), the script performs several validations.

If all of the validations are successful, the DPK setup script uses the location set for inventory_loc in oraInst.loc for the Oracle 19c Database Server and Database Client installation locations.

If any of the validations fails, the script exits. If the oraInst.loc file is not accessible, or if the entries are not valid, the script instructs you to delete it and rerun the DPK setup script with the `--prereq` option.

The validations include:

- The existing oraInst.loc file must be accessible for reading.
- The entries for inventory_loc and inst_group are present.
- The directory defined by inventory_loc is present.
- The group defined by inst_group is present.
- If all validations are successful, the script sets the permission to 775 for the directory defined by inventory_loc.
Setting the permission to 775 gives the directory owner and group read, write, and execute permission, and all others read and execute access.
- The script sets the group ownership for the directory defined by inventory_loc to inst_group.
- If oraInst.loc does not exist (/etc/oraInst.loc on Linux or AIX, or /var/opt/oracle/oraInst.loc on Solaris), the DPK setup script uses the location /srv/dpk/oracle for the central inventory location and the group oinstall for inst_group. The script:
 - Checks for the oinstall group, and creates it if it does not exist.
 - Checks for the /srv/dpk/oracle directory, and creates it if it does not exist.
 - Sets the group ownership for the /srv/dpk/oracle directory to oinstall.
 - Sets the permission to 775 for the /srv/dpk/oracle directory.

On Linux only, after either successfully validating an existing oraInst.loc, or creating a valid central inventory location, the script prompts the root user to give non-root users the necessary access to the central inventory location. If you answer Yes to the prompt:

- The script verifies that the user name entered belongs to a valid user.
If the user is not valid, the script exits. Identify the correct user name for a valid non-root user and rerun the DPK setup script with the `--prereq` option.
- The script adds the non-root user to the group defined by inst_group in the existing oraInst.loc file or to the newly created oinstall group.

- If the non-root user is added successfully, you are prompted to give access to more users.

For information on managing Linux users, groups, and permissions, see the documentation for your Linux operating systems.

To verify that a non-root user, such as `psftuser`, belongs to the correct group, such as `oinstall`, sign in to the `psftuser` account as root, and run the `id` command. The list of groups should include `oinstall`; for example:

```
uid=1223 (psftuser) gid=8500 (dba) groups=8500 (dba), 56789 (oinstall)
```

To verify that the central inventory location, such as `/srv/dpk/oracle`, has the correct permission, use a command to list the directory contents. The listing includes the read, write, and execute permissions (`rwX`), user, group, size, and file name.

```
cd /srv/dpk
ls -al
total 12
drwxr-xr-x  3 root      root      4096 Jul 16 18:17 .
drwxr-xr-x  3 root      root      4096 Jul 16 18:17 ..
drwxrwxr-x  4 psftuser oinstall 4096 Jul 16 19:58 oracle
```

Task 1-5-1: Running as a Non-Root User

Before and after a non-root user deploys the DPKs, the root user must perform the following steps:

1. Run one of the DPK setup prereq steps.

To validate and set up a default central inventory location for Oracle central inventory location:

```
./psft-dpk-setup.sh --prereq
```

2. Run the mid-tier or full-tier deployment.
3. Run the DPK setup post-configuration step.

For mid-tier deployments, this step completes the Oracle Database Client setup.

```
./psft-dpk-setup.sh --postcfg --psft_base_dir BASE_DIR
```

Chapter 2

Deploying the PeopleSoft PeopleTools Deployment Packages

This chapter discusses:

- Obtaining the PeopleSoft PeopleTools DPKs
- Using the PT-INFRA DPK for Additional Component Software
- Reviewing the DPK Setup Script Options
- Deploying as a Non-Root User on Linux, AIX, or Solaris
- Running the DPK Setup Script for Mid-Tier Deployment
- Running the DPK Setup Script to Install Mid-Tier Software Only
- Running the DPK Setup Script to Deploy an Application Server Domain
- Running the DPK Setup Script to Deploy a Process Scheduler Domain
- Running the DPK Setup Script to Deploy an Application Server and a Process Scheduler Domain
- Running the DPK Setup Script to Deploy a PIA Domain
- Running the DPK Setup Script to Install PS_HOME Only

Task 2-1: Obtaining the PeopleSoft PeopleTools DPKs

This section discusses:

- Obtaining the PeopleSoft PeopleTools DPKs from My Oracle Support
- Obtaining the PeopleSoft PeopleTools DPKs from Oracle Software Delivery Cloud
- Reviewing the PeopleSoft PeopleTools DPKs

Task 2-1-1: Obtaining the PeopleSoft PeopleTools DPKs from My Oracle Support

Beginning with the general availability date for PeopleSoft PeopleTools 8.62 for on-premises installations, and for later patches, you can obtain the PeopleSoft PeopleTools patch DPKs from My Oracle Support. Contact Oracle if you need a user ID and password for My Oracle Support.

To locate and download the DPKs:

1. Go to the PeopleSoft PeopleTools Patches Home Page, My Oracle Support, Doc ID 2062712.2, to find the information on locating and downloading the latest PeopleSoft PeopleTools patch.

This page includes documentation and links to the most recent patches. To find earlier PeopleSoft PeopleTools patches:

- a. Sign in to My Oracle Support.
 - b. Select the Patches & Updates tab.
 - c. Select Product or Family (Advanced), and search for PeopleSoft PeopleTools.
2. Download the DPK zip files into a single directory, referred to in this documentation as *DPK_INSTALL*.
Be sure that the *DPK_INSTALL* directory has adequate available space for all the zip files. When you download, there will probably be multiple zip files. The multiple files are needed due to size limitations.
This documentation typically refers to the downloaded zip files as *FILENAME_#ofn.zip*. The filename syntax is described in a later section.

Task 2-1-2: Obtaining the PeopleSoft PeopleTools DPKs from Oracle Software Delivery Cloud

At the general availability date for PeopleSoft PeopleTools 8.62 for on-premises installations, you can obtain the PeopleSoft PeopleTools patch DPKs from Oracle Software Delivery Cloud. Later patches are available only on My Oracle Support. To obtain the PeopleSoft PeopleTools DPKs from Oracle Software Delivery Cloud:

1. Sign in to Oracle Software Delivery Cloud.
See Oracle Software Delivery Cloud, <https://edelivery.oracle.com>.
2. Search for the current PeopleSoft PeopleTools release.
3. In the search results, locate the PeopleSoft PeopleTools download package, and click the button to add it to your download queue.
4. Select Continue.
5. On the Download Queue page, select your operating system from the Platforms/Languages drop-down list.
Select or clear the check boxes if you do not want all the items.
6. Click Continue.
7. Review and accept the terms and conditions, then click Continue.
8. Download the DPK zip files, for example V123456-0#.zip, into a single directory, referred to in this documentation as *DPK_INSTALL*.

Be sure that the *DPK_INSTALL* directory has adequate available space for all the zip files. When you download, there will probably be multiple zip files. The multiple files are needed due to size limitations.

This documentation typically refers to the downloaded zip files as *FILENAME_#ofn.zip*. The filename syntax is described in the next section.

Task 2-1-3: Reviewing the PeopleSoft PeopleTools DPKs

The PeopleSoft PeopleTools DPKs are delivered for each PeopleTools patch on My Oracle Support. The files are double-zipped. This table describes the downloaded zip files and the embedded zip files. Be sure to review the instructions in this documentation before unzipping the files.

Downloaded Zip Files*	Embedded Zip Files	Description
PEOPLETOOLS-<OS>-<Rel.Patch>_1of4.zip	The setup folder, including the setup script and other files.	Setup DPK

Downloaded Zip Files*	Embedded Zip Files	Description
PEOPLETOOLS-<OS>-<Rel.Patch>_2of4.zip	PT-DPK-<OS>-<Rel.Patch>-1of2.zip	PeopleTools server, Part 1
PEOPLETOOLS-<OS>-<Rel.Patch>_3of4.zip	PT-DPK-<OS>-<Rel.Patch>-2of2.zip	PeopleTools server, Part 2
PEOPLETOOLS-<OS>-<Rel.Patch>_4of4.zip	PTC-DPK-<OS>-<Rel.Patch>-1of1.zip	PeopleTools Client for 8.62

* This refers to the name of the files downloaded from My Oracle Support.

The zip files have the following format:

PEOPLETOOLS-<OS>-<Rel.Patch>_#ofn.zip

For example:

PEOPLETOOLS-WIN-8.62.04_1of4.zip

The files names are comprised of the following parts:

- <OS> is one of these operating systems:
 - AIX for IBM AIX
 - LNX for Linux
 - SOL for Oracle Solaris
 - WIN for Microsoft Windows
- <Rel.Patch> is the release and patch number for the product, such as 8.62.04.
- *n* represents the total number of zip files.

Task 2-2: Using the PT-INFRA DPK for Additional Component Software

The PT-INFRA DPKs contain supporting (third-party) software that is required for a PeopleSoft installation. The PT-INFRA DPKs are delivered as needed to provide security updates for one or more of the components. You can use the PT-INFRA DPKs to take advantage of up-to-date security updates (CPUs). When you use the PT-INFRA DPKs with a new installation the script installs the supporting software components with the updated CPUs. When you use the PT-INFRA DPKs with an existing installation, the script installs the CPUs on the existing third-party software installation.

The PT-INFRA DPKs include the following:

- Oracle Tuxedo
- Oracle WebLogic
- Oracle Database Client
- Java JDK

You can also use the PT-INFRA DPKs to update the JDK and Oracle Database Client for new or existing PeopleTools Client installations.

See *PT-INFRA Deployment Package Installation (PeopleSoft PeopleTools 8.62)*, PeopleSoft PeopleTools on Oracle Help Center, <https://docs.oracle.com/en/applications/peoplesoft/peopletools/index.html>.

Task 2-3: Reviewing the DPK Setup Script Options

This section discusses:

- Using the DPK Setup Script Options
- Preparing to Run the DPK Setup Script

Task 2-3-1: Using the DPK Setup Script Options

The PeopleSoft PeopleTools DPK setup script alleviates the installation process by automating most of the manual tasks on a virtual or bare-metal host running a supported operating system. By convention, the setup DPK is the first zip file (*FILENAME_1ofn.zip*) in the group of PeopleSoft DPK zip files you download from My Oracle Support.

The DPK setup zip file includes a script, *psft-dpk-setup*, that you use to set up a PeopleSoft environment. The DPK setup script offers a variety of options for setting up mid-tier components, *PS_HOME* folder, and PeopleSoft domains, depending upon the options you supply. The script is an interactive script that detects the downloaded DPKs and verifies that they are correct. It also prompts the user for input, and once that information is gathered, will set up a complete functional PeopleSoft mid-tier environment connecting to an existing PeopleSoft database.

Note. This document includes several examples of using the script. In some cases the examples have been formatted to make them easier to read. It is a good idea to type the script directly into your command or terminal window. If you copy from this document and paste it, the pasted text may not be correct.

Note. The DPK setup script does not provide any default passwords. It is a good idea to be prepared to supply passwords such as user ID, PeopleSoft Connect ID, Application Server Domain Connection, and so on.

When specifying directory locations, such as for the base directory and user home directory, enter the full path. For example, *C:/psft* on Microsoft Windows, or */ds1/psft* on Linux, AIX, or Solaris.

The following table lists the options available for the DPK setup script, *psft-dpk-setup.bat* for Microsoft Windows and *psft-dpk-setup.sh* for Linux, AIX, or Solaris. The suffix *<ext>* in the table refers to the operating system specific extension.

Note that the command options require two dashes when running on Microsoft Windows, Linux, AIX, or Solaris.

See the section *Preparing to Run the DPK Setup Script as a Non-Root User on Linux, AIX, or Solaris* for additional script options.

Note. The commands in the table include line feeds to improve readability.

Deployment	DPK Setup Script Command
Perform the following: • Install Puppet software in <i>BASE_DIR</i>/psft_puppet_agent. • Install the software required for the mid-tier components, including Oracle Tuxedo, Oracle WebLogic, and Oracle database client. • Deploy and set up the domains for the mid-tier components (Application Server, web server, Process Scheduler and Oracle database client). The deployment sets up one each of Application Server, web server, and Process Scheduler domains. • Install the <i>PS_HOME</i> directory.	<pre>psft-dpk-setup.<ext> --env_type midtier or psft-dpk-setup.<ext> --env_type midtier --domain_type all</pre>
Perform the following: • Install Puppet software in <i>BASE_DIR</i>/psft_puppet_agent. • Install the software required for the mid-tier components, including Oracle Tuxedo, Oracle WebLogic and Oracle database client, without setting up the mid-tier domains. • Install the <i>PS_HOME</i> directory. *There is additional information following this table.	<pre>psft-dpk-setup.<ext> --env_type midtier --deploy_only or psft-dpk-setup.<ext> --env_type midtier --deploy_only --deploy_type all</pre>
• Install Puppet software in <i>BASE_DIR</i>/psft_puppet_agent. • Deploy the <i>PS_HOME</i> directory only. This option does not set up any domains. *There is additional information following this table.	<pre>psft-dpk-setup.<ext> --env_type midtier --deploy_only --deploy_type tools_home</pre>
• Install Puppet software in <i>BASE_DIR</i>/psft_puppet_agent. • Deploy and set up the domain for the Application Server only. • Install the Oracle Tuxedo and Oracle WebLogic software. Note. The deployment installs the binary files for all of the servers (Application Server, Process Scheduler, web server, database server) in <i>PS_HOME</i>.	<pre>psft-dpk-setup.<ext> --env_type midtier --domain_type appserver</pre>

Deployment	DPK Setup Script Command
- Install Puppet software in <i>BASE_DIR</i>/psft_puppet_agent. - Deploy and set up the domain for the Process Scheduler only. - Install the Oracle Tuxedo and Oracle WebLogic software. Note. The deployment installs the binary files for all of the servers (Application Server, Process Scheduler, web server, database server) in <i>PS_HOME</i>.	<pre>psft-dpk-setup.<ext> --env_type midtier --domain_type prcs</pre>
- Install Puppet software in <i>BASE_DIR</i>/psft_puppet_agent. - Deploy and set up the domain for PIA only. - Install the Oracle Tuxedo and Oracle WebLogic software. Note. Before beginning the PIA domain deployment, ensure that application server and Process Scheduler domains are available. Note. The deployment installs the binary files for all of the servers (Application Server, Process Scheduler, web server, database server) in <i>PS_HOME</i>.	<pre>psft-dpk-setup.<ext> --env_type midtier --domain_type pia</pre>
- Install Puppet software in <i>BASE_DIR</i>/psft_puppet_agent. - Deploy and set up the domains for the Application Server and the Process Scheduler. - Install the Oracle Tuxedo and Oracle WebLogic software. Note. The deployment installs the binary files for all of the servers (Application Server, Process Scheduler, web server, database server) in <i>PS_HOME</i>.	<pre>psft-dpk-setup.<ext> --env_type midtier --domain_type appbatch</pre>
Specify the full path of the downloaded DPKs. The script assumes that the downloaded DPKs are in the parent directory of the DPK setup script. If the DPKs are located in a different directory, use this option.	<pre>psft-dpk-setup.<ext> --env_type midtier --dpk_src_dir <full_DPK_path></pre>
Run the DPK setup script in silent mode for default initialization. You perform the deployment in silent mode by providing all the required information in a response file. See Running the DPK Setup Script in Silent Mode.	<pre>psft-dpk-setup.<ext> --silent --response_file=<response_file></pre>

Deployment	DPK Setup Script Command
Run the DPK setup script in silent mode with a customization file. Use this command to specify a customization YAML file.	<pre>psft-dpk-setup.<ext> --silent --response_file=<response_file> --customization_file=<dpk_⇒ customization_file></pre>
Remove a deployed environment. See "Using and Maintaining the PeopleSoft Environment," Removing a Deployed PeopleSoft Environment.	<pre>psft-dpk-setup.<ext> --cleanup</pre>
List the DPK setup script usage.	<pre>psft-dpk-setup.<ext> --help</pre>
Specify the location for the installation log file by adding the log_file option to any of the other commands in this table.	Combine the option with the other DPK setup script commands listed in this table. Here are three examples: <pre>psft-dpk-setup.<ext> --env_type midtier --log_file <log file> psft-dpk-setup.<ext> --env_type midtier --deploy_only --log_file <log file> psft-dpk-setup.<ext> --env_type midtier --domain_type appserver --log_file <log file></pre>
This option requires the presence of the PT-INFRA DPK. Apply CPUs for installed software components on an existing environment. See <i>PT-INFRA Deployment Package Installation</i> (PeopleSoft PeopleTools 8.62).	<pre>psft-dpk-setup.<ext> --psft_base_dir <full_path_base_⇒ dir> --apply_infra_cpu</pre>

Note. If you want the DPK script log file to include debugging messages generated by Puppet, add the option `--debug` to any of the commands in this table. Note that running with this option increases the log file size. If you contact Oracle support regarding a deployment problem, Oracle support will request the log file. If the log file does not include the debugging messages it may not be helpful in resolving the issue.

The following options are also available for the PeopleSoft Application Images. These options require the presence of PeopleSoft application DPK zip files in the deployment folder. If `DPK_INSTALL` includes only the PeopleTools DPK zip files, you cannot use these options.

See PeopleSoft 9.2 Application Installation for your database platform.

Deployment with PeopleSoft Application DPKs Present	DPK Setup Script Command
- Install Puppet software in <i>BASE_DIR</i>/psft_puppet_agent. - Deploy the <i>PS_APP_HOME</i> directory only. This option does not set up any domains. *There is additional information following this table.	<pre>psft-dpk-setup.<ext> --env_type midtier --deploy_only --deploy_type app_home</pre>
- Install Puppet software in <i>BASE_DIR</i>/psft_puppet_agent. - Deploy the <i>PS_HOME</i> and <i>PS_APP_HOME</i> directories only. This option does not set up any domains. *There is additional information following this table.	<pre>psft-dpk-setup.<ext> --env_type midtier --deploy_only --deploy_type app_and_tools_home</pre>

* When you use the `--deploy_only` options on Linux, AIX, or Solaris operating systems, the deployment does not set environment variables needed for subsequent tasks. After the deployment is complete, you can set the environment variables using one of these methods:

- Change directory to *BASE_DIR*/pt/ps_home8.62.xx and run `../psconfig.sh`.

- Run the following command.

```
<PUPPET_DIR>/puppet apply --confdir=<BASE_DIR>/dpk/puppet
-e "include ::pt_profile::pt_psft_environment"
--logdest <DPK_INSTALL>/<log_file_name>
```

PUPPET_DIR is *BASE_DIR*/psft_puppet_agent.

Note. The command text given here includes line feeds for readability.

Task 2-3-2: Preparing to Run the DPK Setup Script

Include the following decisions in preparing to install with the DPK setup script:

- Non-root deployment

On Linux, AIX, or Solaris, you have the option to deploy the PeopleSoft environment as a non-root user.

See [Preparing to Run the DPK Setup Script as a Non-Root User on Linux, AIX, or Solaris](#)

- Default or manual configuration

After extracting the DPKs, you are given the option to exit the process, create a customization file, and complete the configuration manually using the `psft_puppet_apply` script with a user-written customization file. Use the manual configuration if you want to change installation locations and so on.

See ["Completing the DPK Initialization with Customizations."](#)

Installing on an AIX operating system requires manual configuration using the customizations:

See [Reviewing the Software Requirements on AIX](#)

See [Preparing the Customization File for JDK on AIX](#).

- User IDs and password

The DPK setup process does not include any default passwords. There are default users in some cases, which

are included in the prompts. You must provide user IDs and passwords, as determined by the type of deployment.

The restrictions for special characters are listed in the following article.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

The DPK setup script prompts for the following user IDs and passwords:

- PeopleSoft Connect ID and password
 - Database admin user (SYS/SYSTEM) password
 - Database access ID (SYSADM) password
 - PeopleSoft operator ID (such as PS or VP1) password
 - (Optional) Application Server Domain Connection password
 - Oracle WebLogic server administrator (system) password
 - PTWEBSERVER web profile user password
 - Integration Gateway administrator and password
 - Integration Gateway keystore password
- Unicode or non-Unicode

While running the DPK setup script, you can choose to install a Unicode or non-Unicode environment.

Alternatively, specify Unicode using the customizations and `psft_puppet_apply` script.

See "Completing the DPK Initialization with Customizations," Preparing the Customization File for Unicode.

- Specifying *PS_CUST_HOME*

You may wish to set up a *PS_CUST_HOME* (PeopleSoft Customization Home) directory in your environment to store your site's customized files, separate from *PS_HOME* and *PS_APP_HOME*. If you wish to use a *PS_CUST_HOME* for your environment, you must perform the deployment using the DPK customizations, and specify the *PS_CUST_HOME* location.

See "Completing the DPK Initialization with Customizations," Preparing the Customization File for the PeopleSoft Homes.

Task 2-4: Deploying as a Non-Root User on Linux, AIX, or Solaris

This section discusses:

- Preparing to Run the DPK Setup Script as a Non-Root User on Linux, AIX, or Solaris
- Running the DPK Setup Prerequisite Step for Linux, AIX, or Solaris
- Running the DPK Setup Script as a Non-Root User on Linux, AIX, or Solaris
- Running the DPK Setup Post-Configuration Step

Preparing to Run the DPK Setup Script as a Non-Root User on Linux, AIX, or Solaris

Review the information in this section before deploying on Linux, AIX, or Solaris. You have the option of downloading the DPK zip files and deploying the PeopleSoft environment as a non-root user.

To run the DPK setup script as a non-root user, fulfill the following requirements:

- You can use an existing non-root user account. It is not necessary to create a new user.
- The deployment supports only a single non-root user who deploys into a single *BASE_DIR*.
- The non-root user's home directory must be writable.
- The non-root user must be configured to use the Bash, Bourne, or Korn shell.
- The non-root user must have permission to read and execute the *DPK_INSTALL* folder and its contents, including the downloaded zip files, and *DPK_INSTALL/setup*.

If the root user downloads the DPK zip files and saves them in *DPK_INSTALL*, the root user must ensure that the necessary permissions are granted to allow the non-root user to read and execute the files.

- The non-root user must be a member of the oinstall group, and oinstall must be the primary group for the user. See Database Installation Guide for Linux, Identifying an Oracle Software Owner User Account, <https://docs.oracle.com/en/database/oracle/oracle-database/19/ladbi/identifying-an-oracle-software-owner-user-account.html#GUID-0A95F4E280A6D-9897-A230>.
- Before a non-root user deploys the PeopleSoft environment, the root user must perform a prerequisite task.
- For a full-tier or mid-tier deployment, the root user must run the DPK setup script with the `--prereq` option to check the contents and permissions for the Oracle central inventory file and perform any actions required for the Oracle 19c Database Server and Database Client installation.

See "Preparing for Installation," Reviewing the Oracle Central Inventory File Location and Permissions on Linux, AIX, or Solaris.

After the non-root user completes the deployment:

- The non-root user owns all of the deployed environment, including *PS_HOME* and *PS_CFG_HOME*.
- The log files for the non-root deployment are saved in `<USER_HOME>/psft_dpk_work/psft_dpk_setup_<PID>.log`, where `<USER_HOME>` is the home directory for the user running the script, and `<PID>` is a process ID.

For example, if the home directory for the root user is `/root`, when the root user runs the command `./psft-dpk-setup.sh --prereq`, the log file is `/root/psft_dpk_work/psft_dpk_setup_1234.log`.

For example, if the home directory for the non-root user is `/home/psft_user`, when the non-root user runs `./psft-dpk-setup.sh --midtier`, or another deployment command, the log file is `/home/psft_user/psft_dpk_work/psft_dpk_setup_5678.log`.

- If a non-root user reboots the Linux system after a mid-tier or full-tier deployment, the PeopleSoft domains (Application Server, Process Scheduler, web server) will not be restarted. This is because there are no Linux systemd services installed for a non-root user. The systemd services require root access.

The following table lists the high-level steps required to deploy a PeopleSoft environment by a non-root user, with a root user performing a prerequisite step. The table uses a mid-tier deployment as an example, but the process also applies to other deployments, such as deploying full-tier, or deploying PeopleSoft domains only, and so on.

Note. The commands in the table include line feeds to improve readability.

Step	Reference	Comment
1. Obtain DPKs and extract the first zip file.	Obtaining the PeopleSoft PeopleTools DPKs	NA

Step	Reference	Comment
2. Select and run one or more prerequisite commands.	Running the DPK Setup Prerequisite Step for Linux, AIX, or Solaris	Important! This step must be run by the root user. This action is required once for each host.
3. Run the DPK setup script. For example, to deploy a mid-tier environment: <code>./psft-dpk-setup.sh --env_type midtier</code>	Running the DPK Setup Script as a Non-Root User on Linux, AIX, or Solaris	For other deployment options, see the table in the section Using the DPK Setup Script Options.
4. Run the post-configuration command. <code>./psft-dpk-setup.sh --postcfg --psft_base_dir BASE_DIR</code>	Running the DPK Setup Script as a Non-Root User on Linux, AIX, or Solaris	Important! This step must be run by the root user.
4. If necessary, run the cleanup command. <code>./psft-dpk-setup.sh --cleanup</code>	"Using and Maintaining the PeopleSoft Environment," Using the DPK Setup Script to Remove the PeopleSoft Environment on Linux, AIX, or Solaris as a Non-Root User	Run cleanup of the environment (optional).
5. Source the script to set environment variables: <code>source BASE_DIR/pt⇒ /psft_env.sh</code>	"Using and Maintaining the PeopleSoft Environment," Setting Environment Variables for the Non-Root User on Linux, AIX, or Solaris	Before using PeopleSoft utilities and programs, source the script to set the required environment variables.

Task 2-4-1: Running the DPK Setup Prerequisite Step for Linux, AIX, or Solaris

This section discusses:

- Understanding the DPK Setup Prerequisite Step
- Running the DPK Setup Prerequisite Step to Validate the Oracle Central Inventory Location
- Running the DPK Setup Prerequisite Step to Validate the Oracle Central Inventory Location and Set the System Configuration (Linux only)

Understanding the DPK Setup Prerequisite Step

Before a non-root user can install the PeopleSoft environment, the root user must run one of the prerequisite commands in the following table:

Note. The commands include line feeds for readability.

DPK Setup Script Command	Action
<code>./psft-dpk-setup.sh --prereq</code>	Validate the Oracle central inventory location and set up a default central inventory location with the correct permissions if none exists.
<code>./psft-dpk-setup.sh --prereq --syscfg</code> Note. This command is supported only on Linux.	Set system configuration variables such as kernel parameters, user and group ulimits, as defined in <code>psft_unix_system.yaml</code> . Use this option in combination with the <code>--prereq</code> option.

Running the DPK Setup Prerequisite Step to Validate the Oracle Central Inventory Location

To run the prerequisite step without performing system configuration:

1. Open a terminal window as a user with root access, and extract the first zip file (*FILENAME_1ofn.zip*). The extraction creates the *DPK_INSTALL/setup* folder and other files.

Note. It is a good idea to extract into the same directory where you downloaded the zip files, *DPK_INSTALL*.

2. Change directory to *DPK_INSTALL/setup*.

3. Run the script as follows:

```
./psft-dpk-setup.sh --prereq
```

The DPK setup log is written to the file `<ROOT_HOME>/psft_dpk_work/psft_dpk_setup_<PID>.log`, where `<ROOT_HOME>` is the home directory for the root user running the script, and `<PID>` is a process ID.

4. After the script completes successfully, log out and log in as a non-root user to deploy the PeopleSoft environment.

If the script exits with an exception, follow the instructions to correct the error, then rerun the script.

See "Preparing for Installation," Reviewing the Oracle Central Inventory File Location and Permissions on Linux, AIX, or Solaris.

Running the DPK Setup Prerequisite Step to Validate the Oracle Central Inventory Location and Set the System Configuration (Linux only)

To run the DPK setup script prerequisite step:

1. Open a terminal window as a user with root access, and extract the first zip file (*FILENAME_1ofn.zip*). The extraction creates the *DPK_INSTALL/setup* folder and other files.

Note. It is a good idea to extract into the same directory where you downloaded the zip files, *DPK_INSTALL*.

2. Change directory to *DPK_INSTALL/setup*.

3. Run the script as follows:

```
./psft-dpk-setup.sh --prereq --syscfg
```

Note. This command is supported only on Linux.

The DPK setup log is written to the file `<ROOT_HOME>/psft_dpk_work/psft_dpk_setup_<PID>.log`, where `<ROOT_HOME>` is the home directory for the root user running the script, and `<PID>` is a process ID.

4. After the script completes successfully, log out and log in as a non-root user to deploy the PeopleSoft environment.

If the script exits with an exception, follow the instructions to correct the error, then rerun the script.

See "Preparing for Installation," Reviewing the Oracle Central Inventory File Location and Permissions on Linux, AIX, or Solaris.

Task 2-4-2: Running the DPK Setup Script as a Non-Root User on Linux, AIX, or Solaris

After the root user completes the prerequisite, start a terminal session as a non-root user and run the DPK setup script with the appropriate options. The following items are specific to the process when run by a non-root user.

See Reviewing the DPK Setup Script Options.

- The DPK setup script includes a prompt for `PS_CFG_HOME`.

The script validates whether the specified `PS_CFG_HOME` location is writable and has 10 GB free space.

- More than one non-root user can run the DPK setup script from the same `DPK_INSTALL/setup`.
- The non-root user must have permission to read and execute the `DPK_INSTALL` folder and its contents, including the downloaded zip files, and `DPK_INSTALL/setup`.

If the root user downloads the DPK zip files and saves them in `DPK_INSTALL`, the root user must ensure that the necessary permissions are granted to allow the non-root user to read and execute the files.

- The DPK setup log is written to the file `<USER_HOME>/psft_dpk_work/psft_dpk_setup_<PID>.log`, where `<USER_HOME>` is the home directory for the user running the script, and `<PID>` is a process ID.

Task 2-4-3: Running the DPK Setup Post-Configuration Step

After the non-root user deploys the PeopleSoft environment, the root user must run the following command to create the Oracle central inventory file if necessary.

```
./psft-dpk-setup.sh --postcfg --psft_base_dir BASE_DIR
```

See PeopleSoft Deployment Packages for Update Images Installation for information on using the NFS shares.

Task 2-5: Running the DPK Setup Script for Mid-Tier Deployment

This section discusses:

- Understanding the Mid-Tier Deployment
- Prerequisites
- Running with the Mid-Tier Option on Microsoft Windows
- Running with the Mid-Tier Option on Linux, AIX, or Solaris as the Root User
- Running with the Mid-Tier Option on Linux, AIX, or Solaris as a Non-Root User

Understanding the Mid-Tier Deployment

Use this procedure to install the PeopleSoft mid-tier components. The deployment includes the following:

- *PS_HOME* installed to the default location under the DPK base directory
- Oracle Tuxedo installed to the default location under the DPK base directory
- Oracle WebLogic installed to the default location under the DPK base directory
- Oracle Database Client installed to the default location under the DPK base directory

Note. This is an Oracle 19c Database Client. The client can be used with the Oracle Database releases that are supported for the current PeopleSoft PeopleTools release. See the Certifications for PeopleSoft PeopleTools on My Oracle Support.

- Deployed and set up PeopleSoft domains. There is a single Application Server domain, single Process Scheduler domain, and single PIA domain.
- The Microsoft Windows DPKs include Microsoft Visual C++ Redistributable Packages for Visual Studio, which include required Microsoft C++ runtime libraries

Prerequisites

Before performing the mid-tier deployment, be sure that you have fulfilled the following requirements:

- You have downloaded all of the required PeopleSoft PeopleTools DPKs, and saved them in a location accessible to the Microsoft Windows, Linux, AIX, or Solaris host, referred to here as *DPK_INSTALL*. See Obtaining the PeopleSoft PeopleTools DPKs.

Note. After the DPK setup script extracts the downloaded zip files, it will delete the original zip files in *DPK_INSTALL*. If you want to save the original zip files, make a backup copy in a different directory.

- Remove any previous installations of the same version of Oracle Tuxedo.
- The user running the script *must have administrative permission* on Microsoft Windows.

Note. Restarting services for the deployed PeopleSoft environment, such as those for Oracle Tuxedo, must be performed by the same user (with administrative permission) who carried out the installation.

- You must have *root access* to deploy the PeopleSoft DPKs on Linux, AIX, or Solaris.
For information on non-root deployment, see the section Deploying as a Non-Root User on Linux, AIX, or Solaris.
- For deployment on Linux, AIX, or Solaris, there is a writable directory available for the home for the users that own the PeopleSoft environment.

If you install as a non-root user, the DPK setup script uses the home directory of the logged-in user as the default home directory for the user, and for the deployment log files. The non-root deployment includes a prompt for *PS_CFG_HOME*. When prompted, enter the full path for a writable directory.

If you do the entire installation as root, the DPK setup script creates default users, and includes a prompt for the home directory for these generated default users. When prompted, enter the full path for a writable directory. The default is /home. In this case, *PS_CFG_HOME* is installed as a subdirectory of the psadm2 default user's home directory.

See "Using and Maintaining the PeopleSoft Environment," Using the PeopleSoft Installation.

- There is enough space on the host for the PeopleSoft environment.
See "Prerequisites," Reviewing Hardware Requirements on Microsoft Windows.
- For deployment with the AIX DPK, you have installed JDK required for the operating system.
See Reviewing Software Requirements.
- You have installed database connectivity software for the database that you want to access on the machine on which you deploy the mid-tier components.
See "Completing the DPK Initialization with Customizations."
- For all installations on Db2 z/OS, you must catalog the database before mid-tier deployment using DPKs. To catalog the database, see the documentation for Db2 z/OS for information.
- The mid-tier deployment constructs a tnsnames.ora entry for use by the PeopleSoft mid-tier components (that is, application server and Process Scheduler) to connect to a database using SERVICE_NAME. If you plan to connect to an Oracle database, ensure that your database can be accessed using SERVICE_NAME in the tnsnames.ora entry.
- You have the information for the database to connect to, including:
 - RDBMS platform
 - Database name, service name, host, and listening port
 - Unicode or non-Unicode database
 - For Db2 z/OS, database catalog information and the location of the connectivity software for the Db2 client.
 - For Microsoft SQL Server, the database server name and connectivity software information.
- You have the information for the user IDs and passwords needed for the deployment, including the following:
The DPK setup process does not include any default passwords. There are default users in some cases, which are included in the prompts. You must provide user IDs and passwords, as determined by the type of deployment. Type carefully, because the window does not display masking characters as you type.
 - PeopleSoft Connect ID and password
 - PeopleSoft operator ID (such as PS or VP1) and password
 - Application Server Domain Connection password (optional)
 - PTWEBSEVER web profile user password
 - Oracle WebLogic server administrator password
 - Integration Gateway administrator and password
 - Integration Gateway keystore password
- Review the information for password restrictions. When you run the DPK setup script, the prompts for some of the passwords do not explicitly specify the restrictions as they did in previous releases.
See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Task 2-5-1: Running with the Mid-Tier Option on Microsoft Windows

To deploy mid-tier components on physical or virtual Microsoft Windows hosts:

1. Extract the first zip file, *FILENAME_1ofn.zip*.

It is recommended that you extract into the same directory where you downloaded the zip file, *DPK_INSTALL*. The extraction creates the *DPK_INSTALL/setup* directory and other files.

Note. It is important that you retain the *DPK_INSTALL/setup* directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

2. Open a command prompt window with Run as Administrator.
 3. Change directory to the location where you extracted the first zip file, *DPK_INSTALL/setup*.
 4. Run the script with the mid-tier option to set up the Application Server, PIA, and web server mid-tier components.
-

Note. If you see an error message similar to "The application has failed to start because its side-by-side configuration is incorrect," it indicates that your machine does not include the necessary Microsoft C++ runtime libraries. Go to the Microsoft Web site, locate the Microsoft Visual C++ redistributable package for your system, and install as directed.

- If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:

```
psft-dpk-setup.bat --env_type midtier
```
 - If you extracted the first zip file into a different directory, include the option `dpk_src_dir` to specify the location of the downloaded zip files, such as *DPK_INSTALL*.

```
psft-dpk-setup.bat --dpk_src_dir DPK_INSTALL --env_type midtier
```
-

Note. Running the DPK setup script with the `--env_type midtier` option deploys all servers. If you want to deploy one of the servers (application server, Process Scheduler server, PIA, or application server and Process Scheduler server) see the command options in "Installing the PeopleSoft Homes," Reviewing the DPK Setup Script Options.

5. Wait while the script begins the setup process.

The system displays messages indicating the steps in the setup process. The success or failure of each step is indicated by [OK] or [FAILED].

Starting the PeopleSoft Environment Setup Process:

```
Validating User Arguments:                [ OK ]
Validating PeopleSoft Supported Platform:  [ OK ]
```

6. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory.

The base directory is used to extract the PeopleSoft DPKs as well as for deploying PeopleSoft components. The script creates the directory if it is not present.

Note. When entering the path for the base directory, use forward slashes (/). For example, *C:/psft*. Enclose any names with special characters in double quotes. Do not use a name for the base directory that begins with a number. Confirm your choice or change it if necessary.

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

Enter the full path for the PeopleSoft Base Directory: **C:/psft**

Are you happy with your answer? [Y|n|q]:

The script validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

The script creates the following sub-directories under the user-provided base directory, *BASE_DIR*:

- *BASE_DIR*\db
This directory is not used for a mid-tier deployment.
- *BASE_DIR*\dpk
The script uses this directory to extract the archives from the PeopleSoft DPKs, and contains the Puppet YAML files for the deployment.
- *BASE_DIR*\psft_puppet_agent
This script uses this directory to install Puppet software.
- *BASE_DIR*\pt
The script uses this directory to deploy PeopleSoft components.

7. Review the status messages.

The script installs Puppet software, verifies if the DPKs are available in *DPK_INSTALL*, and checks for available space. It aborts with the message [FAILED] in case of errors.

Installing PSFT Relocatable Puppet Software in the base directory:

```
[ OK ]
Installing eYAML Hierarchical Backend on this host:           [ OK ]
Checking if PeopleSoft DPKs are Present:                    [ OK ]
Checking if the Base Directory has Enough Free Space:        [ OK ]
```

8. Review the status messages as the script validates the files found in *DPK_INSTALL* and extracts the DPK archives.

The script carries out validations for the mid-tier deployment. If any of the validations fail, the PeopleSoft environment setup is aborted.

After the script completes the extraction, it deletes the original files. Make a backup copy if you want to keep them.

See Obtaining the PeopleSoft PeopleTools DPKs, for the filename syntax of the DPK zip files

Note. The messages have been truncated for brevity.

Validating the PeopleSoft DPKs in the Windows Host:

```
[...]
Extracting the PeopleSoft DPK Archives in the Windows Host:
[...]
```

9. Review the status messages as the script sets up the Puppet file system.

The script sets up Puppet on the host or VM. It then copies the PeopleSoft Puppet modules to the standard location under the base directory (*BASE_DIR*\dpk) and updates the YAML files to reflect the type of PeopleSoft environment setup.

```
Setting up Puppet on the Windows Host:
Generating eYAML Hierarchical Backend Encryption Keys:      [ OK ]
```

```
Updating the Puppet Hiera YAML Files in the Windows Host:      [ OK ]
Updating the Role in Puppet Site File for the Windows Host:    [ OK ]
```

10. Specify the information for the database that you want to connect to.

- a. For the database platform, enter ORACLE, MSSQL (Microsoft SQL Server), or DB2ODBC (Db2 for z/OS).

Enter the PeopleSoft database platform [ORACLE]:

- b. Enter y (yes) if the database you are connecting to is a Unicode database, or n (no) for a non-Unicode database.

Is the PeopleSoft database unicode? [Y|n]:

- c. Enter the database name.

Enter a new PeopleSoft database name. Ensure that the database name start with a letter and contains only uppercase letters and numbers and is no more than 8 characters in length [HCM92]:

- d. For a Db2 z/OS database, enter the location for the connectivity software for the Db2 z/OS client.

See *PeopleSoft 9.2 Application Installation for Db2 for z/OS (PeopleSoft PeopleTools 8.62)*, "Installing and Configuring DB2 Connect."

Enter DB2 Client SQLLIB location:

- e. For a Microsoft SQL Server database, enter the database server name, for example, server.example.com\sql2022.

Enter the PeopleSoft database server name: **server.example.com\sql2022**

- f. For a Microsoft SQL Server database, enter the ODBC driver name.

Enter Microsoft SQL Server ODBC Name["ODBC Driver 17 for SQL Server"]:

If you want to change to a different version, enter the text without double quotes; for example:

Enter Microsoft SQL Server ODBC Name["ODBC Driver 17 for SQL Server"]: **ODBC Driver 18 for SQL Server**

- g. Enter the database service name.

Note. The service name is required for Oracle RDBMS.

For the service name, enter the full name, including the domain, if the database was installed with the domain. Use forward slashes if necessary. If the service name includes non-alphanumeric characters such as periods, enclose the name in double quotes. For example, "HCM.92.example.com". Do not enter an IP address.

Enter the PeopleSoft database service name [HCM92]:

- h. Enter the name of the host where the database is installed, and the port number:

Use forward slashes if necessary. If the host name includes non-alphanumeric characters such as periods, enclose the name in double quotes. For example, "host.example.com". Do not enter an IP address.

Enter the PeopleSoft database host name:

Enter the PeopleSoft database port [1521]:

11. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

Enter the PeopleSoft database Connect ID [people]:

12. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Enter the PeopleSoft database Connect ID [people] password.

Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft Connect ID password:

13. Enter the PeopleSoft Operator ID (user ID) at the next prompt:

Enter the PeopleSoft database Operator ID [PS]:

14. Enter the password twice for the PeopleSoft operator ID, such as PS or VP1.

Enter a new PeopleSoft database Operator ID [PS] password.

Ensure that the password is between 1 and 32 characters in length.

You may include these special characters !@#\$%^& :

Re-Enter the PeopleSoft Operator ID password:

15. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.

Ensure that the password is between 8 and 30 characters in length:

You may include these special characters !@#\$%^& :

Re-Enter the Application Server Domain connection password:

16. Enter the password for the PTWEBSEVER web profile user.

Enter a new PeopleSoft Web Profile user [PTWEBSEVER] password.

Ensure that the password is between 8 and 32 characters in length.

You may include these special characters !@#\$%^& :

Re-Enter the PeopleSoft Web Profile user password:

17. Enter the Oracle WebLogic Server Admin password, following the guidelines in the prompt.

The default Oracle WebLogic server administrator is system. The window does not display masking characters as you type. There is no default password.

Enter a new WebLogic Server Admin user [system] password.

Ensure that the password is between 8 and 30 characters in length with at least one lowercase letter and one uppercase letter.

It must also contain one number or one of these special characters !@#\$%^& :

Re-Enter the WebLogic Server Admin user password:

Enter the Integration Gateway user ID and password at the following prompt.

The default user ID is administrator.

```

Enter the PeopleSoft Integration Gateway user [administrator]:
Enter the PeopleSoft Integration Gateway user [administrator] password.
Ensure the password is between 8 and 30 characters in length:
You may include these special characters !@#$$%^& :
Re-Enter the PeopleSoft Integration Gateway user password:

```

18. Enter the Integration Gateway keystore password.

This is the SSL Keystore password, which is required for web servers and Integration Broker gateways in SSL-enabled environments. The password you enter is used for the default keystore. If you need to reset the password, use the `pskeymanager` utility.

See *PeopleTools: System and Server Administration*, "Implementing WebLogic SSL Keys and Certificates."

See *PeopleTools: Integration Broker Administration*, "Configuring Security and General Properties."

```

Enter the PeopleSoft Integration Gateway Keystore password. Ensure
the password is between 8 and 30 characters in length.
You may include these special characters !@#$$%^& :
Re-Enter the PeopleSoft Integration Gateway Keystore password:

```

19. If you want to change any of the answers to the previous questions, enter *n* (no) at the following prompt, or enter *y* (yes) to continue:

```
Are you happy with your answers? [y|n]:
```

20. Review the status messages as the script updates the Puppet YAML files with the user input.

```

Encrypting the Passwords in the User Data:           [ OK ]
Updating the Puppet Hiera YAML Files with User Data: [ OK ]

```

21. If you want to continue running the initialization script using the default configuration, answer *y* (yes) to the following prompt, and continue with the next step.

Note. If you select the default initialization process, the PeopleSoft environment is created with one Application Server domain, one Process Scheduler domain, and one PIA domain.

If you want to customize the PeopleSoft environment, answer *n* (no) to stop the script. You must use customizations to complete the mid-tier deployment.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the `psft_puppet_apply` script to continue with the setup of the PeopleSoft environment.

```
Do you want to continue with the default initialization process? [y|n]:
```

22. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

The script stops and exits the first time a profile application fails, and displays an error message. This example shows the error message after the first step failed:

Starting the Default Initialization of PeopleSoft Environment:

Deploying PeopleTools Components: [FAILED]

The initialization of PeopleSoft environment setup failed. Check the log file [C:\DPK_INSTALL\setup\psft_dpk_setup.log] for the errors. After correcting the errors, run the following commands to continue with the setup of PeopleSoft environment.

Start a cmd window as Administrator and run C:\psft\psft_puppet_⇒ apply.cmd

Exiting the PeopleSoft environment setup process.

Upon successful completion, the DPK setup script displays the following message:

Starting the Default Initialization of PeopleSoft Environment:

```
Deploying PeopleTools Components:           [ OK ]
Setting up PeopleSoft OS Users Environment:  [ OK ]
Setting up PeopleSoft Application Server Domain: [ OK ]
Setting up PeopleSoft Process Scheduler Domain: [ OK ]
Setting up PeopleSoft PIA Domain:           [ OK ]
Changing the Passwords for the Environment:  [ OK ]
Configuring Pre-Boot PeopleSoft Environment: [ OK ]
Starting PeopleSoft Domains:                [ OK ]
Configuring Post-Boot PeopleSoft Environment: [ OK ]
Setting up Source Details for PeopleTools Client: [ OK ]
The PeopleSoft Environment Setup Process Ended.
```

The complete setup log is written to the file psft_dpk_setup.log in the same location as the DPK setup script.

Task 2-5-2: Running with the Mid-Tier Option on Linux, AIX, or Solaris as the Root User

If you are installing the PeopleSoft environment as a non-root user, see the following section, Running with the Mid-Tier Option on Linux, AIX, or Solaris as a Non-Root User.

To deploy mid-tier components on Linux, AIX, or Solaris hosts as the root user:

1. Open a terminal window and change directory to *DPK_INSTALL/setup*.

Note. It is important that you retain the *DPK_INSTALL/setup* directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

2. Run the script as follows:

- If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:

```
./psft-dpk-setup.sh --env_type midtier
```
- If you extracted the first zip file into a different directory, include the option *dpk_src_dir* to specify the location of the downloaded zip files, such as *DPK_INSTALL*.

```
./psft-dpk-setup.sh --dpk_src_dir DPK_INSTALL --env_type midtier
```

Note. Running the DPK setup script with the `--env_type midtier` option deploys all servers. If you want to deploy one of the servers (application server, Process Scheduler server, PIA, or application server and Process Scheduler server) see the command options in the section *Reviewing the DPK Setup Script Options*.

3. Wait while the script begins the setup process.

The system displays messages indicating the steps in the setup process. The success or failure of each step is indicated by [OK] or [FAILED].

Starting the PeopleSoft Environment Setup Process:

```
Validating User Arguments:                [ OK ]
Validating PeopleSoft Supported Platform: [ OK ]
```

4. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory.

The base directory is used to extract the PeopleSoft DPKs as well as for deploying PeopleSoft components. The directory `/cs1/psft` is used in this example:

Note. When entering the path for the base directory, use forward slashes (/). For example, `/cs1/psft`. If the name includes any non-alphanumeric characters such as periods, enclose the name in double quotes. Do not use a name for the base directory that begins with a number. Do not end the base directory name with a forward slash (for example, do not enter `/ds1/psft/`). Confirm your choice or change it if necessary.

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

```
Enter the full path for the PeopleSoft Base Directory: /cs1/psft
Are you happy with your answer? [Y|n|q]:
```

The script creates the following sub-directories under the user provided base directory, `BASE_DIR`:

- `BASE_DIR/db`

This directory is not used for this deployment.

- `BASE_DIR/dpk`

The script uses this directory to extract the archives from the PeopleSoft PeopleTools DPKs, and contains the Puppet YAML files for the deployment.

- `BASE_DIR/psft_puppet_agent`

This script uses this directory to install Puppet software.

- `BASE_DIR/pt`

The script uses this directory to deploy PeopleSoft components.

5. Specify a writable directory for the user home directory at the following prompt.

The PeopleSoft environment setup using DPKs creates local users on the host. These users deploy the PeopleSoft components and own the PeopleSoft runtime domains. Enter a new location to be used for creating the home directories for these local users, or specify the default home directory, `/home`. Enter the full path, and ensure that the directory is writable. Confirm your choice or change it if necessary.

```
Enter the full path for the User Home directory
```



```
that is writable [/home]: /ds1
Are you happy with your answer? [y|n|q]:
```

If the script finds that the location you enter (either a new location or the default) is not writable, it exits with the following message.

```
The User does not have write permission to create the user's home
directory under [<user input>] on the Linux VM.
Exiting the PeopleSoft environment setup process.
```

6. Review the status messages.

The script installs Puppet software, verifies if the DPKs are available in *DPK_INSTALL*, and checks for available space. It aborts with the message [FAILED] in case of errors.

```
Installing PSFT Relocatable Puppet Software in the base directory:
[ OK ]
Installing eYAML Hiera Backend on this host:                      [ OK ]
Checking if PeopleSoft DPKs are Present:                         [ OK ]
Checking if the Base Directory has Enough Free Space:             [ OK ]
```

7. Review the status messages as the script validates the files found in *DPK_INSTALL* and extracts the DPK archives.

The script carries out validations for the mid-tier deployment. If any of the validations fail, the PeopleSoft environment setup is aborted.

After the script completes the extraction, it deletes the original files. Make a backup copy if you need to keep them.

See Obtaining the PeopleSoft PeopleTools DPKs, for the filename syntax of the DPK zip files.

Note. The messages have been truncated for brevity.

```
Validating the PeopleSoft DPKs in the Linux Host:
[...]
Extracting the PeopleSoft DPK Archives in the Linux Host:
[...]
```

8. Review the status messages as the script sets up the Puppet file system.

The script sets up Puppet on the host or VM. As part of this setup, if the eYAML files are installed, it will generate the encryption keys. It then copies the PeopleSoft Puppet modules to the standard location (*BASE_DIR/dpk*) and updates the YAML files to reflect the type of PeopleSoft environment setup.

```
Setting up Puppet on the Linux VM:
Generating eYAML Hiera Backend Encryption Keys:                  [ OK ]
Updating the Puppet Hiera YAML Files in the Linux Host:          [ OK ]
Updating the Role in Puppet Site File for the Linux Host:         [ OK ]
```

9. Specify the information for the database that you want to connect to.

a. For the database platform, enter ORACLE or DB2ODBC (Db2 for z/OS).

```
Enter the PeopleSoft database platform [ORACLE]:
```

b. Enter y (yes) if the database you are connecting to is a Unicode database, or n (no) for a non-Unicode database.

```
Is the PeopleSoft database unicode? [Y|n]:
```

- c. Enter the database name.

Enter the PeopleSoft database name:

- d. Enter the location for the connectivity software for the Db2 z/OS client.

See *PeopleSoft 9.2 Application Installation for Db2 for z/OS (PeopleSoft PeopleTools 8.62)*, "Installing and Configuring DB2 Connect."

Enter DB2 Client SQLLIB location:

- e. Enter the database service name.

Note. The service name is required for Oracle RDBMS.

For the service name, enter the full name, including the domain, if the database was installed with the domain. Use forward slashes if necessary. If the service name includes non-alphanumeric characters such as periods, enclose the name in double quotes. For example, "HCM.92.example.com". Do not enter an IP address.

Enter the PeopleSoft database service name [HCM92]:

- f. Enter the name of the host where the database is installed, and the port number:

Use forward slashes if necessary. If the host name includes non-alphanumeric characters such as periods, enclose the name in double quotes. For example, "host.example.com". Do not enter an IP address.

Enter the PeopleSoft database host name:

Enter the PeopleSoft database port [1521]:

10. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

Enter a new PeopleSoft database Connect ID [people]:

11. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Enter a new PeopleSoft database Connect ID [people] password.

Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft Connect ID password:

12. Enter the PeopleSoft Operator ID (user ID):

Enter the PeopleSoft database Operator ID [PS]:

13. Enter the password twice for the PeopleSoft operator ID, such as PS or VP1.

Enter a new PeopleSoft database Operator ID [PS] password.

Ensure that the password is between 1 and 32 characters in length.

You may include these special characters !@#\$\$%^& :

Re-Enter the PeopleSoft Operator ID password:

14. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.
 Ensure the password is between 8 and 30 characters in length.
 You may include these special characters !@#\$\$%^& :
 Re-Enter the Application Server Domain connection password.

15. Enter the password twice for the PTWEBSEVER web profile user.

Enter a new PeopleSoft Web Profile user [PTWEBSEVER] password.
 Ensure that the password is between 8 and 32 characters in length.
 You may include these special characters !@#\$\$%^& :
 Re-Enter the PeopleSoft Web Profile user password:

16. Enter the Oracle WebLogic Server Admin password, following the guidelines in the prompt.

The default Oracle WebLogic server administrator is system. The window does not display masking characters as you type. There is no default password.

Enter a new WebLogic Server Admin user [system] password.
 Ensure that the password is between 8 and 30 characters in length
 with at least one lowercase letter and one uppercase letter.
 It must also contain one number or
 one of these special characters !@#\$\$%^& :
 Re-Enter the WebLogic Server Admin user password:

17. Enter the Integration Gateway user ID and password.

The default user ID is administrator.

Enter the PeopleSoft Integration Gateway user [administrator]:
 Enter the PeopleSoft Integration Gateway user [administrator] password.
 Ensure the password is between 8 and 30 characters in length.
 You may include these special characters !@#\$\$%^& :
 Re-Enter the PeopleSoft Integration Gateway user password:

18. Enter the Integration Gateway keystore password.

This is the SSL Keystore password, which is required for web servers and Integration Broker gateways in SSL-enabled environments. The password you enter is used for the default keystore. If you need to reset the password, use the pskeymanager utility.

See *PeopleTools: System and Server Administration*, "Implementing WebLogic SSL Keys and Certificates."

See *PeopleTools: Integration Broker Administration*, "Configuring Security and General Properties."

Enter the PeopleSoft Integration Gateway Keystore password. Ensure
 the password is between 8 and 30 characters in length.
 You may include these special characters !@#\$\$%^& :
 Re-Enter the PeopleSoft Integration Gateway Keystore password:

19. If you want to change any of the answers to the previous questions, enter *n* (no) at the following prompt, or enter *y* (yes) to continue:

Are you happy with your answers? [y|n]:

20. Review the status messages as the script updates the Puppet YAML files with the user input.

If eYAML files are installed, the passwords are encrypted and updated in the YAML file.

```
Encrypting the Passwords in the User Data:          [ OK ]
Updating the Puppet Hiera YAML Files with User Data: [ OK ]
```

21. If you want to continue running the initialization script using the default configuration, answer *y* (yes) to the

following prompt, and continue with the next step.

Note. If you select the default initialization process, the PeopleSoft environment is created with one Application Server domain, one Process Scheduler domain, and one PIA domain.

If you want to customize the PeopleSoft environment, answer *n* (no) to stop the script. You must use customizations to complete the mid-tier deployment.

See "Completing the DPK Initialization with Customizations."

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the psft_puppet_apply script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

22. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

The script stops and exits the first time a profile application fails, and displays an error message. This example shows the error message after the first step failed:

Starting the Default Initialization of PeopleSoft Environment:

Setting Up System Settings: [FAILED]

The initialization of PeopleSoft environment setup failed. Check the log file [/cs1/DPK_INSTALL/setup/psft_dpk_setup.log] for the errors. After correcting the errors, run the following commands to continue with the setup of PeopleSoft environment.

From the shell, run /cs1/psft/psft_puppet_apply.sh

Exiting the PeopleSoft environment setup process.
The PeopleSoft Environment Setup Process Ended.

See "Completing the DPK Initialization with Customizations."

Upon successful completion, the DPK setup script displays the following message:

```
Starting the Default Initialization of PeopleSoft Environment:
Setting Up System Settings: [ OK ]
Deploying PeopleTools Components: [ OK ]
DSetting up PeopleSoft OS Users Environment: [ OK ]
Setting up PeopleSoft Application Server Domain: [ OK ]
Setting up PeopleSoft Process Scheduler Domain: [ OK ]
Setting up PeopleSoft PIA Domain: [ OK ]
Changing the Passwords for the Environment: [ OK ]
Configuring Pre-Boot PeopleSoft Environment: [ OK ]
```

```

Starting PeopleSoft Domains:                [ OK ]
Configuring Post-Boot PeopleSoft Environment: [ OK ]
Setting up Source Details for PeopleTools Client: [ OK ]
The PeopleSoft Environment Setup Process Ended.

```

The complete setup log is written to the file `psft_dpk_setup.log` in the same location as the DPK setup script.

Task 2-5-3: Running with the Mid-Tier Option on Linux, AIX, or Solaris as a Non-Root User

If you are installing the PeopleSoft environment as a non-root user, ensure that you fulfill the prerequisites in the section *Deploying as a Non-Root User on Linux, AIX, or Solaris*.

To deploy mid-tier components on Linux, AIX, or Solaris hosts as a non-root user

1. Open a terminal window and change directory to `DPK_INSTALL/setup`.

Note. It is important that you retain the `DPK_INSTALL/setup` directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

2. Run the script as follows:

- If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:

```
./psft-dpk-setup.sh --env_type midtier
```
 - If you extracted the first zip file into a different directory, include the option `dpk_src_dir` to specify the location of the downloaded zip files, such as `DPK_INSTALL`.

```
./psft-dpk-setup.sh --dpk_src_dir DPK_INSTALL --env_type midtier
```
-

Note. Running the DPK setup script with the `--env_type midtier` option deploys all servers. If you want to deploy one of the servers (Application Server, Process Scheduler server, PIA, or application server and Process Scheduler server) see the command options in the section *Reviewing the DPK Setup Script Options*.

3. Answer y (yes) at the following prompt:

```

You are running DPK setup without root/administrator access.
This is fine as long as the system administrator has performed
all necessary tasks and all prerequisites have been met.
Please see the documentation to determine the prerequisite tasks
that need to be performed to successfully run DPK set up
without root/administrator privilege.

```

```
Would you like to proceed with the setup as a non-root user? [y/n]: y
```

4. Wait while the script begins the setup process.

The system displays messages indicating the steps in the setup process. The success or failure of each step is indicated by `[ OK ]` or `[ FAILED ]`.

```

Starting the PeopleSoft Environment Setup Process:
Validating User Arguments:                [ OK ]
Validating PeopleSoft Supported Platform:  [ OK ]

```

5. At the following prompt, enter the full path to a location that is accessible to the host to be used as the

PeopleSoft base directory.

The base directory is used to extract the PeopleSoft DPKs as well as for deploying PeopleSoft components. The directory `/cs1/psft` is used in this example:

Note. When entering the path for the base directory, use forward slashes (/). For example, `/cs1/psft`. If the name includes any non-alphanumeric characters such as periods, enclose the name in double quotes. Do not use a name for the base directory that begins with a number. Do not end the base directory name with a forward slash (for example, do not enter `/ds1/psft/`). Confirm your choice or change it if necessary.

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

```
Enter the full path for the PeopleSoft Base Directory: /cs1/psft
Are you happy with your answer? [Y|n|q]:
```

The script creates the following three sub-directories under the user provided base directory, `BASE_DIR`:

- `BASE_DIR/db`
This directory is not used for this deployment.
- `BASE_DIR/dpk`
The script uses this directory to extract the archives from the PeopleSoft PeopleTools DPKs, and contains the Puppet YAML files for the deployment.
- `BASE_DIR/psft_puppet_agent`
This script uses this directory to install Puppet software.
- `BASE_DIR/pt`
The script uses this directory to deploy PeopleSoft components.

6. Enter the full path for a writable directory with at least 10 GB available space for `PS_CFG_HOME`.

The default is `USER_HOME/psft/pt/8.62`, where `USER_HOME` is the home directory for the logged-in user. The `PS_CFG_HOME` directory holds the configuration and log files for the PeopleSoft Application Server, Process Scheduler, and PIA domains. Confirm your choice or change it if necessary.

```
Enter a writable ps_config_home directory for PeopleSoft domains
with at least 10.0GB space [/home/psftuser/psft/pt/8.62]:
Are you happy with your answer? [Y|n|q]: y
```

7. Review the status messages.

The script installs Puppet software, verifies if the DPKs are available in `DPK_INSTALL`, and checks for available space. It aborts with the message `[FAILED]` in case of errors.

Note. A mid-tier setup of a PeopleSoft environment takes about 25 GB of disk space.

```
Installing PSFT Relocatable Puppet Software in the base directory:
```

```
[ OK ]
Installing eYAML Hiera Backend on this host:           [ OK ]
Checking if PeopleSoft DPKs are Present:              [ OK ]
Checking if the Base Directory has Enough Free Space:  [ OK ]
```

8. Review the status messages as the script validates the files found in `DPK_INSTALL` and extracts the DPK archives.

The script carries out validations for the mid-tier deployment. If any of the validations fail, the PeopleSoft environment setup is aborted.

After the script completes the extraction, it deletes the original files. Make a backup copy if you need to keep them.

See Obtaining the PeopleSoft PeopleTools DPKs, for the filename syntax of the DPK zip files.

Note. The messages have been truncated for brevity.

```
Validating the PeopleSoft DPKs in the Linux VM:
```

```
[...]
```

```
Extracting the PeopleSoft DPK Archives in the Linux VM:
```

```
[...]
```

9. Review the status messages as the script sets up the Puppet file system.

The script sets up Puppet on the host or VM. As part of this setup, if the eYAML files are installed, it will generate the encryption keys. It then copies the PeopleSoft Puppet modules to the standard location (*BASE_DIR/dpk*) and updates the YAML files to reflect the type of PeopleSoft environment setup.

```
Setting up Puppet on the Linux Host:
```

```
Generating eYAML Hiera Backend Encryption Keys:           [ OK ]
```

```
Updating the Puppet Hiera YAML Files in the Linux Host:   [ OK ]
```

```
Updating the Role in Puppet Site File for the Linux Host: [ OK ]
```

10. Specify the information for the database that you want to connect to.

- a. For the database platform, enter ORACLE or DB2ODBC (Db2 for z/OS).

```
Enter the PeopleSoft database platform [ORACLE]:
```

- b. Enter *y* (yes) if the database you are connecting to is a Unicode database, or *n* (no) for a non-Unicode database.

```
Is the PeopleSoft database unicode? [Y|n]:
```

- c. Enter the database name.

```
Enter the PeopleSoft database name:
```

- d. Enter the database service name.

Note. The service name is required for Oracle RDBMS.

For the service name, enter the full name, including the domain, if the database was installed with the domain. Use forward slashes if necessary. If the service name includes non-alphanumeric characters such as periods, enclose the name in double quotes. For example, "HCM.92.example.com". Do not enter an IP address.

```
Enter the PeopleSoft database service name [HCM92]:
```

- e. Enter the name of the host where the database is installed, and the port number:

Use forward slashes if necessary. If the host name includes non-alphanumeric characters such as periods, enclose the name in double quotes. For example, "host.example.com". Do not enter an IP address.

```
Enter the PeopleSoft database host name:
```

```
Enter the PeopleSoft database port [1521]:
```

11. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

Enter a new PeopleSoft database Connect ID [people]:

12. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Enter a new PeopleSoft database Connect ID [people] password.

Ensure that the password meets the length and complexity requirements for your database platform :

Re-Enter the PeopleSoft database Connect ID password:

13. Enter the PeopleSoft Operator ID (user ID):

Enter the PeopleSoft database Operator ID [PS]:

14. Enter the password twice for the PeopleSoft operator ID, such as PS or VP1.

Enter the PeopleSoft database Operator ID [PS] password.

Ensure that the password is between 1 and 32 characters in length.

You may include these special characters !@#\$\$%^& :

Re-Enter the PeopleSoft database Operator ID password:

15. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.

Ensure that the password is between 8 and 30 characters in length:

You may include these special characters !@#\$\$%^& :

Re-Enter the Application Server Domain connection password.

16. Enter the password twice for the PTWEBSEVER web profile user.

Enter the PeopleSoft Web Profile user [PTWEBSEVER] password.

Ensure that the password is between 8 and 32 characters in length:

You may include these special characters !@#\$\$%^& :

Re-Enter the PeopleSoft Web Profile user password:

17. Enter the Oracle WebLogic Server Admin password, following the guidelines in the prompt.

The default Oracle WebLogic server administrator is system. The window does not display masking characters as you type. There is no default password.

Enter a new WebLogic Server Admin user [system] password.

Ensure that the password is between 8 and 30 characters in length with at least one lowercase letter and one uppercase letter.

It must also contain one number or one of these special characters !@#\$\$%^& :

Re-Enter the WebLogic Server Admin user password:

18. Enter the Integration Gateway user ID and password.

The default user ID is administrator.

Enter the PeopleSoft Integration Gateway user [administrator]:

Enter the PeopleSoft Integration Gateway user [administrator] password.

Ensure that the password is between 8 and 30 characters in length:
 You may include these special characters !@#\$%^& :
 Re-Enter the PeopleSoft Integration Gateway user password:

19. Enter the Integration Gateway keystore password.

This is the SSL Keystore password, which is required for web servers and Integration Broker gateways in SSL-enabled environments. The password you enter is used for the default keystore. If you need to reset the password, use the pskeymanager utility.

See *PeopleTools: System and Server Administration*, "Implementing WebLogic SSL Keys and Certificates."

See *PeopleTools: Integration Broker Administration*, "Configuring Security and General Properties."

Enter the PeopleSoft Integration Gateway Keystore password. Ensure the password is between 8 and 30 characters in length.
 You may include these special characters !@#\$%^& :
 Re-Enter the PeopleSoft Integration Gateway Keystore password:

20. If you want to change any of the answers to the previous questions, enter *n* (no) at the following prompt, or enter *y* (yes) to continue:

Are you happy with your answers? [y|n]:

21. Review the status messages as the script updates the Puppet YAML files with the user input.

If eYAML files are installed, the passwords are encrypted and updated in the YAML file.

```
Encrypting the Passwords in the User Data:           [ OK ]
Updating the Puppet Hiera YAML Files with User Data: [ OK ]
```

22. If you want to continue running the initialization script using the default configuration, answer *y* (yes) to the following prompt, and continue with the next step.

Note. If you select the default initialization process, the PeopleSoft environment is created with one Application Server domain, one Process Scheduler domain, and one PIA domain.

If you want to customize the PeopleSoft environment, answer *n* (no) to stop the script. You must use customizations to complete the mid-tier deployment.

See "Completing the DPK Initialization with Customizations."

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the psft_puppet_apply script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

23. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

The script stops and exits the first time a profile application fails, and displays an error message. This example shows the error message after the first step failed:

Starting the Default Initialization of PeopleSoft Environment:

Setting Up System Settings: [FAILED]

The initialization of PeopleSoft environment setup failed. Check the log file [/cs1/DPK_INSTALL/setup/psft_dpk_setup.log] for the errors. After correcting the errors, run the following script to continue with the setup of PeopleSoft environment.

From the shell, run /cs1/psft/psft_puppet_apply.sh

Exiting the PeopleSoft environment setup process.
The PeopleSoft Environment Setup Process Ended.

See "Completing the DPK Initialization with Customizations."

Upon successful completion, the DPK setup script displays the following message:

```
Starting the Default Initialization of PeopleSoft Environment:
Setting Up System Settings: [ OK ]
Deploying PeopleTools Components: [ OK ]
DSetting up PeopleSoft OS Users Environment: [ OK ]
Setting up PeopleSoft Application Server Domain: [ OK ]
Setting up PeopleSoft Process Scheduler Domain: [ OK ]
Setting up PeopleSoft PIA Domain: [ OK ]
Changing the Passwords for the Environment: [ OK ]
Configuring Pre-Boot PeopleSoft Environment: [ OK ]
Starting PeopleSoft Domains: [ OK ]
Configuring Post-Boot PeopleSoft Environment: [ OK ]
Setting up Source Details for PeopleTools Client: [ OK ]
The PeopleSoft Environment Setup Process Ended.
```

The setup.log is written to the file <USER_HOME>/psft_dpk_work/psft_dpk_setup_<PID>.log, where <USER_HOME> is the home directory for the user running the script, and <PID> is a process ID

Task 2-6: Running the DPK Setup Script to Install Mid-Tier Software Only

This section discusses:

- Understanding the Mid-Tier Software Installation
- Running the DPK Setup Script to Install Mid-Tier Software on Microsoft Windows
- Running the DPK Setup Script as the Root User to Install Mid-tier Software on Linux, AIX, or Solaris
- Running the DPK Setup Script as a Non-Root User to Install Mid-Tier Software on Linux, AIX, or Solaris

Understanding the Mid-Tier Software Installation

Use this option to install *PS_HOME* and the software required for mid-tier deployment, without deploying the PeopleSoft domains. The deployment includes the following:

- *PS_HOME* installed to the default location under the DPK base directory

- Oracle Tuxedo installed to the default location under the base directory
- Oracle WebLogic installed to the default location under the base directory
- Oracle Database Client installed to the default location under the base directory

Note. This is an Oracle 19c Database Client. The client can be used with the Oracle Database releases that are supported for the current PeopleSoft PeopleTools release. See the Certifications for PeopleSoft PeopleTools on My Oracle Support.

- The Microsoft Windows DPKs include Microsoft Visual C++ Redistributable Packages for Visual Studio, which include required Microsoft C++ runtime libraries

The script requires the following information:

- Database platform type
- Unicode or non-Unicode

In addition, ensure that you fulfill the items in the Prerequisites section in the task Running the DPK Setup Script for Mid-Tier Deployment.

See Also

"Using and Maintaining the PeopleSoft Environment," Using the PeopleSoft Installation

Task 2-6-1: Running the DPK Setup Script to Install Mid-Tier Software on Microsoft Windows

This procedure assumes you have obtained the four PeopleSoft PeopleTools DPK zip files and saved them in *DPK_INSTALL*.

Note. Some of the informational script messages have been omitted for brevity.

1. Extract the first zip file (*FILENAME_1ofn.zip*).

Note. It is a good idea to extract into the same directory where you downloaded the zip files, *DPK_INSTALL*.

Note. It is important that you retain the *DPK_INSTALL/setup* directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

The extraction creates the *DPK_INSTALL/setup* directory and other files.

2. Open a command prompt with Run as Administrator.
3. Change directory to *DPK_INSTALL/setup*.
4. Run the script as follows:

Note. On Microsoft Windows, if you see an error message similar to "The application has failed to start because its side-by-side configuration is incorrect," it indicates that your machine does not include the necessary Microsoft C++ runtime libraries. Go to the Microsoft Web site, locate the Microsoft Visual C++ redistributable package for your system, and install as directed.

- If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:

```
psft-dpk-setup.bat --env_type midtier --deploy_only
```

- If you extracted the first zip file into a different directory, include the option `dpk_src_dir` to specify the location of the downloaded zip files, such as `DPK_INSTALL`, as follows:

```
psft-dpk-setup.bat --dpk_src_dir DPK_INSTALL --env_type midtier ⇒
--deploy_only
```

5. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory, referred to here as *BASE_DIR*.

The base directory is used to extract the DPKs as well as for deploying PeopleSoft components. The script creates the base directory if it does not exist.

Use forward slashes only (/) when specifying the base directory; for example, C:/psft. Do not use a base directory name that begins with a number.

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permissions and should have enough free space.

```
Enter the full path for the PeopleSoft Base Directory:
Are you happy with your answer? [Y|n|q]:
```

The script installs Puppet software and validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

6. Specify the type of database platform.

Enter MSSQL for Microsoft SQL Server, DB2ODBC for Db2 for z/OS, or ORACLE.

```
Enter the PeopleSoft database platform [ORACLE]:
```

7. Specify whether you want support for a Unicode database.

```
Is the PeopleSoft database unicode? [Y|n]:
```

8. Enter y to continue with the script.

```
Are you happy with your answers? [y|n]: y
```

```
Encrypting the Passwords in the User Data:
```

```
[ OK ]
```

```
Updating the Puppet Hiera YAML Files with User Data:
```

```
[ OK ]
```

9. If you want to continue running the initialization script using the default configuration, answer y (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer n (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml'

and running the `psft_puppet_apply` script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

10. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

Upon successful completion, the DPK setup script displays the following message:

The PeopleSoft Environment Setup Process Ended.

The complete setup log is written to the file `psft_dpk_setup.log` in the same location as the DPK setup script.

Task 2-6-2: Running the DPK Setup Script as the Root User to Install Mid-tier Software on Linux, AIX, or Solaris

This procedure assumes you have obtained the four PeopleSoft PeopleTools DPK zip files and saved them in *DPK_INSTALL*.

Note. Some of the informational script messages have been omitted for brevity.

1. Extract the first zip file (*FILENAME_1ofn.zip*).

Note. It is a good idea to extract into the same directory where you downloaded the zip files, *DPK_INSTALL*.

Note. It is important that you retain the *DPK_INSTALL/setup* directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

The extraction creates the *DPK_INSTALL/setup* directory and other files.

2. Open a terminal windows as the root user.
3. Change directory to *DPK_INSTALL/setup*.
4. Run the script as follows:
 - If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:


```
./psft-dpk-setup.sh --env_type midtier --deploy_only
```
 - If you extracted the first zip file into a different directory, include the option `dpk_src_dir` to specify the location of the downloaded zip files, such as *DPK_INSTALL*, as follows:


```
./psft-dpk-setup.sh --dpk_src_dir DPK_INSTALL --env_type midtier => --deploy_only
```

5. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory, referred to here as *BASE_DIR*.

The base directory is used to extract the DPKs as well as for deploying PeopleSoft components. The script creates the base directory if it does not exist.

Use forward slashes only (/) when specifying the base directory; for example, `/home/psft`. Do not use a base directory name that begins with a number. Do not end the base directory name with a forward slash (for example, do not enter `/ds1/psft/`).

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

```
Enter the full path for the PeopleSoft Base Directory:
Are you happy with your answer? [Y|n|q]:
```

The script installs Puppet software and validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

6. Specify a writable directory for the user home directory at the following prompt.

The PeopleSoft environment setup using DPKs creates local users on the host. These users deploy the PeopleSoft components and own the PeopleSoft runtime domains. Enter a new location to be used for creating the home directories for these local users, or specify the default home directory, /home. Enter the full path, and ensure that the directory is writable.

```
Enter the full path for the User Home directory
that is writable [/home]: /ds1
Are you happy with your answer? [y|n|q]:
```

If the script finds that the location you enter (either a new location or the default) is not writable, it exits with the following message.

```
The User does not have write permission to create the user's home
directory under [<user input>] on the Linux VM.
Exiting the PeopleSoft environment setup process.
```

7. Specify the type of database platform.

Enter MSSQL for Microsoft SQL Server, DB2ODBC for Db2 for z/OS, or ORACLE.

```
Enter the PeopleSoft database platform [ORACLE]:
```

8. Specify whether you want support for a Unicode database.

```
Is the PeopleSoft database unicode? [Y|n]:
```

9. Enter y to continue with the script.

```
Are you happy with your answers? [y|n]: y
Encrypting the Passwords in the User Data:          [ OK ]
Updating the Puppet Hiera YAML Files with User Data: [ OK ]
```

10. If you want to continue running the initialization script using the default configuration, answer y (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer n (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide

for creating the Hiera YAML file 'psft_customizations.yaml' and running the psft_puppet_apply script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

11. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

Upon successful completion, the DPK setup script displays the following message:

The PeopleSoft Environment Setup Process Ended.

The complete setup log is written to the file psft_dpk_setup.log in the same location as the DPK setup script.

Task 2-6-3: Running the DPK Setup Script as a Non-Root User to Install Mid-Tier Software on Linux, AIX, or Solaris

To install the mid-tier software as a non-root user:

Note. Some of the informational script messages have been omitted for brevity.

1. Open a terminal window as a non-root user.
2. Change directory to *DPK_INSTALL/setup*.

Note. It is important that you retain the *DPK_INSTALL/setup* directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

3. Run the script as follows:
 - If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:

```
./psft-dpk-setup.sh --env_type midtier --deploy_only
```

- If you extracted the first zip file into a different directory, include the option *dpk_src_dir* to specify the location of the downloaded zip files, such as *DPK_INSTALL*, as follows:

```
./psft-dpk-setup.sh --dpk_src_dir DPK_INSTALL --env_type midtier ⇒  
--deploy_only
```

4. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory, referred to here as *BASE_DIR*.

The base directory is used to extract the DPKs as well as for deploying PeopleSoft components. The script creates the base directory if it does not exist.

Use forward slashes only (/) when specifying the base directory; for example, /home/psft. Do not use a base directory name that begins with a number. Do not end the base directory name with a forward slash (for example, do not enter /ds1/psft/).

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

Enter the full path for the PeopleSoft Base Directory:
Are you happy with your answer? [Y|n|q]:

The script installs Puppet software and validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

5. Specify the type of database platform.

Enter MSSQL for Microsoft SQL Server, DB2ODBC for Db2 for z/OS, or ORACLE.

Enter the PeopleSoft database platform [ORACLE]:

6. Specify whether you want support for a Unicode database.

Is the PeopleSoft database unicode? [Y|n]:

7. Enter y to continue with the script.

Are you happy with your answers? [y|n]: **y**

Encrypting the Passwords in the User Data: [OK]

Updating the Puppet Hiera YAML Files with User Data: [OK]

8. If you want to continue running the initialization script using the default configuration, answer y (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer n (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the psft_puppet_apply script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

9. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

Upon successful completion, the DPK setup script displays the following message:

The PeopleSoft Environment Setup Process Ended.

The complete setup log is written to the file psft_dpk_setup.log in the same location as the DPK setup script.

Task 2-7: Running the DPK Setup Script to Deploy an Application Server Domain

This section discusses:

- Understanding the Application Server Domain Deployment
- Running the DPK Setup Script for the Application Server Domain Deployment on Microsoft Windows
- Running the DPK Setup Script for the Application Server Domain Deployment on Linux, AIX, or Solaris as the Root User
- Running the DPK Setup Script for the Application Server Domain Deployment on Linux, AIX, or Solaris as a Non-Root User

Understanding the Application Server Domain Deployment

Use this option to set up an application server domain only, for example, on a host separate from the database. The deployment includes the following:

- *PS_HOME* installed to the default location under the DPK base directory.
- *PS_CFG_HOME* installed to the default location
- Oracle Tuxedo installed to the default location under the base directory
- Oracle WebLogic installed to the default location under the base directory
- PeopleSoft application server domain is installed and running.
- The Microsoft Windows DPKs include Microsoft Visual C++ Redistributable Packages for Visual Studio, which include required Microsoft C++ runtime libraries

The script requires the following information:

- Database platform type
- Database name
- Database host name
- Database port
- Unicode or non-Unicode
- PeopleSoft Connect ID and password
- PeopleSoft operator ID and password
- Application Server Domain Connection password (optional)

If you are installing on Linux, AIX, or Solaris, see the information about running as non-root in the section *Reviewing the DPK Setup Script Options*.

In addition, ensure that you fulfill the items in the Prerequisites section in the task *Running the DPK Setup Script for Mid-Tier Deployment*.

See Also

"Using and Maintaining the PeopleSoft Environment," Using the PeopleSoft Installation

Task 2-7-1: Running the DPK Setup Script for the Application Server Domain Deployment on Microsoft Windows

This procedure to deploy an application server domain assumes you have obtained the four PeopleSoft PeopleTools DPK zip files and saved them in *DPK_INSTALL*.

Note. Some of the informational script messages have been omitted for brevity.

1. Extract the first zip file (*FILENAME_1ofn.zip*).

Note. It is a good idea to extract into the same directory where you downloaded the zip files, *DPK_INSTALL*.

Note. It is important that you retain the *DPK_INSTALL/setup* directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

The extraction creates the *DPK_INSTALL/setup* directory and other files.

2. Open a command prompt with Run as Administrator.
3. Change directory to *DPK_INSTALL/setup*.
4. Run the script as follows:

Note. If you see an error message similar to "The application has failed to start because its side-by-side configuration is incorrect," it indicates that your machine does not include the necessary Microsoft C++ runtime libraries. Go to the Microsoft Web site, locate the Microsoft Visual C++ redistributable package for your system, and install as directed.

- If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:

```
psft-dpk-setup.bat --env_type midtier --domain_type appserver
```

- If you extracted the first zip file into a different directory, include the option *dpk_src_dir* to specify the location of the downloaded zip files, such as *DPK_INSTALL*, as follows:

```
psft-dpk-setup.bat --dpk_src_dir DPK_INSTALL --env_type midtier =>
--domain_type appserver
```

5. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory, referred to here as *BASE_DIR*.

The base directory is used to extract the DPKs as well as for deploying PeopleSoft components. The script creates the base directory if it does not exist.

Use forward slashes only (/) when specifying the base directory; for example, C:/psft. Do not use a base directory name that begins with a number.

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

```
Enter the full path for the PeopleSoft Base Directory:
Are you happy with your answer? [Y|n|q]:
```

The script installs Puppet software and validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

6. Specify the type of database platform.

Enter MSSQL for Microsoft SQL Server, DB2ODBC for Db2 for z/OS, or ORACLE.

Enter the PeopleSoft database platform [ORACLE]:

7. Specify whether you want a Unicode database.

Is the PeopleSoft database unicode? [Y|n]:

8. Enter the database name.

Enter the PeopleSoft database name:

9. If your database platform is Db2 for z/OS, enter the location for the connectivity software for the Db2 z/OS client.

See *PeopleSoft 9.2 Application Installation for Db2 for z/OS (PeopleSoft PeopleTools 8.62)*, "Installing and Configuring DB2 Connect."

Enter DB2 Client SQLLIB location:

10. If your database platform is Oracle, enter the database service name.

The default is the same as the database name. Do not enter an IP address.

Enter the PeopleSoft database service name [PSFT92DB]:

11. Enter the name of the host where the database is installed.

Do not enter an IP address.

Enter the PeopleSoft database host name:

12. If your database platform is Oracle, enter the database listener port number:

Enter the PeopleSoft database port [1521]:

13. If your database platform is Microsoft SQL Server, enter the database server name.

Enter the PeopleSoft database server name:

14. If your database platform is Microsoft SQL Server, enter the ODBC driver name.

Enter Microsoft SQL Server ODBC Name["ODBC Driver 17 for SQL Server"]:

If you want to change the version, enter the text without double quotes; for example:

Enter Microsoft SQL Server ODBC Name["ODBC Driver 17 for SQL Server"]:
ODBC Driver 18 for SQL Server

15. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

Enter the PeopleSoft database Connect ID [people]:

16. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords,

My Oracle Support, Doc ID 2765013.1.

Enter the PeopleSoft database Connect ID [people] password.
Ensure that the password meets the length and complexity requirements
for your database platform:
Re-Enter the PeopleSoft database Connect ID password:

17. Enter the PeopleSoft user ID (operator ID), such as PS or VP1.

Enter the PeopleSoft database Operator ID [VP1]:

18. Enter the password twice for the PeopleSoft operator ID.

Enter the PeopleSoft database Operator ID [VP1] password.
Ensure that the password is between 1 and 32 characters in length.
You may include these special characters !@#\$\$%^& :
Re-Enter the PeopleSoft database Operator ID password:

19. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.
Ensure that the password is between 8 and 30 characters in length.
You may include these special characters !@#\$\$%^& :
Re-Enter the Application Server Domain connection password:

20. Enter y to continue with the script.

```
Are you happy with your answers? [y|n]: y
Encrypting the Passwords in the User Data:           [ OK ]
Updating the Puppet Hiera YAML Files with User Data: [ OK ]
```

21. If you want to continue running the initialization script using the default configuration, answer y (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer n (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the psft_puppet_apply script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

22. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

Upon successful completion, the DPK setup script displays the following message:

The PeopleSoft Environment Setup Process Ended.

The complete setup log is written to the file `psft_dpk_setup.log` in the same location as the DPK setup script.

Task 2-7-2: Running the DPK Setup Script for the Application Server Domain Deployment on Linux, AIX, or Solaris as the Root User

This procedure to deploy an application server domain assumes you have obtained the four PeopleSoft PeopleTools DPK zip files and saved them in `DPK_INSTALL`.

If you are installing the PeopleSoft environment as a non-root user, see the section *Running the DPK Setup Script for the Application Server Domain Deployment on Linux, AIX, or Solaris as a Non-Root User*.

Note. Some of the informational script messages have been omitted for brevity.

To deploy the domain:

1. Extract the first zip file (`FILENAME_1ofn.zip`).

Note. It is a good idea to extract into the same directory where you downloaded the zip files, `DPK_INSTALL`.

Note. It is important that you retain the `DPK_INSTALL/setup` directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

The extraction creates the `DPK_INSTALL/setup` directory and other files.

2. Open a terminal window as root.
3. Change directory to `DPK_INSTALL/setup`.
4. Run the script as follows:
 - If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:


```
./psft-dpk-setup.sh --env_type midtier --domain_type appserver
```
 - If you extracted the first zip file into a different directory, include the option `dpk_src_dir` to specify the location of the downloaded zip files, such as `DPK_INSTALL`, as follows:


```
./psft-dpk-setup.sh --dpk_src_dir DPK_INSTALL --env_type midtier =>
--domain_type appserver
```
5. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory, referred to here as `BASE_DIR`.

The base directory is used to extract the DPKs as well as for deploying PeopleSoft components. The script creates the base directory if it does not exist.

Use forward slashes only (/) when specifying the base directory; for example, `/home/psft`. Do not use a base directory name that begins with a number. Do not end the base directory name with a forward slash (for example, do not enter `/ds1/psft/`).

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

```
Enter the full path for the PeopleSoft Base Directory:
Are you happy with your answer? [Y|n|q]:
```

The script installs Puppet software and validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

6. Specify a writable directory for the user home directory at the following prompt.

The PeopleSoft environment setup using DPKs creates local users on the host. These users deploy the PeopleSoft components and own the PeopleSoft runtime domains. Enter a new location to be used for creating the home directories for these local users, or specify the default home directory, /home. Enter the full path, and ensure that the directory is writable.

```
Enter the full path for the User Home directory
that is writable [/home]: /ds1
Are you happy with your answer? [y|n|q]:
```

If the script finds that the location you enter (either a new location or the default) is not writable, it exits with the following message.

```
The User does not have write permission to create the user's home
directory under [<user input>] on the Linux VM.
Exiting the PeopleSoft environment setup process.
```

7. Specify the type of database platform.

Enter DB2ODBC for Db2 for z/OS, or ORACLE.

```
Enter the PeopleSoft database platform [ORACLE]:
```

8. Specify whether you want a Unicode database.

```
Is the PeopleSoft database unicode? [Y|n]:
```

9. Enter the database name.

```
Enter the PeopleSoft database name:
```

10. If your database platform is Db2 for z/OS, enter the location for the connectivity software for the Db2 z/OS client.

See *PeopleSoft 9.2 Application Installation for Db2 for z/OS (PeopleSoft PeopleTools 8.62)*, "Installing and Configuring DB2 Connect."

```
Enter DB2 Client SQLLIB location:
```

11. If your database platform is Oracle, enter the database service name.

The default is the same as the database name. Do not enter an IP address.

```
Enter the PeopleSoft database service name [PSFT92DB]:
```

12. Enter the name of the host where the database is installed.

Do not enter an IP address.

```
Enter the PeopleSoft database host name:
```

13. If your database platform is Oracle, enter the database listener port number:

Enter the PeopleSoft database port [1521]:

14. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

Enter the PeopleSoft database Connect ID [people]:

15. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Enter the PeopleSoft database Connect ID [people] password.

Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft database Connect ID password:

16. Enter the PeopleSoft user ID (operator ID), such as PS or VP1.

Enter the PeopleSoft database Operator ID [VP1]:

17. Enter the password twice for the PeopleSoft operator ID.

Enter the PeopleSoft database Operator ID [VP1] password.

Ensure that the password is between 1 and 32 characters in length.

You may include these special characters !@#\$\$%^& :

Re-Enter the PeopleSoft database Operator ID password:

18. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.

Ensure that the password is between 8 and 30 characters in length.

You may include these special characters !@#\$\$%^& :

Re-Enter the Application Server Domain connection password:

19. Enter y to continue with the script.

Are you happy with your answers? [y|n]: **y**

Encrypting the Passwords in the User Data: [OK]

Updating the Puppet Hiera YAML Files with User Data: [OK]

20. If you want to continue running the initialization script using the default configuration, answer y (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer n (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the psft_puppet_apply script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

21. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

Upon successful completion, the DPK setup script displays the following message:

The PeopleSoft Environment Setup Process Ended.

The complete setup log is written to the file `psft_dpk_setup.log` in the same location as the DPK setup script.

Task 2-7-3: Running the DPK Setup Script for the Application Server Domain Deployment on Linux, AIX, or Solaris as a Non-Root User

This procedure to deploy an application server domain assumes you have fulfilled the prerequisites.

If you are installing the PeopleSoft environment as a non-root user, see the section Running the DPK Setup Script for the Application Server Domain Deployment on Linux, AIX, or Solaris as the Root User.

Note. Some of the informational script messages have been omitted for brevity.

To deploy the domain as a non-root user:

1. Open a terminal window.
2. Change directory to `DPK_INSTALL/setup`.

Note. It is important that you retain the `DPK_INSTALL/setup` directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

3. Run the script as follows:

- If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:
- If you extracted the first zip file into a different directory, include the option `dpk_src_dir` to specify the location of the downloaded zip files, such as `DPK_INSTALL`, as follows:

```
./psft-dpk-setup.sh --env_type midtier --domain_type appserver
```

```
./psft-dpk-setup.sh --dpk_src_dir DPK_INSTALL --env_type midtier ⇒
--domain_type appserver
```

4. If you are running as a non-root user, answer y (yes) at the following prompt:

```
You are running DPK setup without root/administrator access.
This is fine as long as the system administrator has performed
all necessary tasks and all prerequisites have been met.
Please see the documentation to determine the prerequisite tasks
that need to be performed to successfully run DPK set up
without root/administrator privilege.
```

```
Would you like to proceed with the setup as a non-root user? [y|n]: y
```

5. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory, referred to here as `BASE_DIR`.

The base directory is used to extract the DPKs as well as for deploying PeopleSoft components. The script creates the base directory if it does not exist.

Use forward slashes only (/) when specifying the base directory; for example, /home/psft. Do not use a base directory name that begins with a number. Do not end the base directory name with a forward slash (for example, do not enter /ds1/psft/).

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

```
Enter the full path for the PeopleSoft Base Directory:
Are you happy with your answer? [Y|n|q]:
```

The script installs the Puppet software and validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

6. Enter the full path to a writable directory with at least 10 GB available space for *PS_CFG_HOME*.

The default is *USER_HOME*/psft/pt/8.62, where *USER_HOME* is the home directory for the logged-in user. The *PS_CFG_HOME* directory holds the configuration and log files for the PeopleSoft Application Server, Process Scheduler, and PIA domains.

```
Enter a writable ps_config_home directory for PeopleSoft domains
with at least 10.0GB space [/home/psftuser/psft/pt/8.62]:
Are you happy with your answer? [Y|n|q]: y
```

7. Specify the type of database platform.

Enter DB2ODBC for Db2 for z/OS, or ORACLE.

```
Enter the PeopleSoft database platform [ORACLE]:
```

8. Specify whether you want a Unicode database.

```
Is the PeopleSoft database unicode? [Y|n]:
```

9. Enter the database name.

```
Enter the PeopleSoft database name:
```

10. If your database platform is Db2 for z/OS, enter the location for the connectivity software for the Db2 z/OS client.

See *PeopleSoft 9.2 Application Installation for Db2 for z/OS (PeopleSoft PeopleTools 8.62)*, "Installing and Configuring DB2 Connect."

```
Enter DB2 Client SQLLIB location:
```

11. If your database platform is Oracle, enter the database service name.

The default is the same as the database name. Do not enter an IP address.

```
Enter the PeopleSoft database service name [PSFT92DB]:
```

12. Enter the name of the host where the database is installed.

Do not enter an IP address.

Enter the PeopleSoft database host name:

13. If your database platform is Oracle, enter the database listener port number:

Enter the PeopleSoft database port [1521]:

14. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

Enter the PeopleSoft database Connect ID [people]:

15. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Enter the PeopleSoft database Connect ID [people] password.

Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft database Connect ID password:

16. Enter the PeopleSoft user ID (operator ID), such as PS or VP1.

Enter the PeopleSoft database Operator ID [VP1]:

17. Enter the password twice for the PeopleSoft operator ID.

Enter the PeopleSoft database Operator ID [VP1] password.

Ensure that the password is between 1 and 32 characters in length.

You may include these special characters !@#\$\$%^& :

Re-Enter the PeopleSoft database Operator ID password:

18. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.

Ensure that the password is between 8 and 30 characters in length.

You may include these special characters !@#\$\$%^& :

Re-Enter the Application Server Domain connection password:

19. Enter y to continue with the script.

Are you happy with your answers? [y|n]: **y**

Encrypting the Passwords in the User Data: [OK]

Updating the Puppet Hiera YAML Files with User Data: [OK]

20. If you want to continue running the initialization script using the default configuration, answer y (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer n (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide

for creating the Hiera YAML file 'psft_customizations.yaml' and running the psft_puppet_apply script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

21. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

Upon successful completion, the DPK setup script displays the following message:

The PeopleSoft Environment Setup Process Ended.

If you are running as a non-root user, the setup.log is written to the file <USER_HOME>/psft_dpk_work/psft_dpk_setup_<PID>.log, where <USER_HOME> is the home directory for the user running the script, and <PID> is a process ID

Task 2-8: Running the DPK Setup Script to Deploy a Process Scheduler Domain

This section discusses:

- Understanding the Process Scheduler Domain Deployment
- Running the DPK Setup Script for the Process Scheduler Domain Deployment on Microsoft Windows
- Running the DPK Setup Script for the Process Scheduler Domain Deployment on Linux, AIX, or Solaris as the Root User
- Running the DPK Setup Script for the Process Scheduler Domain Deployment on Linux, AIX, or Solaris as a Non-Root User

Understanding the Process Scheduler Domain Deployment

Use this option to set up a single Process Scheduler domain, for example, to install on a host separate from the database. The deployment includes the following:

- *PS_HOME* installed to the default location under the DPK base directory.
- *PS_CFG_HOME* installed to the default location
- Oracle Tuxedo installed to the default location under the DPK base directory
- Oracle WebLogic installed to the default location under the DPK base directory
- PeopleSoft Process Scheduler domain is installed and running.
- The Microsoft Windows DPKs include Microsoft Visual C++ Redistributable Packages for Visual Studio, which include required Microsoft C++ runtime libraries

The script requires the following information:

- Database platform type
- Database name
- Database host name
- Database service name (for Oracle database platforms)

- Database port (for Oracle database platforms)
- Database server name and connectivity information (for Microsoft SQL Server)
- Location of client connectivity software (for Db2 for z/OS)
- Unicode or non-Unicode
- PeopleSoft Connect ID and password
- PeopleSoft operator ID and password
- Application Server Domain Connection password (optional)

In addition, ensure that you fulfill the items in the Prerequisites section in the task Running the DPK Setup Script for Mid-Tier Deployment.

See Also

"Using and Maintaining the PeopleSoft Environment," Using the PeopleSoft Installation

Task 2-8-1: Running the DPK Setup Script for the Process Scheduler Domain Deployment on Microsoft Windows

This procedure to deploy a Process Scheduler domain assumes that you have obtained the four PeopleSoft PeopleTools DPK zip files and saved them in *DPK_INSTALL*.

Note. Some of the informational script messages have been omitted for brevity.

1. Extract the first zip file (*FILENAME_1ofn.zip*).

Note. It is a good idea to extract into the same directory where you downloaded the zip files, *DPK_INSTALL*.

Note. It is important that you retain the *DPK_INSTALL/setup* directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

The extraction creates the *DPK_INSTALL/setup* directory and other files.

2. Open a command prompt with Run as Administrator.
3. Change directory to *DPK_INSTALL/setup*.
4. Run the script as follows:

Note. If you see an error message similar to "The application has failed to start because its side-by-side configuration is incorrect," it indicates that your machine does not include the necessary Microsoft C++ runtime libraries. Go to the Microsoft Web site, locate the Microsoft Visual C++ redistributable package for your system, and install as directed.

- If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:

```
psft-dpk-setup.bat --env_type midtier --domain_type prcs
```
- If you extracted the first zip file into a different directory, include the option `dpk_src_dir` to specify the location of the downloaded zip files, such as *DPK_INSTALL*, as follows:

```
psft-dpk-setup.bat --dpk_src_dir DPK_INSTALL --env_type midtier =>
```

```
--domain_type prcs
```

5. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory, referred to here as *BASE_DIR*.

The base directory is used to extract the DPKs as well as for deploying PeopleSoft components. The script creates the base directory if it does not exist.

Use forward slashes only (/) when specifying the base directory; for example, C:/psft. Do not use a base directory name that begins with a number.

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

```
Enter the full path for the PeopleSoft Base Directory:
Are you happy with your answer? [Y|n|q]:
```

The script installs the Puppet software and validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

6. Specify the type of database platform.

Enter MSSQL for Microsoft SQL Server, DB2ODBC for Db2 for z/OS, or ORACLE.

```
Enter the PeopleSoft database platform [ORACLE]:
```

7. Specify whether you want a Unicode database.

```
Is the PeopleSoft database unicode? [Y|n]:
```

8. Enter the database name.

```
Enter the PeopleSoft database name:
```

9. If your database platform is Db2 for z/OS, enter the location for the connectivity software for the Db2 z/OS client.

See *PeopleSoft 9.2 Application Installation for Db2 for z/OS (PeopleSoft PeopleTools 8.62)*, "Installing and Configuring DB2 Connect."

```
Enter DB2 Client SQLLIB location:
```

10. If your database platform is Oracle, enter the database service name.

The default is the same as the database name. Do not enter an IP address.

```
Enter the PeopleSoft database service name [PSFT92DB]:
```

11. Enter the name of the host where the database is installed.

Do not enter an IP address.

```
Enter the PeopleSoft database host name:
```

12. If your database platform is Oracle, enter the database listener port number:

```
Enter the PeopleSoft database port [1521]:
```

13. If your database platform is Microsoft SQL server, enter the database server name.

Enter the PeopleSoft database server name:

14. If your database platform is Microsoft SQL Server, enter the ODBC driver name.

Enter Microsoft SQL Server ODBC Name["ODBC Driver 17 for SQL Server"]:

If you want to change the version, enter the text without double quotes; for example:

Enter Microsoft SQL Server ODBC Name["ODBC 17 for SQL Server"]: **ODBC→
Driver 18 for SQL Server**

15. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

Enter the PeopleSoft database Connect ID [people]:

16. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Enter the PeopleSoft database Connect ID [people] password.

Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft database Connect ID password:

17. Enter the PeopleSoft user ID (operator ID), such as PS or VP1.

Enter the PeopleSoft database Operator ID [VP1]:

18. Enter the password twice for the PeopleSoft operator ID.

Enter the PeopleSoft database Operator ID [VP1] password.

Ensure that the password is between 1 and 32 characters in length.

You may include these special characters !@#\$\$%^& :

Re-Enter the PeopleSoft database Operator ID password:

19. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.

Ensure that the password is between 8 and 30 characters in length.

You may include these special characters !@#\$\$%^& :

Re-Enter the Application Server Domain connection password:

20. Enter y to continue with the script.

Are you happy with your answers? [y|n]: **y**

Encrypting the Passwords in the User Data: [OK]

Updating the Puppet Hiera YAML Files with User Data: [OK]

21. If you want to continue running the initialization script using the default configuration, answer y (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer n (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft

environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the psft_puppet_apply script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

22. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

Upon successful completion, the DPK setup script displays the following message:

The PeopleSoft Environment Setup Process Ended.

The complete setup log is written to the file psft_dpk_setup.log in the same location as the DPK setup script.

Task 2-8-2: Running the DPK Setup Script for the Process Scheduler Domain Deployment on Linux, AIX, or Solaris as the Root User

This procedure to deploy a Process Scheduler domain assumes that you have obtained the four PeopleSoft PeopleTools DPK zip files and saved them in *DPK_INSTALL*.

Note. Some of the informational script messages have been omitted for brevity.

If you are installing the PeopleSoft environment as a non-root user, see the section Running the DPK Setup Script for the Process Scheduler Domain Deployment on Linux, AIX, or Solaris as a Non-Root User.

To deploy the domain:

1. Extract the first zip file (*FILENAME_1ofn.zip*).

Note. It is a good idea to extract into the same directory where you downloaded the zip files, *DPK_INSTALL*.

Note. It is important that you retain the *DPK_INSTALL/setup* directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

The extraction creates the *DPK_INSTALL/setup* directory and other files.

2. Open a terminal window as root or a non-root user.
3. Change directory to *DPK_INSTALL/setup*.
4. Run the script as follows:
 - If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:


```
./psft-dpk-setup.sh --env_type midtier --domain_type prcs
```
 - If you extracted the first zip file into a different directory, include the option *dpk_src_dir* to specify the location of the downloaded zip files, such as *DPK_INSTALL*, as follows:

```
./psft-dpk-setup.sh --dpk_src_dir DPK_INSTALL --env_type midtier =>
--domain_type prcs
```

5. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory, referred to here as *BASE_DIR*.

The base directory is used to extract the DPKs as well as for deploying PeopleSoft components. The script creates the base directory if it does not exist.

Use forward slashes only (/) when specifying the base directory; for example, /home/psft. Do not use a base directory name that begins with a number. Do not end the base directory name with a forward slash (for example, do not enter /ds1/psft/).

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

```
Enter the full path for the PeopleSoft Base Directory:
Are you happy with your answer? [Y|n|q]:
```

The script installs the Puppet software and validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

6. Specify a writable directory for the user home directory at the following prompt.

The PeopleSoft environment setup using DPKs creates local users on the host. These users deploy the PeopleSoft components and own the PeopleSoft runtime domains. Enter a new location to be used for creating the home directories for these local users, or specify the default home directory, /home. Enter the full path, and ensure that the directory is writable.

```
Enter the full path for the User Home directory
that is writable [/home]: /ds1
Are you happy with your answer? [y|n|q]:
```

If the script finds that the location you enter (either a new location or the default) is not writable, it exits with the following message.

```
The User does not have write permission to create the user's home
directory under [<user input>] on the Linux VM.
Exiting the PeopleSoft environment setup process.
```

7. Specify the type of database platform.

Enter DB2ODBC for Db2 for z/OS or ORACLE.

```
Enter the PeopleSoft database platform [ORACLE]:
```

8. Specify whether you want a Unicode database.

```
Is the PeopleSoft database unicode? [Y|n]:
```

9. Enter the database name.

```
Enter the PeopleSoft database name:
```

10. If your database platform is Db2 for z/OS, enter the location for the connectivity software for the Db2 z/OS client.

See *PeopleSoft 9.2 Application Installation for Db2 for z/OS (PeopleSoft PeopleTools 8.62)*, "Installing and Configuring DB2 Connect."

Enter DB2 Client SQLLIB location:

11. If your database platform is Oracle, enter the database service name.

The default is the same as the database name. Do not enter an IP address.

Enter the PeopleSoft database service name [PSFT92DB]:

12. Enter the name of the host where the database is installed.

Do not enter an IP address.

Enter the PeopleSoft database host name:

13. If your database platform is Oracle, enter the database listener port number:

Enter the PeopleSoft database port [1521]:

14. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

Enter the PeopleSoft database Connect ID [people]:

15. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Enter the PeopleSoft database Connect ID [people] password.

Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft database Connect ID password:

16. Enter the PeopleSoft user ID (operator ID), such as PS or VP1.

Enter the PeopleSoft database Operator ID [VP1]:

17. Enter the password twice for the PeopleSoft operator ID.

Enter the PeopleSoft database Operator ID [VP1] password.

Ensure that the password is between 1 and 32 characters in length.

You may include these special characters !@#\$%^& :

Re-Enter the PeopleSoft database Operator ID password:

18. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.

Ensure that the password is between 8 and 30 characters in length.

You may include these special characters !@#\$%^& :

Re-Enter the Application Server Domain connection password:

19. Enter y to continue with the script.

Are you happy with your answers? [y|n]: **y**

Encrypting the Passwords in the User Data:

[OK]

Updating the Puppet Hiera YAML Files with User Data:

[OK]

20. If you want to continue running the initialization script using the default configuration, answer *y* (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer *n* (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the `psft_puppet_apply` script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

21. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

Upon successful completion, the DPK setup script displays the following message:

The PeopleSoft Environment Setup Process Ended.

The complete setup log is written to the file `psft_dpk_setup.log` in the same location as the DPK setup script.

Task 2-8-3: Running the DPK Setup Script for the Process Scheduler Domain Deployment on Linux, AIX, or Solaris as a Non-Root User

If you are installing the PeopleSoft environment as a non-root user, ensure that you fulfill the prerequisites in the section *Deploying as a Non-Root User on Linux, AIX, or Solaris*.

Note. Some of the informational script messages have been omitted for brevity.

To deploy the domain:

1. Open a terminal window as a non-root user.
2. Change directory to `DPK_INSTALL/setup`.

Note. It is important that you retain the `DPK_INSTALL/setup` directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

3. Run the script as follows:
 - If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:


```
./psft-dpk-setup.sh --env_type midtier --domain_type prcs
```
 - If you extracted the first zip file into a different directory, include the option `dpk_src_dir` to specify the location of the downloaded zip files, such as `DPK_INSTALL`, as follows:


```
./psft-dpk-setup.sh --dpk_src_dir DPK_INSTALL --env_type midtier =>
--domain_type prcs
```

4. Answer *y* (yes) at the following prompt:

```
You are running DPK setup without root/administrator access.
This is fine as long as the system administrator has performed
all necessary tasks and all prerequisites have been met.
Please see the documentation to determine the prerequisite tasks
that need to be performed to successfully run DPK set up
without root/administrator privilege.
```

```
Would you like to proceed with the setup as a non-root user? [y/n]: y
```

5. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory, referred to here as *BASE_DIR*.

The base directory is used to extract the DPKs as well as for deploying PeopleSoft components. The script creates the base directory if it does not exist.

Use forward slashes only (/) when specifying the base directory; for example, /home/psft. Do not use a base directory name that begins with a number. Do not end the base directory name with a forward slash (for example, do not enter /ds1/psft/).

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

```
Enter the full path for the PeopleSoft Base Directory:
Are you happy with your answer? [Y|n|q]:
```

The script installs the Puppet software and validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

6. Enter the full path for a writable directory with at least 10 GB available space for *PS_CFG_HOME*.

The default is *USER_HOME*/psft/pt/8.62, where *USER_HOME* is the home directory for the logged-in user. The *PS_CFG_HOME* directory holds the configuration and log files for the PeopleSoft Application Server, Process Scheduler, and PIA domains.

```
Enter a writable ps_config_home directory for PeopleSoft domains
with at least 10.0GB space [/home/psftuser/psft/pt/8.62]:
Are you happy with your answer? [Y|n|q]: y
```

7. Specify the type of database platform.

Enter DB2ODBC for Db2 for z/OS or ORACLE.

```
Enter the PeopleSoft database platform [ORACLE]:
```

8. Specify whether you want a Unicode database.

```
Is the PeopleSoft database unicode? [Y|n]:
```

9. Enter the database name.

```
Enter the PeopleSoft database name:
```

10. If your database platform is Db2 for z/OS, enter the location for the connectivity software for the Db2 z/OS client.

See *PeopleSoft 9.2 Application Installation for Db2 for z/OS (PeopleSoft PeopleTools 8.62)*, "Installing and Configuring DB2 Connect."

Enter DB2 Client SQLLIB location:

11. If your database platform is Oracle, enter the database service name.

The default is the same as the database name. Do not enter an IP address.

Enter the PeopleSoft database service name [PSFT92DB]:

12. Enter the name of the host where the database is installed.

Do not enter an IP address.

Enter the PeopleSoft database host name:

13. If your database platform is Oracle, enter the database listener port number:

Enter the PeopleSoft database port [1521]:

14. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

Enter the PeopleSoft database Connect ID [people]:

15. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Enter the PeopleSoft database Connect ID [people] password.

Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft database Connect ID password:

16. Enter the PeopleSoft user ID (operator ID), such as PS or VP1.

Enter the PeopleSoft database Operator ID [VP1]:

17. Enter the password twice for the PeopleSoft operator ID.

Enter the PeopleSoft database Operator ID [VP1] password.

Ensure that the password is between 1 and 32 characters in length.

You may include these special characters !@#\$%^& :

Re-Enter the PeopleSoft database Operator ID password:

18. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.

Ensure the password is between 8 and 30 characters in length.

You may include these special characters !@#\$%^& :

Re-Enter the Application Server Domain connection password:

19. Enter y to continue with the script.

Are you happy with your answers? [y|n]: **y**

Encrypting the Passwords in the User Data:

[OK]

Updating the Puppet Hiera YAML Files with User Data:

[OK]

20. If you want to continue running the initialization script using the default configuration, answer *y* (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer *n* (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the `psft_puppet_apply` script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

21. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

Upon successful completion, the DPK setup script displays the following message:

The PeopleSoft Environment Setup Process Ended.

The complete setup log is written to the file `psft_dpk_setup.log` in the same location as the DPK setup script.

The `setup.log` is written to the file `<USER_HOME>/psft_dpk_work/psft_dpk_setup_<PID>.log`, where `<USER_HOME>` is the home directory for the user running the script, and `<PID>` is a process ID

Task 2-9: Running the DPK Setup Script to Deploy an Application Server and a Process Scheduler Domain

This section discusses:

- Understanding the Application Server and Process Scheduler Domain Deployment
- Running the DPK Setup Script for the Application Server and Process Scheduler Domain Deployment on Microsoft Windows
- Running the DPK Setup Script for the Application Server and Process Scheduler Domain Deployment on Linux, AIX, or Solaris as the Root User
- Running the DPK Setup Script for the Application Server and Process Scheduler Domain Deployment on Linux, AIX, or Solaris as a Non-Root User

Understanding the Application Server and Process Scheduler Domain Deployment

Use this option to set up a single application server and a single Process Scheduler domain, for example to install on a host separate from the database. The deployment includes the following:

- `PS_HOME` installed to the default location under the DPK base directory.
- `PS_CFG_HOME` installed to the default location

- Oracle Tuxedo installed to the default location under the DPK base directory
- Oracle WebLogic installed to the default location under the DPK base directory
- An Application Server domain and a Process Scheduler domains are installed and running.
- The Microsoft Windows DPKs include Microsoft Visual C++ Redistributable Packages for Visual Studio, which include required Microsoft C++ runtime libraries

The script requires the following information:

- Database platform type
- Database name
- Database host name
- Database service name (for Oracle database platforms)
- Database port (for Oracle database platforms)
- Database server name and connectivity information (for Microsoft SQL Server)
- Location of database connectivity software (for Db2 for z/OS)
- Unicode or non-Unicode
- PeopleSoft Connect ID and password
- PeopleSoft operator ID and password
- Application Server Domain Connection password (optional)

If you are installing on Linux, AIX, or Solaris, see the information about running as non-root in the section *Reviewing the DPK Setup Script Options*.

In addition, ensure that you fulfill the items in the Prerequisites section in the task *Running the DPK Setup Script for Mid-Tier Deployment*.

See Also

"Using and Maintaining the PeopleSoft Environment," Using the PeopleSoft Installation

Task 2-9-1: Running the DPK Setup Script for the Application Server and Process Scheduler Domain Deployment on Microsoft Windows

This procedure to deploy an application server and a Process Scheduler domain assumes that you have obtained the four PeopleSoft PeopleTools DPK zip files and saved them in *DPK_INSTALL*.

Note. Some of the informational script messages have been omitted for brevity.

To deploy the domains:

1. Extract the first zip file (*FILENAME_1ofn.zip*).

Note. It is a good idea to extract into the same directory where you downloaded the zip files, *DPK_INSTALL*.

Note. It is important that you retain the *DPK_INSTALL/setup* directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

The extraction creates the *DPK_INSTALL/setup* directory and other files.

2. Open a command prompt with Run as Administrator.
3. Change directory to *DPK_INSTALL/setup*.
4. Run the script as follows:

Note. On Microsoft Windows, if you see an error message similar to "The application has failed to start because its side-by-side configuration is incorrect," it indicates that your machine does not include the necessary Microsoft C++ runtime libraries. Go to the Microsoft Web site, locate the Microsoft Visual C++ redistributable package for your system, and install as directed.

- If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:

```
psft-dpk-setup.bat --env_type midtier --domain_type appbatch
```
- If you extracted the first zip file into a different directory, include the option `dpk_src_dir` to specify the location of the downloaded zip files, such as *DPK_INSTALL*, as follows:

```
psft-dpk-setup.bat --dpk_src_dir DPK_INSTALL --env_type midtier =>
--domain_type appbatch
```

5. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory, referred to here as *BASE_DIR*.

The base directory is used to extract the DPKs as well as for deploying PeopleSoft components. The script creates the base directory if it does not exist.

Use forward slashes only (/) when specifying the base directory; for example, C:/psft. Do not use a base directory name that begins with a number.

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

```
Enter the full path for the PeopleSoft Base Directory:
Are you happy with your answer? [Y|n|q]:
```

The script installs the Puppet software and validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

6. Specify the type of database platform.
Enter MSSQL for Microsoft SQL Server, DB2ODBC for Db2 for z/OS, or ORACLE.
Enter the PeopleSoft database platform [ORACLE]:
7. Specify whether you want a Unicode database.
Is the PeopleSoft database unicode? [Y|n]:
8. Enter the database name.
Enter the PeopleSoft database name:
9. If your database platform is Db2 for z/OS, enter the location for the connectivity software for the Db2 z/OS client.

See *PeopleSoft 9.2 Application Installation for Db2 for z/OS (PeopleSoft PeopleTools 8.62)*, "Installing and Configuring DB2 Connect."

Enter DB2 Client SQLLIB location:

10. If your database platform is Oracle, enter the database service name.

The default is the same as the database name. Do not enter an IP address.

Enter the PeopleSoft database service name [PSFT92DB]:

11. Enter the name of the host where the database is installed.

Do not enter an IP address.

Enter the PeopleSoft database host name:

12. If your database platform is Oracle, enter the database listener port number:

Enter the PeopleSoft database port [1521]:

13. If your database platform is Microsoft SQL Server, enter the database server name.

Enter the PeopleSoft database server name:

14. If your database platform is Microsoft SQL Server, enter the ODBC driver name.

Enter Microsoft SQL Server ODBC Name["ODBC Driver 17 for SQL Server"]:

If you want to change to a different version, enter the text without double quotes; for example:

Enter Microsoft SQL Server ODBC Name["ODBC Driver 17 for SQL Server"]:
ODBC Driver 18 for SQL Server

15. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

Enter the PeopleSoft database Connect ID [people]:

16. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Enter the PeopleSoft database Connect ID [people] password.
Ensure that the password meets the length and complexity requirements
for your database platform:
Re-Enter the PeopleSoft database Connect ID password:

17. Enter the PeopleSoft user ID (operator ID), such as PS or VP1.

Enter the PeopleSoft database Operator ID [VP1]:

18. Enter the password twice for the PeopleSoft operator ID.

Enter the PeopleSoft database Operator ID [VP1] password.
Ensure that the password is between 1 and 32 characters in length.
You may include these special characters !@#\$\$%^& :
Re-Enter the PeopleSoft database Operator ID password:

19. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.
 Ensure that the password is between 8 and 30 characters in length.
 You may include these special characters !@#\$\$%^& :
 Re-Enter the Application Server Domain connection password:

20. Enter *y* to continue with the script.

```
Are you happy with your answers? [y|n]: y
Encrypting the Passwords in the User Data:           [ OK ]
Updating the Puppet Hiera YAML Files with User Data: [ OK ]
```

21. If you want to continue running the initialization script using the default configuration, answer *y* (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer *n* (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the psft_puppet_apply script to continue with the setup of the PeopleSoft environment.

```
Do you want to continue with the default initialization process? [y|n]:
```

22. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

Upon successful completion, the DPK setup script displays the following message:

```
The PeopleSoft Environment Setup Process Ended.
```

The complete setup log is written to the file psft_dpk_setup.log in the same location as the DPK setup script.

Task 2-9-2: Running the DPK Setup Script for the Application Server and Process Scheduler Domain Deployment on Linux, AIX, or Solaris as the Root User

This procedure to deploy an application server and a Process Scheduler domain assumes that you have obtained the four PeopleSoft PeopleTools DPK zip files and saved them in *DPK_INSTALL*.

Note. Some of the informational script messages have been omitted for brevity.

If you are installing the PeopleSoft environment as a non-root user, see the following section, Running the DPK Setup Script for the Application Server and Process Scheduler Domain Deployment on Linux, AIX, or Solaris as a Non-Root User.

To deploy the domains:

1. Extract the first zip file (*FILENAME_1ofn.zip*).

Note. It is a good idea to extract into the same directory where you downloaded the zip files, *DPK_INSTALL*.

Note. It is important that you retain the *DPK_INSTALL/setup* directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

The extraction creates the *DPK_INSTALL/setup* directory and other files.

2. Open a terminal window as root.
3. Change directory to *DPK_INSTALL/setup*.
4. Run the script as follows:
 - If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:

```
./psft-dpk-setup.sh --env_type midtier --domain_type appbatch
```

- If you extracted the first zip file into a different directory, include the option *dpk_src_dir* to specify the location of the downloaded zip files, such as *DPK_INSTALL*, as follows:

```
./psft-dpk-setup.sh --dpk_src_dir DPK_INSTALL --env_type midtier --domain_type appbatch
```

5. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory, referred to here as *BASE_DIR*.

The base directory is used to extract the DPKs as well as for deploying PeopleSoft components. The script creates the base directory if it does not exist.

Use forward slashes only (/) when specifying the base directory; for example, */home/psft*. Do not use a base directory name that begins with a number. Do not end the base directory name with a forward slash (for example, do not enter */ds1/psft*).

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

```
Enter the full path for the PeopleSoft Base Directory:
Are you happy with your answer? [Y|n|q]:
```

The script installs the Puppet software and validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

6. Specify a writable directory for the user home directory at the following prompt.

The PeopleSoft environment setup using DPKs creates local users on the host. These users deploy the PeopleSoft components and own the PeopleSoft runtime domains. Enter a new location to be used for creating the home directories for these local users, or specify the default home directory, */home*. Enter the full path, and ensure that the directory is writable.

```
Enter the full path for the User Home directory
that is writable [/home]: /ds1
```

Are you happy with your answer? [y|n|q]:

If the script finds that the location you enter (either a new location or the default) is not writable, it exits with the following message.

The User does not have write permission to create the user's home directory under [*<user input>*] on the Linux VM.

Exiting the PeopleSoft environment setup process.

7. Specify the type of database platform.

Enter DB2ODBC for Db2 for z/OS or ORACLE.

Enter the PeopleSoft database platform [ORACLE]:

8. Specify whether you want a Unicode database.

Is the PeopleSoft database unicode? [Y|n]:

9. Enter the database name.

Enter the PeopleSoft database name:

10. If your database platform is Db2 for z/OS, enter the location for the connectivity software for the Db2 z/OS client.

See *PeopleSoft 9.2 Application Installation for Db2 for z/OS (PeopleSoft PeopleTools 8.62)*, "Installing and Configuring DB2 Connect."

Enter DB2 Client SQLLIB location:

11. If your database platform is Oracle, enter the database service name.

The default is the same as the database name. Do not enter an IP address.

Enter the PeopleSoft database service name [PSFT92DB]:

12. Enter the name of the host where the database is installed.

Do not enter an IP address.

Enter the PeopleSoft database host name:

13. If your database platform is Oracle, enter the database listener port number:

Enter the PeopleSoft database port [1521]:

14. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

Enter the PeopleSoft database Connect ID [people]:

15. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Enter the PeopleSoft database Connect ID [people] password.

Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft database Connect ID password:

16. Enter the PeopleSoft user ID (operator ID), such as PS or VP1.

Enter the PeopleSoft database Operator ID [VP1]:

17. Enter the password twice for the PeopleSoft operator ID.

Enter the PeopleSoft database Operator ID [VP1] password.
 Ensure that the password is between 1 and 32 characters in length.
 You may include these special characters !@#\$\$%^& :
 Re-Enter the PeopleSoft database Operator ID password:

18. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.
 Ensure that the password is between 8 and 30 characters in length.
 You may include these special characters !@#\$\$%^& :
 Re-Enter the Application Server Domain connection password:

19. Enter y to continue with the script.

Are you happy with your answers? [y|n]: **y**
 Encrypting the Passwords in the User Data: [OK]
 Updating the Puppet Hiera YAML Files with User Data: [OK]

20. If you want to continue running the initialization script using the default configuration, answer y (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer n (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the psft_puppet_apply script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

21. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

Upon successful completion, the DPK setup script displays the following message:

The PeopleSoft Environment Setup Process Ended.

The complete setup log is written to the file psft_dpk_setup.log in the same location as the DPK setup script.

Task 2-9-3: Running the DPK Setup Script for the Application Server and Process Scheduler Domain Deployment on Linux, AIX, or Solaris as a Non-Root User

If you are installing the PeopleSoft environment as a non-root user, ensure that you fulfill the prerequisites in the section Deploying as a Non-Root User on Linux, AIX, or Solaris.

Note. Some of the informational script messages have been omitted for brevity.

To deploy the domains:

1. Open a terminal window as a non-root user.
2. Change directory to *DPK_INSTALL/setup*.

Note. It is important that you retain the *DPK_INSTALL/setup* directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

3. Run the script as follows:

- If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:
- If you extracted the first zip file into a different directory, include the option *dpk_src_dir* to specify the location of the downloaded zip files, such as *DPK_INSTALL*, as follows:

```
./psft-dpk-setup.sh --env_type midtier --domain_type appbatch
```

```
./psft-dpk-setup.sh --dpk_src_dir DPK_INSTALL --env_type midtier =>
--domain_type appbatch
```

4. Answer y (yes) at the following prompt:

```
You are running DPK setup without root/administrator access.
This is fine as long as the system administrator has performed
all necessary tasks and all prerequisites have been met.
Please see the documentation to determine the prerequisite tasks
that need to be performed to successfully run DPK set up
without root/administrator privilege.
```

```
Would you like to proceed with the setup as a non-root user? [y/n]: y
```

5. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory, referred to here as *BASE_DIR*.

The base directory is used to extract the DPKs as well as for deploying PeopleSoft components. The script creates the base directory if it does not exist.

Use forward slashes only (/) when specifying the base directory; for example, /home/psft. Do not use a base directory name that begins with a number. Do not end the base directory name with a forward slash (for example, do not enter /ds1/psft/).

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

```
Enter the full path for the PeopleSoft Base Directory:
Are you happy with your answer? [Y|n|q]:
```

The script installs the Puppet software and validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

6. Enter the full path for a writable directory with at least 10 GB available space for *PS_CFG_HOME*.

The default is *USER_HOME*/psft/pt/8.62, where *USER_HOME* is the home directory for the logged-in user. The *PS_CFG_HOME* directory holds the configuration and log files for the PeopleSoft Application Server, Process Scheduler, and PIA domains.

```
Enter a writable ps_config_home directory for PeopleSoft domains
with at least 10.0GB space [/home/psftuser/psft/pt/8.62]:
Are you happy with your answer? [Y|n|q]: y
```

7. Specify the type of database platform.

Enter DB2ODBC for Db2 for z/OS or ORACLE.

```
Enter the PeopleSoft database platform [ORACLE]:
```

8. Specify whether you want a Unicode database.

```
Is the PeopleSoft database unicode? [Y|n]:
```

9. Enter the database name.

```
Enter the PeopleSoft database name:
```

10. If your database platform is Db2 for z/OS, enter the location for the connectivity software for the Db2 z/OS client.

See *PeopleSoft 9.2 Application Installation for Db2 for z/OS (PeopleSoft PeopleTools 8.62)*, "Installing and Configuring DB2 Connect."

```
Enter DB2 Client SQLLIB location:
```

11. If your database platform is Oracle, enter the database service name.

The default is the same as the database name. Do not enter an IP address.

```
Enter the PeopleSoft database service name [PSFT92DB]:
```

12. Enter the name of the host where the database is installed.

Do not enter an IP address.

```
Enter the PeopleSoft database host name:
```

13. If your database platform is Oracle, enter the database listener port number:

```
Enter the PeopleSoft database port [1521]:
```

14. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

```
Enter the PeopleSoft database Connect ID [people]:
```

15. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Enter the PeopleSoft database Connect ID [people] password.
 Ensure that the password meets the length and complexity requirements for your database platform:
 Re-Enter the PeopleSoft database Connect ID password:

16. Enter the PeopleSoft user ID (operator ID), such as PS or VP1.

Enter the PeopleSoft database Operator ID [VP1]:

17. Enter the password twice for the PeopleSoft operator ID.

Enter the PeopleSoft database Operator ID [VP1] password.
 Ensure that the password is between 1 and 32 characters in length.
 You may include these special characters !@#\$\$%^& :
 Re-Enter the PeopleSoft database Operator ID password:

18. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.
 Ensure that the password is between 8 and 30 characters in length.
 You may include these special characters !@#\$\$%^& :
 Re-Enter the Application Server Domain connection password:

19. Enter y to continue with the script.

```
Are you happy with your answers? [y|n]: y
Encrypting the Passwords in the User Data:           [ OK ]
Updating the Puppet Hiera YAML Files with User Data: [ OK ]
```

20. If you want to continue running the initialization script using the default configuration, answer y (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer n (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the psft_puppet_apply script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

21. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

Upon successful completion, the DPK setup script displays the following message:

The PeopleSoft Environment Setup Process Ended.

The setup.log is written to the file `<USER_HOME>/psft_dpk_work/psft_dpk_setup_<PID>.log`, where `<USER_HOME>` is the home directory for the user running the script, and `<PID>` is a process ID.

Task 2-10: Running the DPK Setup Script to Deploy a PIA Domain

This section discusses:

- Understanding the PIA Domain Deployment
- Prerequisites for the PIA Domain Deployment
- Running the DPK Setup Script for the PIA Domain Deployment on Microsoft Windows
- Running the DPK Setup Script for the PIA Domain Deployment on Linux, AIX, or Solaris as the Root User
- Running the DPK Setup Script for the PIA Domain Deployment on Linux, AIX, or Solaris as a Non-Root User

Understanding the PIA Domain Deployment

Use these instructions to set up a PeopleSoft Pure Internet Architecture (PIA) domain only, for example to install on a host separate from the database.

The PIA domain deployment includes the following:

- *PS_HOME* installed to the default location under the DPK base directory
- *PS_CFG_HOME* installed to the default location
- Oracle Tuxedo installed to the default location under the DPK base directory
- Oracle WebLogic installed to the default location under the DPK base directory
- PIA domain is installed and running.
- The Microsoft Windows DPKs include Microsoft Visual C++ Redistributable Packages for Visual Studio, which include required Microsoft C++ runtime libraries

See Also

"Using and Maintaining the PeopleSoft Environment," Using the PeopleSoft Installation

Prerequisites for the PIA Domain Deployment

Review the following item to prepare for the PIA domain deployment:

- Before beginning the PIA domain deployment, ensure that Application Server and Process Scheduler domains are available.
- Ensure that you fulfill the items in the Prerequisites section in the task Running the DPK Setup Script for Mid-Tier Deployment.
- If you are installing on Linux, AIX, or Solaris, see the information about running as non-root in the section Reviewing the DPK Setup Script Options.
- If your environment includes separate hosts for the PIA domain and the Application Server domain, you must use customizations to designate the application server that the PIA domain will access.

See "Completing the DPK Initialization with Customizations," Reviewing the Customization File for a PIA Domain on a Separate Host.

The script requires the following information:

- Database platform type
- Database name
- Database host name
- Database service name (for Oracle database platforms)
- Database port (for Oracle database platforms)
- Location of connectivity software for Db2 for z/OS client
- Database server name and connectivity information (for Microsoft SQL Server)
- Unicode or non-Unicode
- PeopleSoft Connect ID and password
- PeopleSoft operator ID and password
- Application Server Domain Connection password (optional)
- PeopleSoft Web profile user (PTWEBSEVER) password
- WebLogic server administrator password
- Integration Gateway administrator user and password
- Integration Gateway keystore password
- Application Server Domain Connections string
- Process Scheduler Domain Server Name

Task 2-10-1: Running the DPK Setup Script for the PIA Domain Deployment on Microsoft Windows

This procedure to deploy a single PIA domain assumes that you have obtained the four PeopleSoft PeopleTools DPK zip files and saved them in *DPK_INSTALL*.

Note. Some of the informational script messages have been omitted for brevity.

1. Extract the first zip file (*FILENAME_1ofn.zip*).

Note. It is a good idea to extract into the same directory where you downloaded the zip files, *DPK_INSTALL*.

Note. It is important that you retain the *DPK_INSTALL/setup* directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

The extraction creates the *DPK_INSTALL/setup* directory and other files.

2. Open a command prompt with Run as Administrator.
3. Change directory to *DPK_INSTALL/setup*.
4. Run the script as follows:

Note. If you see an error message similar to "The application has failed to start because its side-by-side configuration is incorrect," it indicates that your machine does not include the necessary Microsoft C++ runtime libraries. Go to the Microsoft Web site, locate the Microsoft Visual C++ redistributable package for your system, and install as directed.

- If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:
- If you extracted the first zip file into a different directory, include the option `dpk_src_dir` to specify the location of the downloaded zip files, such as `DPK_INSTALL`, as follows:

```
psft-dpk-setup.bat --env_type midtier --domain_type pia
```

```
psft-dpk-setup.bat --dpk_src_dir DPK_INSTALL --env_type midtier =>
--domain_type pia
```

5. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory, referred to here as *BASE_DIR*.

The base directory is used to extract the DPKs as well as for deploying PeopleSoft components. The script creates the base directory if it does not exist.

Use forward slashes only (/) when specifying the base directory; for example, C:/psft. Do not use a base directory name that begins with a number.

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

```
Enter the full path for the PeopleSoft Base Directory:
Are you happy with your answer? [Y|n|q]:
```

The script installs the Puppet software and validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

```
Checking if the Base directory has Enough Free Space:           [ OK ]
```

6. Specify the type of database platform.

Enter MSSQL for Microsoft SQL Server, DB2ODBC for Db2 for z/OS, or ORACLE.

```
Enter the PeopleSoft database platform [ORACLE]:
```

7. Specify whether you want a Unicode database.

```
Is the PeopleSoft database unicode? [Y|n]:
```

8. Enter the database name.

```
Enter the PeopleSoft database name:
```

9. If your database platform is Db2 for z/OS, enter the location for the connectivity software for the Db2 z/OS client.

See *PeopleSoft 9.2 Application Installation for Db2 for z/OS (PeopleSoft PeopleTools 8.62)*, "Installing and Configuring DB2 Connect."

Enter DB2 Client SQLLIB location:

10. If your database platform is Oracle, enter the database service name.

The default is the same as the database name. Do not enter an IP address.

Enter the PeopleSoft database service name [PSFT92DB]:

11. Enter the name of the host where the database is installed.

Do not enter an IP address.

Enter the PeopleSoft database host name:

12. If your database platform is Oracle, enter the database listener port number:

Enter the PeopleSoft database port [1521]:

13. If your database platform is Microsoft SQL Server, enter the database server name.

Enter the PeopleSoft database server name:

14. If your database platform is Microsoft SQL Server, enter the ODBC driver name.

Enter Microsoft SQL Server ODBC Name["ODBC Driver 17 for SQL Server"]:

If you want to change to a different version, enter the text without double quotes; for example:

Enter Microsoft SQL Server ODBC Name["ODBC Driver 17 for SQL Server"]:
ODBC Driver 18 for SQL Server

15. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

Enter the PeopleSoft database Connect ID [people]:

16. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Enter the PeopleSoft database Connect ID [people] password.

Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft database Connect ID password:

17. Enter the PeopleSoft user ID (operator ID), such as PS or VP1.

Enter the PeopleSoft database Operator ID [VP1]:

18. Enter the password twice for the PeopleSoft operator ID.

Enter the PeopleSoft database Operator ID [VP1] password.

Ensure that the password is between 1 and 32 characters in length.

You may include these special characters !@#\$\$%^& :

Re-Enter the PeopleSoft database Operator ID password:

19. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password. Ensure that the password is between 8 and 30 characters in length. You may include these special characters !@#\$%^& :
Re-Enter the Application Server Domain connection password:

20. Enter the password for the PTWEBSEVER web profile user at the following prompt:

Enter a new PeopleSoft WebProfile user [PTWEBSEVER] password. Ensure the password is between 8 and 32 characters in length. You may include these special characters !@#\$%^& :
Re-Enter the PeopleSoft WebProfile user password:

21. Enter the Oracle WebLogic Server Admin password, following the guidelines in the prompt.

The default Oracle WebLogic server administrator is system. The window does not display masking characters as you type. There is no default password.

Enter a new WebLogic Server Admin user [system] password. Ensure that the password is between 8 and 30 characters in length with at least one lowercase letter and one uppercase letter. It must also contain one number or one of these special characters !@#\$%^& :

Re-Enter the WebLogic Server Admin user password:

22. Enter the Integration Gateway user ID and password at the following prompt.

The default user ID is administrator.

Enter the PeopleSoft Integration Gateway user [administrator]:
Enter the PeopleSoft Integration Gateway user [administrator] password. Ensure that the password is between 8 and 30 characters in length:. You may include these special characters !@#\$%^& :
Re-Enter the PeopleSoft Integration Gateway user password:

23. Enter the Integration Gateway keystore password.

Enter the SSL Keystore password, which is required for web servers and Integration Broker gateways in SSL-enabled environments. The password you enter is used for the default keystore. If you need to reset the password, use the pskeymanager utility.

See *PeopleTools: System and Server Administration*, "Implementing WebLogic SSL Keys and Certificates."

See *PeopleTools: Integration Broker Administration*, "Configuring Security and General Properties."

Enter the PeopleSoft Integration Gateway Keystore password. Ensure the password is between 8 and 30 characters in length. You may include these special characters !@#\$%^& :
Re-Enter the PeopleSoft Integration Gateway Keystore password:

24. Enter the Application Server Domain Connections string, in the format <Server_name>:<Port>.

To specify the Application Server Domain Connect string, enter the application server name and a colon, followed by the Jolt port that the PIA domain connects to. For example, **psftserver:9000**.

See *PeopleTools: System and Server Administration*, "Configuring Jolt Failover and Load Balancing."

See *PeopleTools: System and Server Administration*, "Configuring SSL for Workstation Listener and Jolt Listener."

Enter the Application Server Domain Connections String:

25. Enter the name of the server with the Process Scheduler domain.

Enter the Process Scheduler Domain Server Name:

When you run the DPK setup script with default initialization, the Process Scheduler domain server name is PRCSxxxx, where xxx is a random number. On a host where Process Scheduler has been deployed, you can find the Process Scheduler domain server name (PrcsServerName) in the Process Scheduler configuration file. Locate it in `<PS_CFG_HOME>/appserv/prcs/<Domain name>/psprcs.cfg`, under General settings for the Process Scheduler.

For example:

```
;=====
; General settings for the Process Scheduler
;=====
PrcsServerName=PRCS8783
```

26. Enter y to continue with the script.

```
Are you happy with your answers? [y|n]: y
Encrypting the Passwords in the User Data:          [ OK ]
Updating the Puppet Hiera YAML Files with User Data: [ OK ]
```

27. If you want to continue running the initialization script using the default configuration, answer y (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer n (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the psft_puppet_apply script to continue with the setup of the PeopleSoft environment.

```
Do you want to continue with the default initialization process? [y|n]:
```

28. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

Upon successful completion, the DPK setup script displays the following message:

```
The PeopleSoft Environment Setup Process Ended.
```

The complete setup log is written to the file psft_dpk_setup.log in the same location as the DPK setup script.

Task 2-10-2: Running the DPK Setup Script for the PIA Domain Deployment on Linux, AIX, or Solaris as the Root User

This procedure to deploy a single PIA domain assumes that you have obtained the four PeopleSoft PeopleTools DPK zip files and saved them in `DPK_INSTALL`.

Note. Some of the informational script messages have been omitted for brevity.

If you are installing the PeopleSoft environment as a non-root user, see the next section, Running the DPK Setup Script for the PIA Domain Deployment on Linux, AIX, or Solaris as a Non-Root User

To deploy the domain:

1. Extract the first zip file (*FILENAME_1ofn.zip*).

Note. It is a good idea to extract into the same directory where you downloaded the zip files, *DPK_INSTALL*.

Note. It is important that you retain the *DPK_INSTALL/setup* directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

The extraction creates the *DPK_INSTALL/setup* directory and other files.

2. Open a terminal windows as root.
3. Change directory to *DPK_INSTALL/setup*.
4. Run the script as follows:
 - If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:


```
./psft-dpk-setup.sh --env_type midtier --domain_type pia
```
 - If you extracted the first zip file into a different directory, include the option *dpk_src_dir* to specify the location of the downloaded zip files, such as *DPK_INSTALL*, as follows:


```
./psft-dpk-setup.sh --dpk_src_dir DPK_INSTALL --env_type midtier --domain_type pia
```
5. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory, referred to here as *BASE_DIR*.

The base directory is used to extract the DPKs as well as for deploying PeopleSoft components. The script creates the base directory if it does not exist.

Use forward slashes only (/) when specifying the base directory; for example, */home/psft*. Do not use a base directory name that begins with a number. Do not end the base directory name with a forward slash (for example, do not enter */ds1/psft*).

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

```
Enter the full path for the PeopleSoft Base Directory:
Are you happy with your answer? [Y|n|q]:
```

The script validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

6. Specify a writable directory for the user home directory at the following prompt.

The PeopleSoft environment setup using DPKs creates local users on the host. These users deploy the PeopleSoft components and own the PeopleSoft runtime domains. Enter a new location to be used for creating the home directories for these local users, or specify the default home directory, */home*. Enter the full path, and ensure that the directory is writable.

```
Enter the full path for the User Home directory
that is writable [/home]: /ds1
Are you happy with your answer? [y|n|q]:
```

If the script finds that the location you enter (either a new location or the default) is not writable, it exits with the following message.

```
The User does not have write permission to create the user's home
directory under [<user input>] on the Linux VM.
Exiting the PeopleSoft environment setup process.
```

7. Specify the type of database platform.

Enter DB2ODBC for Db2 for z/OS, or ORACLE.

```
Enter the PeopleSoft database platform [ORACLE]:
```

8. Specify whether you want a Unicode database.

```
Is the PeopleSoft database unicode? [Y|n]:
```

9. Enter the database name.

```
Enter the PeopleSoft database name:
```

10. If your database platform is Db2 for z/OS, enter the location for the connectivity software for the Db2 z/OS client.

See *PeopleSoft 9.2 Application Installation for Db2 for z/OS (PeopleSoft PeopleTools 8.62)*, "Installing and Configuring DB2 Connect."

```
Enter DB2 Client SQLLIB location:
```

11. If your database platform is Oracle, enter the database service name.

The default is the same as the database name. Do not enter an IP address.

```
Enter the PeopleSoft database service name [PSFT92DB]:
```

12. Enter the name of the host where the database is installed.

Do not enter an IP address.

```
Enter the PeopleSoft database host name:
```

13. If your database platform is Oracle, enter the database listener port number:

```
Enter the PeopleSoft database port [1521]:
```

14. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

```
Enter the PeopleSoft database Connect ID [people]:
```

15. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

```
Enter the PeopleSoft database Connect ID [people] password.
```

```
Ensure that the password meets the length and complexity requirements
for your database platform:
```

```
Re-Enter the PeopleSoft database Connect ID password:
```

16. Enter the PeopleSoft user ID (operator ID), such as PS or VP1.

Enter the PeopleSoft database Operator ID [VP1]:

17. Enter the password twice for the PeopleSoft operator ID.

Enter the PeopleSoft database Operator ID [VP1] password.
Ensure the password is between 1 and 32 characters in length.
You may include these special characters !@#\$\$%^& :
Re-Enter the PeopleSoft database Operator ID password:

18. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.
Ensure the password is between 8 and 30 characters in length.
You may include these special characters !@#\$\$%^& :
Re-Enter the Application Server Domain connection password:

19. Enter the password for the PTWEBSEVER web profile user at the following prompt:

Enter a new PeopleSoft Web Profile user [PTWEBSEVER] password. Ensure that the password is between 8 and 32 characters in length.
You may include these special characters !@#\$\$%^& :
Re-Enter the PeopleSoft Web Profile user password:

20. Enter the Oracle WebLogic Server Admin password, following the guidelines in the prompt.

The default Oracle WebLogic server administrator is system. The window does not display masking characters as you type. There is no default password.

Enter a new WebLogic Server Admin user [system] password.
Ensure that the password is between 8 and 30 characters in length with at least one lowercase letter and one uppercase letter. It must also contain one number or one of these special characters !@#\$\$%^& :

Re-Enter the WebLogic Server Admin user password:

21. Enter the Integration Gateway user ID and password at the following prompt.

The default user ID is administrator.

Enter the PeopleSoft Integration Gateway user [administrator]:
Enter the PeopleSoft Integration Gateway user [administrator] password.
Ensure that the password is between 8 and 30 characters in length.
You may include these special characters !@#\$\$%^& :
Re-Enter the PeopleSoft Integration Gateway user password:

22. Enter the Integration Gateway keystore password.

Enter the SSL Keystore password, which is required for web servers and Integration Broker gateways in SSL-enabled environments. The password you enter is used for the default keystore. If you need to reset the password, use the pskeymanager utility.

See *PeopleTools: System and Server Administration*, "Implementing WebLogic SSL Keys and Certificates."

See *PeopleTools: Integration Broker Administration*, "Configuring Security and General Properties."

Enter the PeopleSoft Integration Gateway Keystore password. Ensure the password is between 8 and 30 characters in length. You may include these special characters !@#\$\$%^& :
Re-Enter the PeopleSoft Integration Gateway Keystore password:

23. Enter the Application Server Domain Connection string, in the format `<Server_name>:<Port>`.

To specify the Application Server Domain Connect string, enter the application server name and a colon, followed by the Jolt port that the PIA domain connects to. For example, **psftserver:9000**.

See *PeopleTools: System and Server Administration*, "Configuring Jolt Failover and Load Balancing."

See *PeopleTools: System and Server Administration*, "Configuring SSL for Workstation Listener and Jolt Listener.."

Enter the Application Server Domain Connections String:

24. Enter the name of the server with the Process Scheduler domain.

Enter the Process Scheduler Domain Server Name:

When you run the DPK setup script with default initialization, the Process Scheduler domain server name is PRCSxxxx, where xxx is a random number. On a host where Process Scheduler has been deployed, you can find the Process Scheduler domain server name (PrCsServerName) in the Process Scheduler configuration file. Locate it in `<PS_CFG_HOME>/appserv/prcs/<Domain name>/psprcs.cfg`, under General settings for the Process Scheduler.

For example:

```
;=====
; General settings for the Process Scheduler
;=====
PrCsServerName=PRCS8783
```

25. Enter y to continue with the script.

```
Are you happy with your answers? [y|n]: y
Encrypting the Passwords in the User Data:           [ OK ]
Updating the Puppet Hiera YAML Files with User Data: [ OK ]
```

26. If you want to continue running the initialization script using the default configuration, answer y (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer n (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the psft_puppet_apply script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

27. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED]

indicates that the profile application failed.

Upon successful completion, the DPK setup script displays the following message:

The PeopleSoft Environment Setup Process Ended.

The complete setup log is written to the file `psft_dpk_setup.log` in the same location as the DPK setup script.

Task 2-10-3: Running the DPK Setup Script for the PIA Domain Deployment on Linux, AIX, or Solaris as a Non-Root User

If you are installing the PeopleSoft environment as a non-root user, ensure that you fulfill the prerequisites in the section *Deploying as a Non-Root User on Linux, AIX, or Solaris*.

Note. Some of the informational script messages have been omitted for brevity.

To deploy the domain:

1. Open a terminal window as a non-root user.
2. Change directory to `DPK_INSTALL/setup`.

Note. It is important that you retain the `DPK_INSTALL/setup` directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

3. Run the script as follows:

- If you extracted the first zip file into the same directory where you downloaded the zip files, use this command:
- If you extracted the first zip file into a different directory, include the option `dpk_src_dir` to specify the location of the downloaded zip files, such as `DPK_INSTALL`, as follows:

```
./psft-dpk-setup.sh --env_type midtier --domain_type pia
```

```
./psft-dpk-setup.sh --dpk_src_dir DPK_INSTALL --env_type midtier --domain_type pia
```

4. Answer `y` (yes) at the following prompt:

```
You are running DPK setup without root/administrator access.
This is fine as long as the system administrator has performed
all necessary tasks and all prerequisites have been met.
Please see the documentation to determine the prerequisite tasks
that need to be performed to successfully run DPK set up
without root/administrator privilege.
```

```
Would you like to proceed with the setup as a non-root user? [y/n]: y
```

5. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory, referred to here as `BASE_DIR`.

The base directory is used to extract the DPKs as well as for deploying PeopleSoft components. The script creates the base directory if it does not exist.

Use forward slashes only (/) when specifying the base directory; for example, `/home/psft`. Do not use a base directory name that begins with a number. Do not end the base directory name with a forward slash (for example, do not enter `/ds1/psft/`).

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

Enter the full path for the PeopleSoft Base Directory:
Are you happy with your answer? [Y|n|q]:

The script installs the Puppet software and validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

6. Enter the full path to a writable directory with at least 10 GB available space for *PS_CFG_HOME*.

The default is *USER_HOME*/psft/pt/8.62, where *USER_HOME* is the home directory for the logged-in user. The *PS_CFG_HOME* directory holds the configuration and log files for the PeopleSoft Application Server, Process Scheduler, and PIA domains.

Enter a writable ps_config_home directory for PeopleSoft domains with at least 10.0GB space [/home/psftuser/psft/pt/8.62]:
Are you happy with your answer? [Y|n|q]: y

7. Specify the type of database platform.

Enter DB2ODBC for Db2 for z/OS or ORACLE.

Enter the PeopleSoft database platform [ORACLE]:

8. Specify whether you want a Unicode database.

Is the PeopleSoft database unicode? [Y|n]:

9. Enter the database name.

Enter the PeopleSoft database name:

10. If your database platform is Db2 for z/OS, enter the location for the connectivity software for the Db2 z/OS client.

See *PeopleSoft 9.2 Application Installation for Db2 for z/OS (PeopleSoft PeopleTools 8.62)*, "Installing and Configuring DB2 Connect."

Enter DB2 Client SQLLIB location:

11. If your database platform is Oracle, enter the database service name.

The default is the same as the database name. Do not enter an IP address.

Enter the PeopleSoft database service name [PSFT92DB]:

12. Enter the name of the host where the database is installed.

Do not enter an IP address.

Enter the PeopleSoft database host name:

13. If your database platform is Oracle, enter the database listener port number:

Enter the PeopleSoft database port [1521]:

14. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

Enter the PeopleSoft database Connect ID [people]:

15. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Enter the PeopleSoft database Connect ID [people] password.

Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft database Connect ID password:

16. Enter the PeopleSoft user ID (operator ID), such as PS or VP1.

Enter the PeopleSoft database Operator ID [VP1]:

17. Enter the password twice for the PeopleSoft operator ID.

Enter the PeopleSoft database Operator ID [VP1] password.

Ensure that the password is between 1 and 32 characters in length.

You may include these special characters !@#\$%^& :

Re-Enter the PeopleSoft database Operator ID password:

18. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.

Ensure that the password is between 8 and 30 characters in length.

You may include these special characters !@#\$%^& :

Re-Enter the Application Server Domain connection password:

19. Enter the password for the PTWEBSEVER web profile user at the following prompt:

Enter a new PeopleSoft Web Profile user [PTWEBSEVER] password.

Ensure that the password is between 8 and 32 characters in length.

You may include these special characters !@#\$%^& :

Re-Enter the PeopleSoft Web Profile user password:

20. Enter the Oracle WebLogic Server Admin password, following the guidelines in the prompt.

The default Oracle WebLogic server administrator is system. The window does not display masking characters as you type. There is no default password.

Enter a new WebLogic Server Admin user [system] password.

Ensure that the password is between 8 and 30 characters in length with at least one lowercase letter and one uppercase letter. It must⇒ also

contain one number or one of these special characters !@#\$%^& :

Re-Enter the WebLogic Server Admin user password:

21. Enter the Integration Gateway user ID and password at the following prompt.

The default user ID is administrator.

Enter the PeopleSoft Integration Gateway user [administrator]:

Enter the PeopleSoft Integration Gateway user [administrator] password.

Ensure that the password is between 8 and 30 characters in length.
 You may include these special characters !@#\$\$%^& :
 Re-Enter the PeopleSoft Integration Gateway user password:

22. Enter the Integration Gateway keystore password.

Enter the SSL Keystore password, which is required for web servers and Integration Broker gateways in SSL-enabled environments. The password you enter is used for the default keystore. If you need to reset the password, use the pskeymanager utility.

See *PeopleTools: System and Server Administration*, "Implementing WebLogic SSL Keys and Certificates."

See *PeopleTools: Integration Broker Administration*, "Configuring Security and General Properties."

Enter the PeopleSoft Integration Gateway Keystore password. Ensure the password is between 8 and 30 characters in length.
 You may include these special characters !@#\$\$%^& :
 Re-Enter the PeopleSoft Integration Gateway Keystore password:

23. Enter the Application Server Domain Connection string, in the format <Server_name>:<Port>.

To specify the Application Server Domain Connect string, enter the application server name and a colon, followed by the Jolt port that the PIA domain connects to. For example, **psftserver:9000**.

See *PeopleTools: System and Server Administration*, "Configuring Jolt Failover and Load Balancing."

See *PeopleTools: System and Server Administration*, "Configuring SSL for Workstation Listener and Jolt Listener.."

Enter the Application Server Domain Connections String:

24. Enter the name of the server with the Process Scheduler domain.

Enter the Process Scheduler Domain Server Name:

When you run the DPK setup script with default initialization, the Process Scheduler domain server name is PRCSxxxx, where xxx is a random number. On a host where Process Scheduler has been deployed, you can find the Process Scheduler domain server name (PrCsServerName) in the Process Scheduler configuration file. Locate it in <PS_CFG_HOME>/appserv/prcs/<Domain name>/psprcs.cfg, under General settings for the Process Scheduler.

For example:

```
;=====
; General settings for the Process Scheduler
;=====
PrCsServerName=PRCS8783
```

25. Enter y to continue with the script.

```
Are you happy with your answers? [y|n]: y
Encrypting the Passwords in the User Data:           [ OK ]
Updating the Puppet Hiera YAML Files with User Data: [ OK ]
```

26. If you want to continue running the initialization script using the default configuration, answer y (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer n (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following

prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the psft_puppet_apply script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

27. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

Upon successful completion, the DPK setup script displays the following message:

The PeopleSoft Environment Setup Process Ended.

The setup.log is written to the file <USER_HOME>/psft_dpk_work/psft_dpk_setup_<PID>.log, where <USER_HOME> is the home directory for the non-root user running the script, and <PID> is a process ID.

Task 2-11: Running the DPK Setup Script to Install PS_HOME Only

This section discusses:

- Understanding the PS_HOME Deployment
- Installing PS_HOME Only on Microsoft Windows
- Installing PS_HOME Only on Linux, AIX, or Solaris

Understanding the PS_HOME Deployment

Use these instructions to install the *PS_HOME* installation directory, which includes the PeopleSoft PeopleTools server utilities. Use this deployment, for example, to get the tools needed to carry out database creation. The *PS_HOME* deployment includes the following:

- *PS_HOME* installed to *BASE_DIR*/pt/ps_home8.62.xx by default.
- The Microsoft Windows DPKs include Microsoft Visual C++ Redistributable Packages for Visual Studio, which include required Microsoft C++ runtime libraries
- PeopleTools utilities and scripts including:
 - *PS_HOME*/appserv/PSADMIN.exe
 - *PS_HOME*/bin/client/winx86/pscfg.exe (Configuration Manager)
 - *PS_HOME*/bin/client/winx86/psdmt.exe (Data Mover)
 - *PS_HOME*/bin/client/winx86/pside.exe (Application Designer)
 - *PS_HOME*/scripts
 - Other PeopleTools utilities
- Setup utilities including:
 - *PS_HOME*/setup/PsMpPIAInstall (PeopleSoft Pure Internet Architecture installer)

- *PS_HOME/setup/PsMpDbInstall* (Database installer)
- *PS_HOME/setup/PsCA* (Change Assistant installer)
- *PS_HOME/setup/PsCIA* (Change Impact Analyzer installer)
- *PS_HOME/setup/PsMpWebAppDeployInstall* (Web Application Deployment installer)

Ensure that you fulfill the prerequisites in the section *Running the DPK Setup Script for Mid-Tier Deployment*.

Task 2-11-1: Installing PS_HOME Only on Microsoft Windows

This procedure assumes you have obtained the four PeopleSoft PeopleTools DPK zip files and saved them in *DPK_INSTALL*. To use the DPK setup script to install *PS_HOME* only:

1. Extract the first zip file (*FILENAME_1of4.zip*) in the same directory, *DPK_INSTALL*.

The extraction creates the *DPK_INSTALL/setup* directory and other files.

Note. It is important that you retain the *DPK_INSTALL/setup* directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

See *Obtaining the PeopleSoft PeopleTools DPK* for the DPK file name syntax.

2. Open a command prompt with Run as Administrator.
3. Change directory to *DPK_INSTALL/setup*.
4. Run the script with the options for mid-tier and deployment only.

Note. If you see an error message similar to "The application has failed to start because its side-by-side configuration is incorrect," it indicates that your machine does not include the necessary Microsoft C++ runtime libraries. Go to the Microsoft Web site, locate the Microsoft Visual C++ redistributable package for your system, and install as directed.

```
psft-dpk-setup.bat --env_type midtier --deploy_only --deploy_type =>
tools_home
```

5. Wait while the script locates the valid PeopleSoft zip files and extracts them.

The system displays messages indicating the steps in the setup process. The success or failure of each step is indicated by [OK] or [FAILED].

The script locates the valid PeopleSoft zip files and extracts them. After it completes the extraction, it deletes the original downloaded zip files.

```
Starting the PeopleSoft Environment Setup Process:
```

```
Validating User Arguments: [ OK ]
```

```
Validating PeopleSoft Supported Platform: [ OK ]
```

6. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory.

The base directory is used to extract the PeopleSoft DPKs as well as for deploying PeopleSoft components.

Note. When entering the path for the base directory, use forward slashes (/). For example, *C:/psft*. Do not use a name for the base directory that begins with a number.

The base directory is used to extract the PeopleSoft DPKs. It is also

used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

Enter the full path for the PeopleSoft Base Directory: **[C:/psft]**
Are you happy with your answer? [Y|n|q]:

The script validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

Note. A mid-tier setup of a PeopleSoft environment requires about 25 GB of disk space.

The script creates the following sub-directories under the user provided base directory, *BASE_DIR*:

- *BASE_DIR\db*
This directory is not used for this deployment.
- *BASE_DIR\dpk*
The script uses this directory to extract the archives from the PeopleSoft DPKs.
- *BASE_DIR\psft_puppet_agent*
The script uses this directory to install Puppet software.
- *BASE_DIR\pt*
The script uses this directory to deploy PeopleSoft PeopleTools.

7. Review the status messages.

The script installs Puppet software, verifies if the DPKs are available in *DPK_INSTALL*, and checks for available space. It aborts with the message [FAILED] in case of errors.

Installing PSFT Relocatable Puppet Software in the base directory:

```
[ OK ]
Installing eYAML Hierarchical Backend on this host:           [ OK ]
Checking if PeopleSoft DPKs are Present:                     [ OK ]
Checking if the Base Directory has Enough Free Space:         [ OK ]
```

8. Review the status messages as the script validates the files found in *DPK_INSTALL* and extracts the archives from the DPKs.

The script carries out validations for the mid-tier deployment. If any of the validations fail, the PeopleSoft environment setup is aborted.

Note. The messages have been truncated for brevity.

Validating the PeopleSoft DPKs in the directory:

```
[...]
Extracting the Peoplesoft DPK Archives in the Windows Host:
[...]
```

9. Review the status messages as the script sets up the Puppet file system.

The script sets up Puppet on the host. It then copies the PeopleSoft Puppet modules to the standard location (*BASE_DIR\dpk*) and updates the YAML files to reflect the type of PeopleSoft environment setup.

Setting up Puppet on the Windows Host:

```
Generating eYAML Hierarchical Backend Encryption Keys:       [ OK ]
Updating the Puppet Hierarchical YAML Files in the Windows Host: [ OK ]
```


Updating the Role in Puppet Site File for the Windows Host: [OK]

10. Specify the information for your database platform.

- a. For the database platform, enter ORACLE, MSSQL (Microsoft SQL Server), or DB2ODBC (Db2 for z/OS).

Enter the PeopleSoft database platform [ORACLE]:

- b. Enter y (yes) to indicate that the database you will connect to is a Unicode database.

Note. All PeopleSoft Update Image databases are required to be Unicode.

Is the PeopleSoft database unicode? [Y|n]: **y**

11. Enter y to continue with the script.

Are you happy with your answers? [y|n]: y

Updating the Puppet Hiera YAML Files with User Data: [OK]

12. If you want to continue running the initialization script using the default configuration, answer y (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer n (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the psft_puppet_apply script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

13. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

The script stops and exits the first time a profile application fails, and displays an error message. This example shows the error message after the step to set up the PeopleSoft OS Users environment failed:

Starting the Default Initialization of PeopleSoft Environment:

```
Deploying PeopleTools Components: [FAILED]
The initialization of PeopleSoft environment setup failed. Check the
log file [C:\DPK_INSTALL\setup\psft_dpk_setup.log] for the errors.
After correcting the errors, run the following script to continue
with the setup of PeopleSoft environemnt.
```

Start a cmd window as Administrator and run C:\psft\psft_puppet_⇒
apply.cmd

Exiting the PeopleSoft environment setup process.

See "Completing the DPK Initialization with Customizations."

Upon successful completion, the DPK setup script displays the following message:

```
Starting the Default Initialization of PeopleSoft Environment:
```

```
Deploying PeopleTools Components:           [ OK ]
Setting up PeopleSoft OS Users Environment:  [ OK ]
```

```
The PeopleSoft Environment Setup Process Ended.
```

The complete setup log is written to the file `psft_dpk_setup.log` in the same location as the DPK setup script.

Task 2-11-2: Installing PS_HOME Only on Linux, AIX, or Solaris

This procedure assumes you have obtained the four PeopleSoft PeopleTools DPK zip files and saved them in *DPK_INSTALL*.

If you are installing the PeopleSoft environment as a non-root user, ensure that you fulfill the prerequisites in the section *Deploying as a Non-Root User on Linux, AIX, or Solaris*.

To use the DPK setup script to install *PS_HOME* only:

1. Extract the first zip file (*FILENAME_1of4.zip*) in the same directory, *DPK_INSTALL*.

The extraction creates the *DPK_INSTALL/setup* directory and other files.

Note. It is important that you retain the *DPK_INSTALL/setup* directory, even after deploying, because it holds the DPK setup script, which must be used for both deploying an environment and cleanup of deployed environment.

See Obtaining the PeopleSoft PeopleTools DPKs for the DPK file name syntax.

2. Open a terminal window and change directory to *DPK_INSTALL/setup*.
3. As a user with root access, run the script with the options for mid-tier and deployment only.

```
psft-dpk-setup.sh --env_type midtier --deploy_only --deploy_type tools_⇒
home
```

4. Wait while the script locates the valid PeopleSoft zip files and extracts them.

The system displays messages indicating the steps in the setup process. The success or failure of each step is indicated by [OK] or [FAILED].

```
Starting the PeopleSoft Environment Setup Process:
Validating User Arguments:           [ OK ]
Validating PeopleSoft Supported Platform: [ OK ]
```

5. At the following prompt, enter the full path to a location that is accessible to the host to be used as the PeopleSoft base directory.

The base directory is used to extract the PeopleSoft DPKs as well as for deploying PeopleSoft components.

Note. When entering the path for the base directory, use forward slashes (/). For example, `/cs1/psft`. Do not use a name for the base directory that begins with a number. Do not end the base directory name with a forward slash (for example, do not enter `/ds1/psft/`).

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be

accessible, must have write permission and should have enough free space.

Enter the full path for the PeopleSoft Base Directory [/opt/oracle⇒/psft]:

Are you happy with your answer? [Y|n|q]:

The script validates if there is enough free space available under the specified base directory for the PeopleSoft environment. The PeopleSoft environment setup is aborted if there is not enough free space.

The script creates the following sub-directories under the user provided base directory, *BASE_DIR*:

- *BASE_DIR/db*

This directory is not used for this deployment.

- *BASE_DIR/dpk*

The script uses this directory to extract the archives from the PeopleSoft DPKs.

- *BASE_DIR/psft_puppet_agent*

The script uses this directory to install Puppet software.

- *BASE_DIR/pt*

The script uses this directory to deploy PeopleSoft PeopleTools.

6. Review the status messages as the script validates the files found in *DPK_INSTALL* and extracts the archives from the DPKs.

The script carries out validations for the mid-tier deployment. If any of the validations fail, the PeopleSoft environment setup is aborted.

Note. The messages have been truncated for brevity.

Validating the PeopleSoft DPKs in the directory:

[...]

Extracting the DPK Archives in the VM:

[...]

7. Review the status messages.

The script installs Puppet software, verifies if the DPKs are available in *DPK_INSTALL*, and checks for available space. It aborts with the message [FAILED] in case of errors.

Installing PSFT Relocatable Puppet Software in the base directory:

[OK]

Installing eYAML Hiera Backend on this host:

[OK]

Checking if PeopleSoft DPKs are Present:

[OK]

Checking if the Base Directory has Enough Free Space:

[OK]

8. Review the status messages as the script sets up the Puppet file system.

The script sets up Puppet on the host. It then copies the PeopleSoft Puppet modules to the standard location (*BASE_DIR/dpk*) and updates the YAML files to reflect the type of PeopleSoft environment setup.

Setting up Puppet on the VM:

Generating eYAML Hiera Backend Encryption Keys:

[OK]

Updating the Puppet Hiera YAML Files in the Linux VM:

[OK]

Updating the Role in Puppet Site File for the Linux VM:

[OK]

9. Specify the information for your database platform.

- a. For the database platform, enter ORACLE or DB2ODBC (Db2 for z/OS).

Enter the PeopleSoft database platform [ORACLE]:

- b. Enter y (yes) to indicate that the database you are connecting to is a Unicode database.

Note. All PeopleSoft Update Image databases are required to be Unicode.

Is the PeopleSoft database unicode? [Y|n]: **y**

10. Enter y to continue with the script.

Are you happy with your answers? [y|n]: y

Updating the Puppet Hiera YAML Files with User Data: [OK]

11. If you want to continue running the initialization script using the default configuration, answer y (yes) to the following prompt, and continue with the next step.

If you want to customize the PeopleSoft environment using the Puppet YAML files, answer n (no) to stop the script.

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the Hiera YAML file 'psft_customizations.yaml' and running the psft_puppet_apply script to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]:

12. Review the status messages as the script runs Puppet profiles to set up the PeopleSoft environment.

A message of [OK] indicates that the profile has been applied successfully while a message [FAILED] indicates that the profile application failed.

The script stops and exits the first time a profile application fails, and displays an error message. This example shows the error message after the first step failed:

Starting the Default Initialization of PeopleSoft Environment:

```
Deploying PeopleTools Components: [FAILED]
The initialization of PeopleSoft environment setup failed. Check the
log file [/opt/DPK_INSTALL/setup/psft_dpk_setup.log] for the errors.
After correcting the errors, run the following commands to continue
with the setup of PeopleSoft environment.
```

From the shell, run /opt/oracle/psft/psft_puppet_apply.sh

Exiting the PeopleSoft environment setup process.

See "Completing the DPK Initialization with Customizations."

Upon successful completion, the DPK setup script displays the following message:

Starting the Default Initialization of PeopleSoft Environment:

```
Deploying PeopleTools Components:          [ OK ]
Setting up PeopleSoft OS Users Environment: [ OK ]
```

The PeopleSoft Environment Setup Process Ended.

The complete setup log is written to the file `psft_dpk_setup.log` in the same location as the DPK setup script.

If you are running as a non-root user, the `setup.log` is written to the file `<USER_HOME>/psft_dpk_work/psft_dpk_setup_<PID>.log`, where `<USER_HOME>` is the home directory for the user running the script, and `<PID>` is a process ID

Chapter 3

Deploying the PeopleSoft PeopleTools Deployment Packages in Silent Mode

This chapter discusses:

- Understanding Silent Mode Installation
- Reviewing the Response File Sample for Mid-tier Installation
- Reviewing the Response File Sample to Deploy an Application Server Domain
- Reviewing the Response File Sample to Deploy a Process Scheduler Domain
- Reviewing the Response File Sample to Deploy an Application Server and a Process Scheduler Domain
- Reviewing the Response File Sample to Deploy a PIA Domain
- Reviewing the Response File Sample to Install PS_HOME Only
- Running the DPK Setup Script in Silent Mode for Default Initialization
- Running the DPK Setup Script in Silent Mode with Customizations

Understanding Silent Mode Installation

Use this section to perform a silent mode installation with the DPK setup script. In silent mode, you record the answers for the script prompts in a text file, called a response file. After you start the script and specify the response file location, no further interaction is required. Use these guidelines:

- Include a customization file if necessary.
You can also run the DPK setup script in silent mode and specify a customizations file in addition to the response file. Use the examples in the chapter "Completing the DPK Initialization with Customizations" to create a customization file. Follow the procedure in the section Running the DPK Setup Script in Silent Mode with Customizations.
- You must use customizations for installations on AIX operating systems.
See Reviewing the Software Requirements on AIX.
See Preparing the Customization File for JDK on AIX.
- Make a note of the required user IDs and passwords.
The DPK setup process does not include any default passwords. You must supply the user IDs and passwords included in the samples.
- Enter passwords in clear text.
Note that some of the response file samples in this section include placeholders for passwords. When creating the response file for silent mode installation, enter the passwords in clear text. If you are running a customized deployment, enter the passwords in clear text in the psft_customizations.yaml file. Do not enter encrypted passwords.

- Fulfill prerequisites if running as a non-root user.

If you want to run as a non-root user on Linux, AIX, or Solaris, fulfill the requirements in the section *Deploying as a Non-Root User on Linux, AIX, or Solaris*. Before you run the silent mode installation as a non-root user, the root user must run the DPK setup prereq step.

See "Installing the PeopleSoft Homes," *Deploying as a Non-Root User on Linux, AIX, or Solaris*.

Create your response file based on the samples in this section. The response file should include the values you would supply when running the DPK setup script interactively, and will vary depending upon the database platform and operating system.

The response files in this section include the following parameters:

- **env_type** — Specify midtier as the type of DPK deployment.
- **install_type** — Specify FRESH as the installation type for this task.
See *Reviewing the DPK Setup Script Options* for information on the allowed installation types.
This is required for mid-tier deployments if the DPK set includes App DPKs.
- **deploy_only** — Specify true for one of the special deployment options, such as to deploy only *PS_HOME*.
- **deploy_type** — Specify the type of deployment, as shown in the response file samples.
- **db_type** — Specify whether you want to install a DEMO or SYS database.
- **db_is_unicode** — Specify false if you want to install a non-Unicode database, or true to install a Unicode environment.

The default setting is true. If you do not include the **db_is_unicode** parameter, the DPK setup script installs a Unicode environment.

- **psft_base_dir** — Enter an accessible location for the base folder, which is used to extract the PeopleSoft DPKs and for deploying PeopleSoft components.

The script creates the folder if it is not present.

For installation on Microsoft Windows, use forward slashes (/) for the base folder. For example, *C:/psft*. Enter the full path, and enclose the path in double quotes. Do not use a name for the base folder that begins with a number.

For installation on Linux, AIX, or Solaris, use forward slashes (/) for the base directory. For example, */cs1/psft*. Enter the full path, and enclose the path in double quotes. Do not use a name for the base directory that begins with a number. Do not end the base directory name with a forward slash (for example, do not enter */ds1/psft/*).

- **user_home_dir** — On Linux, AIX, or Solaris, if you are performing the deployment as the root user, enter the full path to a writable directory for the home directory for the script-created users (psadm1, psadm2, psadm3, and oracle2).
- **user_config_home_dir** — On Linux, AIX, or Solaris, if you are performing the deployment as a non-root user, enter a writable directory for the *PS_CFG_HOME* directory.
If you do not include **user_config_home_dir** in the response file, it defaults to *USER_HOME/psft*.
Enter the full path to a writable directory, and enclose the path in double quotes.
- **db_platform** — Specify the database platform.
Enter ORACLE, MSSQL (Microsoft SQL Server), or DB2ODBC (Db2 for z/OS).
- **db_name** — Enter the PeopleSoft database name.

If the database name includes non-alphanumeric characters such as periods, enclose the name in double

quotes. For example, "HCM.92".

- **db_service_name** — Enter the database service name.

For the service name, enter the full name, including the domain, if the database was installed with the domain. Use forward slashes if necessary. If the service name includes non-alphanumeric characters such as periods, enclose the name in double quotes. For example, "HCM.92.example.com".

This is required only for installations on Oracle RDBMS.

- **db_host** — Enter the name of the host where the database is installed.

This is required only for installations on Oracle RDBMS.

- **sqllib_location** — Enter the full path for the location for the Db2 z/OS client.

This is needed only for Db2 z/OS installations.

See *PeopleSoft 9.2 Application Installation for Db2 for z/OS (PeopleSoft PeopleTools 8.62)*, "Installing and Configuring DB2 Connect."

- **db_port** — Enter the database port.

This is required only for installations on Oracle RDBMS.

- **mss_odbc_name** — Enter the ODBC driver name, for example, ODBC Driver 17 for SQL Server or ODBC Driver 18 for SQL Server.

This is needed only for Microsoft SQL Server installations.

- **connect_id** — Enter the PeopleSoft database Connect ID.

The default is people.

- **connect_pwd** — Enter the password for the Connect ID.

Ensure the password meets the length and complexity requirements for your database platform.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

- **opr_id** — Enter the PeopleSoft operator ID, such as PS or VP1.

- **opr_pwd** — Enter the password for the operator ID.

Ensure that the password is between 1 and 32 characters in length. You may include these special characters !@#\$%^&.

- **domain_conn_pwd** — Enter the Application Server Domain Connection password.

This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

- **weblogic_admin_pwd** — Enter the Oracle WebLogic Server Admin password.

The default Oracle WebLogic server administrator is system. Ensure that the password is between 8 and 30 characters in length with at least one lowercase letter, one uppercase letter and one number or one special character (!@#\$%^&).

- **webprofile_user_id** — Enter the web profile user name.

- **webprofile_user_pwd** — Enter the password for the PTWEBSERVER web profile user.

Ensure that the password is between 8 and 32 characters in length. You may include these special characters !@#\$%^&.

- **pia_psserver_list** — Enter <application_server_host>:<Jolt port>.

List the application server domains that are used by the PIA domains, using the format <application_server_host>:<Jolt port>. If you enter more than one domain, separate the entries with a comma.

- **prcs_domain_id** — Enter the name of the server with the Process Scheduler domain.

When you run the DPK setup script with default initialization, the name generated for the Process Scheduler Server is PRCSxxxx, where xxx is a random number. On a host where Process Scheduler has been deployed, you can find the Process Scheduler Server name (PrcsServerName) in the Process Scheduler configuration file. Locate it in <PS_CFG_HOME>/appserv/prcs/<Domain name>/psprcs.cfg, under General settings for the Process Scheduler. For example:

```
;=====
; General settings for the Process Scheduler
;=====
PrcsServerName=PRCS8783
```

- **prcs_server_name** — Enter the name of the server with the Process Scheduler domain, as described for prcs_domain_id. When you run the DPK setup script with default initialization, Process Scheduler/PrcsServerName is an interpolation function based on prcs_domain_id.
- **gw_user_id** — Enter the Integration Gateway user ID.
The default is administrator.
- **gw_user_pwd** — Enter the password for the Integration Gateway user.
Ensure that the password is between 8 and 30 characters in length. You may include these special characters !@#%&^&.
- **gw_keystore_pwd** — Enter the Integration Gateway keystore password.
Ensure the password is between 8 and 30 characters in length. You may include these special characters !@#%&^&.

Task 3-1: Reviewing the Response File Sample for Mid-tier Installation

This section discusses:

- Reviewing the Response File Sample for Mid-tier Installation on Microsoft Windows
- Reviewing the Response File Sample for Mid-tier Installation as the Root User on Linux, AIX, or Solaris
- Reviewing the Response File Sample for Mid-tier Installation as a Non-Root User on Linux, AIX, or Solaris

Task 3-1-1: Reviewing the Response File Sample for Mid-tier Installation on Microsoft Windows

Here is a sample response file for installing mid-tier components on Microsoft Windows.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
psft_base_dir="C:/psft"
db_platform=ORACLE
db_name=HCM92U46
```

```
db_service_name=HCM92U46
db_host=server.example.com
db_port=1521
connect_id=people
connect_pwd=password
opr_id=PS
opr_pwd=password
weblogic_admin_pwd=password
webprofile_user_id=PTWEBSEVER
webprofile_user_pwd=password
domain_conn_pwd=password
gw_user_id=administrator
gw_user_pwd=password
gw_keystore_pwd=password
```

Task 3-1-2: Reviewing the Response File Sample for Mid-tier Installation as the Root User on Linux, AIX, or Solaris

Here is a sample response file for installing mid-tier components on Linux, AIX, or Solaris.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
db_platform=ORACLE
psft_base_dir="/opt/oracle/psft"
user_home_dir="/opt/home"
db_name=HCM92U46
db_service_name=HCM92U46
db_host=server.example.com
db_port=1521
connect_id=people
connect_pwd=password
opr_id=PS
opr_pwd=password
weblogic_admin_pwd=password
webprofile_user_id=PTWEBSEVER
webprofile_user_pwd=password
domain_conn_pwd=password
gw_user_id=administrator
gw_user_pwd=password
gw_keystore_pwd=password
```

Task 3-1-3: Reviewing the Response File Sample for Mid-tier Installation as a Non-Root User on Linux, AIX, or Solaris

Here is a sample response file for installing mid-tier components on Linux, AIX, or Solaris.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
db_platform=ORACLE
```

```
psft_base_dir="/opt/oracle/psft"
user_config_home_dir="/opt/psftuser/pscfg_pt862_silent"
db_name=HCM92U46
db_service_name=HCM92U46
db_host=server.example.com
db_port=1521
connect_id=people
connect_pwd=password
opr_id=PS
opr_pwd=password
weblogic_admin_pwd=password
webprofile_user_id=PTWEBSEVER
webprofile_user_pwd=password
domain_conn_pwd=password
gw_user_id=administrator
gw_user_pwd=password
gw_keystore_pwd=password
```

Task 3-2: Reviewing the Response File Sample to Deploy an Application Server Domain

This section discusses:

- Reviewing the Response File Sample to Deploy an Application Server Domain on Microsoft Windows
- Reviewing the Response File Sample to Deploy an Application Server Domain on Linux, AIX, or Solaris as the Root User
- Reviewing the Response File Sample to Deploy an Application Server Domain on Linux, AIX, or Solaris as a Non-Root User

Task 3-2-1: Reviewing the Response File Sample to Deploy an Application Server Domain on Microsoft Windows

Here is a sample response file for deploying an application server domain on Microsoft Windows.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
psft_base_dir="C:/psft"
db_platform=ORACLE
domain_type=appserver
db_name=HCM92U46
db_host=server.example.com
db_service_name=HCM92U46
db_port=1521
connect_id=people
connect_pwd=password
domain_conn_pwd=password
opr_id=PS
opr_pwd=password
```

Task 3-2-2: Reviewing the Response File Sample to Deploy an Application Server Domain on Linux, AIX, or Solaris as the Root User

Here is a sample response file for deploying an application server domain on Linux, AIX, or Solaris.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
psft_base_dir="/opt/oracle/psft"
user_home_dir="/scratch/dpkbase"
db_platform=ORACLE
domain_type=appserver
db_name=HCM92U46
db_host=server.example.com
db_service_name=HCM92U46
db_port=1521
connect_id=people
connect_pwd=password
domain_conn_pwd=password
opr_id=PS
opr_pwd=password
```

Task 3-2-3: Reviewing the Response File Sample to Deploy an Application Server Domain on Linux, AIX, or Solaris as a Non-Root User

Here is a sample response file for deploying an application server domain on Linux, AIX, or Solaris.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
psft_base_dir="/opt/oracle/psft"
user_config_home_dir="/home/psftuser/pscfg_pt862_silent"
db_platform=ORACLE
domain_type=appserver
db_name=HCM92U46
db_host=server.example.com
db_service_name=HCM92U46
db_port=1521
connect_id=people
connect_pwd=password
domain_conn_pwd=password
opr_id=PS
opr_pwd=password
```

Task 3-3: Reviewing the Response File Sample to Deploy a Process Scheduler Domain

This section discusses:

- Reviewing the Response File Sample to Deploy a Process Scheduler Domain on Microsoft Windows
- Reviewing the Response File Sample to Deploy a Process Scheduler Domain on Linux, AIX, or Solaris as the Root User
- Reviewing the Response File Sample to Deploy a Process Scheduler Domain on Linux, AIX, or Solaris as a Non-Root User

Task 3-3-1: Reviewing the Response File Sample to Deploy a Process Scheduler Domain on Microsoft Windows

Here is a sample response file for deploying a Process Scheduler domain on Microsoft Windows.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
psft_base_dir="C:/psft"
db_platform=ORACLE
domain_type=prcs
db_name=HCM92U46
db_host=server.example.com
db_service_name=HCM92U46
db_port=1521
connect_id=people
connect_pwd=password
domain_conn_pwd=password
opr_id=QEDMO
opr_pwd=password
```

Task 3-3-2: Reviewing the Response File Sample to Deploy a Process Scheduler Domain on Linux, AIX, or Solaris as the Root User

Here is a sample response file for deploying a Process Scheduler domain on Linux, AIX, or Solaris.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
psft_base_dir="/opt/oracle/psft"
user_home_dir="/scratch/dpkbase"
db_platform=ORACLE
domain_type=prcs
db_name=HCM92U46
db_host=server.example.com
db_service_name=HCM92U46
db_port=1521
connect_id=people
connect_pwd=password
domain_conn_pwd=password
opr_id=QEDMO
opr_pwd=password
```

Task 3-3-3: Reviewing the Response File Sample to Deploy a Process Scheduler Domain on Linux, AIX, or Solaris as a Non-Root User

Here is a sample response file for deploying a Process Scheduler domain on Linux, AIX, or Solaris.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
psft_base_dir="/opt/oracle/psft"
user_config_home_dir="/home/psftuser/pscfg_pt862_silent"
db_platform=ORACLE
domain_type=prcs
db_name=HCM92U46
db_host=server.example.com
db_service_name=HCM92U46
db_port=1521
connect_id=people
connect_pwd=password
domain_conn_pwd=password
opr_id=QEDMO
opr_pwd=password
```

Task 3-4: Reviewing the Response File Sample to Deploy an Application Server and a Process Scheduler Domain

This section discusses:

- Reviewing the Response File Sample to Deploy an Application Server and a Process Scheduler Domain on Microsoft Windows
- Reviewing the Response File Sample to Deploy an Application Server and a Process Scheduler Domain on Linux, AIX, or Solaris as the Root User
- Reviewing the Response File Sample to Deploy an Application Server and a Process Scheduler Domain on Linux, AIX, or Solaris as a Non-Root User

Task 3-4-1: Reviewing the Response File Sample to Deploy an Application Server and a Process Scheduler Domain on Microsoft Windows

Here is a sample response file for deploying an application server and a Process Scheduler domain on Microsoft Windows.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
psft_base_dir="C:/psft"
db_platform=ORACLE
domain_type=appbatch
db_name=HCM92U46
db_host=server.example.com
```

```
db_service_name=HCM92U46
db_port=1521
connect_id=people
connect_pwd=password
domain_conn_pwd=password
opr_id=PS
opr_pwd=password
```

Task 3-4-2: Reviewing the Response File Sample to Deploy an Application Server and a Process Scheduler Domain on Linux, AIX, or Solaris as the Root User

Here is a sample response file for deploying an application server and a Process Scheduler domain on Linux, AIX, or Solaris.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
psft_base_dir="/opt/oracle/psft"
user_home_dir="/scratch/dpkbase"
db_platform=ORACLE
domain_type=appbatch
db_name=HCM92U46
db_host=server.example.com
db_service_name=HCM92U46
db_port=1521
connect_id=people
connect_pwd=password
domain_conn_pwd=password
opr_id=PS
opr_pwd=password
```

Task 3-4-3: Reviewing the Response File Sample to Deploy an Application Server and a Process Scheduler Domain on Linux, AIX, or Solaris as a Non-Root User

Here is a sample response file for deploying an application server and a Process Scheduler domain on Linux, AIX, or Solaris.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
psft_base_dir="/opt/oracle/psft"
user_config_home_dir="scratch/dpkbase"
db_platform=ORACLE
domain_type=appbatch
db_name=HCM92U46
db_host=server.example.com
db_service_name=HCM92U46
db_port=1521
```



```
connect_id=people
connect_pwd=password
domain_conn_pwd=password
opr_id=PS
opr_pwd=password
```

Task 3-5: Reviewing the Response File Sample to Deploy a PIA Domain

This section discusses:

- Reviewing the Response File Sample to Deploy a PIA Domain on Microsoft Windows
- Reviewing the Response File Sample to Deploy a PIA Domain on Linux, AIX, or Solaris as the Root User
- Reviewing the Response File Sample to Deploy a PIA Domain on Linux, AIX, or Solaris as a Non-Root User

Task 3-5-1: Reviewing the Response File Sample to Deploy a PIA Domain on Microsoft Windows

Here is a sample response file for deploying a PIA domain on Microsoft Windows.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
psft_base_dir="C:/psft"
db_platform=ORACLE
domain_type=pia
db_name=HCM92U46
db_host=server.example.com
db_service_name=HCM92U46
db_port=1521
connect_id=people
connect_pwd=password
opr_id=PS
opr_pwd=password
weblogic_admin_pwd=password
webprofile_user_id=PTWEBSEVER
webprofile_user_pwd=password
domain_conn_pwd=password
gw_user_id=administrator
gw_user_pwd=password
gw_keystore_pwd=password
pia_psserver_list=server2.example.com:9033
prcs_server_name=PRCS9722
prcs_domain_id=PRCS9722
```

Task 3-5-2: Reviewing the Response File Sample to Deploy a PIA Domain on Linux, AIX, or Solaris as the Root User

Here is a sample response file for deploying a PIA domain on Linux, AIX, or Solaris.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
psft_base_dir="/opt/oracle/psft"
user_home_dir="/scratch/dpkbase"
db_platform=ORACLE
domain_type=pia
db_name=HCM92U46
db_host=server.example.com
db_service_name=HCM92U46
db_port=1521
connect_id=people
connect_pwd=password
opr_id=PS
opr_pwd=password
weblogic_admin_pwd=password
webprofile_user_id=PTWEBSEVERER
webprofile_user_pwd=password
domain_conn_pwd=password
gw_user_id=administrator
gw_user_pwd=password
gw_keystore_pwd=password
pia_psserver_list=server2.example.com:9033
prcs_server_name=PRCS9152
prcs_domain_id=PRCS9152
```

Task 3-5-3: Reviewing the Response File Sample to Deploy a PIA Domain on Linux, AIX, or Solaris as a Non-Root User

Here is a sample response file for deploying a PIA domain on Linux, AIX, or Solaris.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
psft_base_dir="/opt/oracle/psft"
user_config_home_dir="/opt/psftuser/pscfg_pt862_silent"
db_platform=ORACLE
domain_type=pia
db_name=HCM92U46
db_host=server.example.com
db_service_name=HCM92U46
db_port=1521
connect_id=people
connect_pwd=password
opr_id=PS
opr_pwd=password
```

```
weblogic_admin_pwd=password
webprofile_user_id=PTWEBSEVER
webprofile_user_pwd=password
domain_conn_pwd=password
gw_user_id=administrator
gw_user_pwd=password
gw_keystore_pwd=password
pia_psserver_list=server2.example.com:9033
prcs_server_name=PRCS9152
prcs_domain_id=PRCS9152
```

Task 3-6: Reviewing the Response File Sample to Install PS_HOME Only

This section discusses:

- Reviewing the Response File Sample to Install PS_HOME Only on Microsoft Windows
- Reviewing the Response File Sample to Install PS_HOME Only as the Root User on Linux, AIX, or Solaris
- Reviewing the Response File Sample to Install PS_HOME Only as a Non-Root User on Linux, AIX, or Solaris

Task 3-6-1: Reviewing the Response File Sample to Install PS_HOME Only on Microsoft Windows

Here is a sample response file for installing only the *PS_HOME* installation directory, which includes the PeopleSoft PeopleTools server utilities.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
deploy_only=True
deploy_type=tools_home
db_platform=ORACLE
psft_base_dir="C:/psft"
db_is_unicode=False
```

Task 3-6-2: Reviewing the Response File Sample to Install PS_HOME Only as the Root User on Linux, AIX, or Solaris

Here is a sample response file for installing only the *PS_HOME* installation directory, which includes the PeopleSoft PeopleTools server utilities.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
deploy_only=True
deploy_type=tools_home
user_home_dir="/opt/home"
```

```
db_platform=ORACLE
psft_base_dir="/opt/oracle/psft"
db_is_unicode=False
```

Task 3-6-3: Reviewing the Response File Sample to Install PS_HOME Only as a Non-Root User on Linux, AIX, or Solaris

Here is a sample response file for installing only the *PS_HOME* installation directory, which includes the PeopleSoft PeopleTools server utilities.

Note. Review the requirements in Understanding Silent Mode Installation before preparing the response file.

```
env_type=midtier
deploy_only=True
deploy_type=tools_home
user_config_home_dir="/opt/psftuser/pscfg_pt862_silent"
db_platform=ORACLE
psft_base_dir="/opt/oracle/psft"
db_is_unicode=False
```

Task 3-7: Running the DPK Setup Script in Silent Mode for Default Initialization

This procedure assumes you have obtained the required DPK zip files and saved them in *DPK_INSTALL*.

Note. If you want to run as a non-root user on Linux, AIX, or Solaris, fulfill the requirements in the section Deploying as a Non-Root User on Linux, AIX, or Solaris. Before you run the silent mode installation, the root user must run the DPK setup prereq step.

Note. If you are installing on an AIX operating system, go to the next section to install with customizations. See Running the DPK Setup Script in Silent Mode with Customizations.

1. Prepare the response file, using the examples in this section.
2. Extract the first zip file (*FILENAME_1ofn.zip*).

Note. It is a good idea to extract into the same directory where you downloaded the zip files, *DPK_INSTALL*.

The extraction creates the *DPK_INSTALL/setup* folder and other files.

3. Open a command prompt with Run as Administrator.
4. Change directory to *DPK_INSTALL/setup*.
5. Run the script and supply the full path and filename for the response file.

On Microsoft Windows:

```
psft-dpk-setup.bat --silent --response_file=<full_path/filename.txt>
```

On Linux, AIX, or Solaris:

```
./psft-dpk-setup.sh --silent --response_file=<full_path/filename.txt>
```

6. Wait until the installation is complete.

The script displays progress messages. The complete setup log is written to the file `psft_dpk_setup.log` in the same location as the DPK setup script.

Task 3-8: Running the DPK Setup Script in Silent Mode with Customizations

This procedure assumes you have obtained the required DPK zip files and saved them in *DPK_INSTALL*.

Note. If you want to run as a non-root user on Linux, AIX, or Solaris, fulfill the requirements in the section *Deploying as a Non-Root User on Linux, AIX, or Solaris*. Before you run the silent mode installation, the root user must run the DPK setup prereq step.

Note. If you are installing on an AIX operating system, you must use customizations. See *Understanding Silent Mode Installation*.

Note. Remember to enter passwords in clear text in the response file and the `psft_customizations.yaml` file.

1. Prepare the response text file, using the examples in this section.
2. Prepare the customization YAML file, using the instructions in this documentation.

Note. You can name the file whatever you like. For the silent mode installation, it is not necessary to use the name `psft_customizations.yaml`.

See "Completing the DPK Initialization with Customizations."

3. Extract the first zip file (*FILENAME_1ofn.zip*).

Note. It is a good idea to extract into the same directory where you downloaded the zip files, *DPK_INSTALL*.

The extraction creates the *DPK_INSTALL/setup* folder and other files.

4. Open a command prompt with Run as Administrator.
5. Change directory to *DPK_INSTALL/setup*.
6. Run the script, supplying the full path and filename for both the response file and the customization file.

On Microsoft Windows:

```
psft-dpk-setup.bat --silent --response_file=<full_path/filename.txt>
--customization_file=<full_path/custfilename.yaml>
```

On Linux, AIX, or Solaris:

```
./psft-dpk-setup.sh --silent --response_file=<full_path/filename.txt>
--customization_file=<full_path/custfilename.yaml>
```

7. Wait until the installation is complete.

The script displays progress messages. The complete setup log is written to the file `psft_dpk_setup.log` in the same location as the DPK setup script.

Chapter 4

Deploying the PeopleTools Client DPK

Task 4-1: Deploying the PeopleTools Client DPK

This section discusses:

- Understanding the Standalone Mode Deployment
- Preparing for the PeopleTools Client DPK Deployment
- Deploying in Standalone Mode

Task 4-1-1: Understanding the Standalone Mode Deployment

Use the standalone mode (SA mode) deployment for the PeopleTools Client DPK when deploying the DPK alone, without first deploying the PeopleSoft application or PeopleSoft PeopleTools DPKs. Use this method, for example, when carrying out a PeopleTools-only upgrade, or to install Change Assistant or one of the other utilities.

Install the PeopleTools Client DPK on a Microsoft Windows host that is certified for PeopleTools client installation.

Use SA mode deployment for the following tasks:

- PeopleTools Upgrade

The deployment process installs a PeopleTools client *PS_HOME* that includes the directories needed for a PeopleSoft PeopleTools-only upgrade, such as data, projects, and scripts directories.

- PeopleTools Patch

The deployment process installs a PeopleTools client *PS_HOME* that includes the directories needed for a PeopleSoft PeopleTools patch application, such as the PTP directory.

See "Learning About the PeopleSoft Deployment Process," Reviewing the PeopleTools Patch DPKs.

- PeopleTools Client

The deployment process installs a PeopleTools client *PS_HOME*. Choose the deployment type "None of the above" for this deployment.

- Change Assistant installation

You can install Change Assistant as part of the PeopleTools Client deployment, or as a separate installation. The deployment process installs, but does not configure Change Assistant. To use Change Assistant for a PeopleSoft PeopleTools-only upgrade or to apply a PeopleSoft PeopleTools patch, you must configure Change Assistant manually. See the PeopleTools upgrade or patch documentation for information.

If there is an existing Change Assistant installation, the deployment process removes or upgrades it to the current release, and saves a configuration file with the existing setup.

- Change Impact Analyzer

You can install Change Impact Analyzer as part of the PeopleTools Client deployment, or as a separate installation.

- PeopleSoft Test Framework (PTF) installation

You can install PeopleSoft Test Framework as part of the PeopleTools Client deployment, or as a separate installation.

- PeopleSoft Test Framework (PTF) configuration

If you choose to configure PTF, the deployment process prompts you for setup parameters. You can configure PTF either at the same time that you install it or later. For example, you may choose to configure PTF separately if you install and configure it first, and then later the middle-tier components in your environment change. In this case, you do not need to install, but you can use the deployment process to reconfigure PTF.

- Configuration Manager

If you accept the option to configure the PeopleTools client, the information that you supply is used to configure Configuration Manager.

- The PeopleTools Client deployment installs Microsoft Visual C++ Redistributable Packages for Visual Studio, which include required Microsoft C++ runtime libraries.

In addition to the Standalone Mode deployment described in this section, it is possible to deploy the PeopleTools Client in Update Manager mode. To deploy in Update Manager mode, you must have installed a PeopleSoft application image in full-tier mode and specified the PUM installation type. A full-tier PUM installation installs the directory *BASE_DIR\pt\tools_client*. The installation files in this directory are reserved for use in the Update Manager mode deployment.

See *PeopleSoft Deployment Packages for Update Images Installation (PeopleSoft PeopleTools 8.62)*.

Task 4-1-2: Preparing for the PeopleTools Client DPK Deployment

To obtain and extract the PeopleTools Client DPK:

1. Go to the download location for the PeopleSoft PeopleTools DPKs, and download only the last zip file to a location known as *DPK_INSTALL* on a Microsoft Windows computer.

The last zip file, for example *Filename_4of4.zip*, is the PeopleSoft PeopleTools client DPK.

See Obtaining the PeopleSoft PeopleTools Patch DPKs, for the filename syntax of the DPK zip files.

2. Extract the downloaded zip file, which yields another zip file.
3. Extract the resulting zip file to a local or shared directory; for example *C:\tools_client*.

Task 4-1-3: Deploying in Standalone Mode

This section assumes that the user running the script has administrative permission. The script includes the options in the following table:

Deployment	Script Commands
Install the PeopleTools client software in standalone mode.	<code>SetupPTClient.bat -t</code>

Deployment	Script Commands
The setup script deploys to drive C by default. To deploy to a different drive, you can use the option <code>-d <drive></code> This option installs all specified software (Change Assistant, Change Impact Analyzer, PeopleSoft Test Framework), installation and temporary directories, and log files to the specified drive. The drive can be any valid local or mapped shared drive.	<pre>SetupPTClient.bat -t -d <drive></pre> For example, to install to drive E: <pre>SetupPTClient.bat -t -d E</pre>
Install the PeopleTools client software in standalone mode and enable logging.	<pre>SetupPTClient.bat -t -l</pre>
Apply CPUs for JDK and the Oracle Database Client on an existing PeopleTools client environment. This usage requires the presence of the PT-INFRA DPK.	For information on using the PT-INFRA DPK, see <i>PT-INFRA Deployment Package Installation (PeopleSoft PeopleTools 8.62)</i>.

To deploy the PeopleTools Client DPK in SA mode:

1. Verify that the Microsoft Windows folders options are set to show known file extensions.

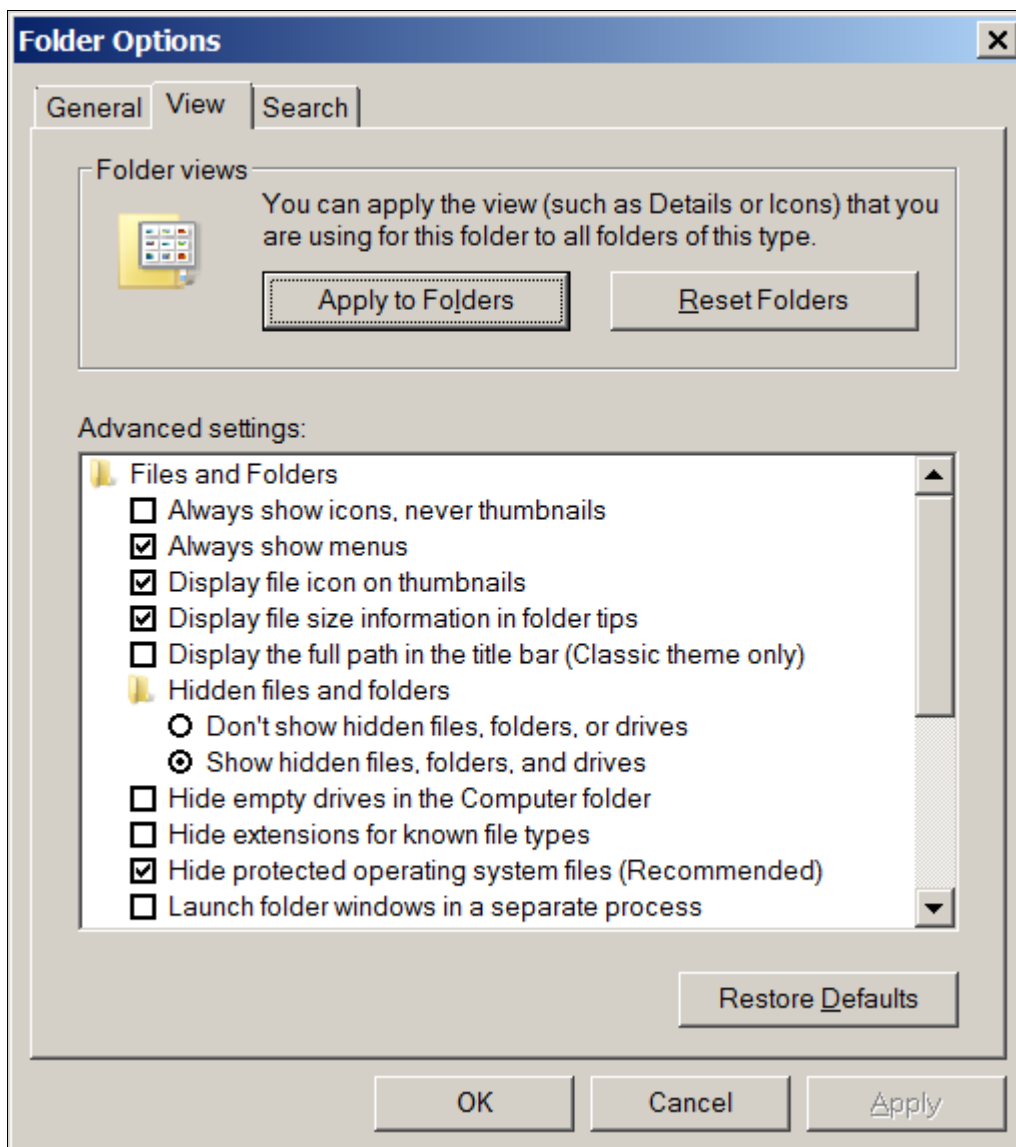
Hidden file extensions may interfere with the script. To show file extensions, for example:

- a. Open Windows Explorer and select Tools, Folder Options.

Note. Depending upon the Microsoft Windows operating system, you may use a different method to set the folder options.

- b. On the Folder Options dialog box, select the View tab.

- c. Verify that the check box for Hide extensions for known file types is not selected, as shown in this example:



Folder Options dialog box: View tab

- d. Click OK to close the box.
- Open a command prompt, running as administrator, and change directory to the C:\tools_client directory. The tools_client directory includes various sub-directories, and the following files:
 - SetupPTClient.bat
The interactive script that installs the PeopleSoft PeopleTools components such as Application Designer, Change Assistant, Change Impact Analyzer, and PeopleSoft Test Framework.
 - readme.txt
 - Run the setup script with the following command to install to drive C.
For other script options, see the table at the beginning of this section.
`SetupPTClient.bat -t`

Note. If you see an error message similar to "The application has failed to start because its side-by-side configuration is incorrect," it indicates that your machine does not include the necessary Microsoft C++ runtime libraries. Go to the Microsoft Web site, locate the Microsoft Visual C++ redistributable package for your system, and install as directed.

4. Answer *y* (yes) at the following prompt to deploy the PeopleTools Client.

If you are running the script after having deployed the PeopleTools Client previously, and you want to install Change Assistant, Change Impact Analyzer, or PeopleSoft Test Framework without deploying the PeopleTools Client again, answer *n* (no), and continue with step 9.

```
***** SetupPTClient started at 11:42:38.91 *****
set logger to true
Do you want to deploy PeopleTools client? [Y/N]: y
```

5. Specify the RDBMS type for the PeopleTools Client that you want to deploy.

In this example, the RDBMS is option 1, Oracle.

```
Please Select the Database Platform:
1. Oracle
2. Microsoft SQL Server
3. DB2 for zOS
Enter your choice [1-3] : 1
```

6. Specify the installation directory, referred to as PSHOME, for the PeopleTools Client, or press ENTER to accept the default directory, C:\PT<release_number>_Client_<database_type>, for example C:\PT8.62.02_Client_ORA.

```
Please specify the PSHOME for the PeopleTools Client
[C:\PT8.62.02_Client_ORA]:
```

7. Specify whether you want to supply configuration details at the following prompt.

```
Do you want to configure PeopleTools client? [Y/N]:
```

If you answer *n* (no), you do not want to configure the PeopleTools client, continue with step 9.

If you answer *y* (yes), specify the information for your environment at the following prompts:

```
Database Name: HCM92
Server Name: example.com
UserId: VP1
Connect ID: people
Connect Password:
Retype Connect Password:
```

Note. When you enter the password, the script does not echo the password or any masking characters as you type.

- Specify the database name and database server to connect to.
 - The connect ID a valid database-level ID that the PeopleSoft system uses to make the initial connection to the database.
 - For User ID, specify a PeopleSoft user ID, such as VP1 or PS, that has permission to access the database from the PeopleTools client, Application Designer, and so on.
8. Select the type of deployment at the following prompt:

See the definitions in Understanding the Standalone Mode Deployment.

Please make your selection for the Tools Client deployment:

1. People Tools Full Upgrade
2. People Tools Patch
3. None of the above

Enter your choice [1-3]:

9. Specify whether you want to install Change Assistant at the following prompt:

Do you want to install Change Assistant? [Y/N]:

If you answer y (yes), specify the installation directory, or accept the default, C:\Program Files\PeopleSoft\Change Assistant:

Please specify the directory to install Change Assistant
[C:\Program Files\PeopleSoft\Change Assistant]:

10. Specify whether you want to install Change Impact Analyzer at the following prompt:

Do you want to install Change Impact Analyzer? [Y/N]:

If you answer y (yes), specify the installation directory for Change Impact Analyzer, or accept the default, C:\Program Files\PeopleSoft\Change Impact Analyzer:

Please specify the directory to install Change Impact Analyzer
[C:\Program Files\PeopleSoft\Change Impact Analyzer]:

11. Specify whether you want to install PeopleSoft Test Framework at the following prompt:

Do you want to install PeopleSoft Test Framework? [Y/N]:

If you answer y (yes), specify the installation directory for PeopleSoft Test Framework, or accept the default, C:\Program Files\PeopleSoft\PeopleSoft Test Framework:

Please specify the directory to install PeopleSoft Test Framework
[C:\Program Files\PeopleSoft\PeopleSoft Test Framework]:

12. Specify whether you want to configure the PeopleSoft Test Framework at the following prompt:

Do you want to configure PeopleSoft Test Framework? [Y/N]:

If you answer y (yes), specify the information for your environment. For information on these parameters, see the PeopleTools Test Framework product documentation.

See *PeopleTools: Test Framework*, "Installing a PTF Client."

```
Database Name: HCM92
Server:Port: example.com:443
Node ID: node_name
User ID: VP1
Proxy [Y/N]: y
Proxy Server: proxyserver.com
Proxy Port: 5000
Proxy User: username
Proxy Password:*****
Retype Proxy Password:*****
```

13. Review the setup steps.

The messages you see depend upon your choices.

```
Starting Tools Client Deployment!  
Deploying PeopleTools 8.62.02 Client in C:\PT8.62.02_Client_ORA  
Configuring PeopleTools 8.62.02 Client  
Deployment of PeopleTools Client Complete.  
Tools Client Deployment Ended.  
***** SetupPTClient ended at 11:35:08.91 *****  
Please review C:\PeopleSoft\PTClientDeploy.log for additional⇒  
information.
```

14. To review the log file for the setup process, go to
%USERPROFILE%\AppData\Local\Temp\PeopleSoft\PTClientDeploy.log.

For example, if the USERPROFILE environment variable is C:\Users\username, the log file location is C:\Users\username\AppData\Local\Temp\PeopleSoft\PTClientDeploy.log.

Note. If you used the `-d <drive>` option to deploy to a drive other than drive C:\, the log file is found in `<drive>:\Users\<username>\AppData\Local\Temp\PeopleSoft\PTClientDeploy.log` and creates the directory if it does not exist.

The PTClientDeploy.log file includes a record of each of the steps in the PeopleTools Client deployment process. If any of the steps fail, a detailed error or warning message will be written to the same log file.

Chapter 5

Completing the DPK Initialization with Customizations

This chapter discusses:

- Understanding PeopleSoft Environment Customizations
- Preparing Customization Files for Linux, AIX, or Solaris Users and Groups
- Preparing the Customization File for JDK on AIX
- Preparing the Customization File for PeopleSoft Domain Definitions
- Preparing the Customization File to Create PeopleSoft Domains Without Configuration
- Preparing the Customization File for Component Software Locations
- Preparing the Customization File for Unicode
- Preparing the Customization Files for the PeopleSoft Homes
- Preparing the Customization File for Jolt SSL and WSL SSL Ports
- Preparing the Customization File for Session Cookie Names
- Preparing the Customization File for JVM Heap Sizes
- Preparing the Customization File to Exclude Oracle Database Client Installation
- Preparing the Customization File for sysctl and ulimit Parameters on Linux, AIX, or Solaris
- Completing the Customized Deployment

Understanding PeopleSoft Environment Customizations

The PeopleSoft DPK setup script allows setup of a PeopleSoft environment quickly using the default data from the packaged Hiera YAML files. This section gives examples of ways to use the YAML files for customization.

Always use the documented procedures to make changes to your environment. Doing so will allow you to retain your customizations when removing a deployment before deploying a new patch or version.

Note. You can use the customizations in this chapter whether you use the DPK script interactively or in silent mode. This list notes a few places where using the DPK customization is different for interactive or silent mode.

Use these guidelines when customizing your environment:

- (Interactive mode) Do not change any of the original delivered YAML files.

This practice enables you to retain your customizations after deploying a new patch or update.

When you deploy the PeopleSoft DPKs, the YAML files associated with the deployment are installed in the following location. Use these files as the basis for the `psft_customizations.yaml` file.

- `BASE_DIR/dpk/puppet/production/data/defaults.yaml`

- `BASE_DIR/dpk/puppet/production/data/psft_configuration.yaml`
- `BASE_DIR/dpk/puppet/production/data/psft_deployment.yaml`
- `BASE_DIR/dpk/puppet/production/data/psft_unix_system.yaml`

- (Silent mode) Do not change any of the original delivered YAML files.

This practice enables you to retain your customizations after deploying a new patch or update.

Use the YAML files in the following location as the basis for the customizations file used in silent installation:

- `DPK_INSTALL/setup/puppet/production/data/defaults.yaml`
- `DPK_INSTALL/setup/puppet/production/data/psft_configuration.yaml`
- `DPK_INSTALL/setup/puppet/production/data/psft_deployment.yaml`
- `DPK_INSTALL/setup/puppet/production/data/psft_unix_system.yaml`
- (Interactive mode) Start with the DPK setup script and choose not to continue with the default initialization.

Answer *no* at the prompt "Do you want to continue with the default initialization process? [y|n]:" to exit the script and bypass the default initialization process.

To set up a customized PeopleSoft environment, use the DPK setup script for the first portion of the process, that is, to automate the tasks of extracting the DPK zip files, installing Puppet (if not installed), and copying the Puppet modules and Hiera data YAML files from the DPK into the location where Puppet looks for these files during the orchestration process. When you exit the script, it displays instructions on how to proceed to complete the initialization.

- Always use the customizations when installing on an AIX operating system.
- Always create a `psft_customizations.yaml` file to use for modified parameters.
 - Never modify the delivered YAML files. Instead, by copying the parameters that you want to modify into the `psft_customizations.yaml` file you are able to save the customization.
 - Copy only the section of the delivered YAML file that includes the parameters that you need to change, as directed by the samples in this documentation. Depending upon the specific type of customization, you may need to copy a single line, or an entire block of text, so be sure to check this documentation.
 - The DPK setup script processes the `psft_customizations.yaml` file before the generated YAML files, so that the values in `psft_customizations.yaml` override the values in `psft_configuration.yaml`, `psft_deployment.yaml`, and `psft_unix_system.yaml`.
 - (Interactive mode) Note that the file must be named "`psft_customizations.yaml`" for interactive mode deployment. Be sure to use the correct spelling.
 - (Silent mode) You can name the customization YAML file whatever you like for the silent mode installation.
- Verify the content of the delivered YAML files with each release.

The YAML files may have changed since this document was published. It is important that you copy the appropriate section of code from the YAML files you install with each new deployment, and use it as the basis for your `psft_customizations.yaml` file (or the silent mode customization YAML file).

- Do not create new parameters for `psft_customizations.yaml` (or the silent mode customization YAML file).

The deployment recognizes only those parameters in the delivered YAML files or given in the product documentation.

- Use a single `psft_customizations.yaml` file (or silent mode customization YAML file).

You can copy the necessary sections from more than one of the delivered YAML files and include them in a single `psft_customizations.yaml` file. Again, copy only those sections with the parameters you want to change.

- Use the same `psft_customizations.yaml` file (or silent mode customization YAML file) for all deployments on a given base folder.

This applies to a use case in which you carry out more than one deployment on the same `BASE_DIR`. For example, you first install `PS_HOME` only, and use a `psft_customizations.yaml` file to specify a non-default `PS_HOME` location. Then you later do a second deployment, with the same `BASE_DIR`, to install mid-tier components, and you want to customize the location of Oracle WebLogic. In this case, use the first `psft_customizations.yaml` file, including the non-default `PS_HOME`, append the customization for the Oracle WebLogic location, and use it for the second deployment.

- Include the `remove: false` attribute to retain your customizations through the clean-up process.

To ensure that your customizations are not removed when removing a deployed environment:

- For each segment of customization parameters in the `psft_customizations.yaml` file (or silent mode customization YAML file), include the `remove: false` attribute at the end of the segment.
- If you remove the environment manually (using the `psft_puppet_apply` script), set the `ensure` attribute to `absent` in `default.yaml`.

If you remove the environment using the `--cleanup` option for the PeopleSoft DPK setup script, you do not need to set the attribute first because it is part of the script process.

- Remove the environment using the `--cleanup` option for the PeopleSoft DPK setup script, as described in this documentation.

See "Installing the PeopleSoft Homes," Removing a Deployed PeopleSoft Environment.

- Copy an entire section containing the parameter to be modified, and be sure to retain the indentation from the delivered YAML file.

The hierarchy and alignment of the YAML files are very important to the correct operation. In addition to the brief overview given here, review the information in the appendix "Using the Puppet Hiera YAML Files for Customization."

- The YAML files include scalar type and collection type parameters.

Scalar parameters are of the form `key: value`; for example:

```
db_platform: ORACLE
```

Collection type parameters include a parameter name followed by one or more indented lists of `key: value` pairs. In this case, the value of the collection parameter is defined by the indented list of values; for example:

```
ps_home:
  db_type:      "%{hiera('db_platform')}}"
  unicode_db:   "%{hiera('unicode_db')}}"
  location:     "%{hiera('ps_home_location')}}"
```

- When you locate a parameter that you want to modify, be sure to locate the section heading that begins at the first column of the YAML file. This ensures that the deployment operation modifies the correct parameter.
- Be sure to retain the indentation from the delivered YAML file.

Typically there is an indentation of 2 or 3 spaces for each successive subsection. This is necessary in order for the parameters to be correctly interpreted.

Note. Be sure when copying and pasting that you retain the indentation. Depending upon the authoring or editing tools you use, the desired indentation may be lost when you copy and paste. It is a good idea to double-check the final `psft_customizations.yaml` file (or silent mode customization YAML file), especially for the special cases where you copy a sample from this documentation.

- When copying and modifying collection type parameters, use only spaces, not tabs, to indent the subsections.
- (Interactive mode) Use the encrypted passwords from the generated YAML files.

The DPK setup script encrypts user-supplied passwords and includes them in the generated YAML files. If you copy a section of a YAML file with encrypted passwords, do not replace or remove the encrypted text.

The encrypted passwords are quite long. Be sure to copy the entire string, without adding spaces, tabs, or line feeds.

Note. For the majority of the customizations described in this documentation, you copy the encrypted passwords from the generated YAML files. If that is not possible, see the appendix "Encrypting Passwords for Customization Files."

- (Silent mode) Enter passwords in clear text.

When creating the `psft_customizations.yaml` file for silent mode installation, enter the passwords in clear text. Do not enter encrypted passwords.

- Replace the entire attribute string.

The parameters in the delivered YAML files are written with Hiera interpolation functions that act as variables. To modify each parameter, you must replace the entire string after the colon, and enclose your new value in double quotes. For example, in the `psft_deployment.yaml` file, the location for an Oracle WebLogic installation is given by the following parameters:

```
weblogic_location: "%{hiera('pt_location')}/bea"
weblogic:
  location: "%{hiera('weblogic_location')}"
```

The second Hiera function refers to the first. When `pt_location` is set as `C:/psft`, Oracle WebLogic will be installed in `C:/psft/bea`. To change this, remove both strings of text `"%{hiera('pt_location')}/bea"` and `"%{hiera('weblogic_location')}"`, and replace them with the full path to the new location. Retain the two-space indentation, and use a forward slash (/) for paths on both Microsoft Windows and Linux; for example:

On Microsoft Windows:

```
weblogic_location: "C:/psft/weblogic"
weblogic:
  location: "C:/psft/weblogic"
```

On Linux:

```
weblogic_location: "/opt/bea/weblogic"
weblogic:
  location: "/opt/bea/weblogic"
```

- Do not use the customizations to set up a non-Unicode environment if you are deploying the PeopleSoft Update Image DPKs for use with PeopleSoft Update Manager.

The environments for the PeopleSoft Update Images are required to be Unicode.

- Verify existing installations before beginning deployment.

You have the option to use existing installations, for example for Oracle WebLogic, but you have the responsibility to ensure that the installation is supported, complete, and correct. The deployment script does not verify whether an installation directory includes a valid, working installation.

See *Preparing the Customization File for Component Software Locations*.

- Set the Puppet environment if necessary.

The process to complete the initialization using the customizations, as described in the section *Completing the Customized Deployment*, runs the `psft_puppet_apply` script, which sets necessary environment variables and runs the `puppet apply` command. If you choose to use the `puppet apply` command directly rather than the script, you may get a message saying that "puppet" is not recognized. This message may indicate that the Puppet software is not included in your system's path. In that case, you can use the commands given here to set the Puppet environment. You should also set the Puppet environment if you need to run `puppet apply` after the script execution has ended with an error.

Note. Oracle recommends that you use the delivered `psft_puppet_apply` script, not the `puppet apply` command.

You must also set the Puppet environment before you encrypt passwords to include in the `psft_customizations.yaml` file for a customized deployment on Linux, AIX, or Solaris.

See "Encrypting Passwords for Customization Files."

On Microsoft Windows, to set the Puppet environment, run this command

```
"BASE_DIR\psft_puppet_agent\bin\puppet_shell.bat"
```

To set the environment variables on Linux, AIX, or Solaris, use `pspuppet.sh` along with manual commands. The `pspuppet.sh` script is installed by the DPK setup script in `BASE_DIR/psft_puppet_agent`, and will set the Puppet `PATH` and `LIBRARY` environment variables. Source the script by entering the following command:

```
. BASE_DIR/psft_puppet_agent/pspuppet.sh
```

The dot, or period (".") at the beginning of the command is a source operator that ensures that the script commands persist in the shell environment that you are deploying from. After sourcing the script, continue with the deployment by running the `puppet apply` command.

On Linux, AIX, or Solaris, first specify the following environment variables:

```
export PUPPET_DIR=BASE_DIR/psft_puppet_agent
export PUPPET_BIN=${PUPPET_DIR}/bin
export PUPPET_LIB=${PUPPET_DIR}/lib
```

Next, source `pspuppet.sh` to set the Puppet `PATH` and `LIBRARY` environment variables:

```
. BASE_DIR/psft_puppet_agent/pspuppet.sh
```

- Use only the predefined web profiles.

PeopleSoft PeopleTools includes four predefined web profiles — DEV, KIOSK, PROD, and TEST. In the delivered YAML file `psft_configuration.yaml`, the web profile is specified by the scalar parameter `pia_webprofile_name: PROD`. If you want to specify a different value using `psft_customizations.yaml`, be sure to use one of the four predefined values.

See *PeopleTools: Portal Technology*, "Configuring Web Profiles."

- When using the customizations for a PeopleSoft web server domain, do not use the names PIA, PIA1, PIA2, or weblogic for the domain name.

The name of the WebLogic domain and the server and cluster names within it must be unique. The names PIA, PIA1, and PIA2 are reserved for use by the PeopleSoft system. The name weblogic is reserved for use by the Oracle WebLogic software. These restrictions apply to single server and multi-server domain creation.

See *Preparing the Customization File for PeopleSoft Domain Definitions*.

See *PeopleTools: System and Server Administration*, "WebLogic Domain Types."

- To specify a non-default location for the Process Scheduler Report Repository, you must create the Report Repository directory before you begin the DPK installation.

The Report Repository is the designated server for reports that are generated from the PeopleSoft Process Scheduler Server. In the delivered YAML file `psft_configuration.yaml`, the Report Repository location is defined as a subdirectory of `PS_CFG_HOME`, as specified by this scalar parameter:

```
report_repository_dir: "%{hiera('ps_config_home')}/psreports"
```

To define a different location, create the directory first. Use the `report_repository_dir` parameter with the customized location in the `psft_customizations.yaml` file.

See *PeopleTools: Process Scheduler*, "PeopleSoft Process Scheduler Architecture."

See the task Setting Up Process Scheduler to Transfer Reports and Logs to the Report Repository in the PeopleSoft 9.2 Application Installation guide for your database platform.

See Oracle's PeopleSoft PeopleTools 8.62 Home Page, Installation and Upgrade, My Oracle Support, Doc ID 3076202.2.

Task 5-1: Preparing Customization Files for Linux, AIX, or Solaris Users and Groups

This section discusses:

- Requirements for Users and Groups Customizations
- Preparing the Customization File for a New Single User and Single Group (New or Existing)
- Preparing the Customization File for an Existing Single User and Single Group (New or Existing)
- Preparing the Customization File for a New Single User, New Primary Group, and New Secondary Group
- Preparing the Customization File for a New Single User, New Primary Group, and Existing Secondary Group
- Preparing the Customization File for Existing Users and Groups

Requirements for Users and Groups Customizations

Ensure that you fulfill these requirements.

- *Root user deployment*

The customizations for Linux, AIX, or Solaris users and group are supported only when the root user performs the entire deployment. The root user can prepare the environment for a non-root user with the customizations in this section.

It is not necessary for the root user to run the DPK setup script with the `--prereq` option. Run the DPK setup script with the `--postcfg` option to complete the Oracle Database Client setup.

- *Oinstall group*

Customizations for a single group require that the user belong to the oinstall group, and it must be included in the `psft_customizations.yaml` file. This applies for both new and existing oinstall groups. If the oinstall group exists, the DPK setup script will skip it. If it does not exist, the DPK setup script will create it.

Customizations for more than one group require that the oinstall group be either the primary or secondary group.

- *Access to Oracle central inventory location*

The DPK setup script creates an Oracle central inventory location for a root deployment. The root user must manually add access to the central inventory location for the single user specified in these customizations, and the user should have oinstall as the primary group.

See "Preparing for the Installation," Reviewing the Central Inventory File Location and Permissions on Linux or AIX

- *Encrypted passwords*

To use an encrypted password with one of the customization files in this section, note that the successful use of the encrypted password depends on the presence of the public and private keys in the *BASE_DIR*/dpk/puppet directory referred to in the eyaml encrypt command. You cannot save an encrypted password and use it with an installation with a different *BASE_DIR*.

Note. Encrypted passwords are needed only for interactive mode deployments, and only for new users.

- *LDAP users*

If you want to set up your environment to use existing LDAP or existing users and groups on Linux, AIX, or Solaris, you must meet these requirements: 1) The user home directory should have read/write/execute permission for the root user. 2) The user default shell should be Bash.

Task 5-1-1: Preparing the Customization File for a New Single User and Single Group (New or Existing)

This user customization applies to Linux, AIX, or Solaris OS platforms only. If you choose the default initialization when running the DPK setup script, the Puppet framework creates default local users and default groups, which are listed in the generated psft_unix_system.yaml file. Use the sample customization file in this section if you do not want to use the default users and groups, and instead want to set up your environment with different single user and single group for the whole PeopleSoft environment. This customization will create a new single user that belongs to the oinstall group.

Note. Review the requirements in Understanding PeopleSoft Environment Customizations and Requirements for Users and Groups Customizations before preparing the customization file.

Note. After completing the initialization, the system will prompt you to provide a new password for the new single user the first time you log in.

This customization will create a single user that belongs to the oinstall group. You must specify values for two parameters that are not included in the generated psft_unix_system.yaml file, psft_user and psft_group.

- *groups/psft_group*

- Use the groups/psft_group collection parameter for a new or existing group for a single user. The DPK process will create the group. If there is an existing group with the same name, the script will skip it.
- Specify the same value, for groups/psft_group/name and for users/psft_user/gid.

Use a group name (string), not a GID (number), for both the name in the group collection parameter, and the gid in the users collection parameter.

- You must specify oinstall as the group name and gid.

This requirement applies whether the oinstall group exists, or you want to create a new group. In both cases, the name must be oinstall.

- Note that you must use the parameters exactly as given in this documentation. If you try to create a different parameter name or alter the parameter, the DPK process will not recognize it.

- *users/psft_user*

- Use the users/psft_user collection parameter to create a new user and add that user to the group specified by groups/psft_group.
- This group is the primary group for the new user.

- Specify the same value for `users/psft_user/name` and for the scalar parameter `psft_runtime_user_name`.
- The single user has all the roles and permissions that the default users would have.
See "Using and Maintaining the PeopleSoft Environment," Using the PeopleSoft Installation, for a list of the default users and permissions.
- For interactive mode, supply an encrypted password for the new user.
- For silent mode, supply a clear-text password for the new user.

• `users/psft_user/home_dir`

When you run the DPK setup script, it includes a prompt for the users' home directory. That value is included in the generated `psft_unix_system.yaml` file. You can accept that same value in this customization file for `users/psft_user/home_dir`, or you can change it here. If you change it, the DPK process will create the new home directory. Enter the full path to a writable directory.

To prepare the customization file:

1. Create a `psft_customizations.yaml` using a standard editing tool, such as `vi` on Linux, and save it in the same location as the `psft_unix_system.yaml` file.

By default, the DPK setup script installs the YAML files in `BASE_DIR/dpk/puppet/production/data`.

2. Use the sample below in creating the `psft_customizations.yaml` file, and modify the values as needed.

Note. Be sure that your final `psft_customizations.yaml` file includes the indentation shown here. The indentation may be lost if you copy from this documentation and paste into the file.

In this example, the new single user *newuser1* will be created and assigned to the primary group `oinstall`.

```
---
groups:
  psft_group:
    name: oinstall
    remove: false

psft_runtime_user_name: newuser1

users:
  psft_user:
    name: newuser1
    gid: oinstall
    home_dir: /dpk_base/home/userhome
    password: ENC[PKCS7,MIIBeQYJKoZIhvcNA.....]
    remove: false
```

Important! Verify that you fulfill the following requirements:

- Ensure that the file begins with three dashes (- - -).
- (Interactive mode) For a new user, replace the password sample above with an encrypted password.
Enter the encrypted password on a single line. Do not include spaces or line feeds. See the instructions later in this documentation to generate the encrypted password.
See "Encrypting Passwords for Customization Files."
- (Silent mode) For a new user, replace the password sample above with a clear text password.

3. Save the file.
4. Continue with the steps in Completing the Customized Deployment.

Task 5-1-2: Preparing the Customization File for an Existing Single User and Single Group (New or Existing)

This user customization applies to Linux, AIX, or Solaris OS platforms only. If you choose the default initialization when running the DPK setup script, the Puppet framework creates default local users and default groups, which are listed in the generated `psft_unix_system.yaml` file. Use the sample customization file in this section if you do not want to use the default users and groups, and instead want to set up your environment with a different single user and single group for the whole PeopleSoft environment.

This customization uses an existing single user that belongs to the `oinstall` group.

Note. Review the requirements in Understanding PeopleSoft Environment Customizations and Requirements for Users and Groups Customizations before preparing the customization file.

Note. After completing the initialization, the system will prompt you to provide a new password the first time you log in.

To use the customization for an existing single user, do not enter a password in the `psft_customizations.yaml` file.

This customization is for an existing single user that belongs to the `oinstall` group. You must specify values for two parameters that are not included in the generated `psft_unix_system.yaml` file, `psft_user` and `psft_group`.

- `groups/psft_group`
 - Use the `groups/psft_group` collection parameter for a new or existing group for a single user. The DPK process will create the group. If there is an existing group with the same name, the script will skip it.
 - Specify the same value, for `groups/psft_group/name` and for `users/psft_user/gid`.
Use a group name (string), not a GID (number), for both the name in the group collection parameter, and the gid in the users collection parameter.
 - You must specify `oinstall` as the group name and gid.
This requirement applies whether the `oinstall` group exists, or you want to create a new group. In both cases, the name must be `oinstall`.
 - Note that you must use the parameters exactly as given in this documentation. If you try to create a different parameter name or alter the parameter, the DPK process will not recognize it.
- `users/psft_user`
 - Use the `users/psft_user` collection parameter to supply the existing user name and add that user to the group specified by `groups/psft_group`.
 - This group is the primary group for the new user.
 - Specify the same value for `users/psft_user/name` and for the scalar parameter `psft_runtime_user_name`.
 - The single user has all the roles and permissions that the default users would have.
See "Using and Maintaining the PeopleSoft Environment," Using the PeopleSoft Installation, for a list of the default users and permissions.
 - Do not supply the password for an existing single user in the `psft_customizations.yaml` file.
- `users/psft_user/home_dir`

When you run the DPK setup script, it includes a prompt for the users' home directory. That value is included in the generated `psft_unix_system.yaml` file. You can accept that same value in this customization file for `users/psft_user/home_dir`, or you can change it here. If you change it, the DPK process will create the new home directory. Enter the full path to a writable directory.

To prepare the customization file:

1. Create a `psft_customizations.yaml` using a standard editing tool, such as `vi` on Linux, and save it in the same location as the `psft_unix_system.yaml` file.
By default, the DPK setup script installs the YAML files in `BASE_DIR/dpk/puppet/production/data`.
2. Use the sample below in creating the `psft_customizations.yaml` file, and modify the values as needed.

Note. Be sure that your final `psft_customizations.yaml` file includes the indentation shown here. The indentation may be lost if you copy from this documentation and paste into the file.

In this example, the existing single user `user2` will be created and assigned to the primary group `oinstall`.

```
---
groups:
  psft_group:
    name: oinstall
    remove: false

psft_runtime_user_name: user2

users:
  psft_user:
    name: user2
    gid: oinstall
    home_dir: /dpk_base/home/userhome
    remove: false
```

Important! Verify that you fulfill the following requirements:

- Ensure that the file begins with three dashes (- - -).
 - Do not enter a password for the existing user.
 - The group name must be `oinstall`.
3. Save the file.
 4. Continue with the steps in Completing the Customized Deployment.

Task 5-1-3: Preparing the Customization File for a New Single User, New Primary Group, and New Secondary Group

This user customization applies to Linux, AIX, and Solaris OS platforms only. If you choose the default initialization when running the DPK setup script, the Puppet framework creates local users and default groups, which are contained in the generated `psft_unix_system.yaml` file. Use the sample customization file in this section if you do not want to use the default users and groups, and instead want to set up your environment with a new single user assigned to two groups.

See "Using and Maintaining the PeopleSoft Environment," Using the PeopleSoft Installation, for a list of the default users and permissions.

Note. After completing the initialization, the system will prompt you to provide a new password for the new user, the first time you log in.

Note. Review the requirements in Understanding PeopleSoft Environment Customizations and Requirements for Users and Groups Customizations before preparing the customization file.

This customization will create a new single user and a new group, the primary group. The new user is also assigned to a new secondary group. Either the primary group or the secondary group must be named `oinstall`.

You must specify values for two parameters that are not included in the generated `psft_unix_system.yaml` file, `psft_user` and `psft_group`.

- `groups/psft_group`
 - Use the `groups/psft_group` collection parameter only if you want to create a new group for a single user. The DPK process will create the group. If there is an existing group with the same name, the script will skip it.
 - Specify the same value for `groups/psft_group/name` and for `users/psft_user/gid`.
Use a group name (string), not a GID (number), for both the name in the group collection parameter, and the gid in the users collection parameter.
 - Note that you must use the parameters exactly as given in this documentation. If you try to create a different parameter name or alter the parameter, the DPK process will not recognize it.
- `users/psft_user`
 - Use the `users/psft_user` collection parameter to create a new user and add that user to the new group specified by `groups/psft_group/name`.
 - Specify the same value for `users/psft_user/name` and for the scalar parameter `psft_runtime_user_name`.
 - The new group specified by `users/psft_user/gid` and `groups/psft_group/name` is the primary group for the new user.
 - The new group specified by `users/psft_user/groups` is the secondary group for the new user.
 - Either the primary group or the secondary group must be named `oinstall`.
 - The single user has all the roles and permissions that the default users would have.
See "Using and Maintaining the PeopleSoft Environment," Using the PeopleSoft Installation, for a list of the default users and permissions.
- `users/psft_user/home_dir`

When you run the DPK setup script, it includes a prompt for the users' home directory. That value is included in the generated `psft_unix_system.yaml` file. You can accept that same value in this customization file for `users/psft_user/home_dir`, or you can change it here. If you change it, the DPK process will create the new home directory. Enter the full path to a writable directory.

To prepare the customization file:

1. Create a `psft_customizations.yaml` using a standard editing tool, such as `vi` on Linux, and save it in the same location as the `psft_unix_system.yaml` file.
By default, the DPK setup script installs the YAML files in `BASE_DIR/dpk/puppet/production/data`.
2. Use the sample below in creating the `psft_customizations.yaml` file, and modify the values as needed.

Note. Be sure that your final `psft_customizations.yaml` file includes the indentation shown here. The indentation may be lost if you copy from this documentation and paste into the file.

In this example, the new single user `newuser3` will be created and assigned to the newly created primary group `primgrp` and the new secondary group `oinstall`.

```
---
groups:
  psft_group:
    name: primgrp
    remove: false
```

```
psft_runtime_user_name: newuser3

users:
  psft_user:
    name: newuser3
    gid: primgrp
    groups: oinstall
    home_dir: /dpk_base/home/userhome
    password: ENC[PKCS7,MIIBeQYJKoZIhvcNA.....]
    remove: false
```

In this example, the new single user *newuser4* will be created and assigned to the newly created primary group *oinstall* and the new secondary group *secgrp*.

```
---
groups:
  psft_group:
    name: oinstall
    remove: false

psft_runtime_user_name: newuser4

users:
  psft_user:
    name: newuser4
    gid: oinstall
    groups: secgrp
    home_dir: /dpk_base/home/userhome
    password: ENC[PKCS7,MIIBeQYJKoZIhvcNA.....]
    remove: false
```

Important! Verify that you fulfill the following requirements:

- Ensure that the file begins with three dashes (- - -).
- (Interactive mode) Replace the password sample above with an encrypted password.
Enter the encrypted password on a single line. Do not include spaces or line feeds. See the instructions later in this documentation to generate the encrypted password.
See "Encrypting Passwords for Customization Files."
- (Silent mode) Replace the password sample above with a clear text password.

3. Save the file.
4. Continue with the steps in Completing the Customized Deployment.

Task 5-1-4: Preparing the Customization File for a New Single User, New Primary Group, and Existing Secondary Group

This user customization applies to Linux, AIX, and Solaris OS platforms only. If you choose the default initialization when running the DPK setup script, the Puppet framework creates local users and default groups, which are contained in the generated `psft_unix_system.yaml` file. Use the sample customization file in this section if you do not want to use the default users and groups, and instead want to set up your environment with a new single user assigned to two groups.

See "Using and Maintaining the PeopleSoft Environment," Using the PeopleSoft Installation, for a list of the default users and permissions.

Note. After completing the initialization, the system will prompt you to provide a new password for the new user, the first time you log in.

Note. Review the requirements in Understanding PeopleSoft Environment Customizations and Requirements for Users and Groups Customizations before preparing the customization file.

This customization will create a new single user and a new group, the primary group. The new user is also assigned to an existing, secondary group. Either the primary group or the secondary group must be named oinstall.

You must specify values for two parameters that are not included in the generated `psft_unix_system.yaml` file, `psft_user` and `psft_group`.

- `groups/psft_group`
 - Use the `groups/psft_group` collection parameter only if you want to create a new group for a single user. The DPK process will create the group. If there is an existing group with the same name, the script will skip it.
 - Specify the same value for `groups/psft_group/name` and for `users/psft_user/gid`.
Use a group name (string), not a GID (number), for both the name in the group collection parameter, and the gid in the users collection parameter.
 - Note that you must use the parameters exactly as given in this documentation. If you try to create a different parameter name or alter the parameter, the DPK process will not recognize it.
- `users/psft_user`
 - Use the `users/psft_user` collection parameter to create a new user and add that user to the new group specified by `groups/psft_group/name`.
 - Specify the same value for `users/psft_user/name` and for the scalar parameter `psft_runtime_user_name`.
 - The new group specified by `users/psft_user/gid` and `groups/psft_group/name` is the primary group for the new user.
 - The existing group specified by `users/psft_user/groups` is the secondary group for the new user.
 - Either the primary group or the secondary group must be named oinstall.
 - The single user has all the roles and permissions that the default users would have.
See "Using and Maintaining the PeopleSoft Environment," Using the PeopleSoft Installation, for a list of the default users and permissions.
- `users/psft_user/home_dir`

When you run the DPK setup script, it includes a prompt for the users' home directory. That value is included in the generated `psft_unix_system.yaml` file. You can accept that same value in this customization file for `users/psft_user/home_dir`, or you can change it here. If you change it, the DPK process will create the new home directory. Enter the full path to a writable directory.

To prepare the customization file:

1. Create a `psft_customizations.yaml` using a standard editing tool, such as vi on Linux, and save it in the same location as the `psft_unix_system.yaml` file.
By default, the DPK setup script installs the YAML files in `BASE_DIR/dpk/puppet/production/data`.
2. Use the sample below in creating the `psft_customizations.yaml` file, and modify the values as needed.

Note. Be sure that your final `psft_customizations.yaml` file includes the indentation shown here. The indentation may be lost if you copy from this documentation and paste into the file.

In this example, the new single user *newuser5* will be created and assigned to the newly created primary group *primgrp* and the existing secondary group *oinstall*.

```
---
groups:
  psft_group:
    name: primgrp
    remove: false

psft_runtime_user_name: newuser5

users:
  psft_user:
    name: newuser5
    gid: primgrp
    groups: oinstall
    home_dir: /dpk_base/home/userhome
    password: ENC[PKCS7,MIIBeQYJKoZIhvcNA.....]
    remove: false
```

In this example, the new single user *newuser6* will be created and assigned to the newly created primary group *oinstall* and the existing secondary group *secgrp*.

```
---
groups:
  psft_group:
    name: oinstall
    remove: false

psft_runtime_user_name: newuser6

users:
  psft_user:
    name: newuser6
    gid: oinstall
    groups: secgrp
    home_dir: /dpk_base/home/userhome
    password: ENC[PKCS7,MIIBeQYJKoZIhvcNA.....]
    remove: false
```

Important! Verify that you fulfill the following requirements:

- Ensure that the file begins with three dashes (- - -).
- (Interactive mode) Replace the password sample above with an encrypted password.
Enter the encrypted password on a single line. Do not include spaces or line feeds. See the instructions later in this documentation to generate the encrypted password.
See "Encrypting Passwords for Customization Files."
- (Silent mode) Replace the password sample above with a clear text password.

3. Save the file.
4. Continue with the steps in Completing the Customized Deployment.

Task 5-1-5: Preparing the Customization File for Existing Users and Groups

This user customization applies to Linux, AIX, and Solaris OS platforms only. If you choose the default initialization, the Puppet framework creates default local users and groups. However, your security policies may prohibit creating these OS users. In such a scenario, you can override these default users using the customizations file. The customizations file can refer to one or more existing users or existing groups and Puppet will use them instead of the default users.

See "Using and Maintaining the PeopleSoft Environment," Using the PeopleSoft Installation, for a list of the default users and permissions.

Note. After completing the initialization, the system will prompt you to provide a new password for the existing user, the first time you log in.

Note. Review the requirements in Understanding PeopleSoft Environment Customizations before preparing the customization file.

Ensure you fulfill these requirements:

- The users, groups, and GIDs that you specify in the `psft_customizations.yaml` file are present before you begin the installation.
- The user who installs the Oracle Database software must belong to the `oinstall` group (primary or secondary).
- Do not include a password in `psft_customizations.yaml`.

The customizations file does not specify new passwords, because it is assumed that the passwords associated with the existing users will be used.

- When you run the DPK setup script, you must specify a user home directory in which the existing user resides.
1. Locate the `psft_unix_system.yaml` file, which includes default users and groups.

By default, the DPK setup script installs the YAML files in `BASE_DIR/dpk/puppet/production/data`.

Note. The code examples in this topic are for illustrative purposes only. Remember to use the text from the YAML files you install with each new deployment as the basis for your `psft_customizations.yaml` file.

2. If necessary, create a `psft_customizations.yaml` using a standard editing tool, such as `vi` on Linux, and save it in the same location as the `psft_unix_system.yaml` file.

If this is the first entry in the `psft_customizations.yaml` file, ensure that there are three dashes (- - -) on the first line. Do not indent the dashes.

3. Copy the entire section for the users and groups from the `psft_unix_system.yaml` file into the `psft_customizations.yaml` file and modify the values as needed.

Note. Be sure that your final `psft_customizations.yaml` file includes the indentation from the generated YAML file. The indentation may be lost when you copy and paste.

Note. In this example, the user `oraclex3` belongs to the primary group `orainstgrp` and the secondary group `oinstall`.

For example:

```
---
psft_install_user_name:      psadm5
psft_runtime_user_name:     psadm6
psft_app_install_user_name: psadm7
oracle_user_name:           oraclex3

psft_runtime_group_name:     psftrungrp
psft_app_install_group_name: psftappgrp
oracle_install_group_name:   orainstgrp
oracle_runtime_group_name:   orarungrp

user_home_dir:  /data1/home
users:
  tools_install_user:
    name:      "%{hiera('psft_install_user_name')}}"
    gid:       orainstgrp
    groups:    "%{hiera('psft_runtime_group_name')}}"
    home_dir:  "%{hiera('user_home_dir')}/%{hiera('psft_install_user_⇒
name')}"

  psft_runtime_user:
    name:      "%{hiera('psft_runtime_user_name')}}"
    gid:       orainstgrp
    home_dir:  "%{hiera('user_home_dir')}/%{hiera('psft_runtime_user_⇒
name')}"

  app_install_user:
    name:      "%{hiera('psft_app_install_user_name')}}"
    gid:       psftappgrp
    home_dir:  "%{hiera('user_home_dir')}/%{hiera('psft_app_install_user_⇒
name')}"

  oracle_user:
    name:      "%{hiera('oracle_user_name')}}"
    gid:       orainstgrp
    groups:    oinstall
    home_dir:  "%{hiera('user_home_dir')}/%{hiera('oracle_user_name')}}"

  es_user:
    name:      esuserx3
    gid:       users
```

```
home_dir: /data1/home/esuserx3
```

The following table describes the parameters in the sample `psft_customizations.yaml` and the default values in `psft_unix_system.yaml`:

Attribute and Sample Value in <code>psft_customizations.yaml</code>	Default Value in <code>psft_unix_system.yaml</code>	Description
<code>psft_install_user ⇒ name: psadm5</code>	Replaces the default user <code>psadm1</code> .	This is the PeopleSoft PeopleTools installation administrator, who owns <i>PS_HOME</i> , but cannot write into <i>PS_CFG_HOME</i> .
<code>psft_runtime_user ⇒ name: psadm6</code>	Replaces the default user <code>psadm2</code> .	This is the PeopleSoft PeopleTools domain user who creates and configures the Application Server domain, Process Scheduler (batch server) domain, and the web server domain. This user cannot write to <i>PS_HOME</i> , but has read/execute access.
<code>psft_app_install_user ⇒ name: psadm7</code>	Replaces the default user <code>psadm3</code> .	This is the PeopleSoft application installation administrator who owns <i>PS_APP_HOME</i> .
<code>oracle_user_name: ⇒ oraclex3</code>	Replaces the default user <code>oracle2</code> .	This is the Oracle Database Server owner, who owns <i>ORACLE_HOME</i> .
<code>psft_runtime_group ⇒ name: psftrungrp</code>	Replaces the default group <code>psft</code> .	Note. Do not use the same name for the four group name parameters. Ensure that the names that you specify for these parameters in <code>psft_customizations.yaml</code> are different.
<code>psft_app_install ⇒ group_name: psftapp ⇒ grp</code>	Replaces the default group <code>appinst</code> .	This group is the primary group for the <code>app_install_user</code> . Note. Do not use the same name for the four group name parameters. Ensure that the names that you specify for these parameters in <code>psft_customizations.yaml</code> are different.

Attribute and Sample Value in psft_customizations.yaml	Default Value in psft_unix_system.yaml	Description
<pre>oracle_install_group ⇒ name: orainstgrp</pre>	Replaces the default group name oinstall.	This group is the primary group for the oracle_user, psft_runtime_user, and tools_install_user. Note. Do not use the same name for the four group name parameters. Ensure that the names that you specify for these parameters in psft_customizations.yaml are different.
<pre>oracle_runtime_group ⇒ name: orarungrp</pre>	Replaces the default group name dba.	Note. Do not use the same name for the four group name parameters. Ensure that the names that you specify for these parameters in psft_customizations.yaml are different.
<pre>users: tools_install_user: name: "%⇒ {hiera('psft_install_⇒ user_name')}"" gid: orainst⇒ grp groups: "%⇒ {hiera('psft_runtime_⇒ group_name')}"" home_dir: "%⇒ {hiera('user_home_⇒ dir')}"/%{hiera('psft_⇒ install_user_name')}""</pre>	NA	- The name for the tools_install_user is the same as the psft_install_user_name, as specified by an interpolation function. - The orainstgrp is the primary group for the tools_install_user. - The tools_install_user must belong to the psft runtime group as a secondary group. To satisfy this requirement, the value for users/tools_install_user/groups is set to the interpolation function "%{hiera('psft_runtime_group_name')}".

4. Save the file.
5. Continue with the steps in Completing the Customized Deployment.

Task 5-2: Preparing the Customization File for JDK on AIX

As mentioned in the section Reviewing Software Requirements for AIX, you must use customizations to specify the installation location of the manually installed JDK 11 for the AIX DPK.

Note. Review the requirements in Understanding PeopleSoft Environment Customizations before preparing the customization file.

1. Locate the psft_deployment.yaml file in *BASE_DIR*/dpk/puppet/production/data.

Note. The code examples in this topic are for illustrative purposes only. Remember to use the text from the YAML files you install with each new deployment as the basis for your `psft_customizations.yaml` file.

The installation location for JDK is defined in the `psft_deployment.yaml` file that is installed with the deployment.

2. If necessary, create a `psft_customizations.yaml` using a standard editing tool such as `vi`, and save it in the same location as the `psft_deployment.yaml` file.

If this is the first entry in the `psft_customizations.yaml` file, ensure that there are three dashes (- - -) on the first line of the file. Do not indent the dashes.

3. Copy the `jdk_location` scalar parameter, and the entire `jdk` collection-type section (two lines) from the `psft_deployment.yaml` file into the `psft_customizations.yaml` file.

Be sure to set the locations to the same value. Retain the indentation as given in the delivered YAML file.

```
---
jdk_location:      /home/java/ibm-java-ppc64-80
jdk:
  location:        /home/java/ibm-java-ppc64-80
  remove:          false
```

As previously mentioned, setting the optional attribute `remove: false` means that the parameters in this section will not be deleted when the deployed environment is removed.

4. Save the file.
5. Continue with the steps in Completing the Customized Deployment.

Task 5-3: Preparing the Customization File for PeopleSoft Domain Definitions

This section discusses:

- Preparing the `psft_customizations.yaml` File
- Reviewing the Domain Definitions in `psft_configuration.yaml`
- Reviewing the Customization File for a Single Application Server Domain
- Reviewing the Customization File for a Single Process Scheduler Domain
- Reviewing the Customization File for a Single PIA Domain
- Reviewing the Customization File for a PIA Domain on a Separate Host
- Reviewing the Customization File for Multiple Web Sites in a Single Web Domain
- Reviewing the Customization File for Multiple Domains

Task 5-3-1: Preparing the `psft_customizations.yaml` File

Use this information if you want to customize the PeopleSoft domains — the application server, Process Scheduler, and PIA domains. For example, you may want to create multiple Application Server domains rather than a single domain.

Note. Review the requirements in Understanding PeopleSoft Environment Customizations before preparing the customization file.

Note. As mentioned, do not use the names PIA, PIA1, PIA2, or weblogic to create a PIA (web server) domain.

1. Locate the `psft_configuration.yaml` file, which was installed by the deployment, in `BASE_DIR/dpk/puppet/production/data`.

Note. The code examples in this topic are for illustrative purposes only. Remember to use the text from the YAML files you install with each new deployment as the basis for your `psft_customizations.yaml` file.

2. If necessary, create a `psft_customizations.yaml` using a standard editing tool, such as Notepad on Microsoft Windows or vi on Linux, AIX, or Solaris, and save it in the same location as the `psft_configuration.yaml` file.
If this is the first entry in the `psft_customizations.yaml` file, ensure that there are three dashes (- - -) on the first line of the file. Do not indent the dashes.
3. Copy the sections that you want to customize from the `psft_configuration.yaml` file into the `psft_customizations.yaml` file and modify the values as needed.
Be sure to retain the indentation as given in the delivered YAML file.
The following sections in this task include sample `psft_customizations.yaml` files.
4. Save the file.
5. Continue with the steps in Completing the Customized Deployment.

Task 5-3-2: Reviewing the Domain Definitions in `psft_configuration.yaml`

To customize the PeopleSoft domains, you begin with the `psft_configuration.yaml` file, which lists the attributes pertinent to the PeopleSoft domains. Be sure to retain the indentation as given in the delivered YAML file when you copy the sections into the `psft_customizations.yaml` file.

Note. The `psft_configuration.yaml` file includes definitions for Automated Configuration Manager (ACM) plug-ins, which configure components such as Integration Broker and Report Distribution. Depending upon the PeopleSoft domain being set up, certain ACM configurations will run as part of the deployment.

This sample shows a portion of a `psft_configuration.yaml` file, with annotations added (marked by `###`) for the purposes of this explanation. The default application server name, APPDOM, is defined in the first portion of the file for the parameter `appserver_domain_name`, which is then referenced with an interpolation token `"${hierarchy('appserver_domain_name')}"` in the `appserver_domain_list` section.

The DPK setup script encrypts user-supplied passwords and includes them in the generated YAML files. The encrypted text will be a long single line of letters and numbers. Be sure to copy the text in one unbroken line, with no spaces or line feeds. This sample includes short strings of text beginning with "ENC" to represent encrypted passwords.

Note. Use clear text passwords for silent mode installation.

```
---
db_name:          FSDEMO
db_user:          VP1

#####
# Replace this password sample with encrypted text from the #
# generated psft_configuration.yaml file.                  #
#####
db_user_pwd:      ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]
db_connect_id:    people
```

```
#####
# Replace this password sample with encrypted text from the #
# generated psft_configuration.yaml file. #
#####
db_connect_pwd: ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]

domain_user: "%{hiera('psft_runtime_user_name')}}"
ps_config_home: "C:/Users/%{::env_username}/psft/pt/8.62"
appserver_template: small
appserver_domain_name: APPDOM
prcs_domain_name: PRCSDOM
prcs_domain_id: "PRCS%{::rand}"
report_node_name: "%{hiera('prcs_domain_id')}}"
pia_domain_name: peoplesoft
pia_site_name: ps
pia_http_port: 8000
pia_https_port: 8443
jolt_port: 9033
wsl_port: 7000
db_port: 1521
gateway_node_name: QE_LOCAL
pia_gateway_user: administrator

#####
# Replace these password samples with encrypted text from the #
# generated psft_configuration.yaml file. #
#####
pia_gateway_user_pwd: ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]
pia_gateway_keystore_pwd: ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]
webserver_type: weblogic
pia_webprofile_name: PROD
pia_psserver_list: "%{::fqdn}:%{hiera('jolt_port')}}"
report_repository_dir: "%{hiera('ps_config_home')}/psreports"

#####
# Replace this password sample with encrypted text from the #
# generated psft_configuration.yaml file. #
#####
domain_conn_pwd: ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]

help_uri: pt862pbh1
tns_dir: "%{hiera('db_location')}}"
tns_admin_list:
  "%{hiera('db_name')}":
    db_host: "%{::fqdn}"
    db_port: "%{hiera('db_port')}}"
    db_protocol: TCP
    db_service_name: "%{hiera('db_name')}}"

mssql_server_list:
  "%{hiera('db_name')}":
    mss_server_name: "%{::fqdn}"
    mss_odbc_name: "ODBC Driver 17 for SQL Server"
```

```

db2_client:
  sqllib_location: <SQLLIB_LOCATION>

run_preboot_config_setup: true
run_postboot_config_setup: true

#####
# Copy the entire section beginning here for                                     #
# application server customization.                                             #
#####

appserver_domain_list:
  "%{hiera('appserver_domain_name')}" :
    os_user:          "%{hiera('domain_user')}"
    ps_cfg_home_dir:  "%{hiera('ps_config_home')}"
    template_type:    "%{hiera('appserver_template')}"

db_settings:
  db_name:            "%{hiera('db_name')}"
  db_type:            "%{hiera('db_platform')}"
  db_opr_id:          "%{hiera('db_user')}"
  db_opr_pwd:         "%{hiera('db_user_pwd')}"
  db_connect_id:      "%{hiera('db_connect_id')}"
  db_connect_pwd:     "%{hiera('db_connect_pwd')}"

config_settings:
  Domain Settings/Domain ID:          "%{hiera('appserver_domain_name')}"
  PSAPPSRV/Min Instances:              2
  PSAPPSRV/Max Instances:              2
  PSAPPSRV/Max Fetch Size:             15000
  Security/DomainConnectionPwd:       "%{hiera('domain_conn_pwd')}"
  JOLT Listener/Port:                  "%{hiera('jolt_port')}"
  JOLT Listener/Address:               0.0.0.0
  Workstation Listener/Port:           "%{hiera('wsl_port')}"

feature_settings:
  PUBSUB:          "Yes"
  QUICKSRV:        "No"
  QUERYSRV:        "No"
  JOLT:            "Yes"
  JRAD:            "No"
  WSL:             "Yes"
  DBGSRV:          "No"
  RENSrv:          "No"
  MCF:             "No"
  PPM:             "Yes"
  PSPPMSRV:        "Yes"
  ANALYTICSRV:     "No"
  SERVER_EVENTS:   "Yes"
  DOMAIN_GW:       "No"
#####
# End application server section.                                             #
#####

```

```
#####
# Copy the entire section beginning here for
# Process Scheduler customization.
#####

prcs_domain_list:
  "%{hiera('prcs_domain_name')}":
    os_user:          "%{hiera('domain_user')}}"
    ps_cfg_home_dir: "%{hiera('ps_config_home')}}"

    db_settings:
      db_name:          "%{hiera('db_name')}}"
      db_type:          "%{hiera('db_platform')}}"
      db_opr_id:        "%{hiera('db_user')}}"
      db_opr_pwd:       "%{hiera('db_user_pwd')}}"
      db_connect_id:    "%{hiera('db_connect_id')}}"
      db_connect_pwd:   "%{hiera('db_connect_pwd')}}"

    config_settings:
      Process Scheduler/PrsServerName: "%{hiera('prcs_domain_id')}}"
      Security/DomainConnectionPwd:    "%{hiera('domain_conn_pwd')}}"

    feature_settings:
      MSTRSRV:      "Yes"
      APPENG:       "Yes"
#####
# End Process Scheduler section.
#####

#####
# Copy the entire section beginning here for PIA customization.
#####
pia_domain_list:
  "%{hiera('pia_domain_name')}":
    os_user:          "%{hiera('domain_user')}}"
    ps_cfg_home_dir:  "%{hiera('ps_config_home')}}"
    gateway_user:     "%{hiera('pia_gateway_user')}}"
    gateway_user_pwd: "%{hiera('pia_gateway_user_pwd')}}"
    auth_token_domain: ".%{::domain}"
    webserver_install_type: "%{hiera('webserver_install_type')}}"

    webserver_settings:
      webserver_type:      "%{hiera('webserver_type')}}"
      webserver_home:      "%{hiera('weblogic_location')}}"
      webserver_admin_user: system
      webserver_admin_user_pwd: ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]

#####
# Replace this password sample with encrypted text from the
# generated psft_configuration.yaml file.
#####

    webserver_admin_port:      "%{hiera('pia_http_port')}}"

```

```

webserver_http_port:      "%{hiera('pia_http_port')}}"
webserver_https_port:     "%{hiera('pia_https_port')}}"

site_list:
  "%{hiera('pia_site_name')}":
    appserver_connections: "%{hiera('pia_psserver_list')}}"
    domain_conn_pwd:       "%{hiera('domain_conn_pwd')}}"

    webprofile_settings:
      profile_name:         "%{hiera('pia_webprofile_name')}}"
      profile_user:         PTWEBSERVER
      profile_user_pwd:     ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]

#####
# Replace this password sample with encrypted text from the #
# generated psft_configuration.yaml file.                  #
#####

    report_repository_dir: "%{hiera('report_repository_dir')}}"
#####
# End PIA section.                                          #
#####

#####
# Remaining text removed for brevity.                      #
#####

```

Task 5-3-3: Reviewing the Customization File for a Single Application Server Domain

This sample shows a `psft_customizations.yaml` file for a single application server domain with the domain name `APPDOM1`. Be sure to retain the indentation as given in the delivered `psft_configuration.yaml` file when you copy the sections into the `psft_customizations.yaml` file. This sample includes annotations (marked by `###`) for the purposes of this explanation.

If you want to create PeopleSoft domains in a non-default `PS_CFG_HOME` location, you must specify the desired value for the scalar parameter `ps_config_home` outside the `appserver_domain_list` section.

Note. Specify the same value for `ps_config_home` and for the `ps_cfg_home_dir` parameter in the `appserver_domain_list` section. They both must reference the same location.

See [Preparing the Customization File for the PS_CFG_HOME Location](#).

This sample starts with scalar parameters for `appserver_domain_name` and `jolt_port`. Interpolation functions that reference these scalar parameters will also use the non-default values. This applies to the interpolation function in `psft_customizations.yaml` as well as those used by the ACM plug-ins in `psft_configuration.yaml`.

The `appserver_domain_name` scalar parameter replaces the default value, `APPDOM`, with `APPDOM111`. This sets the value for the domain name in the `appserver_domain_list` collection parameter to the non-default `APPDOM111`.

The `jolt_port` scalar parameter replaces the default port 9033 with 9077. This sets the value for Jolt Listener/Port to the non-default 9077.

```

### Custom port number and application server domain name ###
### in scalar parameters ###
appserver_domain_name: APPDOM111
jolt_port: 9077

appserver_domain_list:

### Application server domain name refers to scalar parameter ###
"%{hiera('appserver_domain_name')}":
  os_user: "%{hiera('domain_user')}"
  template_type: "%{hiera('appserver_template')}"

### Do not change the ps_cfg_home_dir parameter. ###
ps_cfg_home_dir: "%{hiera('ps_config_home')}"

db_settings:
  db_name: "%{hiera('db_name')}"
  db_type: "%{hiera('db_platform')}"
  db_opr_id: "%{hiera('db_user')}"
  db_opr_pwd: "%{hiera('db_user_pwd')}"
  db_connect_id: "%{hiera('db_connect_id')}"
  db_connect_pwd: "%{hiera('db_connect_pwd')}"

config_settings:
  Domain Settings/Domain ID: IBUPG0
  PSAPPSRV/Min Instances: 3
  PSAPPSRV/Max Instances: 5
  JOLT Listener/Port: "%{hiera('jolt_port')}" ### Custom⇒
###
  Workstation Listener/Port: "%{hiera('wsl_port')}"

feature_settings:
  PUBSUB: "Yes"
  QUICKSRV: "No"
  QUERYSRV: "No"
  JOLT: "Yes"
  JRAD: "No"
  WSL: "Yes"
  DBGSRV: "No"
  RENSrv: "No"
  MCF: "No"
  PPM: "Yes"
  PSPPMSRV: "Yes"
  ANALYTICSRV: "No"
  SERVER_EVENTS: "Yes"
  DOMAIN_GW: "No"

```

Task 5-3-4: Reviewing the Customization File for a Single Process Scheduler Domain

This sample shows a `psft_customizations.yaml` file for a single Process Scheduler domain with the domain name `PRCSDOM1`. Be sure to retain the indentation as given in the delivered `psft_configuration.yaml` file when you copy the sections into the `psft_customizations.yaml` file. This sample includes annotations (marked by `###`) for the purposes of this explanation.

If you want to create PeopleSoft domains in a non-default `PS_CFG_HOME` location, you must specify the desired value for the scalar parameter `ps_config_home` outside the `prcs_domain_list` section.

Note. Specify the same value for `ps_config_home` and for the `ps_cfg_home_dir` parameter in the `appserver_domain_list` section. They both must reference the same location.

See [Preparing the Customization File for the PS_CFG_HOME Location](#).

This sample starts with a scalar parameter for `prcs_domain_name`. Interpolation functions that reference this scalar parameter will also use the non-default value. This applies to the interpolation functions in `psft_customizations.yaml` as well as those used by the ACM plug-ins in `psft_configuration.yaml`.

The `prcs_domain_name` scalar parameter replaces the default value, `PRCSDOM`, with `PRCSDOM1`. This sets the value for the domain name in the `prcs_domain_list` collection parameter to the non-default `PRCSDOM1`.

```
---
### Custom Process Scheduler domain name in scalar parameter ###
prcs_domain_name:      PRCSDOM1

prcs_domain_list:

  ### Process Scheduler domain name refers to scalar parameter ###
  "%{hiera('prcs_domain_name')}":
    os_user:            "%{hiera('domain_user')}"

  ### Do not change the ps_cfg_home_dir parameter. ###
  ps_cfg_home_dir:     "%{hiera('ps_config_home')}"

  db_settings:
    db_name:            "%{hiera('db_name')}"
    db_type:            "%{hiera('db_platform')}"
    db_opr_id:          "%{hiera('db_user')}"
    db_opr_pwd:         "%{hiera('db_user_pwd')}"
    db_connect_id:      "%{hiera('db_connect_id')}"
    db_connect_pwd:     "%{hiera('db_connect_pwd')}"

  config_settings:
    Process Scheduler/PrcsServerName: "%{hiera('prcs_domain_id')}"
    Security/DomainConnectionPwd:     "%{hiera('domain_conn_pwd')}"

  feature_settings:
    MSTRSRV:            "Yes"
    APPENG:             "Yes"
```


Task 5-3-5: Reviewing the Customization File for a Single PIA Domain

This sample shows a `psft_customizations.yaml` file for a single PIA domain with the domain name `PIAHR1`. Be sure to retain the indentation as given in the delivered `psft_configuration.yaml` file when you copy the sections into the `psft_customizations.yaml` file. This sample includes annotations (marked by `###`) for the purposes of this explanation.

Note. Do not use the reserved names `PIA`, `PIA1`, `PIA2`, or `weblogic` for the PIA (web server) domain.

If you want to create PeopleSoft domains in a non-default `PS_CFG_HOME` location, you must specify the desired value for the scalar parameter `ps_config_home` outside the `pia_domain_list` section.

Note. Specify the same value for `ps_config_home` and for the `ps_cfg_home_dir` parameter in the `appserver_domain_list` section. They both must reference the same location.

See [Preparing the Customization File for the PS_CFG_HOME Location](#).

This sample starts with scalar parameters for `pia_domain_name`, `pia_http_port`, and `pia_https_port`. Interpolation functions that reference these scalar parameters will also use the non-default values. This applies to the interpolation function in `psft_customizations.yaml` as well as those used by the ACM plug-ins in `psft_configuration.yaml`.

The `pia_domain_name` scalar parameter replaces the default value, `peoplesoft`, with `PIAHR1`. This sets the value for the domain name in the `pia_domain_list` collection parameter to the non-default `PIAHR1`.

The `pia_http_port` and `pia_https_port` scalar parameters replace the default port 8000 and 8443 with 8050 and 8943, respectively. This sets the values for `webserver_admin_port`, `webserver_http_port`, and `webserver_https_port` to the non-default values.

```
---
### Custom port numbers and PIA domain name in scalar parameters ###
pia_http_port: 8050
pia_https_port: 8943
pia_domain_name:      PIAHR1

pia_domain_list:

  ## PIA domain name refers to scalar parameter ###
  "%{hiera('pia_domain_name')}":
    os_user:      "%{hiera('domain_user')}}"

  ### Do not change the ps_cfg_home_dir parameter. ###
  ps_cfg_home_dir:      "%{hiera('ps_config_home')}}"
  gateway_user:         "%{hiera('pia_gateway_user')}}"
  gateway_user_pwd:     "%{hiera('pia_gateway_user_pwd')}}"
  auth_token_domain:    ".%{:domain}"
  webserver_install_type: "%{hiera('webserver_install_type')}}"

  webserver_settings:
    webserver_type:      "%{hiera('webserver_type')}}"
    webserver_home:      "%{hiera('weblogic_location')}}"
    webserver_admin_user: system
    webserver_admin_user_pwd: ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]
    webserver_admin_port: "%{hiera('pia_http_port')}}"  ###Custom###
    webserver_http_port:  "%{hiera('pia_http_port')}}"  ###Custom###
```

```

webserver_https_port:      "%{hiera('pia_https_port')}}"   ###Custom###

site_list:
  "%{hiera('pia_site_name')}}":
    appserver_connections: "%{hiera('pia_psserver_list')}}"
    domain_conn_pwd:       "%{hiera('domain_conn_pwd')}}"

    webprofile_settings:
      profile_name:         "%{hiera('pia_webprofile_name')}}"
      profile_user:         PTWEBSERVER
      profile_user_pwd:     ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]

  report_repository_dir: "%{hiera('report_repository_dir')}}"

```

Task 5-3-6: Reviewing the Customization File for a PIA Domain on a Separate Host

If you want to set up an environment in which the PIA domain and web server are not on the same machine as the application server domain, you must use customizations to specify the machine where the application server is installed. This customization is required for the Integration Broker configuration. The sample includes annotations (marked by ###) for the purposes of this explanation.

1. Copy the entire `component_postboot_setup_list` collection type parameter section (comprised of several lines) from `psft_configuration.yaml` and paste it into `psft_customizations.yaml`.

Be sure to retain the indentation as given in the delivered YAML file when you copy the sections into the `psft_customizations.yaml` file, and when you modify them.

2. Locate the `env.ib_appserver_host` parameter.

This parameter sets the host for Integration Broker to the PIA host. The default value in the delivered `psft_configuration.yaml` file is the machine where the DPK setup script is run:

```
env.ib_appserver_host:      "%{hiera('pia_host_name')}}"
```

3. Change the value for `env.ib_appserver_host` to point to the host where the application server is set up, for example `ps_app_server1`.

See "Deploying the PeopleSoft PeopleTools Deployment Packages," Running the DPK Setup Script to Deploy a PIA Domain.

4. In the section `PTIBConfigureGatewayProperties`, change the value for `env.app_pia_same_host` to "N" to specify that the application server and web server are on different hosts.
5. Add the scalar parameters for `pia_http_port` and `pia_https_port` at the top of the file.

Interpolation functions that reference these scalar parameters will also use the non-default values. This applies to the interpolation function in `psft_customizations.yaml` as well as those used by the ACM plug-ins in `psft_customizations.yaml` and `psft_configuration.yaml`.

The `pia_http_port` and `pia_https_port` scalar parameters replace the default port 8000 and 8443 with 8050 and 8943, respectively. This sets the value for `env.gateway_port` and `env.gateway_ssl_port` to the non-default port values.

Note. Do not use the reserved names PIA, PIA1, PIA2, or weblogic for the PIA (web server) domain.

This sample shows a sample `psft_customizations.yaml` file, with annotations added (marked by ###) for the purposes of this explanation.

```

---
### Custom port numbers in scalar parameters ###
pia_http_port: 8050
pia_https_port: 8943

component_postboot_setup_list:
  integration_broker:
    run_control_id:          intbroker
    os_user:                 "%{hiera('domain_user')}}"

  db_settings:
    db_name:                 "%{hiera('db_name')}}"
    db_type:                 "%{hiera('db_platform')}}"
    db_opr_id:               "%{hiera('db_user')}}"
    db_opr_pwd:              "%{hiera('db_user_pwd')}}"
    db_connect_id:           "%{hiera('db_connect_id')}}"
    db_connect_pwd:          "%{hiera('db_connect_pwd')}}"

  acm_plugin_list:
    PTIBActivateDomain:
      domain.activate_retry_count: 10
      domain.activate_wait_time: 10

### Ports refer to scalar parameters ###
PTIBConfigureGatewayNodes:
  env.gateway_host:          "%{hiera('pia_host_name')}}"
  env.gateway_port:          "%{hiera('pia_http_port')}}"
  env.gateway_ssl_port:      "%{hiera('pia_https_port')}}"
  env.use_ssl_gateway:        false
  env.default_local_node:     "%{hiera('gateway_node_name')}}"
  env.gateway_user:           "%{hiera('pia_gateway_user')}}"
  env.gateway_password:       "%{hiera('pia_gateway_user_⇒
pwd') }}"

  ### Custom application server name ###
  env.ib_appserver_host:      ps_app_server1
  env.ib_jolt_port:           "%{hiera('jolt_port')}}"
  env.ib_node_proxy_userid:    "%{hiera('db_user')}}"
  env.ib_node_proxy_password: "%{hiera('db_user_pwd')}}"
  env.tools_release:          "%ToolsRelease"
  env.ib_appserver_domain_password: "%{hiera('domain_conn_pwd')}}"
  env.ib_set_as_default_node:  true

PTIBConfigureGatewayProperties:
  env.gateway_keystore_password: ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx⇒
xxx]
  env.webserver_domain:       "%{hiera('pia_domain_name')}}"

  ### Application server and web server on different hosts ###
  env.app_pia_same_host:      "N"

PTWebServerConfigUpdate:

```

```

env.domainname:           "%{hiera('pia_domain_name')}}"
env.sitename:             "%{hiera('pia_site_name')}}"
env.piahome:              "%{hiera('ps_config_home')}}"
env.psserver:             ""
env.KeyStorePwd:          ""

acm_plugin_order:
- PTIBActivateDomain
- PTIBConfigureGatewayNodes
- PTIBConfigureGatewayProperties
- PTWebServerConfigUpdate

```

Task 5-3-7: Reviewing the Customization File for Multiple Web Sites in a Single Web Domain

Use these guidelines to create the `psft_customizations.yaml` file for a single PIA (web server) domain with two or more web sites. Be sure to also fulfill the guidelines in the section `Preparing the psft_customizations.yaml File`.

Be sure to retain the indentation as given in the delivered YAML file when you copy the sections into the `psft_customizations.yaml` file.

This sample shows the `psft_customizations.yaml` file for a single PIA domain, called `PIAHR2`, with two web sites, `hr92dev` and `hr92site`.

- Copy the scalar parameter `pia_site_name` from `psft_configuration.yaml` and change the value to the name for the first web site, `hr92dev` in this example.

This web site will be used for configuring the report node and Integration Broker.

- Copy the entire `pia_domain_list` collection type parameter (comprised of several lines) from `psft_configuration.yaml` and change the value `"%{hiera('pia_domain_name')}}"` to the desired name for the PIA domain, `PIAHR2` in this example.

Note. Do not use the reserved names `PIA`, `PIA1`, `PIA2`, or `weblogic` for the PIA (web server) domain.

- In the `pia_domain_list` collection type parameter, to add a second web site, copy the portion defining the web site, and paste it below the first, default, web site definition.

Copy and paste the web site portion for as many web sites as you need, and specify different names for the each site. The web site names in this example are `hr92dev` and `hr92site`. The name of the first web site that you use here is the same as the name you enter for `pia_site_name`.

- Replace the password sample here with encrypted text from the generated `psft_configuration.yaml` file.

Note. Use clear text passwords for silent mode installation.

- The parameters `webserver_admin_port`, `webserver_http_port`, and `webserver_https_port` are interpolation functions. To specify non-default port numbers for these parameters, include the scalar parameters that the interpolation functions are based on at the top of the file. This sample replaces the default values 8000 and 8443 for `pia_http_port` and `pia_https_port` with 50000. This ensures that interpolation functions that are based on `pia_http_port` and `pia_https_port` use the custom values.

Here is a sample `psft_customizations.yaml` file, with annotations added (marked by `###`) for the purposes of this explanation.

```

---
### Custom port numbers for first domain in scalar parameters ###

```

```

pia_http_port: 50000
pia_https_port: 50000

### First domain with custom name in scalar parameter ###
pia_domain_name: PIAHR2

### First site with custom name in scalar parameter ###
pia_site_name:          hr92dev

### First PIA domain refers to scalar parameter ###
pia_domain_list:
    "%{hiera('pia_domain_name')}":
        os_user:                "%{hiera('domain_user')}}"
        ps_cfg_home_dir:        "%{hiera('ps_config_home')}}"
        gateway_user:           "%{hiera('pia_gateway_user')}}"
        gateway_user_pwd:       "%{hiera('pia_gateway_user_pwd')}}"
        auth_token_domain:      ".%{::domain}"
        webserver_install_type: "%{hiera('webserver_install_type')}}"

        webserver_settings:
            webserver_type:      "%{hiera('webserver_type')}}"
            webserver_home:      "%{hiera('weblogic_location')}}"
            webserver_admin_user: system
            webserver_admin_user_pwd: ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]
            webserver_admin_port: "%{hiera('pia_http_port')}}"
            webserver_http_port: "%{hiera('pia_http_port')}}"
            webserver_https_port: "%{hiera('pia_https_port')}}"

site_list:
    ### First web site with custom name ###
    "hr92dev":
        appserver_connections: "%{hiera('pia_psserver_list')}}"
        domain_conn_pwd:       "%{hiera('domain_conn_pwd')}}"

        webprofile_settings:
            profile_name:        "%{hiera('pia_webprofile_name')}}"
            profile_user:         PTWEBSEVER
            profile_user_pwd:     ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]

        report_repository_dir: "%{hiera('report_repository_dir')}}"

    ### Second web site with custom name ###
    "hr92site":
        appserver_connections: "%{hiera('pia_psserver_list')}}"
        domain_conn_pwd:       "%{hiera('domain_conn_pwd')}}"

        webprofile_settings:
            profile_name:        "%{hiera('pia_webprofile_name')}}"
            profile_user:         PTWEBSEVER
            profile_user_pwd:     ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]

        report_repository_dir: "%{hiera('report_repository_dir')}}"

```

Task 5-3-8: Reviewing the Customization File for Multiple Domains

For multiple domains, duplicate the entire domain section, again maintaining the indentation from the original `psft_configuration.yaml` file. This sample shows a `psft_customizations.yaml` file for two application server domains, two PIA domains, and two Process Scheduler domains, with annotations added for the purposes of this explanation. The annotations are labelled with letters referring to the text discussion, and by `###` characters, such as `###(A)###`.

Follow these guidelines in creating a `psft_customizations.yaml` file for customized PeopleSoft domains. The letters correspond to those in the code sample.

- (A) For more than one application server, include the `pia_psserver_list` entry at the top of the `psft_customizations.yaml` definitions. List the application server domains that are used by the PIA domains, using the format `<application_server_host>:<Jolt port>`. Separate the entries with a comma.
- (B) Include the scalar parameters for each domain at the top.

You can retain the default names for each domain, or change them.

This sample starts with several scalar parameters. Interpolation functions that reference these scalar parameters will also use the non-default values. This applies to the interpolation function in `psft_customizations.yaml` as well as those used by the ACM plug-ins in `psft_configuration.yaml`.

- (C) Copy the entire section for the domains that you want to customize.

Be sure to retain the indentation as given in the delivered YAML file when you copy the sections into the `psft_customizations.yaml` file.

In the delivered `psft_configuration.yaml` file, each section begins with a domain name that is defined as an interpolation token based on the scalar parameter. For example, under `appserver_domain_list`, the domain name is defined as `"${hiera('appserver_domain_name')}"`, which uses the scalar parameter `appserver_domain_name`. After you copy the sections into the `psft_customizations.yaml` file, in the first section, either duplicate the value of the scalar parameter, or retain the interpolation token to refer to it.

- (D) Specify unique names for each domain.
- (E) Specify unique, unused ports for each domain.

This sample starts with several scalar parameters for ports. Interpolation functions for the first application server domain, APPDOM111, which reference these scalar parameters, will use the same values. This applies to the interpolation functions in `psft_customizations.yaml` as well as those used by the ACM plug-ins in `psft_configuration.yaml`.

For the second application server domain, APPDOM222, enter non-default port values for Jolt Listener/Port and Workstation Listener/Port directly.

To set Jolt Listener/Port and Workstation Listener/Port for the second domain, you must take into account the range of ports that will be used by the first domain. Derive the allowed ports using the Workstation and Jolt Max Handler values. The default Max Handler values are based on the application server template type. The default DPK deployment uses the small template. Refer to the PeopleTools documentation for the values.

See *PeopleTools: System and Server Administration*, "Setting Application Server Domain Parameters," Jolt Listener Options.

See *PeopleTools: System and Server Administration*, "Setting Application Server Domain Parameters," Workstation Listener Options.

For example, if the Workstation Listener/Port is set to 7001 for the first domain, APPDOM111, and the Workstation Max Handler is 3, set the Workstation Listener/Port for the second domain, APPDOM222, to 7004 (skip 3 numbers).

- (E) If specifying more than one PIA domain, ensure that the ports are not in use, and use different ports for HTTP and HTTPS for each domain.
- (F) If specifying more than one Process Scheduler domain, you must specify unique Process Scheduler server names.

In this sample, the first Process Scheduler server uses the default value, which is defined as an interpolation token. The first Process Scheduler server name is specified with a scalar parameter at the top, `prcs_domain_name`.

The second Process Scheduler server has a different name, `PRCS222`.

- (G) The Master Scheduler Server should be enabled for the first Process Scheduler domain (`MSTRSRV: "Yes"`), and disabled for subsequent Process Scheduler domains (`MSTRSRV: "No"`).

See *PeopleTools: Process Scheduler*, "Understanding PeopleSoft Master Scheduler Server."

- (H) If specifying more than one PIA domain, you must specify different site names for each.

In this sample, the first PIA site name uses the default value, which is defined as an interpolation token. The second PIA site name has a different name, `ps222`.

```
---
pia_psserver_list:    "hostname.example.com:9033,hostname.example.com:9043"
### (A) ###

### (B) , (E) ###
appserver_domain_name: APPDOM111
prcs_domain_name:     PRCSDOM111          ### (F) ###
pia_domain_name:      PIA111
pia_site_name:        ps
pia_http_port: 8000
pia_https_port: 8443
jolt_port: 9033
wsl_port: 7000

appserver_domain_list:
  "%{hiera('appserver_domain_name')}":          ### (C) , (D) ###
  os_user:   "%{hiera('domain_user')}"
  template_type: "%{hiera('appserver_template')}"
  ps_cfg_home_dir: "%{hiera('ps_config_home')}"

  db_settings:
    db_name:      "%{hiera('db_name')}"
    db_type:      "%{hiera('db_platform')}"
    db_opr_id:     "%{hiera('db_user')}"
    db_opr_pwd:    "%{hiera('db_user_pwd')}"
    db_connect_id: "%{hiera('db_connect_id')}"
    db_connect_pwd: "%{hiera('db_connect_pwd')}"

  config_settings:
    Domain Settings/Domain ID:    IBUPG0
    PSAPPSRV/Min Instances:       3
    PSAPPSRV/Max Instances:       5
    JOLT Listener/Port:           "%{hiera('jolt_port')}"          ### (E) ###
    Workstation Listener/Port:    "%{hiera('wsl_port')}"          ### (E) ###

  feature_settings:
```

```

PUBSUB:          "Yes"
QUICKSRV:        "No"
QUERYSRV:        "No"
JOLT:            "Yes"
JRAD:            "No"
WSL:             "Yes"
DBGSRV:          "No"
RENSRV:          "No"
MCF:             "No"
PPM:             "Yes"
PSPPMRSRV:       "Yes"
ANALYTICSRV:     "No"
SERVER_EVENTS:   "Yes"
DOMAIN_GW:       "No"

```

```
"APPDOM222":                                     ### (C), (D) ###
```

```

  os_user:          "%{hiera('domain_user')}}"
  template_type:    "%{hiera('appserver_template')}}"
  ps_cfg_home_dir:  "%{hiera('ps_config_home')}}"

```

```

db_settings:
  db_name:          "%{hiera('db_name')}}"
  db_type:          "%{hiera('db_platform')}}"
  db_opr_id:        "%{hiera('db_user')}}"
  db_opr_pwd:       "%{hiera('db_user_pwd')}}"
  db_connect_id:    "%{hiera('db_connect_id')}}"
  db_connect_pwd:   "%{hiera('db_connect_pwd')}}"

```

```

config_settings:
  Domain Settings/Domain ID:    IBUPG0
  PSAPPSRV/Min Instances:       3
  PSAPPSRV/Max Instances:       5
  JOLT Listener/Port:           9041      ### (E) ###
  Workstation Listener/Port:    7004      ### (E) ###

```

```

feature_settings:
  PUBSUB:          "Yes"
  QUICKSRV:        "No"
  QUERYSRV:        "No"
  JOLT:            "Yes"
  JRAD:            "No"
  WSL:             "Yes"
  DBGSRV:          "No"
  RENSrv:          "No"
  MCF:             "No"
  PPM:             "Yes"
  PSPPMRSRV:       "Yes"
  ANALYTICSRV:     "No"
  SERVER_EVENTS:   "Yes"
  DOMAIN_GW:       "No"

```

```
pia_domain_list:
```



```

"%{hiera('pia_domain_name')}}":                                     ### (C), (D) ###
  os_user:                  "%{hiera('domain_user')}}"
  ps_cfg_home_dir:          "%{hiera('ps_config_home')}}"
  gateway_user:             "%{hiera('pia_gateway_user')}}"
  gateway_user_pwd:         "%{hiera('pia_gateway_user_pwd')}}"
  auth_token_domain:        ".%{::domain}"

  webserver_settings:
    webserver_type:         "%{hiera('webserver_type')}}"
    webserver_home:         "%{hiera('weblogic_location')}}"
    webserver_admin_user:    system
    webserver_admin_user_pwd: ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]

#####
# Replace this password sample with encrypted text from the #
# generated psft_configuration.yaml file.                  #
#####

    webserver_admin_port:    8000                                ### (E) ###
    webserver_http_port:    8000                                ### (E) ###
    webserver_https_port:   8443                                ### (E) ###

  site_list:
    "%{hiera('pia_site_name')}}":                               ### (H) ###
      appserver_connections: "%{hiera('pia_psserver_list')}}"
      domain_conn_pwd:       "%{hiera('domain_conn_pwd')}}"

      webprofile_settings:
        profile_name:        "%{hiera('pia_webprofile_name')}}"
        profile_user:         PTWEBSEVER
        profile_user_pwd:     ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]

#####
# Replace this password sample with encrypted text from the #
# generated psft_configuration.yaml file.                  #
#####

    report_repository_dir: "%{hiera('report_repository_dir')}}"

"PIADOM222":                                                       ### (C), (D) ###
  os_user:                  "%{hiera('domain_user')}}"
  ps_cfg_home_dir:          "%{hiera('ps_config_home')}}"
  gateway_user:             "%{hiera('pia_gateway_user')}}"
  gateway_user_pwd:         "%{hiera('pia_gateway_user_pwd')}}"
  auth_token_domain:        ".%{::domain}"

  webserver_settings:
    webserver_type:         "%{hiera('webserver_type')}}"
    webserver_home:         "%{hiera('weblogic_location')}}"
    webserver_admin_user:    system
    webserver_admin_user_pwd: ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]

#####

```

```

# Replace this password sample with encrypted text from the #
# generated psft_configuration.yaml file. #
#####

webserver_admin_port:      8002          ### (E) ###
webserver_http_port:      8002          ### (E) ###
webserver_https_port:     8445          ### (E) ###

site_list:
  "ps222":                      ### (H) ###
    appserver_connections: "%{hiera('pia_psserver_list')}}"
    domain_conn_pwd:       "%{hiera('domain_conn_pwd')}}"

    webprofile_settings:
      profile_name:        "%{hiera('pia_webprofile_name')}}"
      profile_user:        PTWEBSERVER
      profile_user_pwd:    ENC[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]

#####
# Replace this password sample with encrypted text from the #
# generated psft_configuration.yaml file. #
#####

report_repository_dir: "%{hiera('report_repository_dir')}}"

prcs_domain_list:
  "%{hiera('prcs_domain_name')}}":
    os_user:                "%{hiera('domain_user')}}"
    ps_cfg_home_dir:        "%{hiera('ps_config_home')}}"

db_settings:
  db_name:                  "%{hiera('db_name')}}"
  db_type:                  "%{hiera('db_platform')}}"
  db_opr_id:                "%{hiera('db_user')}}"
  db_opr_pwd:               "%{hiera('db_user_pwd')}}"
  db_connect_id:            "%{hiera('db_connect_id')}}"
  db_connect_pwd:           "%{hiera('db_connect_pwd')}}"

config_settings:
  Process Scheduler/PrcsServerName: "%{hiera('prcs_domain_id')}}" ### (F) =>
###
  Security/DomainConnectionPwd:      "%{hiera('domain_conn_pwd')}}"

feature_settings:
  MSTRSRV:      "Yes"          ### (G) ###
  APPENG:       "Yes"

"PRCSDOM222":
  os_user:      "%{hiera('domain_user')}}"
  ps_cfg_home_dir: "%{hiera('ps_config_home')}}"

db_settings:

```

```

db_name:           "%{hiera('db_name')}}"
db_type:           "%{hiera('db_platform')}}"
db_opr_id:         "%{hiera('db_user')}}"
db_opr_pwd:        "%{hiera('db_user_pwd')}}"
db_connect_id:     "%{hiera('db_connect_id')}}"
db_connect_pwd:    "%{hiera('db_connect_pwd')}}"

config_settings:
  Process Scheduler/PrCsServerName: PRCS222          ### (F) ###
  Security/DomainConnectionPwd:    "%{hiera('domain_conn_pwd')}}"

feature_settings:
  MSTRSRV:         "No"                               ### (G) ###
  APPENG:          "Yes"

```

Task 5-4: Preparing the Customization File to Create PeopleSoft Domains Without Configuration

The default DPK initialization includes pre-boot and post-boot processes that use Automated Configuration Manager (ACM) plug-ins to configure and start the PeopleSoft domains. The ACM configuration, for example, sets up Integration Broker and the report repository for the Process Scheduler.

Use this customization if you want to install the necessary software for the PeopleSoft Application Server, PIA, and Process Scheduler servers without running the pre-boot and post-boot ACM processes. After you complete the DPK deployment with this customization, you can complete the configuration as needed.

Note. Review the requirements in Understanding PeopleSoft Environment Customizations before preparing the customization file.

To prepare the customization file:

1. Locate the `psft_configuration.yaml` file, which was installed by the deployment, in `BASE_DIR/dpk/puppet/production/data`.
2. If necessary, create a `psft_customizations.yaml` using a standard editing tool, such as Notepad on Microsoft Windows or vi on Linux, AIX, or Solaris, and save it in the same location as the generated `psft_configuration.yaml` file.

If this is the first entry in the `psft_customizations.yaml` file, ensure that there are three dashes (- - -) on the first line of the file. Do not indent the dashes.

3. Copy the parameters below from the `psft_configuration.yaml` file and paste them into the `psft_customizations.yaml` file.

Retain the indentation as given in the delivered YAML file.

```

run_preboot_config_setup: true
run_postboot_config_setup: true

```

4. To specify that the deployment does not run the pre-boot and post-boot ACM processes, change the values to "false"; for example:

```

run_preboot_config_setup: false
run_postboot_config_setup: false

```

5. Add the parameter `prcs_domain_id` and provide a name for the Process Scheduler domain server.

For example, you might choose a name to indicate the operating system, such as PSNT for Microsoft Windows or PSUNIX for Linux or UNIX.

```
---
run_preboot_config_setup: false
run_postboot_config_setup: false

prcs_domain_id: PSNT
```

6. Save the file.
7. Continue with the steps in Completing the Customized Deployment.

Task 5-5: Preparing the Customization File for Component Software Locations

Use the information in this section if you want to customize an installation location, for example to use an existing installation of Oracle Tuxedo or Oracle WebLogic.

Note. Review the requirements in Understanding PeopleSoft Environment Customizations before preparing the customization file.

1. Locate the `psft_deployment.yaml` file in `BASE_DIR/dpk/puppet/production/data`.

Note. The code examples in this topic are for illustrative purposes only. Remember to use the text from the YAML files you install with each new deployment as the basis for your `psft_customizations.yaml` file.

The installation locations for Oracle Tuxedo, Oracle WebLogic, JDK, and Oracle database client are defined in the `psft_deployment.yaml` file that is installed with the deployment.

2. If necessary, create a `psft_customizations.yaml` using a standard editing tool, such as Notepad on Microsoft Windows or `vi` on Linux, AIX, or Solaris, and save it in the same location as the `psft_deployment.yaml` file.
If this is the first entry in the `psft_customizations.yaml` file, ensure that there are three dashes (- - -) on the first line of the file. Do not indent the dashes.
3. Select one or more of the sections corresponding to the components that you want to customize, and copy them to the `psft_customizations.yaml` file.

As previously mentioned, setting the optional attribute `remove: false` means that the parameters in this section will not be deleted when the deployed environment is removed.

Note. This applies only for *customized location for new installation* of component software: Before you run the `psft_puppet_apply.<ext>` command, ensure the customized location given in the `psft_customizations.yaml` file does not contain any files or directories.

- For JDK, copy the `jdk_location` scalar parameter, and the entire `jdk` collection-type section (comprised of two lines) from the `psft_deployment.yaml` file into the `psft_customizations.yaml` file. Be sure to set the locations to the same value. Retain the indentation as given in the delivered YAML file.

```
---
jdk_location:      C:/jdk
jdk:
  location:        C:/jdk
  remove:          false
```

- For Oracle Tuxedo, copy both the `tuxedo_location` scalar parameter and the entire `tuxedo` collection-type section (comprised of two lines) from the `psft_deployment.yaml` file into the `psft_customizations.yaml` file. Be sure to set the locations to the same value. Retain the indentation as given in the delivered YAML file.

```
---
tuxedo_location:  C:/psft/tuxedo
tuxedo:
  location:       C:/psft/tuxedo
  remove:        false
```

- For Oracle WebLogic, copy both the `weblogic_location` scalar parameter and the entire `weblogic` collection-type section (comprised of two lines) from the `psft_deployment.yaml` file into the `psft_customizations.yaml` file. Be sure to set the locations to the same value. Retain the indentation as given in the delivered YAML file.

```
---
weblogic_location: C:/psft/weblogic
weblogic:
  location:        C:/psft/weblogic
  remove:         false
```

- For Oracle Client, copy both the `oracle_client_location` scalar parameter and the entire `oracle_client` collection-type section (comprised of two lines) from the `psft_deployment.yaml` file into the `psft_customizations.yaml` file. Be sure to set the locations to the same value. Retain the indentation as given in the delivered YAML file.

```
---
oracle_client_location: <Oracle_Home>
oracle_client:
  location: <Oracle_Home>
```

For example, to specify the location of pre-existing Oracle database client software:

```
---
oracle_client_location: C:/oracle/product/19.3.0.0/dbhome_1
oracle_client:
  location: C:/oracle/product/19.3.0.0/dbhome_1
```

- If you want to customize JDK, Oracle Tuxedo, and Oracle WebLogic, add all three entries to `psft_customizations.yaml`; for example:

```
---
jdk_location:      C:/jdk
jdk:
  location:        C:/jdk
  remove:         false

tuxedo_location:   C:/psft/tuxedo
tuxedo:
  location:        C:/psft/tuxedo
  remove:         false

weblogic_location: C:/psft/weblogic
weblogic:
  location:        C:/psft/weblogic
  remove:         false
```

4. Save the file.
5. Continue with the steps in Completing the Customized Deployment.

Task 5-6: Preparing the Customization File for Unicode

Use these instructions if you want to change the Unicode designation for your database.

Note. Do not try to set up a non-Unicode environment if you are deploying the PeopleSoft Update Image DPKs for use with PeopleSoft Update Manager. The environments for the PeopleSoft Updates Images are required to be Unicode.

Note. Review the requirements in Understanding PeopleSoft Environment Customizations before preparing the customization file.

1. Locate the `psft_deployment.yaml` file.

Note. The code examples in this topic are for illustrative purposes only. Remember to use the text from the YAML files you install with each new deployment as the basis for your `psft_customizations.yaml` file.

By default, the DPK setup script installs the YAML files in `BASE_DIR/dpk/puppet/production/data`.

The `unicode_db` parameter is part of the `ps_home` section.

```
ps_home:
  db_type:      "%{hiera('db_platform')}}"
  unicode_db:   "%{hiera('unicode_db')}}"
  location:     "%{hiera('ps_home_location')}}"
```

2. If necessary, create a `psft_customizations.yaml` using a standard editing tool, such as Notepad on Microsoft Windows or vi on Linux, AIX, or Solaris, and save it in the same location as the `psft_deployment.yaml` file.

If this is the first entry in the `psft_customizations.yaml` file, ensure that there are three dashes (- - -) on the first line of the file. Do not indent the dashes.

3. Copy the entire `ps_home` section from `psft_deployment.yaml`, maintaining the indentation, into the `psft_customizations.yaml` file.

For a Unicode database, set the value for `unicode_db` to `true`:

```
---
ps_home:
  db_type:      "%{hiera('db_platform')}}"
  unicode_db:   true
  location:     "%{hiera('ps_home_location')}}"
```

For a non-Unicode database, set the value for `unicode_db` to `false`:

```
---
ps_home:
  db_type:      "%{hiera('db_platform')}}"
  unicode_db:   false
  location:     "%{hiera('ps_home_location')}}"
```

4. Save the file.
5. Continue with the steps in Completing the Customized Deployment.

Task 5-7: Preparing the Customization Files for the PeopleSoft Homes

This section discusses:

- Preparing the Customization File for the PS_HOME Location
- Preparing the Customization File for the PS_APP_HOME Location
- Preparing the Customization File for the PS_CFG_HOME Location
- Preparing the Customization File for the PS_CUST_HOME Location

Task 5-7-1: Preparing the Customization File for the PS_HOME Location

By default, the DPK setup script creates the *PS_HOME* directory in *BASE_DIR/pt/ps_home<release>*, where *<release>* is the PeopleSoft PeopleTools patch release, such as 8.62.12. Use these steps to specify a different *PS_HOME* location.

Note. Review the requirements in Understanding PeopleSoft Environment Customizations before preparing the customization file.

1. Locate the *psft_deployment.yaml* file in *BASE_DIR/dpk/puppet/production/data*.

Note. The code examples in this topic are for illustrative purposes only. Remember to use the text from the YAML files you install with each new deployment as the basis for your *psft_customizations.yaml* file.

The *PS_HOME* installation location is specified by the *ps_home* section (comprised of four lines).

```
ps_home:
  db_type:      "%{hiera('db_platform')}}"
  unicode_db:   "%{hiera('unicode_db')}}"
  location:     "%{hiera('ps_home_location')}}"
```

2. If necessary, create a *psft_customizations.yaml* using a standard editing tool, such as Notepad on Microsoft Windows or vi on Linux, AIX, or Solaris, and save it in the same location as the *psft_deployment.yaml* file.
If this is the first entry in the *psft_customizations.yaml* file, ensure that there are three dashes (- - -) on the first line of the file. Do not indent the dashes.
3. Copy the entire section from the *psft_deployment.yaml* file into the *psft_customizations.yaml* file and modify the location value as needed.

Retain the indentation as given in the delivered YAML file.

Note. This applies only for *customized location for new installation* of PeopleSoft homes: Before you run the *psft_puppet_apply.<ext>* command, ensure the customized location given in the *psft_customizations.yaml* file does not contain any files or directories.

For example, on Linux, AIX, or Solaris:

```
---
ps_home:
  db_type:      "%{hiera('db_platform')}}"
  unicode_db:   "%{hiera('unicode_db')}}"
```

```
location:    "/home/psft8.62.12"
```

For example, on Microsoft Windows:

```
---
ps_home:
  db_type:    "%{hiera('db_platform')}}"
  unicode_db: "%{hiera('unicode_db')}}"
  location:   "C:/psft8.62.12"
```

4. Save the file.
5. Continue with the steps in Completing the Customized Deployment.

Task 5-7-2: Preparing the Customization File for the PS_APP_HOME Location

By default, the DPK setup script creates the *PS_APP_HOME* directory in *BASE_DIR/pt/<Product>_app_home*, where *<Product>* is the abbreviation for the PeopleSoft application, such as *fscm* for PeopleSoft Financials and Supply Chain Management.

Note. Review the requirements in Understanding PeopleSoft Environment Customizations before preparing the customization file.

Here are two scenarios where you might use this customization:

- If you are performing a new installation using the PeopleSoft DPKs, and you do not want to use the default *PS_APP_HOME* location created by the DPK setup script, use this customization to specify and create the desired *PS_APP_HOME* directory.
 - If you are performing a mid-tier deployment to connect to an existing environment, use this customization to specify the existing *PS_APP_HOME*.
-

Note. This applies only for *customized location for new installation* of PeopleSoft homes: Before you run the `psft_puppet_apply.<ext>` command, ensure the customized location given in the `psft_customizations.yaml` file does not contain any files or directories.

Use these steps to specify the *PS_APP_HOME* location.

1. Locate the `psft_deployment.yaml` file in *BASE_DIR/dpk/puppet/production/data*.
-

Note. The code examples in this topic are for illustrative purposes only. Remember to use the text from the YAML files you install with each new deployment as the basis for your `psft_customizations.yaml` file.

The *PS_APP_HOME* installation location is specified by the `ps_app_home` section.

```
ps_apphome_location:  "%{hiera('pt_location')}/hcm_app_home"
ps_app_home:
  db_type:  "%{hiera('db_platform')}}"
  include_ml_files: false
  location: "%{hiera('ps_apphome_location')}}"
```

2. If necessary, create a `psft_customizations.yaml` using a standard editing tool, such as Notepad on Microsoft Windows or `vi` on Linux, AIX, or Solaris, and save it in the same location as the `psft_deployment.yaml` file.
If this is the first entry in the `psft_customizations.yaml` file, ensure that there are three dashes (- - -) on the first line of the file. Do not indent the dashes.
3. To override the location, copy the entire section from the `psft_deployment.yaml` file into the

psft_customizations.yaml file and modify the location value as needed.

Retain the indentation as given in the delivered YAML file.

For example, on Linux, AIX, or Solaris:

```
---
ps_apphome_location:  "/home/hcm92_home"
ps_app_home:
  db_type:  "%{hiera('db_platform')}}"
  include_ml_files: false
  location:  "/home/hcm92_home"
```

For example, on Microsoft Windows:

```
---
ps_apphome_location:  "C:/hcm92_home"
ps_app_home:
  db_type:  "%{hiera('db_platform')}}"
  include_ml_files: false
  location:  "C:/hcm92_home"
```

4. Save the file.
5. Continue with the steps in Completing the Customized Deployment.

Task 5-7-3: Preparing the Customization File for the PS_CFG_HOME Location

By default, the DPK setup script creates the *PS_CFG_HOME* directory in *<user_profile>/psft/pt/8.62*, such as *C:/users/username/psft/pt/8.62* on Microsoft Windows, and */home/psadm2/psft/pt/8.62* on Linux, AIX, or Solaris. Note that you cannot specify different *PS_CFG_HOME* locations for different PeopleSoft domains. The DPK installation requires the same *PS_CFG_HOME* be used for all domains. Use these steps to specify the *PS_CFG_HOME* location.

Note. Review the requirements in Understanding PeopleSoft Environment Customizations before preparing the customization file.

1. Locate the psft_configuration.yaml file in *BASE_DIR/dpk/puppet/production/data*.

Note. The code examples in this topic are for illustrative purposes only. Remember to use the text from the YAML files you install with each new deployment as the basis for your psft_customizations.yaml file.

The *PS_CFG_HOME* installation location is specified by the ps_config_home parameter.

```
ps_config_home:  "%{hiera('user_home_dir')}/%{hiera('domain_⇒
user')}/psft/pt/8.62"
```

2. If necessary, create a psft_customizations.yaml using a standard editing tool, such as Notepad on Microsoft Windows or vi on Linux, AIX, or Solaris, and save it in the same location as the psft_configuration.yaml file.
If this is the first entry in the psft_customizations.yaml file, ensure that there are three dashes (- - -) on the first line of the file. Do not indent the dashes.
3. Copy the entire section from the psft_configuration.yaml file into the psft_customizations.yaml file and modify the location value as needed.

Note. This applies only for *customized location for new installation* of PeopleSoft homes: Before you run the `psft_puppet_apply.<ext>` command, ensure the customized location given in the `psft_customizations.yaml` file does not contain any files or directories.

Retain the indentation as given in the delivered YAML file.

For example, on Linux, AIX, or Solaris:

```
---
ps_config_home:          "/home/pt862_config"
```

For example, on Microsoft Windows:

```
---
ps_config_home:          "C:/pt862_config"
```

4. Save the file.
5. Continue with the steps in Completing the Customized Deployment.

Task 5-7-4: Preparing the Customization File for the PS_CUST_HOME Location

Use the `PS_CUST_HOME` location for files such as COBOL and SQR that originate with your organization. The delivered YAML files do not include a `PS_CUST_HOME` location. The DPK setup script creates the `PS_CUST_HOME` if it does not exist.

Note. Setting a `PS_CUST_HOME` environment variable, which was used for non-DPK deployments, does not work.

1. If necessary, create a `psft_customizations.yaml` using a standard editing tool, such as Notepad on Microsoft Windows or `vi` on Linux, AIX, or Solaris, and save it in the same location as the `psft_configuration.yaml` file.
If this is the first entry in the `psft_customizations.yaml` file, ensure that there are three dashes (- - -) on the first line of the file. Do not indent the dashes.
2. Add the following parameters in the `psft_customizations.yaml` file and modify the location value as needed.

Note. This applies only for *customized location for new installation* of PeopleSoft homes: Before you run the `psft_puppet_apply.<ext>` command, ensure the customized location given in the `psft_customizations.yaml` file does not contain any files or directories.

Retain the indentation as given in the delivered YAML file.

For example, on Linux, AIX, or Solaris:

```
---
ps_cust_home_location:   "/home/pscusthome"
ps_cust_home:
  location:              "/home/pscusthome"
```

For example, on Microsoft Windows:

```
---
ps_cust_home_location:   "C:/pscusthome"
ps_cust_home:
  location:              "C:/pscusthome"
```

3. Save the file.
4. Continue with the steps in Completing the Customized Deployment.

Task 5-8: Preparing the Customization File for Jolt SSL and WSL SSL Ports

You have the option to use the Secure Socket Layers/Transport Layer Security (SSL/TSL) protocol for Workstation Listener and Jolt Listener ports for the application server configuration. To use this protocol you must set up an Oracle wallet for the digital certificates.

See *PeopleTools: Security Administration*, "Installing Web Server-Based Digital Certificates."

Note. Review the requirements in Understanding PeopleSoft Environment Customizations before preparing the customization file.

1. Locate the `psft_configuration.yaml` file in `BASE_DIR/dpk/puppet/production/data`.

Note. The code examples in this topic are for illustrative purposes only. Remember to use the text from the YAML files you install with each new deployment as the basis for your `psft_customizations.yaml` file.

2. If necessary, create a `psft_customizations.yaml` using a standard editing tool, such as Notepad on Microsoft Windows or vi on Linux, AIX, or Solaris, and save it in the same location as the `psft_configuration.yaml` file.

If this is the first entry in the `psft_customizations.yaml` file, ensure that there are three dashes (- - -) on the first line of the file. Do not indent the dashes.

3. Copy the entire `appserver_domain_list` section from `psft_configuration.yaml` to `psft_customizations.yaml`.

When you copy, retain the indentation as given in the delivered YAML file.

4. Add the following parameters to the `psft_customizations.yaml` file:

Note. These parameters are not included in the delivered `psft_configuration.yaml` file.

- Specify the SSL/TSL port for the Jolt listener; for example 9012.

```
JOLT Listener/SSL Port:          9012
```

- Specify the SSL/TSL port for the Workstation listener, for example 7012:

```
Workstation Listener/SSL Port:    7012
```

- Specify the location of the wallet containing the certificates:

```
Oracle Wallet/SEC_PRINCIPAL_LOCATION: test/security
```

- Specify the wallet name, for example `psft`:

```
Oracle Wallet/SEC_PRINCIPAL_NAME:    psft
```

- Specify the wallet password:

```
Oracle Wallet/SEC_PRINCIPAL_PASSWORD:
```

5. Modify the `psft_customizations.yaml` file, including the added parameters from the previous step, with values for your environment.

Note. Be sure to retain the indentation shown in this example.

This sample `psft_customizations.yaml` file shows the parameters added from step 4 in bold font:

```

appserver_domain_list:
  "%{hiera('appserver_domain_name')}" :
    os_user:           "%{hiera('domain_user')}"
    ps_cfg_home_dir:  "%{hiera('ps_config_home')}"
    template_type:    "%{hiera('appserver_template')}"

    db_settings:
      db_name:         "%{hiera('db_name')}"
      db_type:         "%{hiera('db_platform')}"
      db_opr_id:       "%{hiera('db_user')}"
      db_opr_pwd:      "%{hiera('db_user_pwd')}"
      db_connect_id:   "%{hiera('db_connect_id')}"
      db_connect_pwd:  "%{hiera('db_connect_pwd')}"

    config_settings:
      Domain Settings/Allow Dynamic Changes:      Y
      Domain Settings/Domain ID:                  "%{hiera('appserver_domain_⇒
name')}"
      PSAPPSRV/Min Instances:                      2
      PSAPPSRV/Max Instances:                     2
      PSAPPSRV/Max Fetch Size:                    15000
      Security/DomainConnectionPwd:               "%{hiera('domain_conn_⇒
pwd')}"
      JOLT Listener/Port:                         "%{hiera('jolt_port')}"
      JOLT Listener/Address:                      0.0.0.0
      JOLT Listener/SSL Port:                 9012
      Workstation Listener/Port:                  "%{hiera('wsl_port')}"
      Workstation Listener/SSL Port:          7012

      Oracle Wallet/SEC_PRINCIPAL_LOCATION: test/security

      Oracle Wallet/SEC_PRINCIPAL_NAME:      psft

      Oracle Wallet/SEC_PRINCIPAL_PASSWORD:

    feature_settings:
      PUBSUB:           "Yes"
      QUICKSRV:        "No"
      QUERYSRV:        "No"
      JOLT:            "Yes"
      JRAD:            "No"
      WSL:             "Yes"
      DBGSRV:          "No"
      RENSRV:          "No"
      MCF:             "No"

```

```

PPM:                "Yes"
PSPPMSSRV:          "Yes"
ANALYTICSSRV:        "No"
SERVER_EVENTS:       "Yes"
DOMAIN_GW:           "No"

```

6. Save the file.
7. Continue with the steps in Completing the Customized Deployment.

Task 5-9: Preparing the Customization File for Session Cookie Names

Use the information in this section if you want to customize session cookie names. For example, you may need to set cookies when creating web server clusters.

See *PeopleTools: Portal Technology*, "Configuring Web Profiles."

See *PeopleTools: System and Server Administration*, "Working with Session Cookie Names."

Note. Review the requirements in Understanding PeopleSoft Environment Customizations before preparing the customization file.

Use these guidelines in creating the `psft_customizations.yaml` file:

- This customization uses parameters that are not included in the YAML files generated by the deployment. Follow the samples given here in creating the `psft_customizations.yaml` file.
- You are responsible for setting the correct values. There is no validation for the cookie names.
- Follow the legal naming conventions for http cookies.
- Set a unique name for each "setup of cluster of servers".

For example, if a set of web-servers are for an HCM production site and the cookie-name is used in persistence criteria, then all the web-servers of that HCM site must have the same Portal cookie-name.

1. Locate the `psft_configuration.yaml` file in `BASE_DIR/dpk/puppet/production/data`.

Note. The code examples in this topic are for illustrative purposes only. Remember to use the text from the YAML files you install with each new deployment as the basis for your `psft_customizations.yaml` file.

2. If necessary, create a `psft_customizations.yaml` using a standard editing tool, such as Notepad on Microsoft Windows or vi on Linux, AIX, or Solaris, and save it in the same location as the `psft_deployment.yaml` and `psft_configuration.yaml` files.

Ensure that the file begins with three dashes (- - -).

3. Copy the entire collection parameter section for `pia_domain_list` from the `psft_configuration.yaml` file into the `psft_customizations.yaml` file.

Retain the indentation as given in the delivered YAML file.

4. Add the parameters for `portal_cookie_name` and `portlet_cookie_name` below `webserver_https_port`, and ensure that the indentation is the same as that of `webserver_https_port`.

```

pia_domain_list:
  "%{hiera('pia_domain_name')}" :
    os_user:                "%{hiera('domain_user')}"

```

```

ps_cfg_home_dir:          "%{hiera('ps_config_home')}}"
gateway_user:             "%{hiera('pia_gateway_user')}}"
gateway_user_pwd:         "%{hiera('pia_gateway_user_pwd')}}"
auth_token_domain:        ".%{::domain}"

webserver_settings:
  webserver_type:          "%{hiera('webserver_type')}}"
  webserver_home:          "%{hiera('weblogic_location')}}"
  webserver_admin_user:    system
  webserver_admin_user_pwd: ENC[PKCS7,MIIBeQY.....]
  webserver_admin_port:    "%{hiera('pia_http_port')}}"
  webserver_http_port:     "%{hiera('pia_http_port')}}"
  webserver_https_port:    "%{hiera('pia_https_port')}}"
  portal_cookie_name:      FIN-PORTAL-PSJSESSIONID
  portlet_cookie_name:     FIN-PORTLET-PSJSESSIONID

site_list:
  "%{hiera('pia_site_name')}}":
    appserver_connections: "%{hiera('pia_psserver_list')}}"
    domain_conn_pwd:        "%{hiera('domain_conn_pwd')}}"

  webprofile_settings:
    profile_name:           "%{hiera('pia_webprofile_name')}}"
    profile_user:           PTWEBSEVER
    profile_user_pwd:       ENC[PKCS7,MIIBeQY.....]

  report_repository_dir:   "%{hiera('report_repository_dir')}}"

```

5. Save the file.
6. Continue with the steps in Completing the Customized Deployment.

Task 5-10: Preparing the Customization File for JVM Heap Sizes

Use the information in this section to customize the maximum and minimum JVM heap sizes, or runtime memory, in your deployed environment. The JVM heap size is the amount of memory that a particular JRE (Java Runtime Environment) gives to the JVM (Java Virtual Machine) that it creates. See the product documentation for information on the default settings.

See *PeopleTools: System and Server Administration*, "Adjusting the JVM Heap Size."

See *PeopleTools: System and Server Administration*, "Tuning Performance and Monitoring Resources"

Note. Review the requirements in Understanding PeopleSoft Environment Customizations before preparing the customization file.

Use these guidelines in creating the `psft_customizations.yaml` file:

- This customization uses parameters that are not included in the YAML files generated by the deployment. Follow the samples given here in creating the `psft_customizations.yaml` file.
- You are responsible for setting the correct values. There is no validation for the `java_heap_min` and `java_heap_max`.
- You must include the parameters for both the maximum and minimum heap size in the `psft_customizations.yaml` file.

- The `java_heap_max` value must be greater than the `java_heap_min` value.
1. Locate the `psft_configuration.yaml` files in `BASE_DIR/dpk/puppet/production/data`.

Note. The code examples in this topic are for illustrative purposes only. Remember to use the text from the YAML files you install with each new deployment as the basis for your `psft_customizations.yaml` file.

2. If necessary, create a `psft_customizations.yaml` using a standard editing tool, such as Notepad on Microsoft Windows or vi on Linux, AIX, or Solaris, and save it in the same location as the `psft_deployment.yaml` and `psft_configuration.yaml` files.

Ensure that the file begins with three dashes (---).

3. Copy the entire collection parameter section for `pia_domain_list` from the `psft_configuration.yaml` file into the `psft_customizations.yaml` file.

Retain the indentation as given in the delivered YAML file.

4. Add the parameters for `java_heap_min` and `java_heap_max` below `webserver_https_port`, and ensure that the indentation is the same as that of `webserver_https_port`.

Enter the desired size in megabytes, with no units. For example, enter `2048` for 2048 megabytes, or 2GB.

```
pia_domain_list:
  "{hiera('pia_domain_name')}" :
    os_user:                "{hiera('domain_user')}"
    ps_cfg_home_dir:        "{hiera('ps_config_home')}"
    gateway_user:           "{hiera('pia_gateway_user')}"
    gateway_user_pwd:       "{hiera('pia_gateway_user_pwd')}"
    auth_token_domain:      ".%{:::domain}"

webserver_settings:
  webserver_type:           "{hiera('webserver_type')}"
  webserver_home:           "{hiera('weblogic_location')}"
  webserver_admin_user:     system
  webserver_admin_user_pwd: ENC[PKCS7,MIIBeQY.....]
  webserver_admin_port:     "{hiera('pia_http_port')}"
  webserver_http_port:      "{hiera('pia_http_port')}"
  webserver_https_port:     "{hiera('pia_https_port')}"
  java_heap_min:            2048
  java_heap_max:            4096

site_list:
  "{hiera('pia_site_name')}" :
    appserver_connections:  "{hiera('pia_psserver_list')}"
    domain_conn_pwd:        "{hiera('domain_conn_pwd')}"

webprofile_settings:
  profile_name:             "{hiera('pia_webprofile_name')}"
  profile_user:             PTWEBSERVER
  profile_user_pwd:         ENC[PKCS7,MIIBeQY.....]

report_repository_dir:     "{hiera('report_repository_dir')}"
```

5. Save the file.
6. Continue with the steps in Completing the Customized Deployment.

Task 5-11: Preparing the Customization File to Exclude Oracle Database Client Installation

The DPK setup script command to deploy all software (`psft-dpk-setup.<ext> --env_type midtier --deploy_only --deploy_type all`) includes the installation of Oracle database client. Use the customization in this section to exclude that installation.

See "Installing the PeopleSoft Homes," Running the DPK Setup Script to Install All Software.

Note. Review the requirements in Understanding PeopleSoft Environment Customizations before preparing the customization file.

1. If necessary, create a `psft_customizations.yaml` using a standard editing tool, such as Notepad on Microsoft Windows or `vi` on Linux, AIX, or Solaris, and save it in the same location as the installed YAML files.
If this is the first entry in the `psft_customizations.yaml` file, ensure that there are three dashes (- - -) on the first line of the file. Do not indent the dashes.
2. Add the content below to the `psft_customizations.yaml` file.

Note. The line with "ensure" is indented.

```
---
oracle_client:
  ensure: absent
```

3. Save the file.
4. Continue with the steps in Completing the Customized Deployment.

Task 5-12: Preparing the Customization File for sysctl and ulimit Parameters on Linux, AIX, or Solaris

This section discusses:

- Preparing the Customization File to Change the `setup_sysctl` Parameter
- Preparing the Customization File to Overwrite the `sysctl` Parameters
- Preparing the Customization File to Overwrite the `ulimit` Parameters

Task 5-12-1: Preparing the Customization File to Change the `setup_sysctl` Parameter

Use these instructions for a deployment in this situation:

- The existing `sysctl` parameters on your system meet the DPK requirements.
The values must be equal to or greater than the values for the parameters in the generated `psft_unix_system.yaml` file.
- You do not want the DPK setup script to overwrite the `sysctl` parameters

See "Prerequisites," Reviewing the System Parameters on Linux, AIX, or Solaris.

Note. Review the requirements in Understanding PeopleSoft Environment Customizations before preparing the customization file.

1. Locate the `psft_unix_system.yaml` file, which was installed by the deployment, in *BASE_DIR/dpk/puppet/production/data*.
2. If necessary, create a `psft_customizations.yaml` using a standard editing tool, such as `vi` on Linux, AIX, or Solaris, and save it in the same location as the generated `psft_unix_system.yaml` file.
If this is the first entry in the `psft_customizations.yaml` file, ensure that there are three dashes (- - -) on the first line of the file. Do not indent the dashes.
3. Copy the parameter below from the `psft_unix_system.yaml` file and paste it into the `psft_customizations.yaml` file.
Retain the indentation as given in the delivered YAML file.

```
setup_sysctl: true
```
4. To specify that the deployment does not overwrite the `sysctl` parameters, change the value to "false"; for example:

```
---
setup_sysctl: false
```
5. Save the file.
6. Continue with the steps in Completing the Customized Deployment.

Task 5-12-2: Preparing the Customization File to Overwrite the `sysctl` Parameters

Use these instructions in this situation:

- You want to allow the DPK setup script to change the `sysctl` settings on your system.
 - You want to specify `sysctl` values that are equal to or greater than the values for the parameters in the generated `psft_unix_system.yaml` file.
-

Note. Review the requirements in Understanding PeopleSoft Environment Customizations before preparing the customization file.

1. Locate the `psft_unix_system.yaml` file, which was installed by the deployment, in *BASE_DIR/dpk/puppet/production/data*.
2. If necessary, create a `psft_customizations.yaml` using a standard editing tool, such as `vi` on Linux, AIX, or Solaris, and save it in the same location as the generated `psft_unix_system.yaml` file.
If this is the first entry in the `psft_customizations.yaml` file, ensure that there are three dashes (- - -) on the first line of the file. Do not indent the dashes.
3. Copy the `setup_sysctl: true` scalar parameter from the `psft_unix_system.yaml` file and paste it into the `psft_customizations.yaml` file.
Do not change the parameter; it must be set to "true". Retain the indentation as given in the delivered YAML file.
4. Copy the entire `sysctl: collection` type parameter (comprised of several lines) from the `psft_unix_system.yaml` file and paste it into the `psft_customizations.yaml` file.
Retain the indentation as given in the delivered YAML file.

```

---
setup_sysctl: true
sysctl:
  kernel.msgmnb:      65538
  kernel.msgmni:      1024
  kernel.msgmax:      65536
  kernel.shmmax:      68719476736
  kernel.shmall:      4294967296
  kernel.core_uses_pid: 1
  net.ipv4.tcp_keepalive_time: 90
  net.ipv4.tcp_timestamps: 1
  net.ipv4.tcp_window_scaling: 1
  net.ipv4.ip_local_port_range: '10000 65500'

```

5. Change the values of the `sysctl` parameters in `psft_customizations.yaml` as needed, but the values must be equal to or greater than those in the generated `psft_unix_system.yaml` file.
6. Save the file.
7. Continue with the steps in Completing the Customized Deployment.

Task 5-12-3: Preparing the Customization File to Overwrite the ulimit Parameters

Use these instructions if you want to specify ulimit values that are equal to or greater than the values for the parameters in the generated `psft_unix_system.yaml` file.

There is no parameter that you can use to specify whether the DPK setup script sets the ulimit parameters. You can change the values, but there is no parameter to prevent the DPK setup script from changing the ulimit parameters.

Note. Review the requirements in Understanding PeopleSoft Environment Customizations before preparing the customization file.

1. Locate the `psft_unix_system.yaml` file, which was installed by the deployment, in `BASE_DIR/dpk/puppet/production/data`.
2. If necessary, create a `psft_customizations.yaml` using a standard editing tool, such as `vi` on Linux, AIX, or Solaris, and save it in the same location as the generated `psft_unix_system.yaml` file.

If this is the first entry in the `psft_customizations.yaml` file, ensure that there are three dashes (- - -) on the first line of the file. Do not indent the dashes.

3. Copy the entire `ulimit:` collection type parameter (comprised of several lines) from the `psft_unix_system.yaml` file and paste it into the `psft_customizations.yaml` file.

Retain the indentation as given in the delivered YAML file.

```

---
ulimit:
  group:
    hard.nofile: 65536
    soft.nofile: 65536
    hard.nproc: 65536
    soft.nproc: 65536
    hard.core: unlimited
    soft.core: unlimited

```

```

hard.memlock: 500000
soft.memlock: 500000
hard.stack: 102400
soft.stack: 102400

user:
hard.nofile: 131072
soft.nofile: 131072
hard.nproc: 131072
soft.nproc: 131072
hard.core: unlimited
soft.core: unlimited
hard.memlock: 500000
soft.memlock: 500000

```

4. Change the values of the `ulimit` parameters in `psft_customizations.yaml` as needed, but the values must be equal to or greater than those in the generated `psft_unix_system.yaml` file.
5. Save the file.
6. Continue with the steps in Completing the Customized Deployment.

Task 5-13: Completing the Customized Deployment

Use these steps to complete the customized deployment of the PeopleSoft environment:

1. Run the DPK setup script as previously described.

See "Deploying the PeopleSoft PeopleTools Deployment Packages."

2. Answer *n* (no) to the following prompt:

```
Do you want to continue with the default initialization process? [y|n]: ⇒
n
```

The script stops, and displays instructions for completing the initialization. Leave the command window or terminal window open to refer to the instructions provided.

3. Prepare the `psft_customizations.yaml` file as previously described and save it in `BASE_DIR/dpk/puppet/production/data`.
4. As directed by the message displayed when the DPK setup script exited, enter the full path and script name, and wait until the deployment is complete.

Note. You must run the script as instructed by the script message. Do not copy the `psft_puppet_apply` script into a different `BASE_DIR` to run.

Since the script redirects the output to a log file, you cannot follow the progress on the command window or terminal window. The process is complete when the prompt returns.

On Microsoft Windows:

```
BASE_DIR\psft_puppet_apply.cmd
```

On Linux, AIX, or Solaris:

```
BASE_DIR/psft_puppet_apply.sh
```

The `psft_puppet_apply.<ext>` script performs these actions:

- Sets the required `PATH`, library path, and `PYTHON` path.
- Runs the `puppet apply` command to set up the PeopleSoft environment using the values in `psft_customizations.yaml` and the generated YAML files.

As mentioned, the values in `psft_customizations.yaml` override those in the generated YAML files.

- Saves the log file as `BASE_DIR/psft_dpk_setup_apply.log`.
5. If you want to include the Puppet debug messages in the log file, run the script with the `--debug` option.

This option is useful for troubleshooting. Keep in mind that running with the `--debug` option increases the log file size.

Note. You must run the script as instructed by the script message. Do not copy the `psft_puppet_apply` script into a different `BASE_DIR` to run.

Note that you can run the `puppet apply` command directly, but Oracle recommends that you use the script provided, which sets the required environment variables to specify the locations for the Puppet software and the YAML files. Oracle also recommends that you do not run `puppet apply --debug`.

Chapter 6

Using and Maintaining the PeopleSoft Environment

This chapter discusses:

- Accessing the PeopleSoft Environment
- Reviewing the Deployed File System and Users
- Working with PeopleSoft Utilities and Programs for Root Deployments on Linux, AIX, and Solaris
- Setting Environment Variables for the Non-Root User on Linux, AIX, or Solaris
- Removing a Deployed PeopleSoft Environment

Task 6-1: Accessing the PeopleSoft Environment

This section discusses:

- Accessing the Environment in a Browser

Task 6-1-1: Accessing the Environment in a Browser

To sign in to the deployed PeopleSoft environment in a browser (that is, use the PeopleSoft Pure Internet Architecture, or PIA), use a URL with this format:

`http://<host_name>:<http_port>/<PIA_site_name>/signon.html`

For example, for a deployment with the default port, 8000, and default PIA site name, ps, the URL would be `http://server1.example.com:8000/ps/signon.html`.

See the PeopleSoft product documentation for information on working with the components in a PeopleSoft installation.

See PeopleSoft PeopleTools on the Oracle Help Center,
<https://docs.oracle.com/en/applications/peoplesoft/peopletools/index.html>.

Task 6-2: Reviewing the Deployed File System and Users

This section discusses:

- Reviewing the Deployment File System
- Reviewing the DPK-Created Users for Root Deployments on Linux, AIX, and Solaris

Task 6-2-1: Reviewing the Deployment File System

The PeopleSoft installation deployed by the PeopleSoft DPKs sets up an environment comprised of several directories. This table lists the directories with the location, contents of the directory, and the owner.

The users listed in the Access column are installed when the root user performs a default deployment on Linux, AIX, or Solaris.

Directory	Description	Default Location	Access
PS_HOME	<i>PS_HOME</i> is a secure location for the PeopleTools binary installation files.	<BASE_DIR>/pt/ps_home <ptools_patch_ver> The descriptor <ptools_patch_ver> is the PeopleSoft PeopleTools full release, for example 8.62.03.	This directory can only be written to by the PeopleSoft administrator, psadm1 (Linux, AIX, or Solaris).

Directory	Description	Default Location	Access
PS_CFG_HOME	The <i>PS_CFG_HOME</i> location holds the configuration and log files for the PeopleSoft Application Server and Process Scheduler server domains.	- On Linux, AIX, or Solaris, when deploying as the root user, <i><USER_HOME>/psadm2/psft/pt/<ptools_major_ver></i>. You supply the location for the <i>USER_HOME</i> when you run the DPK setup script. The default value is /home. - On Linux, AIX, or Solaris, when deploying as a non-root user, <i><prompted_ps_cfg_home>/psft/pt/<ptools_major_ver></i>. You supply the location for <i>prompted_ps_cfg_home</i> when you run the DPK setup script. - On Microsoft Windows, C:\%USERPROFILE%\psft\pt\<i><ptools_major_ver></i>. For example, if the USERPROFILE environment variable is C:\Users\username, the location is C:\Users\username\psft\pt\8.62. The descriptor <i><ptools_major_ver></i> is the PeopleSoft PeopleTools major release without patch numbers; for example, 8.62.	This directory is owned by psadm2 (Linux, AIX, Solaris).

Directory	Description	Default Location	Access
Web server (PIA) installation	The web server (PIA) configuration files are located in <i>PS_CFG_HOME</i> /webserv.	- On Linux, AIX, or Solaris, when deploying as the root user, <code><USER_HOME>/psadm2/psft/pt/<ptools_major_ver>/webserv</code> You supply the location for the <i>USER_HOME</i> when you run the DPK setup script. The default value is /home. - On Linux, AIX, or Solaris, when deploying as a non-root user, <code><prompted_ps_cfg_home>/psft/pt/<ptools_major_ver>/webserv</code> You supply the location for <i>prompted_ps_cfg_home</i> when you run the DPK setup script. - On Microsoft Windows, <code>C:\%USERPROFILE%\psft\pt\<ptools_major_ver>\webserv</code> For example, if the <i>USERPROFILE</i> environment variable is <code>C:\Users\username</code>, the location is <code>C:\Users\username\psft\pt\8.62\webserve</code>. The descriptor <i><ptools_major_ver></i> is the PeopleSoft PeopleTools major release without patch numbers; for example, 8.62.	This directory is owned by psadm2 (Linux, AIX, Solaris).
PS_APP_HOME	The <i>PS_APP_HOME</i> location holds the PeopleSoft application installation files.	<code>BASE_DIR/pt/<Product>_app_home</code> The descriptor <i><Product></i> is an abbreviation for the PeopleSoft application, such as hcm for PeopleSoft Human Capital Management.	This directory can only be written to by psadm3 (Linux, AIX, or Solaris).

Directory	Description	Default Location	Access
ORACLE_HOME (Oracle RDBMS software)	This directory includes the Oracle RDBMS database server and client connectivity software, including the SQL*Plus program. The Oracle RDBMS client installation is the 64-bit client used by PeopleSoft PeopleTools to connect from the PeopleSoft Application Server and Process Scheduler domains to the PeopleTools Database. Note. The default listener port is 1521.	<i>BASE_DIR/db/oracle-server</i>	This directory is owned by user oracle2 (Linux, AIX, or Solaris).
Oracle WebLogic	This directory includes the installation files for the Oracle WebLogic web server. Note. The configuration files for the PIA domain are located in <i>PS_CFG_HOME/webserv</i>.	<i>BASE_DIR/pt/bea/wlserver</i>	This directory is owned by psadm1 (Linux, AIX, or Solaris).
Oracle Tuxedo	This directory includes the installation files for Oracle Tuxedo.	<i>BASE_DIR/pt/bea/tuxedo</i>	This directory is owned by psadm1 (Linux, AIX, or Solaris).
PeopleSoft database files (on Oracle RDBMS)	This directory includes the Oracle database files and tables for the PeopleSoft application.	<i>BASE_DIR/db/oradata</i>	The owner of the database tables is oracle2 and its group is oinstall (Linux, AIX, or Solaris). Note. This is different from the users for the PeopleSoft installation and configuration.

See Also

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

Task 6-2-2: Reviewing the DPK-Created Users for Root Deployments on Linux, AIX, and Solaris

When deploying on Linux, AIX, and Solaris as the root user, the deployed configuration includes the default users and default passwords described in the following table.

Important! For Linux and Solaris, all of the passwords for the DPK-created users are set to expire immediately. On the first login of one of the DPK-created users, the system will prompt you to provide new passwords.

In the case of the passwords that expire immediately, such as those for `psadm1` and so on, if you do not log in as the user specified in this table and change the password, the default passwords documented here remain in effect.

For AIX, the passwords for the DPK-created users will remain in effect unless you change them. The system will not prompt you for new passwords when you log in. Oracle recommends that in all cases you log in immediately and change the passwords.

New passwords must include the following characteristics:

- At least 14 characters long
- At least one digit (0–9)
- At least one special character (for example, * or #)
- At least one lowercase letter (a–z)
- At least one uppercase letter (A–Z)

User Name	Default Password	Home Directory	Role Definition
psadm1	0radmin (the first character is the number zero)	<i>USER_HOME</i> /psadm1 You supply the location for the <i>USER_HOME</i> when you run the DPK setup script. The default value is /home.	The PeopleSoft installation administrator who owns <i>PS_HOME</i> . This user cannot write into <i>PS_CFG_HOME</i> .
psadm2	0radmin (the first character is the number zero)	<i>USER_HOME</i> /psadm2 You supply the location for the <i>USER_HOME</i> when you run the DPK setup script. The default value is /home.	The PeopleTools domain user who creates and configures the Application Server domain, Process Scheduler (batch server) domain, and the PIA. This user cannot write to <i>PS_HOME</i> , but has read-execute access.
psadm3	0radmin (the first character is the number zero)	<i>USER_HOME</i> /psadm3 You supply the location for the <i>USER_HOME</i> when you run the DPK setup script. The default value is /home.	The PeopleSoft installation administrator who owns <i>PS_APP_HOME</i> .

User Name	Default Password	Home Directory	Role Definition
oracle2	oracle	<i>USER_HOME</i> /oracle2 You supply the location for the <i>USER_HOME</i> when you run the DPK setup script. The default value is /home.	The Oracle Database Server user name.

See Also

"Completing the DPK Initialization with Customizations," Preparing the Customization File for Linux, AIX, or Solaris Users

Task 6-3: Working with PeopleSoft Utilities and Programs for Root Deployments on Linux, AIX, and Solaris

When you run the DPK setup script with the default initialization, the script installs, configures and starts a single Application Server, a single Process Scheduler, and a single PIA domain. After the root user completes the deployment of the PeopleSoft environment using the DPK setup script *DPK_INSTALL/setup/psft-dpk-setup.sh*, in order to carry out operations on the PeopleSoft environment such as stopping and starting the DPK-created domains, or creating additional domains with PSADMIN, the root user must start a new shell session, and sign in with the DPK-created user psadm2.

See *PeopleTools: System and Server Administration* for information on working with PeopleSoft domains.

The first time that you sign in as user psadm2, you are prompted to change the default password. You must start the session again and sign in with the new password. When you first sign in, the system sources the *PS_HOME/psconfig.sh* script. Sourcing the psconfig.sh script sets environment variables such as TUXDIR, PATH, and LD_LIBRARY_PATH, which are needed to run PeopleSoft utilities and programs. Sourcing the psconfig.sh script sets the environment variables for the current session in the current shell, so that the programs and utilities you run in that shell inherit the environment variables.

Similarly, to carry out operations using programs owned by the DPK-created users psadm1 or psadm3, sign in to a shell as those users.

See Reviewing the DPK-Created Users for Root Deployment on Linux, AIX, and Solaris.

Task 6-4: Setting Environment Variables for the Non-Root User on Linux, AIX, or Solaris

This section discusses:

- Sourcing the psft_env.sh Script
- Creating a psft_env.sh Script

Task 6-4-1: Sourcing the psft_env.sh Script

When you use the DPK setup script with the default initialization, the script installs, configures and starts a single Application Server, a single Process Scheduler, and a single PIA domain.

When a non-root user deploys the PeopleSoft environment, as part of the deployment, the DPK setup script sources a shell script that sets environment variables, such as TUXDIR, PATH, and LD_LIBRARY_PATH, which are needed to run PeopleSoft utilities and programs.

See *PeopleTools: System and Server Administration* for information on working with PeopleSoft domains.

After the non-root user completes the deployment of the PeopleSoft environment using the DPK setup script `DPK_INSTALL/setup/psft-dpk-setup.sh`, in order to carry out operations on the PeopleSoft environment such as stopping and starting the DPK-created domains, creating additional domains with PSADMIN, or running Application Engine programs, the non-root user must source the script `BASE_DIR/pt/psft_env.sh`. For example, use the following command:

```
source BASE_DIR/pt/psft_env.sh
```

Note. If you are performing a deployment using the `deploy_only` option, see the next section.

Note that it is important to source the shell script (`source BASE_DIR/pt/psft_env.sh`), rather than simply running it (`BASE_DIR/pt/psft_env.sh`) in order for the environment variables to persist in the current shell. See your operating system documentation for the correct command to source the script.

Sourcing the `psft_env.sh` script sets the environment variables for the current session in the current shell, so that the programs and utilities you run in that shell inherit the environment variables. You must source the script and run the PeopleSoft utilities and programs from the same `BASE_DIR`. That is, the environment variables apply only to the programs in the `PS_HOME` installed under the `BASE_DIR` from which you run the script.

If your environment includes more than one deployment, be sure to source `BASE_DIR/pt/psft_env.sh` as needed in separate shells for each `BASE_DIR`.

The `psft_env.sh` script points to default or user-specified installation locations as set up by the DPK setup script. See *Reviewing the Deployment File System* for default locations. Here is a summary of the environment variables set by the `BASE_DIR/pt/psft_env.sh` script:

- The script sets a pseudo random number generator to avoid getting stuck in entropy collection for the default random number generation.
- The script sets the TUXDIR, PATH, and LD_LIBRARY_PATH environment variables to point to the Tuxedo installation.
- The script sets the TNS_ADMIN, ORACLE_HOME, and LD_LIBRARY_PATH environment variables to point to the installations of the Oracle database and Oracle database client.
- The script sets language/locale.
- The script sets `PS_CFG_HOME`.
- The script adds the `PS_HOME/appserv` and `PS_HOME/setup` directories to the PATH.
- The script sources the `PS_HOME/psconfig.sh` script.

The `psconfig.sh` script was used previously to set environment variables for non-DPK installations. Because it is included in the `BASE_DIR/pt/psft_env.sh` script, you do not need to source `psconfig.sh` separately.

Task 6-4-2: Creating a psft_env.sh Script

If you are running as a non-root user, the *BASE_DIR*/pt/psft_env.sh script will not be available if you run the DPK setup script using one of the *deploy_only* options. For example:

- `psft-dpk-setup.sh --env_type midtier --deploy_only`
- `psft-dpk-setup.sh --env_type midtier --deploy_only --deploy_type tools_home`
- `psft-dpk-setup.sh --env_type midtier --deploy_only --deploy_type app_home`
- `psft-dpk-setup.sh --env_type midtier --deploy_only --deploy_type app_and_tools_home`

In this case, the *BASE_DIR*/pt/psft_env.sh file is not installed automatically. You must create and run the script to set the required environment variables.

Use the following as a template, and make the necessary modifications for your environment.

In this example, *<BASE_DIR>* refers to the DPK deployment location, and *<psftsuser>* is the non-root user.

```
# User specific aliases and functions
export _JAVA_OPTIONS=-Djava.security.egd=file:/dev/./urandom

export TNS_ADMIN=<BASE_DIR>/db
export ORACLE_HOME=<BASE_DIR>/pt/oracle-client/19.3.0.0
export LD_LIBRARY_PATH=$ORACLE_HOME/lib:$LD_LIBRARY_PATH
export PATH=.:$ORACLE_HOME/bin:$ORACLE_HOME/OPatch:$ORACLE_HOME/perl/bin:$PATH

TUXDIR=<BASE_DIR>/pt/bea/tuxedo
if [ -d $TUXDIR ]; then
    export TUXDIR=$TUXDIR/tuxedo22.1.0.0
    export PATH=$TUXDIR/bin:$PATH
    export LD_LIBRARY_PATH=$TUXDIR/bin:$TUXDIR/lib:$LD_LIBRARY_PATH
fi

export PATH=<BASE_DIR>/pt/ps_home8.62.04/appserv: <BASE_DIR>/pt/ps_
home8.62.04/setup:$PATH

export LANG=C
if [ -d <BASE_DIR>/pt/ps_home8.62.04 ]; then
    CWD=$PWD
    cd <BASE_DIR>/pt/ps_home8.62.04 && . psconfig.sh
    cd $CWD
fi
export PS_CFG_HOME=/home/<psftsuser>/pscfg_pt862_lnx
```

Save the file as *psft_env.sh* in *BASE_DIR*/pt, and source it to set the environment variables. For example, use this command:

```
source BASE_DIR/pt/psft_env.sh
```

Task 6-5: Removing a Deployed PeopleSoft Environment

This section discusses:

- Understanding the Removal Process
- Using the DPK Setup Script to Remove the PeopleSoft Environment on Microsoft Windows
- Using the DPK Setup Script to Remove the PeopleSoft Environment on Linux, AIX, or Solaris
- Using the DPK Setup Script to Remove the PeopleSoft Environment on Linux, AIX, or Solaris as a Non-Root User
- Using the `psft_puppet_apply.cmd` Script to Remove the PeopleSoft Environment on Microsoft Windows
- Using the `psft_puppet_apply.sh` Script to Remove the PeopleSoft Environment on Linux, AIX, or Solaris
- Manually Removing the PeopleSoft Environment on Microsoft Windows
- Manually Removing the PeopleSoft Environment on Linux, AIX, or Solaris

Understanding the Removal Process

The DPKs are based on a specific PeopleTools release and patch number. The DPK zip file names include the PeopleTools release and patch number. For example, the "8.62.05" in the zip file name `PEOPLETOOLS-WIN-8.62.05_1of4.zip` refers to release 8.62 and patch 5. To use the DPK setup script for cleanup, you must use the same DPK setup script (`DPK_INSTALL/setup`) that you used for deploying the PeopleSoft environment that you want to remove. Ensure that the correct script is available before proceeding further in the cleanup.

There will be times when an existing PeopleSoft environment needs to be completely removed. For example, applying a new PeopleSoft PeopleTools patch requires that an existing environment be cleaned up and a new one created. The cleanup that you perform with the DPK setup script conducts an orderly shutdown and removal of all the configured runtime domains — Application Server, Process Scheduler, and PIA domains. Additionally, it will remove all the deployed components. You can use the PeopleSoft DPK setup script cleanup for environments created with the default initialization or with the `psft_customizations.yaml` file.

Note. The Puppet software that is installed by the DPK setup script is not removed by the cleanup process.

In some cases the DPK setup script cleanup process may not remove all of the components. If that is the case, try one of the other methods described in this section.

Task 6-5-1: Using the DPK Setup Script to Remove the PeopleSoft Environment on Microsoft Windows

Use these steps to remove a deployed PeopleSoft environment using the PeopleSoft DPK setup script on Microsoft Windows:

1. Open a command prompt window; for example:
 - Select Start, and navigate to Accessories, Command Prompt.
 - Right-click and select Run as Administrator.
2. Go to `DPK_INSTALL/setup` and run one of the following commands:
`psft-dpk-setup.bat --cleanup`
3. Specify the base directory (`BASE_DIR`) that you want to remove.

Enter the PeopleSoft Base Folder specified during setup:

You see this prompt only when there is more than one deployment. For example:

- You carried out deployment A followed by deployment B.
- You removed the second deployment B. For the cleanup of deployment B, you do not see this prompt for the *BASE_DIR*.
- You run the script a second time. At the prompt, specify the *BASE_DIR* for deployment A.

4. Wait until the process is complete.

The DPK setup script displays [OK] for each step of the process, and [FAILED] if any of the steps are not successful.

5. Review the cleanup log file in *DPK_INSTALL/setup*.

6. After completing these steps, verify that the DPK installation directories (*BASE_DIR/pt* and *BASE_DIR/db*) have been cleared.

The cleanup process does not remove the *BASE_DIR/dpk* directory. Do not remove it manually if you want to use the *psft_apply_puppet.sh* process.

7. Verify that any services have been removed in the Microsoft Windows Services dialog box.
8. If any files or services remain, the cleanup process was not successful. Try running the process again, and if it is still not successful, you may need to carry out advanced cleanup.

See Manually Removing the PeopleSoft Environment on Microsoft Windows.

Task 6-5-2: Using the DPK Setup Script to Remove the PeopleSoft Environment on Linux, AIX, or Solaris

Use these steps to remove a deployed PeopleSoft environment using the PeopleSoft DPK setup script on Linux, AIX, or Solaris:

1. Open a terminal window as a user with root permission.
2. Go to *DPK_INSTALL/setup* and run one of the following commands:

```
sh psft-dpk-setup.sh --cleanup
```

3. Specify the base directory (*BASE_DIR*) that you want to remove.

Enter the PeopleSoft Base Folder specified during setup:

You see this prompt only when there is more than one deployment. For example:

- You carried out deployment A followed by deployment B.
- You removed the second deployment B. For the cleanup of deployment B, you do not see this prompt for the *BASE_DIR*.
- You run the script a second time. At the prompt, specify the *BASE_DIR* for deployment A.

4. Wait until the process is complete.

The DPK setup script displays [OK] for each step of the process, and [FAILED] if any of the steps are not successful.

5. Review the cleanup log file.

If you deployed as root, the cleanup log file is in *DPK_INSTALL/setup*.

6. Verify that the DPK installation directories (*BASE_DIR/pt* and *BASE_DIR/db*) have been cleared.

The cleanup process does not remove the *BASE_DIR/dpk* directory. Do not remove it manually if you want to

use the `psft_apply_puppet.sh` process.

7. Check for leftover processes. If anything remains, the cleanup process was not successful.
8. Try running the cleanup process again, and if it is still not successful, you may need to carry out advanced cleanup.

See *Manually Removing the PeopleSoft Environment on Linux, AIX, or Solaris*.

Task 6-5-3: Using the DPK Setup Script to Remove the PeopleSoft Environment on Linux, AIX, or Solaris as a Non-Root User

If you deployed as a non-root user, after you use the `./psft-dpk-setup.sh --cleanup` command, you can find the cleanup log file in a directory of the deploying user's home directory, *USER_HOME*. The log file is appended with a process ID. For example, if the home directory is `/opt/userhome` and the PID is 1234, the cleanup log is `/opt/userhome/psft_dpk_work/psft_dpk_setup_cleanup_1234.log`.

If more than one non-root user deploys from the same *DPK_INSTALL*, the cleanup process will prompt for the correct *BASE_DIR*.

Task 6-5-4: Using the `psft_puppet_apply.cmd` Script to Remove the PeopleSoft Environment on Microsoft Windows

If the cleanup procedure using the DPK setup script was not entirely successful, the *BASE_DIR* folders may not be entirely cleared, or you may have trouble when carrying out another deployment. In case of a failed deployment, try running the `psft_puppet_apply.cmd` script as described here. This script sets environment variables and then runs the `puppet apply` command to remove the PeopleSoft environment.

To remove the environment on Microsoft Windows:

1. Run the command `psft-dpk-setup.bat --cleanup`.
2. If the script fails, you should see a message similar to the following:.

```
The initialization of PeopleSoft environment setup failed. Check the
log file [C:\DPK_INSTALL\setup\psft_dpk_setup.log] for the errors.
After correcting the errors, run the following commands to continue
with the setup of PeopleSoft environment.
```

```
Start a cmd window as Administrator and run BASE_DIR\psft_puppet_⇒
apply.cmd
```

Leave the command window open while you complete the next step.

3. Open the file `BASE_DIR\dpk\puppet\production\data\defaults.yaml` in a text editor, such as Notepad.
4. Change the value of the `ensure` attribute from `present` to `absent`.
Save and close the defaults file.
5. Follow the instructions from step 2 to run the `psft_puppet_apply.cmd` script.

Task 6-5-5: Using the `psft_puppet_apply.sh` Script to Remove the PeopleSoft Environment on Linux, AIX, or Solaris

If the cleanup procedure using the DPK setup script was not entirely successful, the *BASE_DIR* folders may not be entirely cleared, or you may have trouble when carrying out another deployment. In case of a failed deployment, try running the `psft_puppet_apply.sh` script as described here. This script sets environment variables and then runs the `puppet apply` command to remove the PeopleSoft environment.

To remove the environment with the `psft_puppet_apply.sh` script on Linux, AIX, or Solaris:

1. Run the command `./psft-dpk-setup.sh --cleanup`.
2. If the script fails, you should see a message similar to the following:

```
The initialization of PeopleSoft environment setup failed. Check the
log file [/opt/DPK_INSTALL/setup/psft_dpk_setup.log] for the errors.
After correcting the errors, run the following commands to continue
with the setup of PeopleSoft environment.
```

From the shell, run `BASE_DIR/psft_puppet_apply.sh`

Leave the shell window open while you complete the next step.

3. Open the file `BASE_DIR/dpk/puppet/production/data/defaults.yaml` in a text editor, such as `vi`.
4. Change the value of the `ensure` attribute from `present` to `absent`.
Save and close the `defaults.yaml` file.
5. Follow the instructions from step 2 to run the `psft_puppet_apply.sh` script.

Task 6-5-6: Manually Removing the PeopleSoft Environment on Microsoft Windows

This section includes advanced steps to be used only if the cleanup procedures using the DPK setup script or `psft_puppet_apply` script in this section failed, or if you were not able to use the previous procedures for any reason.

If the cleanup process on Microsoft Windows was not totally successful, the *BASE_DIR* folders may not be entirely cleared, or you may have trouble when carrying out another deployment. Before carrying out the advanced steps in this section:

1. Run the command `psft-dpk-setup.bat --cleanup`.
2. If the script displays a `FAILED` message, run it again.
3. If it succeeds, check the *BASE_DIR* folders to be sure everything has been deleted.
4. If the *BASE_DIR* folders are not clear, or if a subsequent deployment is not successful, carry out the steps below.

For the advanced manual cleanup on Microsoft Windows, there are several steps. The steps in this section should be performed by someone familiar with modifying the Microsoft Windows registry. Depending upon where the cleanup process failed, some of the items mentioned in these steps may have already been removed. The user should remove whatever remains in this order:

1. Start the Microsoft Windows Services utility.
2. Stop the services `OracleServiceCDB<Product>` (for example, `OracleServiceCDBFSCM`) and `OracleOraDB19cHomeTNSListener<Listener_Name>` (for example,

OracleOraDB19cHomeTNSListenerpsft_listener) by highlighting the names, right-clicking and selecting Stop.

Note. If your database is not on an Oracle platform, the references to the Oracle database services here are not applicable.

Note. When you stop the service for the CDB (Oracle container database), you may see a message informing you that it will also stop the services for the PeopleSoft application server and Process Scheduler domains that were deployed for that database.

3. Stop the services for the PeopleSoft application server, Process Scheduler, and PeopleSoft PIA domains, if necessary.
4. Open a command prompt, running as administrator, and remove the two database services and the PeopleSoft domains services with the commands:

```
sc delete OracleServiceCDB<Product>
sc delete OracleOraDB19cHomeTNSListener<Listener_Name>

sc delete PsftAppServerDomain<Appserver_domain_name>Service
sc delete PsftPrsDomain<ProcSched_domain_name>Service
sc delete PsftPIADomain<PIA_domain_name>Service
```

5. In the Services window, stop ORACLE ProcMGR V22.1.0.0.0 and TListen 22.1.0.0.0 (Port 3050) by highlighting the names, right-clicking and selecting Stop.
6. In the Services window, right-click each of the services in step 5, select Properties, and copy the correct service name (rather than the alias).
7. Open a command prompt and remove the two preceding services with the command:

```
sc delete <service_name>
```

8. Open the Microsoft Windows registry; for example, select Start, Run, and enter regedit.
9. In the Registry Editor, locate the HKLM\SOFTWARE\ORACLE folder.
Select the following keys and verify that they contain references to the DPK installation locations in *BASE_DIR*:
 - KEY_OraDB19Home1 (*BASE_DIR*\db by default)
 - KEY_OraTux2210Home<date_time> (*BASE_DIR*\pt\bea\tuxedo by default)
 - KEY_OracleWLHome<date_time> (*BASE_DIR*\pt\bea by default)
10. In the Registry Editor, locate the HKLM\SOFTWARE\ORACLE\TUXEDO folder.
Select the 22.1.0.0.0 key and verify that it contains references to the DPK installation locations in *BASE_DIR* (*BASE_DIR*\pt\bea\tuxedo by default).
11. In the Registry Editor, only for the keys from step 9 and 10 that reference the DPK installation locations, right-click and select Delete.
12. Close the Registry Editor window.
13. Open the file C:\Program Files\Oracle\Inventory\ContentsXML\inventory.xml in a text editor.
14. Locate the lines that reference the DPK deployment:

Note. This sample has been formatted for readability.

```
<HOME NAME="OracleWLHome<date_time>" LOC="C:/psft/pt/bea" TYPE="O" IDX=>
```

```
"16"/>
<HOME NAME="OraTux2210Home<date_time>" LOC="C:\psft\pt\bea\tuxedo" TYPE=>
"O"
IDX="17"/>
<HOME NAME="OraDB19Home1" LOC="C:\psft\db\oracle-server\19.3.0.0"
TYPE="O" IDX="18"/>
```

15. Delete only the lines referencing the DPK deployment, and save the file.
16. Remove everything under the *BASE_DIR* folder (*BASE_DIR*\db, *BASE_DIR*\dpk, and *BASE_DIR*\pt).

Note. If you performed a customized deployment, back up the *psft_customizations.yaml* file and any log files, to refer to if necessary. Save them outside of the *BASE_DIR*.

Note. You may get a message that some of the file names are too big for the recycle bin. Click OK to accept.

17. Remove C:\User\<username>\psft\pt\8.62 (PS_CFG_HOME).
 18. If you performed a customized deployment that installed software such as Oracle Tuxedo or Oracle WebLogic, PS_APP_HOME, or PS_CFG_HOME, in non-default locations, remove that software manually, unless you need to retain the installations.
-
- Note.** If you want to retain the additional components, do not remove the installation locations. Be sure to use a customized deployment and specify the location of the additional components for any subsequent deployments.
-
19. Delete any user-defined System environment variables, such as PS_HOME, TUXDIR, PS_CFG_HOME, PS_APP_HOME, ORACLE_HOME, TNS_ADMIN.
 20. Completely clean up any DPK install directory that was used for previous DPKs.
- If you do not delete these or move them off the machine, they may be picked up by a subsequent DPK setup process and may cause the new DPK to fail.
21. Check the PATH environment variable, and remove the directories or path associated with the previous DPK deployments.
 22. Restart the windows machine to release any caches or processes in the memory.

Task 6-5-7: Manually Removing the PeopleSoft Environment on Linux, AIX, or Solaris

This section includes advanced steps to be used only if the cleanup procedures using the DPK setup script or *psft_puppet_apply* script in this section failed, or if you were not able to use the previous procedures for any reason

If the cleanup process on Linux, AIX, or Solaris was not totally successful, the *BASE_DIR* directories may not be entirely cleared, or you may have trouble when carrying out another deployment. Before carrying out the advanced steps in this section:

1. Run the command `./psft-dpk-setup.sh --cleanup`.
2. If the script displays a FAILED message, run it again.
3. If it succeeds, check the *BASE_DIR* directories to be sure everything has been deleted.
4. If the *BASE_DIR* directories are not clear, or if a subsequent deployment is not successful, try the following steps.

Here are a few things to check for the advanced manual cleanup on Linux, AIX, or Solaris. Depending upon where the cleanup process failed, some of the items mentioned may have already been removed.

1. Check for left-over PeopleSoft processes.

```
ps -aux|more
```

2. Stop the processes using this command with the process ID:

```
kill -9 <PID>
```

3. Check for the PeopleSoft user IDs using these commands

```
id psadm1
id psadm2
id psadm3
id oracle2
```

When you carry out the cleanup using the DPK setup script, it should remove the PeopleSoft users cleanly. However, if the users' home directory was deleted by mistake before running the cleanup, the user definition may remain. If the commands give an output, it means the user exists.

4. If there are left-over PeopleSoft users, check for running processes associated with the users with this command:

```
ps -ef|grep <user_id>
```

5. Stop any running processes associated with the users, if necessary.

6. Delete the users, with this command:

```
userdel -r <user_id>
```

7. Remove the PeopleSoft base directory (*BASE_DIR*).

Note. If you performed a customized deployment, back up the `psft_customizations.yaml` file and any log files to refer to if necessary. Save them outside of *BASE_DIR*.

8. If you performed a customized deployment that installed software such as Oracle Tuxedo or Oracle WebLogic, `PS_APP_HOME` or `PS_CFG_HOME`, in non-default locations, remove that software manually.

Note. If you want to retain the additional components, do not remove the installation locations. Be sure to use a customized deployment and specify the location of the additional components for any subsequent deployments.

9. Remove any environment variables referring to the *BASE_DIR* that you removed, or to any of the customized locations (for example, `TUXDIR`, `WL_HOME`, `BEA_HOME`, `TNS_ADMIN`, `PS_HOME`, `PS_CFG_HOME`, `PS_APP_HOME`).

10. Check for leftover directories on AIX.

On AIX if *BASE_DIR* is on NFS, you may not be able to use the command `rm` to remove the *BASE_DIR*. If so, check for the presence of a directory beginning with ".nfs" in *BASE_DIR*/pt/bea/oui/lib/aix_ppc64. Remove the *BASE_DIR*/pt/bea/oui/lib/aix_ppc64/.nfsxxx directory manually before deleting *BASE_DIR*.

Appendix A

Applying PeopleTools Patches Using DPKs

This appendix discusses:

- Reviewing PeopleTools Patch Application Options
- Using Scenario 1
- Using Scenario 2
- Using Scenario 3

Reviewing PeopleTools Patch Application Options

This appendix describes various use cases you may encounter when planning to apply a PeopleSoft PeopleTools 8.62.xx patch using the PeopleSoft PeopleTools deployment packages (DPKs). These use cases assume that you want to apply the patch to an existing PeopleSoft PeopleTools 8.62 installation.

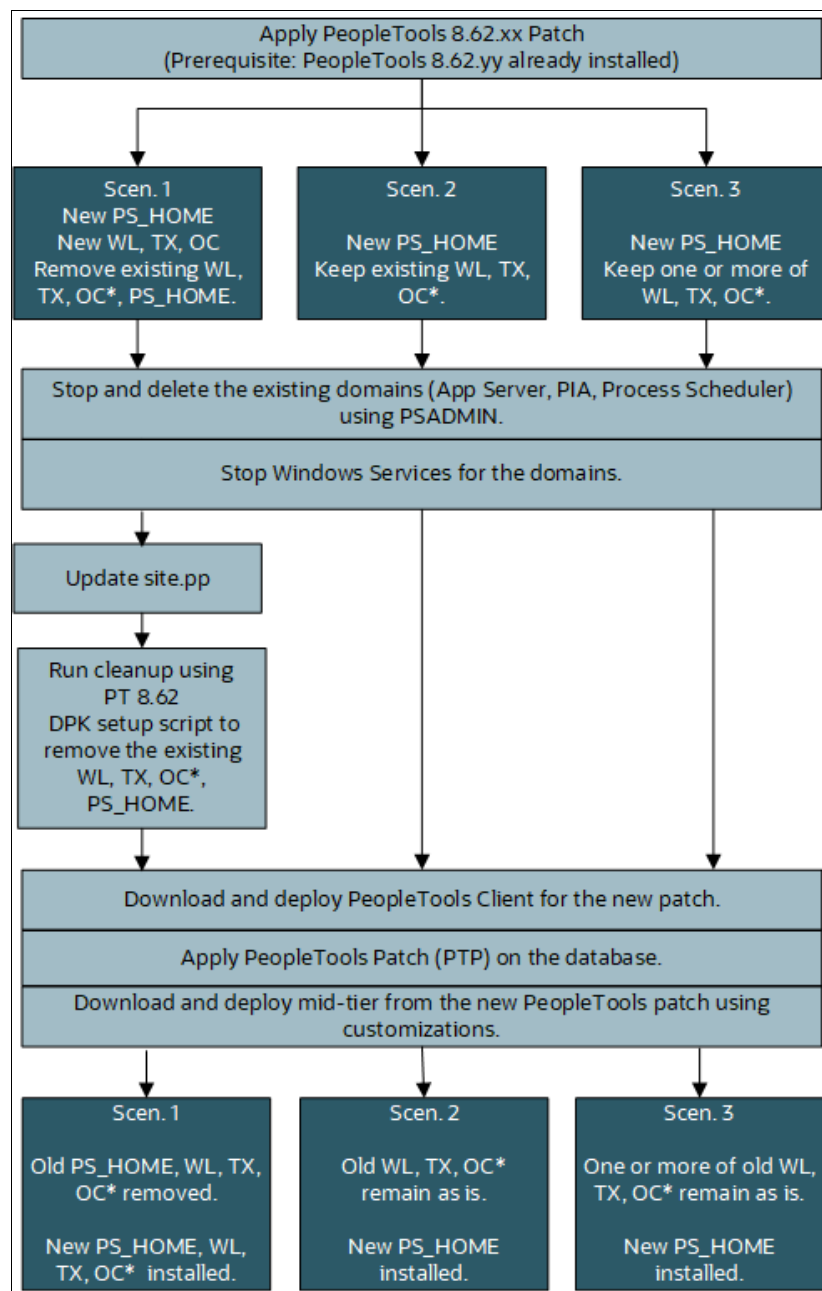
Here are some general recommendations for choosing the method to apply PeopleTools patches:

- If there are any changes to one or more additional software components, such as Oracle WebLogic (WL), Oracle Tuxedo (TX), or Oracle Client (OC), then consider Scenario 3.

Note. References to deploying or removing Oracle Client (OC) in this section are applicable only if your PeopleSoft environment is installed on an Oracle Database platform. For other RDBMS, disregard the references to Oracle Client.

- If there are no changes to any of the additional software components, Oracle WebLogic, Oracle Tuxedo, or Oracle Client, then consider Scenario 2.

This graphic summarizes the three scenarios for applying PeopleTools Patch (8.62.xx) using DPKs.



Scenarios for applying PeopleTools patches

OC* indicates that Oracle Client applies only to environments on Oracle RDBMS.

Task A-1: Using Scenario 1

This section discusses:

- Understanding Scenario 1
- Stopping and Deleting the Domains on the Initial Environment

- Stopping the Services for the Domains
- Updating the site.pp File
- Removing the Existing PeopleTools Components
- Downloading and Deploying the PeopleTools Client for the New Release
- Applying the PeopleTools Patch Using Change Assistant
- Deploying the New Release in Mid-Tier Mode
- Preparing psft_customizations.yaml and Completing the Deployment
- Reviewing the Results
- Verifying the Patch Application

Understanding Scenario 1

Scenario 1 assumes that:

- You need a new installation home directory, referred to here as *PS_HOME_NEW*, along with new installations of Oracle WebLogic, Oracle Tuxedo, and Oracle Client.
- You want to discard the existing installation home directory, referred to here as *PS_HOME_INIT* as well as the Oracle WebLogic, Oracle Tuxedo, and Oracle Client installations.
- You have a Microsoft Windows host to install the PeopleTools Client.
- This scenario applies to Linux, AIX, Solaris and Microsoft Windows operating systems.
- Your existing PeopleTools 8.62.<init> environment was installed using the PeopleSoft DPKs.

Task A-1-1: Stopping and Deleting the Domains on the Initial Environment

Carry out these steps on the existing PeopleTools 8.62.<init> environment (for example, 8.62.01).

If you have not already done so, stop and delete the existing domains running on the initial, existing PeopleTools release, PeopleTools 8.62.<init> — Application Server, PIA, and Process Scheduler, using the PSADMIN utility. See "Using and Maintaining the PeopleSoft Environment," Managing PeopleTools Domains with PSADMIN.

Task A-1-2: Stopping the Services for the Domains

On Microsoft Windows, stop the services for the Application Server, PIA, and Process Scheduler domains:

- Open the Services dialog box, for example by clicking Start and selecting Administrative Tools, Services.
- Right-click on PsftAppServerDomain<Appserver_domain_name>Service and select Stop.
- Right-click on PsftPrsDomain<ProcSched_domain_name>Service and select Stop.
- Right-click on PsftPIADomain<PIA_domain_name>Service and select Stop.
- Select File, Exit, to close the dialog box.

Task A-1-3: Updating the site.pp File

Carry out these steps on the existing, initial PeopleTools 8.62.<init> environment (for example, 8.62.01):

1. Open the site.pp file for editing.

The site.pp file is installed with the PeopleTools DPKs, and is found in *BASE_DIR/*

dpk/puppet/production/manifests.

2. Verify that the site.pp file includes `pt_tools_deployment`, as shown in the sample below.

Note. There is a space after "include" in these examples.

```
node default {

  include ::pt_role::pt_tools_deployment

}
```

Save the file and close.

Task A-1-4: Removing the Existing PeopleTools Components

Carry out these steps on the existing PeopleTools 8.62.<init> environment (for example, 8.62.01):

Remove the existing PeopleTools home directory, referred to here as *PS_HOME_INIT*, as well as Oracle WebLogic, Oracle Tuxedo, Oracle Client, and JDK.

See "Using and Maintaining the PeopleSoft Environment," Removing a Deployed PeopleSoft Environment, for details on removing the deployment components and verifying the removal.

- If you retained the downloaded DPKs in the original location, go to the download location, *DPK_INSTALL_INIT/setup* and run the cleanup command.

On Microsoft Windows, open a command prompt with Run as Administrator and run:

```
psft-dpk-setup.bat --cleanup
```

On Linux, AIX, Solaris, open a terminal window as root and run:

```
./psft-dpk-setup.sh --cleanup
```

- If you did not retain the downloaded DPKs, use the `puppet apply` command or manual methods to remove the existing deployed components.

Note. Verify that the cleanup was complete before proceeding. For more details, refer to the section Removing a Deployed PeopleSoft Environment.

Task A-1-5: Downloading and Deploying the PeopleTools Client for the New Release

On the Microsoft Windows host that you have designated for the PeopleTools Client for the new PeopleTools 8.62.<new> patch; for example, PeopleTools 8.62.11:

1. Locate and download the PeopleTools 8.62.<new> DPKs for the new release to a directory with sufficient disc space, referred to here as *DPK_INSTALL_NEW*.

See PeopleTools Patches Home Page, My Oracle Support, Doc ID 2062712.2, for links to the most recent patches. For earlier releases, search My Oracle Support, Patches and Updates.

2. In the downloaded DPKs, locate the DPK for the PeopleTools Client for the new PeopleTools 8.62.<new> patch, which is the fourth zip file (*Filename_4of4.zip*)

Copy the DPK to the Microsoft Windows Client machine.

3. To deploy the PeopleTools Client for the new 8.62.<new> PeopleTools patch in the Microsoft Windows

Client host, use the instructions for standalone deployment described in this documentation, with the following guidelines.

See "Deploying the PeopleTools Client DPK," Deploying the PeopleTools Client DPK for detailed steps and explanations.

- a. Run `SetupPTClient.bat -t`.
- b. Answer yes when asked if you want to deploy PeopleTools client.
- c. Specify an installation directory, the RDBMS, and other information for your environment.
The default installation directory is `C:\PT<release_number>_Client_<database_type>`, for example `C:\PT8.62.11_Client_ORA`.
- d. Specify the PeopleTools Patch (2) option at this prompt:
Please make your selection for the Tools Client deployment:
1. People Tools Full Upgrade
2. People Tools Patch
3. None of the above
Enter your choice [1-3]: **2**
- e. Answer y (yes) when asked if you want to install Change Assistant:
Do you want to install Change Assistant? [Y/N]: **y**

Task A-1-6: Applying the PeopleTools Patch Using Change Assistant

Use the Change Assistant (CA) you installed in the previous section to apply the new PeopleTools 8.62.<new> patch database changes. In the current PeopleTools release you can apply all patch database changes for the patch by installing a single PeopleTools change package (PTP) using Change Assistant. By using this new preferred method in PeopleTools 8.62, you can avoid applying the patch manually.

The database changes for the new release patch are delivered in a change package located in the `PS_HOME/PTP` directory in the Change Assistant installation; for example, `C:\PT8.62.11_Client_ORA\PTP`.

Here is a brief summary of the steps required to apply the change package using the Change Assistant graphical user interface. For detailed steps and explanations, see the PeopleTools product documentation.

See *PeopleTools: Change Assistant and Update Manager*, "Using Change Assistant to Apply PeopleTools Patch."

1. Start Change Assistant from the desktop icon or program menu.
2. Configure the general options and target database definitions.
3. Select Tools, Change Actions.
4. Select Update Manager and click Next.
5. Select Apply a Patch to your Current PeopleTools Release and click Finish.
6. Review the Change Package Settings page and click Next.
7. Select the target database, or if the database has not been defined yet, use the Create button to create the database.
8. Click Next.
9. Select the Change Package for the PeopleTools patch.
10. Click Next.

Change Assistant performs a PeopleTools patch version check. Review the messages and click Next. A warning is displayed if the selected patch is at the same or a lower level than the installed PeopleTools patch. It is not recommended to re-apply or downgrade PeopleTools patches.

11. The Apply Summary page is displayed; review the summary and click Finish.
12. Change Assistant will load the change package and run the PeopleTools patch job.

All steps will run unattended and when the last step is complete you will receive a message that there are no more steps to run.

Alternatively, if you have configured a target environment and general options in Change Assistant, you can apply the change package via the command line. To apply the PTP on the command line, use the following command. Specify the target database name, such as HCM92U31 for `<YOUR_TARGET_DB_ENV_NAME>`, and the update ID of the change package for `<patchxxx>`:

```
Changeassistant.bat -MODE UM -ACTION PTPAPPLY -TGTENV <YOUR_TARGET_DB_ENV_NAME> -UPD <patchxxx>
```

See *PeopleTools: Change Assistant and Update Manager*, "Running Change Assistant Job from the Command Line."

Task A-1-7: Deploying the New Release in Mid-Tier Mode

To install the PeopleTools DPKs for the new PeopleTools 8.62.<new> release; for example, PeopleTools 8.62.11: There are no default passwords. The DPK setup script includes prompts for user name and passwords. Review the requirements before beginning.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

1. Go to the directory where you downloaded the PeopleTools 8.62.<new> DPKs for the new release, referred to here as `DPK_INSTALL_NEW`.

See Downloading and Deploying the PeopleTools Client for the New Release.

2. Extract the first downloaded DPK zip file, for example, `Filename_1of4.zip`, in the same directory.

The extraction creates the `DPK_INSTALL_NEW/setup` folder and other files.

3. To set up the PeopleTools mid-tier components for the new PeopleTools 8.62.<new> patch release:

- On Microsoft Windows, open a command prompt with Run as Administrator, go to `DPK_INSTALL_NEW/setup` and run this command:

```
psft-dpk-setup.bat --env_type midtier
```

- On Linux, AIX, or Solaris, open a terminal window as root, go to `DPK_INSTALL_NEW/setup`, and run this command:

```
./psft-dpk-setup.sh --env_type midtier
```

4. At the following prompt, enter the full path for a new directory (that is, different from that used for the existing 8.62 installation) for the PeopleSoft base folder (referred to in this documentation as `BASE_DIR_NEW`):

Note. When entering the path for the base folder, use forward slashes (/). For example, `C:/psft_new`. Enclose any names with special characters in double quotes. Do not use a name for the base folder that begins with a number. On Linux, AIX, or Solaris, do not end the base directory name with a forward slash (for example, do not enter `/ds1/psft/`).

Note. The script progress and validation messages are not included here. See the task Running the PeopleSoft PeopleTools DPK Setup Script for Mid-tier Deployment for more details.

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

Enter the full path for the PeopleSoft Base Directory: **C:/psft_new**
Are you happy with your answer? [Y|n|q]:

The deployment sets up a new installation home directory, *PS_HOME_NEW* and installs Oracle WebLogic, Oracle Tuxedo, Oracle Client, and JDK under the specified PeopleSoft base folder, *BASE_DIR_NEW/pt*.

5. Specify the information for the database that you want to connect to.

- a. For the database platform, enter ORACLE, MSSQL (Microsoft SQL Server), or DB2ODBC (Db2 for z/OS).

Enter the PeopleSoft database platform [ORACLE]:

- b. Enter y (yes) if the database you are connecting to is a Unicode database, or n (no) for a non-Unicode database.

Is the PeopleSoft database unicode? [Y|n]:

- c. Enter the PeopleSoft database name.

If the database name includes non-alphanumeric characters such as periods, enclose the name in double quotes. For example, "HCM.92".

Enter the PeopleSoft database name [HCM92]:

- d. Enter the database service name.

Note. The service name is required for Oracle RDBMS.

For the service name, enter the full name, including the domain, if the database was installed with the domain. Use forward slashes if necessary. If the service name includes non-alphanumeric characters such as periods, enclose the name in double quotes. For example, "HCM.92.example.com". Do not enter an IP address.

Enter the PeopleSoft database service name [HCM92]:

- e. Enter the name of the host where the database is installed, and the port number:

Use forward slashes if necessary. If the host name includes non-alphanumeric characters such as periods, enclose the name in double quotes. For example, "host.example.com". Do not enter an IP address.

Enter the PeopleSoft database host name:

Enter the PeopleSoft database port [1521]: **1521**

6. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

Enter the PeopleSoft database Connect ID [people]:

7. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Enter the PeopleSoft database Connect ID [people] password.

Ensure that the password meets the length and complexity requirements

for your database platform:
Re-Enter the PeopleSoft database Connect ID password:

8. Enter the PeopleSoft operator ID, such as PS or VP1.

Enter the PeopleSoft database Operator ID [PS]: PS

9. Enter the password twice for the PeopleSoft operator ID.

Enter a new PeopleSoft database Operator ID [PS] password.
Ensure that the password is between 1 and 32 characters in length.
You may include these special characters !@#\$\$%^& :
Re-Enter the PeopleSoft Operator ID password:

10. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

The window does not display masking characters as you type. There is no default password.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.
Ensure that the password is between 8 and 30 characters in length.
You may include these special characters !@#\$\$%^& :
Re-Enter the Application Server Domain connection password:

11. Enter the password for the PTWEBSEVER web profile user.

Enter a new PeopleSoft Web Profile user [PTWEBSEVER] password.
Ensure that the password is between 8 and 32 characters in length.
You may include these special characters !@#\$\$%^& :
Re-Enter the PeopleSoft Web Profile user password:

12. Enter the Oracle WebLogic Server Admin password, following the guidelines in the prompt.

The default Oracle WebLogic server administrator is system. The window does not display masking characters as you type. There is no default password.

Enter a new WebLogic Server Admin user [system] password.
Ensure that the password is between 8 and 30 characters in length
with at least one lowercase letter and one uppercase letter. It must⇒
also
contain one number or one of these special characters !@#\$\$%^& :
Re-Enter the WebLogic Server Admin user password:

13. Enter the Integration Gateway user ID and password at the following prompt.

The default user ID is administrator.

Enter the PeopleSoft Integration Gateway user [administrator]:
Enter the PeopleSoft Integration Gateway user [administrator] password.
Ensure that the password is between 8 and 30 characters in length.
You may include these special characters !@#\$\$%^& :
Re-Enter the PeopleSoft Integration Gateway user password:

14. Enter the Integration Gateway keystore password.

See the information on using the integrationGateway.properties file and configuring security in the Integration Broker product documentation.

See *PeopleTools: Integration Broker Administration*, "Configuring Security and General Properties."

Enter the PeopleSoft Integration Gateway Keystore password. Ensure the password is between 8 and 30 characters in length. You may include these special characters !@#\$%^& :
Re-Enter the PeopleSoft Integration Gateway Keystore password:

15. If you want to change any of the answers to the previous questions, enter *n* (no) at the following prompt, or enter *y* (yes) to continue:

Are you happy with your answers? [y|n]:

16. Answer *n* (no) to the following prompt:

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the customization Hiera YAML file and running the Puppet 'apply' command directly to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]: ⇒
n

You have decided not to continue with the default PeopleSoft environment setup process. Any customizations to the PeopleSoft environment should be done in the Hiera YAML file 'psft_customizations.yaml' and place it under [c:\psft\dpk\puppet\production\data] folder. After making the necessary customizations, run the following script to continue with the setup of PeopleSoft environment.

Start a cmd window as Administrator and run C:\psft\psft_puppet_⇒
apply.cmd

Exiting the PeopleSoft environment setup process.

The script stops.

17. Complete the instructions in the next section to prepare the psft_customizations.yaml file and complete the initialization.

See Also

"Deploying the PeopleSoft PeopleTools Deployment Packages," Running the DPK Setup Script for Mid-tier Deployment.

Task A-1-8: Preparing psft_customizations.yaml and Completing the Deployment

Carry out these steps from the PeopleTools 8.62.<new> environment, installed in the previous section (for example, 8.62.11). Create or edit a psft_customizations.yaml file, and complete the initialization using the psft_puppet_apply script.

See "Completing the DPK Initialization with Customizations."

The documentation lists several types of customizations you can use for your environment. For this scenario, it is important that you include the location for an existing *PS_APP_HOME* (if you have one) to be associated with the *PS_HOME* in the *psft_customizations.yaml* file.

Here is a sample *psft_customizations.yaml* file that specifies the location for an existing *PS_APP_HOME* location which will be associated to *PS_HOME* during the deployment process:

Note. Be sure to retain the spacing and indentation as shown in this sample.

```
---
ps_apphome_location: c:/fscm_app_home
ps_app_home:
  db_type: "%{hiera('db_platform')}}"
  location: "%{hiera('ps_apphome_location')}}"
```

Complete the initialization using the *psft_puppet_apply* script as described in the documentation.

See "Completing the DPK Initialization with Customizations."

Task A-1-9: Reviewing the Results

After completing the steps above:

- *PS_HOME*, Oracle WebLogic, Oracle Tuxedo, and the Oracle Client from the initial environment have been removed.
- There are new installations of *PS_HOME*, Oracle WebLogic, Oracle Tuxedo, and the Oracle Client.
- The Application Server, Process Scheduler, and PIA domains have been configured.

After applying the PeopleTools patch, review the patch's *readme.txt* for any manual configuration instructions that may be needed for your particular environment.

Task A-1-10: Verifying the Patch Application

Your host should have initialized successfully and started participating in your PeopleSoft environment. Many of the steps that you should take to verify this or diagnose problems will be the same for Microsoft Windows, Linux, AIX, and Solaris hosts.

1. Verify that you can sign in to PeopleSoft:
Start a browser and sign on to the PeopleSoft Application with the URL `http://<hostname>:<pia_http_port>/ps/signon.html`.
2. If you do not see the log in page, verify that the environment can be reached from your machine using a utility such as ping.
3. If your host can be pinged, verify that the PIA domain is running in the following step.
4. Verify that Application Server, Process Scheduler and PIA domains have started:
 - a. On Linux, AIX, or Solaris, using an SSH client, log in as the *psadm2* user.
On Microsoft Windows, open a command prompt with Run as Administrator.
 - b. Start the *psadmin* utility by typing *psadmin* at the command prompt.
When logged in as the *psadm2* user the environment variables for PeopleSoft administration are set as part of the *psadm2* user's log-in profile.
 - c. Use the PSADMIN menus for the Application Server, Process Scheduler, and Web server (PIA) to verify

the status of each of the installed components.

- d. If one or more of the components has not started, examine the log files for the required PeopleSoft component to establish what has caused the component to not start.

The log files are in the default locations for each of the PeopleSoft components.

5. To verify the `PS_APP_HOME` location, check the value of the `PS_APP_HOME` environment variable.

On Linux, AIX, or Solaris, the environment variable is found in the `.profile` file for the `psadm2` user. Use the following command on Linux, AIX, or Solaris to check the environment variable:

```
export PS_APP_HOME=/home/fscm_app_home
```

On Microsoft Windows, open the System Properties dialog box and click Environment Variables.

6. You can review the `psprcs.cfg` file to verify that the SQR section includes a path for `PS_APP_HOME`.

```
[SQR]
;=====→
==
; Settings for SQR Software
;=====→
==
SQRBIN=%PS_HOME%/bin/sqr/ORA/bin
PSSQRFLAGS=-ZIF%PS_HOME%/sqr/pssqr%LANGUAGECD%.unx
Print Log=N
Enhanced HTML=N
PSSQR=%PS_APP_HOME%/sqr:%PS_HOME%/sqr
```

See *PeopleTools: Process Scheduler*, "Using the PSADMIN for the Process Scheduler Configuration File."

Task A-2: Using Scenario 2

This section discusses:

- Understanding Scenario 2
- Stopping and Deleting the Domains on the Initial Environment
- Stopping the Services for the Domains
- Downloading and Deploying the PeopleTools Client for the New Release
- Applying the PeopleTools Patch Using Change Assistant
- Deploying the New Release in Mid-tier Mode
- Preparing `psft_customizations.yaml` and Completing the Deployment
- Reviewing the Results
- Verifying the Patch Application

Understanding Scenario 2

Scenario 2 assumes that:

- You want to install only the new patch release `PS_HOME`
- You want to retain the existing installations of Oracle WebLogic, Oracle Tuxedo, and Oracle Client.

- This scenario applies to Linux, AIX, Solaris, and Microsoft Windows operating systems.

Task A-2-1: Stopping and Deleting the Domains on the Initial Environment

Carry out these steps on the existing PeopleTools 8.62.<init> environment (for example, 8.62.01).

If you have not already done so, stop and delete the existing domains running on the initial, existing PeopleTools release, PeopleTools 8.62.<init> — Application Server, PIA, and Process Scheduler, using the PSADMIN utility.

See "Using and Maintaining the PeopleSoft Environment," Managing PeopleTools Domains with PSADMIN.

Task A-2-2: Stopping the Services for the Domains

On Microsoft Windows, stop the services for the Application Server, PIA, and Process Scheduler domains:

- Open the Services dialog box, for example by clicking Start and selecting Administrative Tools, Services.
- Right-click on PsftAppServerDomain<Appserver_domain_name>Service and select Stop.
- Right-click on PsftPrsDomain<ProcSched_domain_name>Service and select Stop.
- Right-click on PsftPIADomain<PIA_domain_name>Service and select Stop.
- Select File, Exit, to close the dialog box.

Task A-2-3: Downloading and Deploying the PeopleTools Client for the New Release

On the Microsoft Windows host that you have designated for the PeopleTools Client for the new PeopleTools 8.62.<new> patch; for example, PeopleTools 8.62.11:

1. Locate and download the PeopleTools 8.62.<new> DPKs for the new release to a directory with sufficient disc space, referred to here as *DPK_INSTALL_NEW*.

See PeopleTools Patches Home Page, My Oracle Support, Doc ID 2062712.2, for links to the most recent patches. For earlier releases, search My Oracle Support, Patches and Updates.

2. In the downloaded DPKs, locate the DPK for the PeopleTools Client for the new PeopleTools 8.62.<new> patch, which is the fourth zip file (*Filename_4of4.zip*)

Copy the DPK to the Microsoft Windows Client machine.

3. To deploy the PeopleTools Client for the new 8.62.<new> PeopleTools patch in the Microsoft Windows Client host, use the instructions for standalone deployment described in this documentation, with the following guidelines.

See "Deploying the PeopleTools Client DPK," Deploying the PeopleTools Client DPK for detailed steps and explanations.

- a. Run `SetupPTClient.bat -t`.
- b. Answer yes when asked if you want to deploy PeopleTools client.
- c. Specify an installation directory, the RDBMS, and other information for your environment.
The default installation directory is `C:\PT<release_number>_Client_<database_type>`, for example `C:\PT8.62.11_Client_ORA`.
- d. Specify the PeopleTools Patch (2) option at this prompt:

```
Please make your selection for the Tools Client deployment:
1. People Tools Full Upgrade
```



```

2. People Tools Patch
3. None of the above
Enter your choice [1-3]: 2

```

e. Answer y (yes) when asked if you want to install Change Assistant:

```
Do you want to install Change Assistant? [Y/N]: y
```

Task A-2-4: Applying the PeopleTools Patch Using Change Assistant

Use the Change Assistant (CA) you installed in the previous section to apply the new PeopleTools 8.62.<new> patch database changes. In the current PeopleTools release you can apply all patch database changes for the patch by installing a single PeopleTools change package (PTP) using Change Assistant. By using this preferred method in PeopleTools 8.62, you can avoid applying the patch manually.

The database changes for the new release patch are delivered in a change package located in the *PS_HOME/PTP* directory in the Change Assistant installation; for example, *C:\PT8.62.11_Client_ORA\PTP*.

Here is a brief summary of the steps required to apply the change package using the Change Assistant graphical user interface. For detailed steps and explanations, see the PeopleTools product documentation.

See *PeopleTools: Change Assistant and Update Manager*, "Using Change Assistant to Apply PeopleTools Patch."

1. Start Change Assistant from the desktop icon or program menu.
2. Configure the general options and target database definitions.
3. Select Tools, Change Actions.
4. Select Update Manager and click Next.
5. Select Apply a Patch to your Current PeopleTools Release and click Finish.
6. Review the Change Package Settings page and click Next.
7. Select the target database, or if the database has not been defined yet, use the Create button to create the database.
8. Click Next.
9. Select the Change Package for the PeopleTools patch.
10. Click Next.

Change Assistant performs a PeopleTools patch version check. Review the messages and click Next. A warning is displayed if the selected patch is at the same or a lower level than the installed PeopleTools patch. It is not recommended to re-apply or downgrade PeopleTools patches.

11. The Apply Summary page is displayed; review the summary and click Finish.
12. Change Assistant will load the change package and run the PeopleTools patch job.

All steps will run unattended and when the last step is complete you will receive a message that there are no more steps to run.

Alternatively, if you have configured a target environment and general options in Change Assistant, you can apply the change package via the command line. To apply the PTP on the command line, use the following command, edited for your environment:

```
Changeassistant.bat -MODE UM -ACTION PTPAPPLY -TGTENV <YOUR_TARGET_DB_ENV_>
NAME_LIKE_PT856TST> -UPD <patchxxx>
```

See *PeopleTools: Change Assistant and Update Manager*, "Running Change Assistant Job from the Command Line."

Task A-2-5: Deploying the New Release in Mid-tier Mode

To install the PeopleTools DPKs for the new PeopleTools 8.62.<new> release; for example, PeopleTools 8.62.11: The DPK setup script includes prompts for user name and passwords. Review the requirements before beginning. See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

1. Go to the directory where you downloaded the PeopleTools 8.62.<new> DPKs for the new release, referred to here as *DPK_INSTALL_NEW*.

See Downloading and Deploying the PeopleTools Client for the New Release.

2. Extract the first downloaded DPK zip file, for example, *Filename_1of4.zip*, in the same directory.

The extraction creates the *DPK_INSTALL_NEW/setup* folder and other files.

3. To set up the PeopleTools server for the new PeopleTools 8.62.<new> patch release:

- On Microsoft Windows, open a command prompt with Run as Administrator, go to *DPK_INSTALL_NEW/setup* and run this command:

```
psft-dpk-setup.bat --env_type midtier
```

- On Linux, AIX, or Solaris, open a terminal window as root, go to *DPK_INSTALL_NEW/setup*, and run this command:

```
./psft-dpk-setup.sh --env_type midtier
```

4. At the following prompt, enter the full path for a new directory (that is, different from that used for the existing 8.62 installation) for the PeopleSoft base folder (referred to in this documentation as *BASE_DIR_NEW*):

Note. When entering the path for the base folder, use forward slashes (/). For example, *C:/psft_new*. Enclose any names with special characters in double quotes. Do not use a name for the base folder that begins with a number. On Linux, AIX, or Solaris, do not end the base directory name with a forward slash (for example, do not enter */dsl/psft/*).

Note. The script progress and validation messages are not included here. See the task Running the PeopleSoft PeopleTools DPK Setup Script for Mid-tier Deployment for more details.

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

Enter the full path for the PeopleSoft Base Directory: **C:/psft_new**
Are you happy with your answer? [Y|n|q]:

The deployment sets up a new installation home directory, *PS_HOME_NEW* and installs Oracle WebLogic, Oracle Tuxedo, Oracle Client, and JDK under the specified PeopleSoft base folder, *BASE_DIR_NEW/pt*.

5. Specify the information for the database that you want to connect to.
 - a. For the database platform, enter ORACLE, MSSQL (Microsoft SQL Server), or DB2ODBC (Db2 for z/OS).

Enter the PeopleSoft database platform [ORACLE]:

- b. Enter y (yes) if the database you are connecting to is a Unicode database, or n (no) for a non-Unicode database.

Is the PeopleSoft database unicode? [Y|n]:

- c. Enter the PeopleSoft database name.

If the database name includes non-alphanumeric characters such as periods, enclose the name in double quotes. For example, "HCM.92".

Enter the PeopleSoft database name [HCM92]:

- d. Enter the database service name.

Note. The service name is required for Oracle RDBMS.

For the service name, enter the full name, including the domain, if the database was installed with the domain. Use forward slashes if necessary. If the service name includes non-alphanumeric characters such as periods, enclose the name in double quotes. For example, "HCM.92.example.com". Do not enter an IP address.

Enter the PeopleSoft database service name [HCM92]:

- e. Enter the name of the host where the database is installed, and the port number:

Use forward slashes if necessary. If the host name includes non-alphanumeric characters such as periods, enclose the name in double quotes. For example, "host.example.com". Do not enter an IP address.

Enter the PeopleSoft database host name:

Enter the PeopleSoft database port [1521]: **1521**

6. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

Enter the PeopleSoft database Connect ID [people]:

7. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Enter the PeopleSoft database Connect ID [people] password.

Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft database Connect ID password:

8. Enter the PeopleSoft operator ID, such as PS or VP1.

Enter the PeopleSoft database Operator ID [PS]:

9. Enter the password twice for the PeopleSoft operator ID.

Enter a new PeopleSoft database Operator ID [PS] password.

Ensure that the password is between 1 and 32 characters in length.

You may include these special characters !@#\$\$%^& :

Re-Enter the PeopleSoft Operator ID password:

10. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

The window does not display masking characters as you type. There is no default password.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.
 Ensure that the password is between 8 and 30 characters in length.
 You may include these special characters !@#\$%^& :
 Re-Enter the Application Server Domain connection password:

11. Enter the password for the PTWEBSEVER web profile user.

Enter a new PeopleSoft Web Profile user [PTWEBSEVER] password.
 Ensure that the password is between 8 and 32 characters in length.
 You may include these special characters !@#\$%^& :
 Re-Enter the PeopleSoft Web Profile user password:

12. Enter the Oracle WebLogic Server Admin password, following the guidelines in the prompt.

The default Oracle WebLogic server administrator is system. The window does not display masking characters as you type. There is no default password.

Enter a new WebLogic Server Admin user [system] password.
 Ensure that the password is between 8 and 30 characters in length
 with at least one lowercase letter and one uppercase letter. It must⇒
 also
 contain one number or one of these special characters !@#\$%^& :
 Re-Enter the WebLogic Server Admin user password:

13. Enter the Integration Gateway user ID and password at the following prompt.

The default user ID is administrator.

Enter the PeopleSoft Integration Gateway user [administrator]:
 Enter the PeopleSoft Integration Gateway user [administrator] password.
 Ensure that the password is between 8 and 30 characters in length.
 You may include these special characters !@#\$%^& :
 Re-Enter the PeopleSoft Integration Gateway user password:

14. Enter the Integration Gateway keystore password.

See the information on using the integrationGateway.properties file and configuring security in the Integration Broker product documentation.

See *PeopleTools: Integration Broker Administration*, "Configuring Security and General Properties."

Enter the PeopleSoft Integration Gateway Keystore password. Ensure
 the password is between 8 and 30 characters in length.
 You may include these special characters !@#\$%^& :
 Re-Enter the PeopleSoft Integration Gateway Keystore password:

15. If you want to change any of the answers to the previous questions, enter *n* (no) at the following prompt, or enter *y* (yes) to continue:

Are you happy with your answers? [y|n]:

16. Answer *n* (no) to the following prompt:

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following

prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the customization Hiera YAML file and running the Puppet 'apply' command directly to continue with the setup of the PeopleSoft environment.

```
Do you want to continue with the default initialization process? [y|n]: ⇒
n
```

You have decided not to continue with the default PeopleSoft environment setup process. Any customizations to the PeopleSoft environment should be done in the Hiera YAML file 'psft_customizations.yaml' and place it under [c:\psft\dpk\puppet\production\data] folder. After making the necessary customizations, run the following script to continue with the setup of PeopleSoft environment.

```
Start a cmd window as Administrator and run C:\psft\psft_puppet_⇒
apply.cmd
```

Exiting the PeopleSoft environment setup process.

The script stops.

17. Complete the instructions in the next section to prepare the psft_customizations.yaml file and complete the initialization.

See Also

"Deploying the PeopleSoft PeopleTools Deployment Packages," Running the DPK Setup Script for Mid-tier Deployment.

Task A-2-6: Preparing psft_customizations.yaml and Completing the Deployment

Carry out these steps from the PeopleTools 8.62.<new> environment, installed in the previous section (for example, 8.62.11). Create or edit a psft_customizations.yaml file, and complete the initialization using the psft_puppet_apply script.

See "Completing the DPK Initialization with Customizations."

The documentation lists several types of customizations you can use for your environment. For this scenario, it is important that you include the following in the psft_customizations.yaml file:

- Location for an existing *PS_APP_HOME* (if you have one) to be associated with the *PS_HOME*.
- Existing installation locations for Oracle WebLogic, Oracle Tuxedo and Oracle Database client.

Here is a sample psft_customizations.yaml file that specifies the location for the Oracle WebLogic, Oracle Tuxedo, and Oracle Database client. This customization also specifies an existing *PS_APP_HOME* location which will be associated to *PS_HOME* during the deployment process.

Note. The Oracle Database client entry applies only to environments on Oracle RDBMS.

Note. Be sure to retain the spacing and indentation as shown in this sample.

```

---
oracle_client_location: C:/Oracle/Oracle-Client
oracle_client:
  location: C:/Oracle/Oracle-Client

jdk_location: C:/Oracle/JDK
jdk:
  location: C:/Oracle/JDK

weblogic_location: C:/Oracle/weblogic
weblogic:
  location: C:/Oracle/weblogic

tuxedo_location: C:/Oracle/weblogic/tuxedo
tuxedo:
  location: C:/Oracle/weblogic/tuxedo

ps_apphome_location: c:/fscm_app_home
ps_app_home:
  db_type: "%{hiera('db_platform')}}"
  location: "%{hiera('ps_apphome_location')}}"

```

Complete the initialization using the `psft_puppet_apply` script as described in the documentation.

See "Completing the DPK Initialization with Customizations."

Task A-2-7: Reviewing the Results

After completing the steps above:

- *PS_HOME_INIT*, Oracle WebLogic, Oracle Tuxedo, and the Oracle Client from the initial environment remain as is.
- The Application Server, Process Scheduler, and PIA domains are configured.
- There is new installation of *PS_HOME_NEW*.

After applying the PeopleTools patch, review the patch's `readme.txt` for any manual configuration instructions that may be needed for your particular environment.

Task A-2-8: Verifying the Patch Application

Your host should have initialized successfully and started participating in your PeopleSoft environment. Many of the steps that you should take to verify this or diagnose problems will be the same for Microsoft Windows, Linux, AIX, and Solaris hosts.

1. Verify that you can sign in to PeopleSoft:
Start a browser and sign on to the PeopleSoft Application with the URL `http://<hostname>:<pia_http_port>/ps/signon.html`.
2. If you do not see the log in page, verify that the environment can be reached from your machine using a utility such as ping.
3. If your host can be pinged, verify that the PIA domain is running in the following step.
4. Verify that Application Server, Process Scheduler and PIA domains have started:
 - a. On Linux, AIX, or Solaris, using an SSH client, log in as the `psadm2` user.

On Microsoft Windows, open a command prompt with Run as Administrator.

- b. Start the psadmin utility by typing `psadmin` at the command prompt.

When logged in as the psadm2 user the environment variables for PeopleSoft administration are set as part of the psadm2 user's log-in profile.

- c. Use the PSADMIN menus for the Application Server, Process Scheduler, and Web server (PIA) to verify the status of each of the installed components.
- d. If one or more of the components has not started, examine the log files for the required PeopleSoft component to establish what has caused the component to not start.

The log files are in the default locations for each of the PeopleSoft components.

5. To verify the `PS_APP_HOME` location, check the value of the `PS_APP_HOME` environment variable.

On Linux, AIX, or Solaris, the environment variable is found in the `.profile` file for the psadm2 user. Use the following command on Linux, AIX, or Solaris to check the environment variable:

```
export PS_APP_HOME=/home/fscm_app_home
```

On Microsoft Windows, open the System Properties dialog box and click Environment Variables.

6. You can review the `psprcs.cfg` file to verify that the SQR section includes a path for `PS_APP_HOME`.

```
[SQR]
;======>
==
; Settings for SQR Software
;======>
==
SQRBIN=%PS_HOME%/bin/sqr/ORA/bin
PSSQRFLAGS=-ZIF%PS_HOME%/sqr/pssqr%LANGUAGECD%.unx
Print Log=N
Enhanced HTML=N
PSSQR=%PS_APP_HOME%/sqr:%PS_HOME%/sqr
```

See *PeopleTools: Process Scheduler*, "Using the PSADMIN for the Process Scheduler Configuration File."

Task A-3: Using Scenario 3

This section discusses:

- Understanding Scenario 3
- Stopping and Deleting the Domains on the Initial Environment
- Stopping the Services for the Domains
- Downloading and Deploying the PeopleTools Client for the New Release
- Applying the PeopleTools Patch Using Change Assistant
- Deploying the New Release in Mid-tier Mode
- Preparing `psft_customizations.yaml` and Completing the Deployment
- Reviewing the Results
- Verifying the Patch Application

Understanding Scenario 3

Scenario 3 assumes that:

- You want to install only the new patch release *PS_HOME*
- You want to retain one or more of the existing installations of Oracle WebLogic, Oracle Tuxedo, or Oracle Client.
- This scenario applies to Linux, AIX, Solaris, and Microsoft Windows operating systems.

Task A-3-1: Stopping and Deleting the Domains on the Initial Environment

Carry out these steps on the existing PeopleTools 8.62.<init> environment (for example, 8.62.01).

If you have not already done so, stop and delete the existing domains running on the initial, existing PeopleTools release, PeopleTools 8.62.<init> — Application Server, PIA, and Process Scheduler, using the PSADMIN utility.

See "Using and Maintaining the PeopleSoft Environment," Managing PeopleTools Domains with PSADMIN.

Task A-3-2: Stopping the Services for the Domains

On Microsoft Windows, stop the services for the Application Server, PIA, and Process Scheduler domains:

- Open the Services dialog box, for example by clicking Start and selecting Administrative Tools, Services.
- Right-click on PsftAppServerDomain<Appserver_domain_name>Service and select Stop.
- Right-click on PsftPrsDomain<ProcSched_domain_name>Service and select Stop.
- Right-click on PsftPIADomain<PIA_domain_name>Service and select Stop.
- Select File, Exit, to close the dialog box.

Task A-3-3: Downloading and Deploying the PeopleTools Client for the New Release

On the Microsoft Windows host that you have designated for the PeopleTools Client for the new PeopleTools 8.62.<new> patch; for example, PeopleTools 8.62.11:

1. Locate and download the PeopleTools 8.62.<new> DPKs for the new release to a directory with sufficient disc space, referred to here as *DPK_INSTALL_NEW*.

See PeopleTools Patches Home Page, My Oracle Support, Doc ID 2062712.2, for links to the most recent patches. For earlier releases, search My Oracle Support, Patches and Updates.

2. In the downloaded DPKs, locate the DPK for the PeopleTools Client for the new PeopleTools 8.62.<new> patch, which is the fourth zip file (*Filename_4of4.zip*)

Copy the DPK to the Microsoft Windows Client machine.

3. To deploy the PeopleTools Client for the new 8.62.<new> PeopleTools patch in the Microsoft Windows Client host, use the instructions for standalone deployment described in this documentation, with the following guidelines.

See "Deploying the PeopleTools Client DPK," Deploying the PeopleTools Client DPK for detailed steps and explanations.

- a. Run `SetupPTClient.bat -t`.
- b. Answer yes when asked if you want to deploy PeopleTools client.

- c. Specify an installation directory, the RDBMS, and other information for your environment.
The default installation directory is C:\PT<release_number>_Client_<database_type>, for example C:\PT8.62.11_Client_ORA.
- d. Specify the PeopleTools Patch (2) option at this prompt:
Please make your selection for the Tools Client deployment:
1. People Tools Full Upgrade
2. People Tools Patch
3. None of the above
Enter your choice [1-3]: 2
- e. Answer y (yes) when asked if you want to install Change Assistant:
Do you want to install Change Assistant? [Y/N]: y

Task A-3-4: Applying the PeopleTools Patch Using Change Assistant

Use the Change Assistant (CA) you installed in the previous section to apply the new PeopleTools 8.62.<new> patch database changes. In the current PeopleTools release you can apply all patch database changes for the patch by installing a single PeopleTools change package (PTP) using Change Assistant. By using this new preferred method in PeopleTools 8.62, you can avoid applying the patch manually.

The database changes for the new release patch are delivered in a change package located in the *PS_HOME/PTP* directory in the Change Assistant installation; for example, C:\PT8.62.11_Client_ORA\PTP.

Here is a brief summary of the steps required to apply the change package using the Change Assistant graphical user interface. For detailed steps and explanations, see the PeopleTools product documentation.

See *PeopleTools: Change Assistant and Update Manager*, "Using Change Assistant to Apply PeopleTools Patch."

1. Start Change Assistant from the desktop icon or program menu.
2. Configure the general options and target database definitions.
3. Select Tools, Change Actions.
4. Select Update Manager and click Next.
5. Select Apply a Patch to your Current PeopleTools Release and click Finish.
6. Review the Change Package Settings page and click Next.
7. Select the target database, or if the database has not been defined yet, use the Create button to create the database.
8. Click Next.
9. Select the Change Package for the PeopleTools patch.
10. Click Next.

Change Assistant performs a PeopleTools patch version check. Review the messages and click Next. A warning is displayed if the selected patch is at the same or a lower level than the installed PeopleTools patch. It is not recommended to re-apply or downgrade PeopleTools patches.

11. The Apply Summary page is displayed; review the summary and click Finish.
12. Change Assistant will load the change package and run the PeopleTools patch job.

All steps will run unattended and when the last step is complete you will receive a message that there are no more steps to run.

Alternatively, if you have configured a target environment and general options in Change Assistant, you can apply the change package via the command line. To apply the PTP on the command line, use the following command. Specify the target database name, such as HCM92U31, for `<YOUR_TARGET_DB_ENV_NAME>`, and the update ID of the change package for `<patchxxx>`.

```
Changeassistant.bat -MODE UM -ACTION PTPAPPLY -TGTENV <YOUR_TARGET_DB_ENV_NAME> -UPD <patchxxx>
```

See *PeopleTools: Change Assistant and Update Manager*, "Running Change Assistant Job from the Command Line."

Task A-3-5: Deploying the New Release in Mid-tier Mode

To install the PeopleTools DPKs for the new PeopleTools 8.62.<new> release; for example, PeopleTools 8.62.11: The DPK setup script includes prompts for user name and passwords. Review the requirements before beginning. See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

1. Go to the directory where you downloaded the PeopleTools 8.62.<new> DPKs for the new release, referred to here as `DPK_INSTALL_NEW`.

See Downloading and Deploying the PeopleTools Client for the New Release.

2. Extract the first downloaded DPK zip file, for example, `Filename_1of4.zip`, in the same directory.

The extraction creates the `DPK_INSTALL_NEW/setup` folder and other files.

3. To set up the PeopleTools server for the new PeopleTools 8.62.<new> patch release:

- On Microsoft Windows, open a command prompt with Run as Administrator, go to `DPK_INSTALL_NEW/setup` and run this command:

```
psft-dpk-setup.bat --env_type midtier
```

- On Linux, AIX, or Solaris, open a terminal window as root, go to `DPK_INSTALL_NEW/setup`, and run this command:

```
./psft-dpk-setup.sh --env_type midtier
```

4. At the following prompt, enter the full path for a new directory (that is, different from that used for the existing 8.62 installation) for the PeopleSoft base folder (referred to in this documentation as `BASE_DIR_NEW`):

Note. When entering the path for the base folder, use forward slashes (/). For example, `C:/psft_new`. Enclose any names with special characters in double quotes. Do not use a name for the base folder that begins with a number. On Linux, AIX, or Solaris, do not end the base directory name with a forward slash (for example, do not enter `/ds1/psft/`).

Note. The script progress and validation messages are not included here. See the task Running the PeopleSoft PeopleTools DPK Setup Script for Mid-tier Deployment for more details.

The base directory is used to extract the PeopleSoft DPKs. It is also used to deploy the PeopleSoft components. This directory should be accessible, must have write permission and should have enough free space.

Enter the full path for the PeopleSoft Base Directory: **C:/psft_new**

Are you happy with your answer? [Y|n|q]:

The deployment sets up a new installation home directory, *PS_HOME_NEW* and installs Oracle WebLogic, Oracle Tuxedo, Oracle Client, and JDK under the specified PeopleSoft base folder, *BASE_DIR_NEW/pt*.

5. Specify the information for the database that you want to connect to.

- a. For the database platform, enter ORACLE, MSSQL (Microsoft SQL Server), or DB2ODBC (Db2 for z/OS).

Enter the PeopleSoft database platform [ORACLE]:

- b. Enter y (yes) if the database you are connecting to is a Unicode database, or n (no) for a non-Unicode database.

Is the PeopleSoft database unicode? [Y|n]:

- c. Enter the PeopleSoft database name.

If the database name includes non-alphanumeric characters such as periods, enclose the name in double quotes. For example, "HCM.92".

Enter the PeopleSoft database name [HCM92]:

- d. Enter the database service name.

Note. The service name is required for Oracle RDBMS.

For the service name, enter the full name, including the domain, if the database was installed with the domain. Use forward slashes if necessary. If the service name includes non-alphanumeric characters such as periods, enclose the name in double quotes. For example, "HCM.92.example.com". Do not enter an IP address.

Enter the PeopleSoft database service name [HCM92]:

- e. Enter the name of the host where the database is installed, and the port number:

Use forward slashes if necessary. If the host name includes non-alphanumeric characters such as periods, enclose the name in double quotes. For example, "host.example.com". Do not enter an IP address.

Enter the PeopleSoft database host name:

Enter the PeopleSoft database port [1521]: **1521**

6. Enter the PeopleSoft Connect ID at the following prompt:

The default is people.

Enter the PeopleSoft database Connect ID [people]:

7. Enter a password for the PeopleSoft Connect ID, and enter again on the next line, at the following prompt.

See E-DPK - PeopleTools 8.59 and later - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.

Enter the PeopleSoft database Connect ID [people] password.

Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft database Connect ID password:

8. Enter the PeopleSoft operator ID, such as PS or VP1.

Enter the PeopleSoft database Operator ID [PS]:

9. Enter the password twice for the PeopleSoft operator ID, .

Enter a new PeopleSoft database Operator ID [PS] password.
 Ensure that the password is between 1 and 32 characters in length.
 You may include these special characters !@#\$\$%^& :
 Re-Enter the PeopleSoft Operator ID password:

10. Enter the Application Server Domain Connection password, following the guidelines in the prompt.

The window does not display masking characters as you type. There is no default password.

Note. This is an optional password. If no password is entered, the connection between Web Server and Application Server will not be password protected.

[Optional] Enter a new Application Server Domain connection password.
 Ensure that the password is between 8 and 30 characters in length..
 You may include these special characters !@#\$\$%^& :
 Re-Enter the Application Server Domain connection password:

11. Enter the password for the PTWEBSEVER web profile user.

Enter a new PeopleSoft Web Profile user [PTWEBSEVER] password.
 Ensure that the password is between 8 and 32 characters in length.
 You may include these special characters !@#\$\$%^& :
 Re-Enter the PeopleSoft Web Profile user password:

12. Enter the Oracle WebLogic Server Admin password, following the guidelines in the prompt.

The default Oracle WebLogic server administrator is system. The window does not display masking characters as you type. There is no default password.

Enter a new WebLogic Server Admin user [system] password.
 Ensure that the password is between 8 and 30 characters in length
 with at least one lowercase letter and one uppercase letter. It must⇒
 also
 contain one number or one of these special characters !@#\$\$%^& :
 Re-Enter the WebLogic Server Admin user password:

13. Enter the Integration Gateway user ID and password at the following prompt.

The default user ID is administrator.

Enter the PeopleSoft Integration Gateway user [administrator]:
 Enter the PeopleSoft Integration Gateway user [administrator] password.
 Ensure that the password is between 8 and 30 characters in length.
 You may include these special characters !@#\$\$%^& :
 Re-Enter the PeopleSoft Integration Gateway user password:

14. Enter the Integration Gateway keystore password.

See the information on using the integrationGateway.properties file and configuring security in the Integration Broker product documentation.

See *PeopleTools: Integration Broker Administration*, "Configuring Security and General Properties."

Enter the PeopleSoft Integration Gateway Keystore password. Ensure
 the password is between 8 and 30 characters in length.
 You may include these special characters !@#\$\$%^& :
 Re-Enter the PeopleSoft Integration Gateway Keystore password:

15. If you want to change any of the answers to the previous questions, enter *n* (no) at the following prompt, or enter *y* (yes) to continue:

Are you happy with your answers? [y|n]:

16. Answer *n* (no) to the following prompt:

The bootstrap script is ready to deploy and configure the PeopleSoft environment using the default configuration defined in the Puppet Hiera YAML files. You can proceed by answering 'y' at the following prompt. And, if you want to customize the environment by overriding the default configuration, you can answer 'n'. If you answer 'n', you should follow the instructions in the PeopleSoft Installation Guide for creating the customization Hiera YAML file and running the Puppet 'apply' command directly to continue with the setup of the PeopleSoft environment.

Do you want to continue with the default initialization process? [y|n]: ⇒
n

You have decided not to continue with the default PeopleSoft environment setup process. Any customizations to the PeopleSoft environment should be done in the Hiera YAML file 'psft_customizations.yaml' and place it under [c:\psft\dpk\puppet\production\data] folder. After making the necessary customizations, run the following script to continue with the setup of PeopleSoft environment.

Start a cmd window as Administrator and run C:\psft\psft_puppet_⇒
apply.cmd

Exiting the PeopleSoft environment setup process.

The script stops.

17. Complete the instructions in the next section to prepare the psft_customizations.yaml file and complete the initialization.

See Also

"Deploying the PeopleSoft PeopleTools Deployment Packages," Running the DPK Setup Script for Mid-Tier Deployment.

Task A-3-6: Preparing psft_customizations.yaml and Completing the Deployment

Carry out these steps from the PeopleTools 8.62.<new> environment, installed in the previous section (for example, 8.62.11). Create or edit a psft_customizations.yaml file, and complete the initialization using the psft_puppet_apply script.

See "Completing the DPK Initialization with Customizations."

The documentation lists several types of customizations you can use for your environment. For this scenario, it is important that you include the following in the psft_customizations.yaml file:

- Location for an existing *PS_APP_HOME* (if you have one) to be associated with the *PS_HOME*.
- Existing installation locations for one or more of the components that you want to retain; that is, Oracle WebLogic, Oracle Tuxedo or Oracle Database client.

Here is a sample `psft_customizations.yaml` file that specifies the location for Oracle WebLogic and Oracle Tuxedo, so that these components will be retained and not redeployed. Since the Oracle Database client and JDK are not specified, they will be deployed fresh.

This customization also specifies an existing `PS_APP_HOME` location which will be associated to `PS_HOME` during the deployment process.

Note. Be sure to retain the spacing and indentation as shown in this sample.

```
---
weblogic_location: C:/MyCurrentWeblogicLocation/weblogic
weblogic:
  location: C:/MyCurrentWeblogicLocation/weblogic

tuxedo_location: C:/MyCurrentTuxedoLocation/weblogic/tuxedo
tuxedo:
  location: C:/MyCurrentTuxedoLocation/weblogic/tuxedo

ps_apphome_location: c:/MyCurrentAppHomeLocation/fscm_app_home
ps_app_home:
  db_type: "%{hiera('db_platform')}}"
  location: "%{hiera('ps_apphome_location')}}"
```

Complete the initialization using the `psft_puppet_apply` script as described in the documentation.

See "Completing the DPK Initialization with Customizations."

Task A-3-7: Reviewing the Results

After completing the steps above:

- One or more of the Oracle WebLogic, Oracle Tuxedo, and the Oracle Client installations from the initial environment have been retained, as specified by the `psft_customizations.yaml` file.
- The Application Server, Process Scheduler, and PIA domains have been configured.
- There is new `PS_HOME_NEW` installation in the same location as the initial `PS_HOME_INIT`.

After applying the PeopleTools patch, review the patch's `readme.txt` for any manual configuration instructions that may be needed for your particular environment.

Task A-3-8: Verifying the Patch Application

Your host should have initialized successfully and started participating in your PeopleSoft environment. Many of the steps that you should take to verify this or diagnose problems will be the same for Microsoft Windows, Linux, AIX, and Solaris hosts.

1. Verify that you can sign in to PeopleSoft.
Start a browser and sign on to the PeopleSoft Application with the URL `http://<hostname>:<pia_http_port>/ps/signon.html`.
2. If you do not see the log in page, verify that the environment can be reached from your machine using a utility such as ping.
3. If your host can be pinged, verify that the PIA domain is running in the following step.
4. Verify that Application Server, Process Scheduler and PIA domains have started:
 - a. On Linux, AIX, or Solaris, using an SSH client, log in as the `psadm2` user.

On Microsoft Windows, open a command prompt with Run as Administrator.

- b. Start the psadmin utility by typing `psadmin` at the command prompt.

When logged in as the psadm2 user the environment variables for PeopleSoft administration are set as part of the psadm2 user's log-in profile.

- c. Use the PSADMIN menus for the Application Server, Process Scheduler, and Web server (PIA) to verify the status of each of the installed components.
- d. If one or more of the components has not started, examine the log files for the required PeopleSoft component to establish what has caused the component to not start.

The log files are in the default locations for each of the PeopleSoft components.

5. To verify the `PS_APP_HOME` location, check the value of the `PS_APP_HOME` environment variable.

On Linux, AIX, or Solaris, the environment variable is found in the `.profile` file for the psadm2 user. Use the following command on Linux, AIX, or Solaris to check the environment variable:

```
export PS_APP_HOME=/home/fscm_app_home
```

On Microsoft Windows, open the System Properties dialog box and click Environment Variables.

6. You can review the `psprcs.cfg` file to verify that the SQR section includes a path for `PS_APP_HOME`.

```
[SQR]
;=====→
==
; Settings for SQR Software
;=====→
==
SQRBIN=%PS_HOME%/bin/sqr/ORA/bin
PSSQRFLAGS=-ZIF%PS_HOME%/sqr/pssqr%LANGUAGECD%.unx
Print Log=N
Enhanced HTML=N
PSSQR=%PS_APP_HOME%/sqr:%PS_HOME%/sqr
```

See *PeopleTools: Process Scheduler*, "Using the PSADMIN for the Process Scheduler Configuration File."

Appendix B

Performing a PeopleTools-Only Upgrade Using the PeopleSoft PeopleTools DPKs

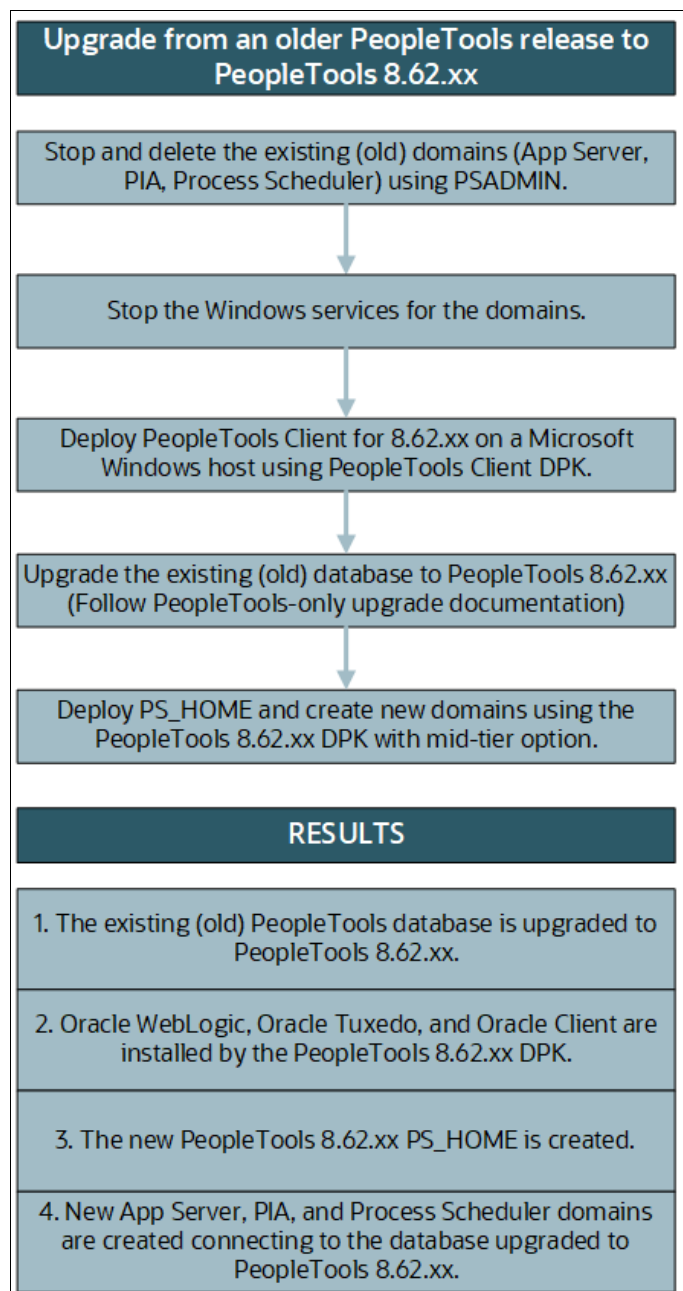
This appendix discusses:

- Understanding the PeopleTools-Only Upgrade Using the PeopleSoft PeopleTools DPKs
- Performing the PeopleTools-Only Upgrade Using DPKs
- Reviewing the Results of the PeopleTools-Only Upgrade Using DPKs

Understanding the PeopleTools-Only Upgrade Using the PeopleSoft PeopleTools DPKs

Use these steps to perform a PeopleTools-only upgrade to PeopleSoft PeopleTools 8.62.xx, using the PeopleSoft PeopleTools Deployment Packages (DPKs). The PeopleTools Client DPK is used first to deploy the PeopleTools Client, which includes the installation of Change Assistant. Subsequently, the PeopleTools DPKs are used to install mid-tier components and the *PS_HOME* for the new release.

This diagram summarizes the scenario for performing a PeopleTools-only upgrade to PeopleSoft PeopleTools 8.62.xx using DPKs:



PeopleTools-only upgrade using DPKs.

This scenario assumes that:

- You want to upgrade to PeopleTools 8.62.xx.
- Your operating system is AIX, Linux, Microsoft Windows or Solaris.

Task B-1: Performing the PeopleTools-Only Upgrade Using DPKs

To use the DPKs to perform a PeopleTools-only upgrade:

1. Stop and delete the domains for the existing (old) release.
Stop and delete the existing Application Server, PeopleSoft Pure Internet Architecture (PIA), and Process Scheduler domains for the old release using the PSADMIN utility.
See *PeopleTools System and Server Administration*, "Using PSADMIN Command-Line Interface."
2. On Microsoft Windows, stop the services for the domains, as follows:
 - a. Open the Services dialog box, for example by clicking Start and selecting Administrative Tools, Services.
 - b. Right-click the PsftAppServerDomain<Appserver_domain_name>Service and select Stop.
 - c. Right-click the PsftPrsDomain<ProcSched_domain_name>Service and select Stop.
 - d. Right-click the PsftPIADomain<PIA_domain_name>Service and select Stop.
 - e. Select File, Exit, to close the dialog box.
3. Deploy PeopleTools Client for 8.62.xx on Microsoft Windows host using the PeopleTools Client DPK, as follows.
 - a. Download the PeopleSoft PeopleTools 8.62 DPK from My Oracle Support.
Go to the PeopleTools Patches Home Page, My Oracle Support, Doc ID 2062712.2, and locate the link for the PeopleTools DPKs for the new release. The fourth zip file (for example, PEOPLETOOLS-WIN-8.62.xx_4of4.zip) includes the DPK for the PeopleTools Windows Client.
 - b. Install the PeopleTools 8.62.xx client using the fourth DPK zip file (PeopleTools Client DPK).
See "Deploying the PeopleTools Client DPK," Deploying the PeopleTools Client DPK.

Note. The PeopleTools-only Upgrade change package is delivered with the PeopleTools Windows Client DPK and the PeopleTools server DPKs.

 - c. During the deployment, select these options:
Choose "PeopleTools Full Upgrade."
Choose the option to install Change Assistant.
4. Upgrade the PeopleTools database running on the existing (old) release.
 - a. Configure the database setup in Change Assistant for the database that needs to be upgraded.
See *PeopleTools Change Assistant and Update Manager*, "Using Change Assistant to Upgrade PeopleTools."
See the upgrade document *Getting Started on Your PeopleTools Upgrade* for your new PeopleTools release on the PeopleTools 8.62 Upgrade Home Page.
See PeopleTools 8.62 Upgrade Home Page, My Oracle Support, Doc ID 3079786.1.
 - b. Follow the PeopleTools-only upgrade instructions for upgrading the database to the new PeopleTools release.
See the PeopleTools Upgrade Documentation for your new PeopleTools release on the PeopleTools 8.62 Upgrade Home Page.
5. Deploy *PS_HOME* and create new domains using the PeopleTools 8.62.xx DPK with mid-tier option.
Perform this step as referenced in the PeopleTools upgrade documentation.
For this upgrade process, it is required that you use the component software that is installed by the PeopleTools DPK for Oracle Tuxedo, Oracle WebLogic, and Oracle Database Client. Do not use existing installations of Oracle Tuxedo, Oracle WebLogic, and Oracle Database Client.

Note. If the server where you plan to deploy *PS_HOME* and mid-tier components is a Microsoft Windows OS, uninstall any existing Oracle Tuxedo installations on the server.

Note. Before deploying new domains against an existing database, review the default DPK settings, and identify anything that needs to be customized. Include parameters such as installation locations or the default local node name (*gateway_local_node* parameter) in your *psft_customizations.yaml* file.

To install the new release *PS_HOME* and create new domains connecting to the database upgraded to PeopleTools 8.62.xx, run the DPK setup script with these options:

- Specify a new PeopleSoft base folder (referred to as *BASE_DIR* in the documentation). This will set up a new *PS_HOME* for the new PeopleTools release as *<BASE_DIR>/pt/ps_home<patch_release>*.
- Use these script options to deploy *PS_HOME* and create new domains:
Linux, AIX, or Solaris: `./psft-dpk-setup.sh --env_type midtier`
Microsoft Windows: `psft-dpk-setup.bat --env_type midtier`

Task B-2: Reviewing the Results of the PeopleTools-Only Upgrade Using DPKs

After you complete the steps above:

- The PeopleTools database is upgraded to 8.62.xx.
- The Oracle WebLogic, Oracle Tuxedo, and Oracle Client from the PeopleTools 8.62.xx are installed.
- The *PS_HOME* from the old (existing) PeopleTools release remains as is.
- The new PeopleTools 8.62.xx *PS_HOME* is created.
- New Application Server, PIA, and Process Scheduler domains are created connecting to the database upgraded to PeopleTools 8.62.xx.

Appendix C

Installing PeopleSoft Change Assistant

This appendix discusses:

- Understanding PeopleSoft Change Assistant
- Using the Change Assistant Setup Script to Install, Upgrade, or Uninstall
- Configuring and Using PeopleSoft Change Assistant
- Validating Change Assistant Settings

Understanding PeopleSoft Change Assistant

Oracle's PeopleSoft Change Assistant is a standalone tool, provided with PeopleSoft PeopleTools, that enables you to assemble and organize the steps necessary to apply patches and fixes for maintenance updates as well as perform PeopleSoft upgrades. You use different modes of Change Assistant to carry out maintenance both for PeopleSoft applications using the PeopleSoft Update Manager, and those using the classic patching method.

To take advantage of all of the Change Assistant features, you must install on a Microsoft Windows-based operating system. On Linux, you can use a command-line version of Change Assistant, and run in Update Manager mode only.

When you run the setup script for the PeopleTools Client DPK, you can choose to install Change Assistant as part of the client installation. If you need to install, upgrade, or remove Change Assistant independently of the PeopleTools Client DPK deployment, use the instructions in this chapter.

See "Deploying the PeopleTools Client DPK."

For the current PeopleSoft PeopleTools release, the Change Assistant installation includes the following features:

- You can run the setup.bat script located in *PS_HOME\setup\PsCA* to install, update, or remove Change Assistant.

The *PS_HOME\setup\PsCA* directory includes setup.bat and a sample response file, resp_file.txt. The *PS_HOME\setup\PsCA* folder is available in both the PeopleTools Client DPK deployment and PeopleTools DPK server deployments.

Note. The *PS_HOME\setup\PsCA* directory includes scripts and files that are reserved for use by the software. You can ignore these files, including silentInstall.bat and CA-silentInstall-response-file.txt.

- You must run from *PS_HOME\setup\PsCA*.

Do not copy the PsCA folder alone to another location and try to install.

- You can specify the installation location on the command line, in response to the script prompts, or in a text file.

If you do not supply the installation location, the script prompts you for the necessary information. To upgrade or remove an existing installation, you run the script with no options, and the script prompts you for the necessary information.

- You can install multiple instances of Change Assistant from the current release on one physical machine.

Note. Multiple instances of Change Assistant can run in parallel on the same machine. However, when configuring Change Assistant, for example to set up update or upgrade jobs, you cannot run multiple instances against the same target database. That is, you cannot specify the same target database on different Change Assistant instances.

See *PeopleTools: Change Assistant and Update Manager*, "Running Multiple Instances of Change Assistant."

- You must remove installations of Change Assistant from PeopleSoft PeopleTools 8.55 or earlier before installing from the current release. Change Assistant from PeopleSoft PeopleTools 8.62 cannot coexist with that from earlier releases.
- You must install each Change Assistant instance in a separate installation location.
- You can remove or upgrade each Change Assistant instance separately.
- When you remove an installation instance, you have the option to save the existing configuration information in a group of files gathered in a zip archive. You can configure Change Assistant at a later time by importing the zip file.

For more information on using Change Assistant for updates and for software upgrades, see the PeopleSoft product documentation.

See Also

PeopleTools: Change Assistant and Update Manager

PeopleTools: Application Designer Lifecycle Management Guide

Task C-1: Using the Change Assistant Setup Script to Install, Upgrade, or Uninstall

This section discusses:

- Running the Change Assistant Setup Script with Command-Line Parameters
- Running the Change Assistant Setup Script with a Response File
- Running the Change Assistant Setup Script Interactively to Install
- Running the Change Assistant Setup Script Interactively to Upgrade
- Running the Change Assistant Setup Script Interactively to Uninstall
- Using Change Assistant on Linux

Task C-1-1: Running the Change Assistant Setup Script with Command-Line Parameters

You can use the following command-line parameters with the Change Assistant setup script.

Command-line Parameter	Description
<code>-p <installation_path></code>	Supply the full path for the Change Assistant installation location. If the location includes spaces, surround it with double quotes, such as "C:\PS\Change Assistant".
<code>-t <action_type></code>	Use one of the following value for <action_type>. - NEW or new Create a new Change Assistant instance. - UPGRADE or upgrade Upgrade an existing instance that was installed from the current PeopleSoft PeopleTools release. - UNINSTALL or uninstall Remove an existing Change Assistant instance.
<code>-bkp <backup or no backup></code>	Use one of these values: - BACKUP or backup Create a zip file containing files with configuration information. The backup file, changeassistantcfbak.zip, is saved in the installation location. - NOBACKUP or nobackup Do not create a backup file with the configuration information.
<code>-lp <log_file_location></code>	Specify the full path where you want the log file to be saved.

To use the Change Assistant setup script with command-line options:

1. Open a command prompt and change directory to `PS_HOME\setup\PsCA`.
2. Enter the following command to specify the installation location for a new installation.
For <installation_path>, supply the full path to the location where you want to install Change Assistant.
`setup.bat -p <installation_path> -t new`

For example:
`setup.bat -p "C:\PS\Change Assistant" -t new`
3. If you want to specify the installation location and a location for the log file, enter the following command.
For <installation_path>, supply the full path to the location where you want to install Change Assistant. For <log_file_location>, supply the full path to the location for the installation log file.
`setup.bat -p <installation_path> -lp <log_file_location> -t new`

4. If you want to upgrade an existing installation, enter the following command:

```
setup.bat -t upgrade
```

5. If you want to remove an existing installation, and save a backup, enter the following command:

```
setup.bat -t uninstall -bkp backup
```

Task C-1-2: Running the Change Assistant Setup Script with a Response File

To use the Change Assistant setup script with the installation location in a text file:

1. Open the sample response file `PS_HOME\setup\PsCA\resp_file.txt` for editing, for example in Notepad.
2. Modify the parameter `INSTALL_PATH="C:\PS\Change Assistant"` to specify the desired installation path.

If the installation location includes spaces, enclose it in double quotes. Save the file.

3. Open a command prompt and change directory to `PS_HOME\setup\PsCA`.
4. Run this command:

```
setup.bat -f resp_file.txt
```

Task C-1-3: Running the Change Assistant Setup Script Interactively to Install

To use the Change Assistant setup script interactively, run without supplying parameters.

1. Open a command prompt and change directory to `PS_HOME\setup\PsCA`.
2. Run the script with no parameters.

```
setup.bat
```

The script checks for a response file and old installations, then prompts you for the necessary information.

3. Enter 1 for New Installation:

```
-----
PeopleSoft Change Assistant
-----
1) New Installation
2) Maintain or Update
q) Quit
Command to execute (1-2, q):1
```

4. Enter an installation location, or accept the default, `C:\PS\Change Assistant`.

```
PeopleSoft will install Change Assistant to the following directory .
Destination Folder [C:\PS\Change Assistant] :
```

5. Wait until the script completes.

```
PeopleSoft Change Assistant Successfully Installed in C:\PS\Change=>
Assistant
```


Task C-1-4: Running the Change Assistant Setup Script Interactively to Upgrade

Run the setup script with no parameters to upgrade an existing Change Assistant installation. You can only upgrade an existing Change Assistant instance that was installed from the same, current PeopleTools release. For example, upgrade Change Assistant based on PeopleTools 8.62.09 to Change Assistant based on PeopleTools 8.62.12.

1. Open a command prompt, and change directory to *PS_HOME\setup\PsCA*.

2. Run the script with no parameters:

```
setup.bat
```

3. Enter 2 for Maintain or Update.

```
-----
PeopleSoft Change Assistant
-----
1) New Installation
2) Maintain or Update
q) Quit
Command to execute (1-2, q):2
```

4. Select the instance of Change Assistant to update.

```
Please select the instance of Change Assistant :
1) Change Assistant 1 8.62.03 C:\Program Files\Change Assistant 2
2) Change Assistant 2 8.62.04 C:\Program Files\PeopleSoft\Change=>
Assistant
3) Change Assistant 3 8.62.09 C:\PS\Change Assistant

q)Quit
Command to execute (1-3, q): 3
Selected
Change Assistant 3 8.62.09 C:\PS\Change Assistant
```

5. Enter 1 to update to the current PeopleTools patch release.

```
Please select the activity :
1) Upgrade Selected Instance
2) Uninstall Selected Instance
q)Quit
Command to execute (1-3, q):1
Selected
Change Assistant 3 8.62.09 C:\PS\Change Assistant
```

6. Enter 1 to upgrade without saving a configuration file.

Alternatively, if you want to retain a configuration file, enter 2 to create a zip file containing files with configuration information. The backup file, *changeassistantcfgbak.zip*, is saved in the installation location.

```
Please select the activity :
1)Without Retaining existing configuration
2)Retaining existing configuration
q)Quit
Command to execute (1-3, q):1
```

Task C-1-5: Running the Change Assistant Setup Script Interactively to Uninstall

Run the setup script with no parameters to remove an existing Change Assistant installation.

1. Open a command prompt, and change directory to *PS_HOME\setup\PsCA*.
2. Run the script with no parameters:
setup.bat

3. Enter 2 for Maintain or Update.

```
-----
PeopleSoft Change Assistant
-----
1) New Installation
2) Maintain or Update
q) Quit
Command to execute (1-2, q):2
```

4. Select the instance of Change Assistant to remove.

```
Please select the instance of Change Assistant :
1) Change Assistant 1 8.62.03 C:\Program Files\Change Assistant 2
2) Change Assistant 2 8.62.04 C:\Program Files\PeopleSoft\Change⇒
Assistant
3) Change Assistant 3 8.62.12 C:\PS\Change Assistant

q)Quit
Command to execute (1-3, q): 2
Selected
Change Assistant 3 8.62.04 C:\PS\Change Assistant
```

5. Enter 2 to remove the selected instance.

```
Please select the activity :
1) Upgrade Selected Instance
2) Uninstall Selected Instance
q)Quit
Command to execute (1-3, q):2
Selected
Change Assistant 3 8.62.04 C:\PS\Change Assistant
```

6. Enter 1 to uninstall without saving a configuration file.

Alternatively, if you want to retain a configuration file, enter 2 to create a zip file containing files with configuration information. The backup file, changeassistantcfgbak.zip, is saved in the installation location.

```
Please select the activity :
1)Without Retaining existing configuration
2)Retaining existing configuration
q)Quit
Command to execute (1-3, q):1
```

Task C-1-6: Using Change Assistant on Linux

You can use a command-line version of Change Assistant on Linux for Update Manager mode only. Change Assistant on Linux can not be used for target databases that are below PeopleTools 8.55.16.

To install Change Assistant on Linux:

1. In a terminal window, change directory to *PS_HOME/setup/PsCA*.
2. Verify that you are running as a user with permission for the files in PsCA.
For example, if your installation includes the default Linux users set up by the DPK, run as the *psadm1* user.
See *Using the PeopleSoft Installation*.
3. Run the setup script and specify the installation directory.

```
$ ./setup.sh -p /ds1/changeassistant -t new
```
4. Go to the installation directory, and run Change Assistant in Update Manager mode using the command-line options in the Change Assistant product documentation.
See *PeopleTools: Change Assistant and Update Manager*, "Running Change Assistant Job from the Command Line."

Task C-2: Configuring and Using PeopleSoft Change Assistant

This section discusses:

- Verifying the Path Variable
- Specifying Options
- Scanning the Workstation
- Exporting Jobs to XML, HTML, or Microsoft Excel Format

Task C-2-1: Verifying the Path Variable

After installing PeopleSoft Change Assistant, verify that the following values are the first entries in the PATH environment variable:

- *PS_HOME\bin\client\winx86*
- *PS_HOME\jre\bin*

See *PeopleTools: Change Assistant and Update Manager*, "Setting Up Change Assistant."

Task C-2-2: Specifying Options

You can configure PeopleSoft Change Assistant modes to carry out updates, upgrades, work with upgrade templates, or access PeopleSoft Update Manager. The mode selection determines which menu options you see when you use PeopleSoft Change Assistant.

See Also

PeopleTools: Change Assistant and Update Manager

PeopleSoft Update Manager (PUM) Home Page, My Oracle Support, Doc ID 1641843.2

Task C-2-3: Scanning the Workstation

The first time you use PeopleSoft Change Assistant, it automatically scans your workstation for applications that it will use in order to automate the steps. For example, it automatically finds the SQL Query tool and uses it to run SQL commands or scripts.

If you add a new application or update an existing application, PeopleSoft Change Assistant must perform a scan of the system in order to discover the changes. To perform this scan, select Tools, Scan Configuration.

Task C-2-4: Exporting Jobs to XML, HTML, or Microsoft Excel Format

Change Assistant allows users to export jobs to XML, HTML, or Microsoft Excel file formats. Do this by selecting File, Export Job in Change Assistant. Then, enter the desired exported filename and select the desired file type format.

Task C-3: Validating Change Assistant Settings

After you have set up and configured PeopleSoft Change Assistant and the Environment Management components, you should validate your PeopleSoft Change Assistant and environment settings.

PeopleSoft Change Assistant validates settings by:

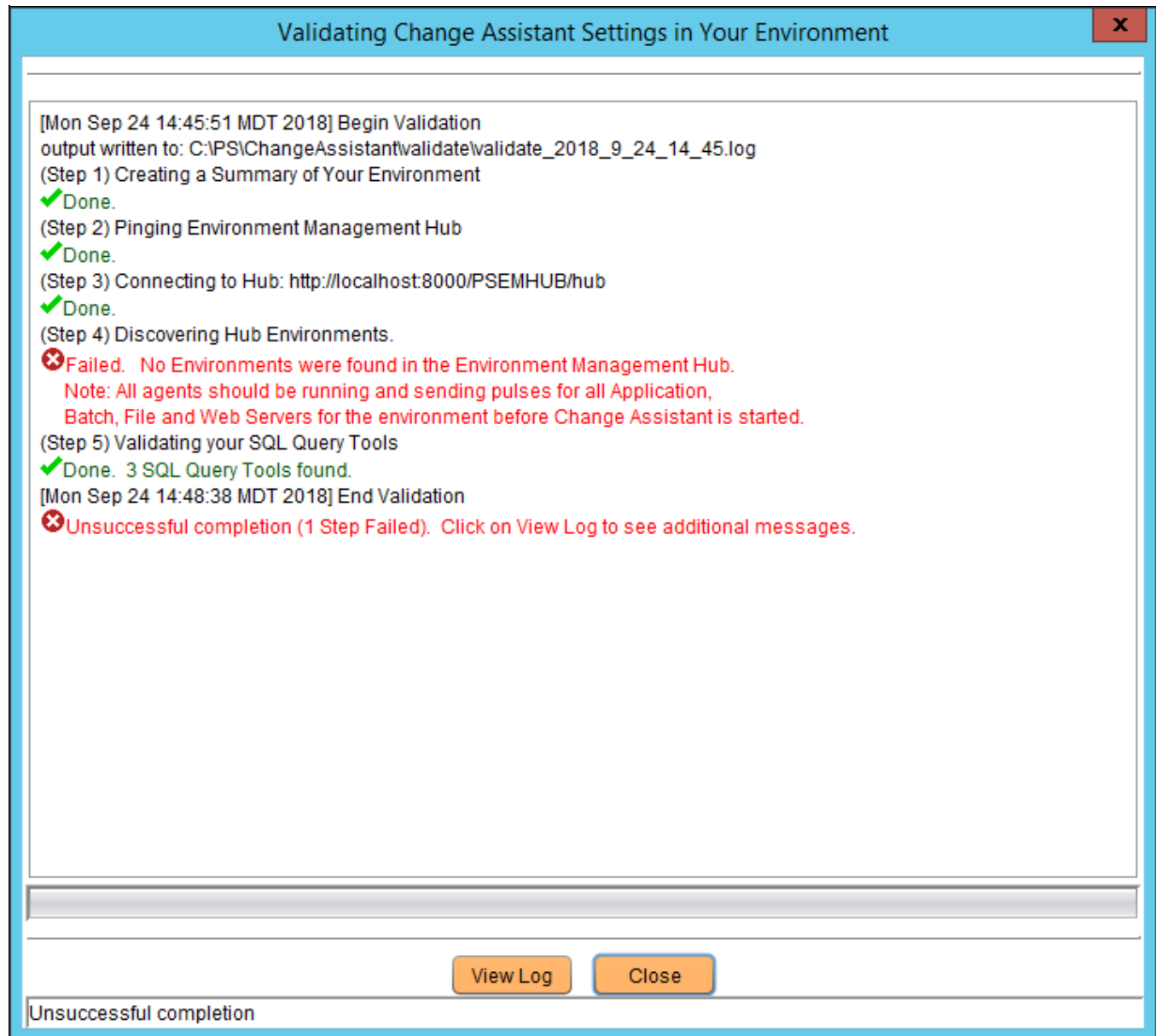
- Locating valid SQL query tools required to run SQL scripts.
- Testing the Environment Management hub and ensuring that PeopleSoft Change Assistant can communicate with it.
- Testing My Oracle Support and ensuring that PeopleSoft Change Assistant can communicate with it.

PeopleSoft Change Assistant sends a ping to My Oracle Support and then tests the connection. In order for the validation to succeed, the machine where you have PeopleSoft Change Assistant installed must have the ping feature enabled.

You can also print a summary of your environment, which can facilitate the diagnosis of problems by Oracle Software Support.

To validate your environment, select Tools, Options, Validate. Click Start Validation.

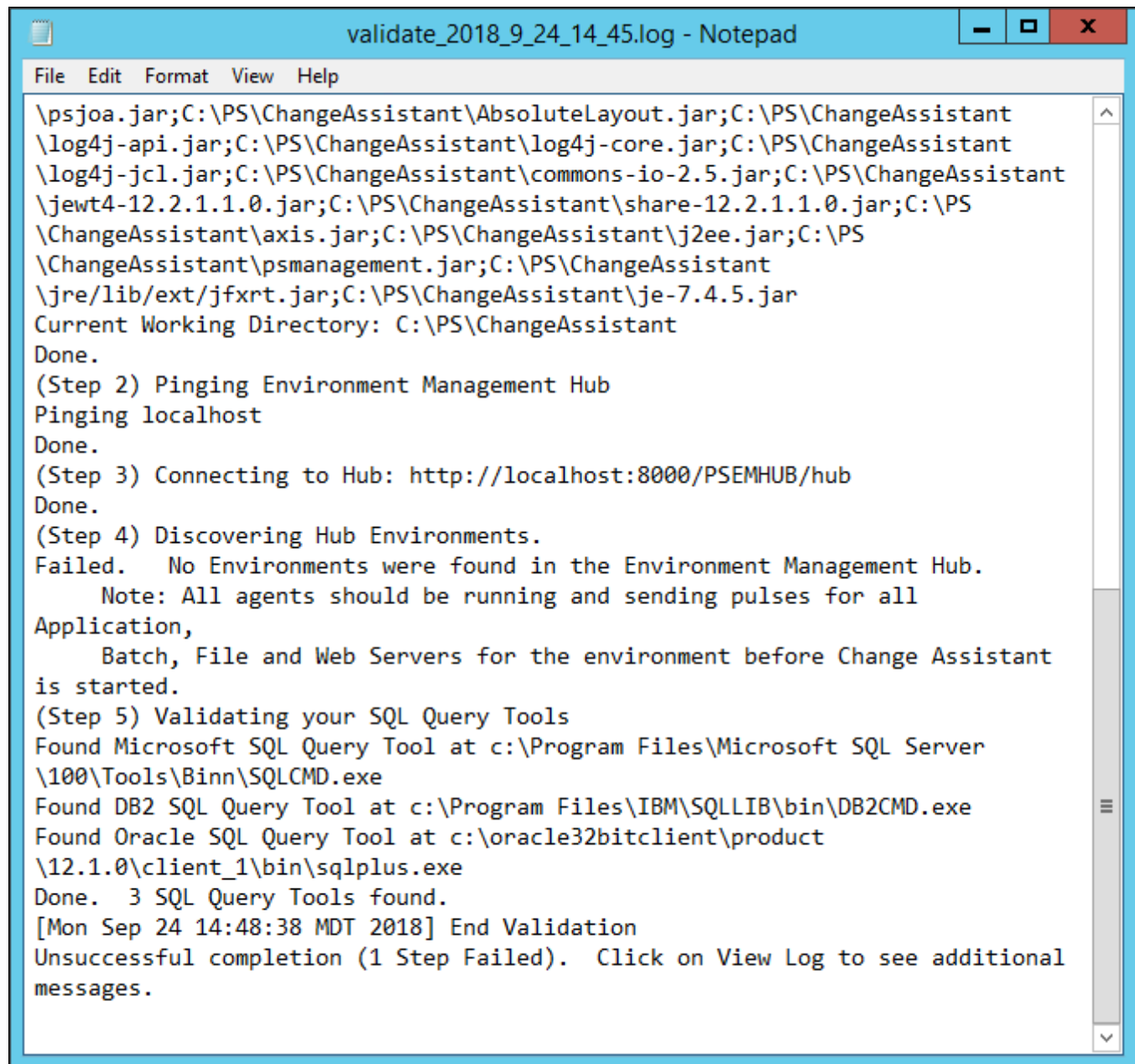
If any of the steps were unable to complete successfully, open the log file to determine the cause. This example shows a summary with both successful messages ("Done") and unsuccessful ("Failed" or "Unsuccessful completion"):



Validating Change Assistant Settings in Your Environment

Note. If you use proxy servers, the system will ping those and prompt for proxy server user ID and password. In this case, the validation step numbers would be different from the example.

To review the log file, click the View Log button at the bottom of the screen. This example shows the first several lines of a log file:



```
validate_2018_9_24_14_45.log - Notepad
File Edit Format View Help
\psjoa.jar;C:\PS\ChangeAssistant\AbsoluteLayout.jar;C:\PS\ChangeAssistant
\log4j-api.jar;C:\PS\ChangeAssistant\log4j-core.jar;C:\PS\ChangeAssistant
\log4j-jcl.jar;C:\PS\ChangeAssistant\commons-io-2.5.jar;C:\PS\ChangeAssistant
\jwt4-12.2.1.1.0.jar;C:\PS\ChangeAssistant\share-12.2.1.1.0.jar;C:\PS
\ChangeAssistant\axis.jar;C:\PS\ChangeAssistant\j2ee.jar;C:\PS
\ChangeAssistant\psmanagement.jar;C:\PS\ChangeAssistant
\jre\lib\ext\jfxrt.jar;C:\PS\ChangeAssistant\je-7.4.5.jar
Current Working Directory: C:\PS\ChangeAssistant
Done.
(Step 2) Pinging Environment Management Hub
Pinging localhost
Done.
(Step 3) Connecting to Hub: http://localhost:8000/PSEMHUB/hub
Done.
(Step 4) Discovering Hub Environments.
Failed. No Environments were found in the Environment Management Hub.
Note: All agents should be running and sending pulses for all
Application,
Batch, File and Web Servers for the environment before Change Assistant
is started.
(Step 5) Validating your SQL Query Tools
Found Microsoft SQL Query Tool at c:\Program Files\Microsoft SQL Server
\100\Tools\Binn\SQLCMD.exe
Found DB2 SQL Query Tool at c:\Program Files\IBM\SQLLIB\bin\DB2CMD.exe
Found Oracle SQL Query Tool at c:\oracle32bitclient\product
\12.1.0\client_1\bin\sqlplus.exe
Done. 3 SQL Query Tools found.
[Mon Sep 24 14:48:38 MDT 2018] End Validation
Unsuccessful completion (1 Step Failed). Click on View Log to see additional
messages.
```

Change Assistant Validation log

Appendix D

Encrypting Passwords for Customization Files

This appendix discusses:

- Encrypting Passwords for Customization Files on Linux, AIX, or Solaris
- Encrypting Passwords for Customization Files on Microsoft Windows

Task D-1: Encrypting Passwords for Customization Files on Linux, AIX, or Solaris

This section describes how to produce an encrypted version of a clear text password and include it in the `psft_customizations.yaml` file for a customized deployment for non-default users and groups on Linux, AIX, or Solaris. This section applies to installations with the Native OS for Linux, AIX, or Solaris DPKs.

Note. You can skip this section if you are creating `psft_customizations.yaml` files for silent mode installations. Use clear text passwords with silent mode installations.

In general, when you run the DPK setup script, you supply several user IDs and passwords, such as the Connect ID password and operator ID password. The script encrypts the passwords that you supply and includes them in the generated YAML files in `BASE_DIR/dpk/puppet/production/data`. When you create a `psft_customizations.yaml` file, you can copy these encrypted passwords from the generated YAML files and include them in the `psft_customizations.yaml` file. However, the passwords for the Linux, AIX, or Solaris users are not prompted for, and therefore the encrypted passwords are not available in any of the generated YAML files.

Note that the successful use of the encrypted password depends on the presence of the public and private keys in the `BASE_DIR/dpk/puppet` directory referred to in the `eyaml encrypt` command. You cannot save an encrypted password and use it with a deployment with a different `BASE_DIR`.

This procedure assumes that you have carried out the first portion of a customized deployment, and stopped at the question "Do you want to continue with the default initialization?"

See "Completing the DPK Initialization with Customizations," Preparing the Customization Files for Linux, AIX, or Solaris Users and Groups.

To encrypt a password:

1. Run this command to source the `pspuppet.sh` script, which sets necessary environment variables (the command begins with a period followed by a space):

```
. BASE_DIR/psft_puppet_agent/pspuppet.sh
```

See "Completing the DPK Initialization with Customizations," Understanding the PeopleSoft Environment Customizations.

2. Open the `BASE_DIR/dpk/puppet/hiera.yaml` file and note the full path to the public and private keys:

```
:pkcs7_private_key: BASE_DIR/dpk/puppet/secure/keys/private_⇒
key.pkcs7.pem
:pkcs7_public_key: BASE_DIR/dpk/puppet/secure/keys/public_key.pkcs7.pem
```

3. Run the following command in a terminal window, supplying the paths from the previous step:

```
<BASE_DIR>/psft_puppet_agent/bin/eyaml encrypt -s "<clear_password>" --⇒
pkcs7-private-key=<private_key_full_path>/<key_name> --pkcs7-public-⇒
key=<public_key_full_path>/<key_name> --output=string
```

Note. The double-quotes around the password are required. Be sure to use the correct punctuation for the command. Note that the command uses different punctuation for the keys than the hiera.yaml file.

Note. If your password includes an exclamation mark (!) you must enclose the entire password in double quotes surrounded by single quotes. For example, '"passw!ord" '.

Example for Linux:

```
BASE_DIR/psft_puppet_agent/bin/eyaml encrypt -s "password" --pkcs7-⇒
private-key=/cs1/psft/dpk/puppet/secure/keys/private_key.pkcs7.pem --⇒
pkcs7-public-key=/cs1/psft/dpk/puppet/secure/keys/public_key.pkcs7.pem⇒
--output=string
```

Example for AIX or Solaris:

```
BASE_DIR/psft_puppet_agent/bin/eyaml encrypt -s "password" --pkcs7-⇒
private-key=/cs1/psft/dpk/puppet/secure/keys/private_key.pkcs7.pem --⇒
pkcs7-public-key=/cs1/psft/dpk/puppet/secure/keys/public_key.pkcs7.pem⇒
--output=string
```

4. Copy the encrypted password from the output in the terminal window.

The encrypted text will be a long single line of letters and numbers. Be sure to copy the text in one unbroken line, with no spaces or line feeds. Here is a truncated representation of an encrypted password:

```
ENC[PKCS7,MIIBeQYJKoZIhvc.....]
```

5. Paste the encrypted password in the psft_customizations.yaml file, replacing the text password.

Again, the encrypted text must be a single line. Also, be sure to retain the indentation in the psft_customizations.yaml file. This is a sample psft_customizations.yaml for a new single user and existing single group:

```
---
psft_runtime_user_name: newusr3

users:
  psft_user:
    name: newusr3
    gid: 35000
    home_dir: /dpk_base/home/userhome
    password: ENC[PKCS7,MIIBeQYJKoZIhvc.....]
    remove: false
```

6. Use the psft_customizations.yaml file for deployment with the psft_puppet_apply script.

The DPK deployment will automatically decrypt the password from the `psft_customizations.yaml` and use it for deployment.

Task D-2: Encrypting Passwords for Customization Files on Microsoft Windows

This section describes how to produce an encrypted version of a clear text password and include it in the `psft_customizations.yaml` file for a customized deployment on Microsoft Windows. This section applies to installations with the Native OS for Windows DPKs.

Note. You can skip this section if you are creating `psft_customizations.yaml` files for silent mode installations. Use clear text passwords with silent mode installations.

In general, when you run the DPK setup script, you supply several user IDs and passwords, such as the Connect ID password and operator ID password. The script encrypts the passwords that you supply and includes them in the generated YAML files in `BASE_DIR/dpk/puppet/production/data`. When you create a `psft_customizations.yaml` file, you can copy these encrypted passwords from the generated YAML files and include them in the `psft_customizations.yaml` file. If you need to encrypt a different password, you can use this procedure.

Note that the successful use of the encrypted password depends on the presence of the public and private keys in the `BASE_DIR/dpk/puppet` directory referred to in the `eyaml encrypt` command. You cannot save an encrypted password and use it with a deployment with a different `BASE_DIR`.

This procedure assumes that you have carried out the first portion of a customized deployment, and stopped at the question "Do you want to continue with the default initialization?"

See "Completing the DPK Initialization with Customizations."

To encrypt a password:

1. Open the `BASE_DIR/dpk/puppet/hiera.yaml` file and note the full path to the public and private keys:

```
:pkcs7_private_key: BASE_DIR/dpk/puppet/secure/keys/private_
key.pkcs7.pem
:pkcs7_public_key:  BASE_DIR/dpk/puppet/secure/keys/public_key.pkcs7.pem
```

2. Open a command prompt and run the following command, supplying the full paths from the previous step.

Enter the command on a single line.

```
<BASE_DIR>\psft_puppet_agent\bin\eyaml encrypt -s "<clear_password>" -->
pkcs7-private-key=<private_key_full_path>\<key_name> --pkcs7-public->
key=<public_key_full_path>\<key_name> --output=string
```

Note. The double-quotes around the password are required. Be sure to use the correct punctuation for the command. Note that the command uses different punctuation for the keys than the `hiera.yaml` file.

Note. If your password includes an exclamation mark (!) you must enclose the entire password in double quotes surrounded by single quotes. For example, `'"passw!ord"'`.

For example:

```
C:\psft\psft_puppet_agent\bin\eyaml encrypt -s "password" --pkcs7->
private-key=C:\psft\dpk\puppet\secure\keys\private_key.pkcs7.pem -->
```

```
pkcs7-public-key=C:\psft\dpk\puppet\secure\keys\public_key.pkcs7.pem -->
output=string
```

3. Copy the encrypted password from the output in the command prompt window.

The encrypted text will be a long single line of letters and numbers. Be sure to copy the text in one unbroken line, with no spaces or line feeds. Here is a truncated representation of an encrypted password:

```
ENC[PKCS7,MIIBeQYJKoZIhvc.....]
```

4. Paste the encrypted password in the `psft_customizations.yaml` file, replacing the text password.

Again, the encrypted text must be a single line. Also, be sure to retain the indentation in the `psft_customizations.yaml` file. This is a sample `psft_customizations.yaml` with an entry for the connect ID:

```
---
db_connect_id:      people
db_connect_pwd:     ENC[PKCS7,MIIBeQYJKoZIhvc.....]
```

5. Use the `psft_customizations.yaml` file for deployment with the `psft_puppet_apply` script.

The DPK deployment will automatically decrypt the password from the `psft_customizations.yaml` and use it for deployment.

Appendix E

Deploying PeopleSoft DPKs in Containers

This appendix discusses:

- Understanding Container Support for PeopleSoft DPKs
- Prerequisites for Container Deployment
- Configuring the Linux VM for Container Deployment
- Building and Running the Container for Mid-tier Deployment
- Building and Running the Container for Search Components
- Working With PeopleSoft Containers

Understanding Container Support for PeopleSoft DPKs

The current PeopleSoft PeopleTools release includes support for deploying PeopleSoft environments in containers. Containers have the advantage of isolating your environment, so that the VM or computer running it does not have to be changed. In addition, containers provide a standard environment, which aids in troubleshooting and support.

The container setup process makes use of the PeopleSoft DPKs, setup script, and silent installation files, along with a new API and container-specific scripts, to enable you to build Podman containers. The following deployments are currently supported:

- Mid-tier — Deploy an application server, Process Scheduler, and web server (PIA) that connects to an existing PeopleSoft application database.

See *PeopleSoft PeopleTools 8.62 Deployment Packages Installation*, "Deploying PeopleSoft DPKs in Containers."

- Deploy an Application server, Process Scheduler, or web server (PIA).

Deploy each component in a separate container.

See *PeopleSoft PeopleTools 8.62 Deployment Packages Installation*, "Deploying PeopleSoft DPKs in Containers."

- Search components — Deploy OpenSearch, OpenSearch Dashboards, and Logstash.

After building and running search containers, you have the option to run Automated Configuration Management (ACM) plug-ins to integrate OpenSearch with the PeopleSoft environment.

See *PeopleSoft PeopleTools 8.62 Deployment Packages Installation*, "Deploying PeopleSoft DPKs in Containers."

- Mid-tier and Search components — Deploy container images on Oracle Kubernetes Engine.

See *PeopleSoft PeopleTools 8.62 Deployment Packages Installation*, "Deploying PeopleSoft Containers on Oracle Kubernetes Engine."

- Full-tier (PUM) — Deploy the PeopleSoft Update Images to create a PeopleSoft Update Manager (PUM) source for applying updates and fixes.

The full-tier installation sets up a PeopleSoft application database on Oracle Database Server, application server, Process Scheduler, and web server (PIA).

See *PeopleSoft Deployment Packages for Update Images Installation (PeopleSoft PeopleTools 8.62)*, "Deploying PeopleSoft DPKs in Containers."

- Full-tier (FRESH) — Deploy a full-tier PeopleSoft environment with the FRESH installation type.

See *PeopleSoft 9.2 Application Installation for Oracle (PeopleSoft PeopleTools 8.62)*, "Deploying PeopleSoft DPKs in Containers."

If you want to acquire updated components or CPUs for PeopleSoft environments deployed in containers, the recommended approach is to use the latest PeopleSoft DPKs to create new containers. This will create environments with the latest available CPUs for Oracle WebLogic, Oracle Tuxedo, Java, and Oracle Database Client. You can then create container images from the new containers. Be aware that the use of PT-INFRA DPK to apply CPUs on an existing container environment is not supported.

Prerequisites for Container Deployment

Before beginning the deployment, you must fulfill the following requirements:

- Access to My Oracle Support to download the DPKs
- Access to Oracle Container Registry

The Oracle Linux 8 image for the installation will be downloaded from this location during the container build process.

See Oracle Container Registry, <https://container-registry.oracle.com>.

- An Oracle Linux VM

The Oracle Linux VM is the host for the container, and must be configured to use Podman as described in this documentation.

- Podman and podman-compose

Each user that builds and runs containers and the prebuilt container images must be able to run Podman and podman-compose. The task Configuring the Linux VM for Container Deployment includes steps to verify that Podman and podman-compose are available.

- A non-root user with sudo root permission

To configure the Linux VM, build and run containers, the user must be able to use the sudo command.

- The PeopleSoft container deployment supports these versions:

- Oracle Linux Server release 8.7
- Red Hat Enterprise Linux release 8.7 (Ootpa)
- podman version 4.9
- podman-compose version 1.0.6 (optional)

Task E-1: Configuring the Linux VM for Container Deployment

This section discusses:

- Setting Proxy Environment Variables
- Installing Podman
- Installing Podman-compose
- Setting Up Podman in Rootless Mode
- Setting Up the Storage Configuration File
- Setting Up the Container Configuration File
- Running Additional Setup Commands
- Verifying Podman
- Specifying sysctl Settings
- Setting Environment Variables
- Verifying Access to Oracle Container Registry

Task E-1-1: Setting Proxy Environment Variables

Ensure that the following proxy-related environment variables are configured with the correct values for your environment, such as server name and port for the proxy server, if necessary.

```
export http_proxy=<proxy value>
export https_proxy=<proxy value>
export HTTP_PROXY=<proxy value>
export HTTPS_PROXY=<proxy value>
export no_proxy=<proxy value>
```

Task E-1-2: Installing Podman

Run the following command to install Podman on the Linux VM.

Use these commands to build a container image and to run containers:

```
sudo dnf module info container-tools
sudo dnf -y module install container-tools:ol8 && sudo dnf clean all
```

Use these commands to run a container:

```
sudo dnf info podman
sudo dnf -y install podman && sudo dnf clean all
```

Use this command to create a nodocker file. This is used by the Podman build.

```
sudo touch "/etc/containers/nodocker"
```

Use these commands to verify the Podman version:

```
podman info
podman -v
```

Task E-1-3: Installing Podman-compose

Similarly to Podman, podman-compose supports the same command line options as compose. It also supports reading compose configuration files that are delivered with the PeopleSoft container files, such as compose.yaml, compose-pum.yaml, and compose-osk.yaml. This means that these configuration files can be interchangeable between compose and podman-compose, typically without any modification.

To install podman-compose, refer to the Oracle tutorial.

See Use Compose Files with Podman on Oracle Linux, Install Podman Compose, <https://docs.oracle.com/en/learn/ol-podman-compose/index.html#install-podman-compose>.

Task E-1-4: Setting Up Podman in Rootless Mode

Run the following commands to authorize users and group IDs.

```
echo "${USER}:231072:65536" | sudo tee -a "/etc/subuid"

echo "${USER}:231072:65536" | sudo tee -a "/etc/subgid"

/usr/bin/systemctl --user daemon-reload

podman system migrate
```

Task E-1-5: Setting Up the Storage Configuration File

The storage requirement for PeopleTools mid-tier containers is 15 GB or greater. The storage requirement for PeopleSoft Update Image container is 76 GB or greater.

Edit the file at /etc/containers/storage.conf to configure the system-wide storage. The default location \$HOME/.local/share/containers/storage defined in /etc/containers/storage.conf may not have sufficient storage space for containers.

The examples in this section use /scratch/podman-rs/storage as the Podman storage path and /scratch/podman-rs/storage/tmp as the default location for storing temporary container image content. The file /etc/containers/containers.conf includes instructions for changing the default storage location for Podman by modifying the TMPDIR environment variable.

Use these steps to set up the storage configuration file, storage.conf.

Note. Enter each command on a single line. Do not include the line-continuation arrow (⇒).

1. Create the storage directory.

```
mkdir -p "/scratch/podman-rs/storage"
```

2. Create a directory for temporary container image content.

```
mkdir -p "/scratch/podman-rs/storage/tmp"
```

3. Change the storage location to /scratch/podman-rs/storage..

```
sudo sed -i 's|# rootless_storage_path = "$HOME/.local/share/containers⇒
/storage"|rootless_storage_path = "/scratch/podman-rs/storage"|g' "/etc⇒
/containers/storage.conf"
```

4. Verify that the storage path for rootless users points to /scratch/podman-rs/storage.

```
podman info | grep graphRoot
```

Task E-1-6: Setting Up the Container Configuration File

Use these steps to set up the container configuration file.

Note. Enter each command on a single line. Do not include the line-continuation arrow (⇒).

1. Copy the default container configuration file to a new file for your configuration.

```
sudo cp "/usr/share/containers/containers.conf" "/etc/containers"
```

2. Change the default networking for Podman to netavark.

```
sudo sed -i 's|network_backend = "cni"|network_backend = "netavark"|g'⇒  
"/etc/containers/containers.conf"
```

3. Set the timeout.

```
sudo sed -i 's|#stop_timeout = 10|stop_timeout = 90|g' "/etc/containers⇒  
/containers.conf"
```

4. Set the temporary directory.

```
sudo sed -i 's|# image_copy_tmp_dir="/var/tmp"|image_copy_tmp_dir⇒  
"storage"|g' "/etc/containers/containers.conf"
```

Task E-1-7: Running Additional Setup Commands

Run these other setup commands:

Enable linger to prevent systemd from shutting down your containers when you log out.

```
sudo loginctl enable-linger "$(whoami)"
```

Task E-1-8: Verifying Podman

To confirm that Podman works, enter one of these commands:

```
podman run --rm hello-world
```

Or:

```
podman run --rm quay.io/podman/hello
```

See Also

Podman Documentation, <https://docs.podman.io/en/latest/>

Podman Installation Instructions, <https://podman.io/docs/installation>

Oracle Podman User's Guide, <https://docs.oracle.com/en/operating-systems/oracle-linux/podman/toc.htm>

Podman tutorial on GitHub, https://github.com/containers/podman/blob/main/docs/tutorials/rootless_tutorial.md

Podman Troubleshooting Guide on GitHub, <https://github.com/containers/podman/blob/main/troubleshooting.md>

Task E-1-9: Specifying sysctl Settings

Modify the `/etc/sysctl.conf` file for the DPK deployment. The sysctl settings will be inherited by the containers.

```
sh
sudo tee -a "/etc/sysctl.conf" <<EOF
# sysctl setting for PeopleTools
kernel.msgmnb = 65538
kernel.msgmni = 1024
kernel.msgmax = 65536
kernel.shmmax = 68719476736
kernel.shmall = 4294967296
kernel.core_uses_pid = 1
net.ipv4.tcp_keepalive_time = 90
net.ipv4.tcp_timestamps = 1
net.ipv4.tcp_window_scaling = 1
net.ipv4.ip_local_port_range = 10000 65500
# sysctl setting for PeopleTools search
vm.max_map_count=262144
net.core.somaxconn=1024
net.ipv4.ip_unprivileged_port_start = 80
EOF

sudo /usr/sbin/sysctl -p
```

Task E-1-10: Setting Environment Variables

Proxy variables are used to pull an Oracle Linux image from Oracle Container Registry. Building PeopleTools container images using Podman is similar to Docker. These additional environment variables are required for proper functioning.

- This variable is required to support HEALTHCHECK specified in the Containerfile:
export BUILDAH_FORMAT=docker
- This variable is required while building the container image in rootless mode.
export BUILDAH_ISOLATION=chroot

Run this command to add the necessary environment variables to the `.bash_profile` file for the user that will run the containers. Substitute the proxy values in your environment for each `<..>`.

```
tee -a ~/.bash_profile <<EOF
export http_proxy=<..>
export https_proxy=<..>
export HTTP_PROXY=<..>
export HTTPS_PROXY=<..>
export no_proxy=<..>
export BUILDAH_FORMAT=docker
export BUILDAH_ISOLATION=chroot
export TMPDIR=/scratch/tmp
EOF
```


Task E-1-11: Verifying Access to Oracle Container Registry

The user that will build and run the container should perform these steps to verify they can obtain the necessary images from Oracle Container Registry (OCR): This can be a non-root user.

1. Log in to Oracle Container Registry with Podman.

```
podman login container-registry.oracle.com
```

2. Test pulling an Oracle Linux 8 image.

```
podman pull container-registry.oracle.com/os/oraclelinux:8
```

Task E-2: Building and Running the Container for Mid-tier Deployment

This section discusses:

- Using the DPKs to Install PS_HOME
- Preparing to Deploy the PeopleTools Mid-tier Container
- Building the Container Image for PeopleTools Mid-tier
- Running the Container Image for PeopleTools Mid-tier
- Starting and Stopping the PeopleTools Mid-tier Container
- Removing the PeopleTools Mid-tier Container

Task E-2-1: Using the DPKs to Install PS_HOME

Follow the instructions in this documentation to obtain the PeopleSoft PeopleTools DPKs and install *PS_HOME*.

1. Obtain the four PeopleSoft PeopleTools DPKs for Native OS Linux from My Oracle Support.

See "Deploying the PeopleSoft PeopleTools Deployment Packages," Obtaining the PeopleSoft PeopleTools DPKs.

2. Install *PS_HOME* on the Linux VM.

See "Deploying the PeopleSoft PeopleTools Deployment Packages," Running the DPK Setup Script to Install PS_HOME Only.

3. Locate the containers directory.

The *PS_HOME/containers/OraclePeopleTools* directory includes text instructions, scripts, and configuration files. You will use these files in the following sections to build and run containers.

Note. You can view README.md and FAQ.md in a text editor. The .md extension refers to the Markdown language used for GitHub documents.

Note. You can install PS_HOME on a computer and copy the OraclePeopleTools directory to the Linux VM where you want to build and run containers.

4. Set the CONTAINER_HOME environment variable to the location of the OraclePeopleTools directory that holds the container files in your environment.

This documentation uses `${CONTAINER_HOME}` in code samples to refer to this location.

```
export CONTAINER_HOME=<Path to Container Code directory OraclePeople=>
Tools>
```

For example, if you installed *PS_HOME* in the directory `/opt/oracle/ps_home8.62`:

```
export CONTAINER_HOME=/opt/oracle/ps_home8.62/containers/OraclePeople=>
Tools
```

The *PS_HOME/containers/OraclePeopleTools* directory includes detailed README.md files for various deployments. Refer to these README.md files for current information. Note that the file structure and directory names may differ in different PeopleTools releases.

- *PS_HOME/containers/OraclePeopleTools/README.md* — Describes the initial setup of Podman on a Linux VM.
- *PS_HOME/containers/OraclePeopleTools/containerfiles/pt/README.md* — Describes the procedure to build and deploy PeopleTools mid-tier containers on a Linux VM.
- *PS_HOME/containers/OraclePeopleTools/containerfiles/osk/README.md* — Describes the process to build and deploy search containers on a Linux VM.
- *PS_HOME/containers/OraclePeopleTools/k8s/README.md* — Describes the process to deploy PeopleTools mid-tier and search containers on a Kubernetes cluster (OKE).
- *PS_HOME/containers/OraclePeopleTools/helm-charts/oracle-peopletools/README.md* — Describes the process to deploy PeopleTools mid-tier and search containers on a Kubernetes cluster (OKE) with Helm.

Task E-2-2: Preparing to Deploy the PeopleTools Mid-tier Container

You can use the PeopleTools DPKs to create and run the following containers.

- Application server, Process Scheduler, and web server (PIA) (mid-tier)
- Application server (appserver)
- Process Scheduler (prcs)
- Application server and Process Scheduler (appbatch)
- Web server (PIA)

The image build process creates an image by installing PeopleTools DPK in silent and `deploy_only` mode. To prepare to deploy PeopleTools mid-tier containers:

1. Review the instructions in *CONTAINER_HOME/containerfiles/pt/README.md*.
2. Copy the four PeopleSoft PeopleTools DPKs zip files into *CONTAINER_HOME/containerfiles/pt*.
Don't unzip the files. Don't use symbolic links.
3. If you want to use the PT-INFRA DPKs to apply update CPUs, copy the DPK zip files into *CONTAINER_HOME/containerfiles/pt*.
Don't unzip the files. Don't use symbolic links.
4. Review *CONTAINER_HOME/containerfiles/pt/install.rsp*.

The `install.rsp` file is the silent installation response file. This file is called by the silent installation command, which is contained in `install.file` in the same directory. The DPK `deploy_only` option installs the software required for the mid-tier components without setting up the mid-tier domains.

```
env_type=midtier
```

```

deploy_only=True
db_platform=ORACLE
db_is_unicode=True
psft_base_dir=/opt/oracle
user_home_dir=/home

```

5. Review the installation command in *CONTAINER_HOME/containerfiles/pt/install.file*, but do not make any changes.

The command deploys the DPK in silent installation mode with a customization file.

```

psft-dpk-setup.sh --silent --response_file=/in/pt/install.rsp -->
customization_file=/in/pt/psft_customizations.yaml --oke_build

```

6. Review the information in *CONTAINER_HOME/containerfiles/pt/psft_customizations.yaml*.

The *psft_customizations.yaml* file includes the only DPK customizations that are supported for containers.

```

# setup_share is not supported in containers
setup_share:      false

# setup_sysctl is not supported in containers
setup_sysctl:     false

```

Do not change the *setup_share* and *setup_sysctl* parameters.

The parameter *setup_sysctl: false* specifies that the DPK setup will not overwrite Linux system parameters. The parameter *setup_share: false* specifies that the DPK setup does not create a share for access to the Linux VM.

Task E-2-3: Building the Container Image for PeopleTools Mid-tier

To build the container image:

1. Change directory to the directory housing the container code.
2. Set the *BUILDAH_FORMAT* environment variable, which is required to support *HEALTHCHECK* specified in the Containerfile.

```
export BUILDAH_FORMAT=docker
```

3. Set the *BUILDAH_ISOLATION* environment variable, which is required for building the container image in rootless mode.

```
export BUILDAH_ISOLATION=chroot
```

4. Run this command to build the image:

```
podman build --no-cache -f ./Containerfile -t [image_name:tag] . | tee>
bldimg.log
```

For *[image_name:tag]* substitute a tagged name to apply to the built image. Use lower-case letters for the name.

If building in a local VM, use this format: *oracle/peopletools/deployonly:8.6x*.

If you are planning to push the container image to Oracle Container Registry (OCR), use this format: *<region-key>.ocir.io/<oci tenancy>/oracle/peopletools/deployonly:8.6x*

See Preparing for Container Registry, <https://docs.oracle.com/en->

[us/iaas/Content/Registry/Concepts/registryprerequisites.htm](https://www.oracle.com/iaas/Content/Registry/Concepts/registryprerequisites.htm).

The image build process is completed when the build output shows "Successfully tagged localhost/<[image_name:tag]>" followed by the long image id.

5. If you want to push the container image to OCR, use this command:

```
podman push [image_name:tag]
```

6. The build generates intermediate images of large size. Remove these images using following commands.

```
podman images -a
podman rmi $(podman images -a | grep "<none>.*<none>" | awk '{ print→
$3; }') 2>/dev/null
podman images -a
```

7. Use these commands to get information on the image:

```
podman images -a
podman inspect <[image_name:tag]>
```

8. In case the deployment results in errors, you can find information on error messages associated with the PeopleSoft containers in *CONTAINER_HOME/FAQ.md*.

Task E-2-4: Running the Container Image for PeopleTools Mid-tier

This section describes two options to run the container image. Use the podman command and define the setup with command parameters, or edit a compose.yaml file and run a podman-compose command.

For both options, first ensure that the CONTAINER_HOME environment variable is set to the location of the OraclePeopleTools directory that holds the container files in your environment.

```
export CONTAINER_HOME=<Path to Container Code directory OraclePeopleTools>
```

Option 1: To run the container image using the podman command:

1. Change directory to *CONTAINER_HOME/in/pt*.

```
cd ${CONTAINER_HOME}/in/pt
```

Note. The volume \${CONTAINER_HOME}/in/pt should be mapped to container at /in/pt:ro. Use /in/pt:z if you are using shared volume/storage.

2. Run this command:

```
podman run -d --name <container name> \
--hostname <container hostname> \
-e DB_WAIT_TIMEOUT=1 \
-p <Add Container Port Mapping> \
-v [<host mount point>:]/in/pt \
<[image_name:tag]>
```

Use these guidelines for the command parameters:

- **--name**

(Optional): The name of the container. If no name is entered, it will be auto generated by default.

- **--hostname**

The parameter <container hostname> will be used as the host name for the container. PeopleTools uses the hostname for various processes, so it is important to set the hostname properly.

The container hostname must not contain any underscores (_).

Do not use the FQDN of the VM host or machine where the container runs for <container hostname>. For example, if your mid-tier container VM host or machine FQDN is server.example.one.oraclevcn.com, then set <container hostname> as mt.oraclevcn.com.

After setting the hostname parameter, you would receive these results from queries in the container:

hostname -f to mt.oraclevcn.com — container long host name (FQDN)

hostname -d to oraclevcn.com — container DNS domain name

hostname -a to mt — container alias name

PeopleTools Auth Token Domain — [.oraclevcn.com]

PIA URL will be http://server.example.one.oraclevcn.com:8000

Use the hostname to determine the type of mid-tier deployment.

Type of Container	Hostname
Mid-tier (mt)	mt.oraclevcn.com
Application server (appserver)	appserver.oraclevcn.com
Process Scheduler (prcs)	prcs.oraclevcn.com
Application server and Process Scheduler (appbatch)	appbatch.oraclevcn.com
Web server (PIA)	pia.oraclevcn.com

- **-e**

(Optional): Environment variable indicating the number of seconds to wait for the database.

DB_WAIT_TIMEOUT=<wait time for DB in seconds>t

- **-p**

The port mapping of the host port to the container port, in the format < host ports >:< fixed container ports >.

Ensure that the ports are not in use. Each container must use different ports.

Container Type	Port Mapping String
mid-tier	-p 10100:10100 -p 10101:10101 -p 7000-7003:7000-7003 -p 7010:7010 -p 8000:8000 -p 8001:8001
appserver	-p 10100:10100 -p 10101:10101 -p 7000-7003:7000-7003 -p 7010:7010 -p 9033-9043:9033-9043
prcs	NA
appbatch	-p 10100:10100 -p 10101:10101 -p 7000-7003:7000-7003 -p 7010:7010 -p 9033-9043:9033-9043
pia	-p 8000:8000 -p 8001:8001

- **-v**

Enter one of the following for the host mount point:

`${CONTAINER_HOME}/in/pt:/in/pt:ro`

`${CONTAINER_HOME}/in/pt:/in/pt:z` if you are using shared volume/storage

The syntax for the volumes definition is <directory_on_host>:<directory_in_container>:<options>. The first line means that the directory `CONTAINER_HOME/in/pt` on the Linux host will map to `in/pt` in the container, and the volume will be read-only (ro). The second line uses the option `z` for shared volume or storage.

- **<[image_name:tag]>**

The name for the container image; for example, `peopletools:8.6x`.

- **--network**

(Optional): `ps-net`

Note. If you plan to use a search component (OSK) DPK with a mid-tier container on a Podman network on same host, create the Podman network before running the mid-tier container. Use this command:
`podman network create --driver bridge ps-net`

3. To remove a container, run the following commands to stop, remove, and start:

```
podman stop <container-name> -t<time in secs>
podman rm <container-name>
podman start <container-name>
```

The `podman stop` command will shut down all PeopleTools domains gracefully before the container stops. View container stop logs simultaneously using the command `podman logs -fn <container-name>` in a new terminal window. Add the option `-t<time in secs>` to the command to specify the time in seconds to gracefully shut down all PeopleTools domains followed by the database instance before the container exits.

The `podman start` command will start all PeopleTools domains. View container start logs simultaneously by using the command `podman logs -fn <container-name>` in a new terminal window.

Option 2: Specify the parameters for running the container image in the `compose.yaml` file, and then run a `podman-compose` command:

1. Open `CONTAINER_HOME/compose.yaml` for editing.
2. Enter the container image name for the image parameter, in the format `image_name:tag`. In this example, the image name is `oracle/peopletools`, and the tag is `8.6x`.

Refer to the previous section for descriptions of the remaining parameters.

```
version: 1
services:
  mt:
    image: oracle/peopletools:8.6x
    hostname: mt.oraclevcn.com
    container_name: mt.oraclevcn.com
    network: net
    tty: true
    ports:
      - "${PORT_RMT_ADMIN:-10100}:10100"
      - "${PORT_RMT_ADMIN_RMI:-10101}:10101"
      - "${PORT_WSL:-7000-7003}:7000-7003"
      - "${PORT_WSL_SSL:-7010}:7010"
      - "${PORT_PIA:-8000}:8000"
      - "${PORT_PIA_SSL:-8001}:8001"
    environment:
      - DB_WAIT_TIMEOUT=1
    volumes:
      - ${CONTAINER_HOME}/in/pt:/in/pt:ro

networks:
  net:
    name: ps-net
    driver: bridge
```

3. Run this command:

```
podman-compose -f ${CONTAINER_HOME}/compose.yaml up -d
```

4. To view the container logs, open a new terminal window and enter this command.

```
podman logs <container-name>
```

The container is up and running when it shows the following message in the podman logs:

```
=====
PEOPLETOOLS IS READY TO USE!
=====
```

5. Remove `CONTAINER_HOME/in/pt/install.rsp` once the container is up and running. The `install.rsp` is not stored anywhere in the container.

```
rm ${CONTAINER_HOME}/in/pt/install.rsp
```

6. To log in to the container as the `psadm2` user, which is created by the DPK setup script, enter this command:

```
podman exec -ti <container-name> su - psadm2
```

7. To access the PIA, use `http://<Container Host FQDN>:8000`.

Enter this command to return the PIA URL:

```
echo "http://$(hostname -f):${PORT_PIA:-8000}"
```

8. To view the DPK logs, log in to <container-name>.

If the deployment was successful, the logs will be in /ps/psft_dpk_setup.log.

If the deployment failed, the logs will be in /in/tmp/setup/psft_dpk_setup.log.

Use these commands to view and copy the DPK logs to the current location on the Linux VM:

```
podman exec -ti <container-name> vi /in/tmp/setup/psft_dpk_setup.log
```

```
podman cp -a <container-name>:/in/tmp/setup/psft_dpk_setup.log
```

In case the deployment results in errors, you can find information on error messages associated with the PeopleSoft containers in *CONTAINER_HOME/FAQ.md*.

Task E-2-5: Starting and Stopping the PeopleTools Mid-tier Container

Use this command to stop the container. This command gracefully shuts down all PeopleTools domains and then exits the container.

```
podman stop <container-name> -t<time in secs>
```

To view logs for the shutdown simultaneously, open a new terminal and enter this command:

```
podman logs -fn <container-name>
```

Use this command to start the container. This command starts all PeopleTools domains.

```
podman start <container-name>
```

Use this command to start the container and view the logs:

```
podman start <container-name> ; podman logs -fnl
```

To view logs simultaneously, open a new terminal and enter this command.

```
podman logs -fn <container-name>
```

Task E-2-6: Removing the PeopleTools Mid-tier Container

Use this command to stop and remove the container. This command gracefully shuts down all PeopleTools domains and then exits the container. Specify the number of seconds to allow for the domains to shut down in <time in secs>.

```
podman-compose -f ${CONTAINER_NAME}/compose.yaml down -t<time in secs>
```

Alternatively, use these commands to stop and remove the container.

```
podman-compose stop <container-name> -t<time in secs>
```

```
podman-compose rm <container-name>
```

To view logs simultaneously, open a new terminal and enter this command.

```
podman-compose -f ${CONTAINER_NAME}/compose.yaml down -t<time in secs>
```


Task E-3: Building and Running the Container for Search Components

This section discusses:

- Using the DPKs to Install PS_HOME
- Preparing to Deploy the OSK Container
- Building the OSK Container Image
- Running the OSK Container Image
- Reviewing the Search Components Container
- Integrating PeopleTools Mid-tier with OpenSearch

Task E-3-1: Using the DPKs to Install PS_HOME

Follow the instructions in the PeopleTools documentation to obtain the PeopleSoft PeopleTools DPKs and install *PS_HOME* on the Linux VM.

1. Obtain the four PeopleSoft PeopleTools DPKs for Native OS Linux from My Oracle Support.
See "Deploying the PeopleSoft PeopleTools Deployment Packages," Obtaining the PeopleSoft PeopleTools DPKs.
2. Use the PeopleSoft PeopleTools DPKs to install *PS_HOME* on the Linux VM.
See "Deploying the PeopleSoft PeopleTools Deployment Packages," Running the DPK Setup Script to Install PS_HOME Only.
3. Locate the containers directory.
The *PS_HOME*/containers/OraclePeopleTools directory includes text instructions, scripts, and configuration files. You will use these files in the following sections to build and run containers.

Note. You can view README.md and FAQ.md in a text editor. The .md extension refers to the Markdown language used for GitHub documents.

4. Obtain the OpenSearch, OpenSearch Dashboards, and Logstash DPK (OSK DPK) for Linux from My Oracle Support.
See *PeopleSoft Deployment Package Installation for Search Components*, "Obtaining the OpenSearch, OpenSearch Dashboards, and Logstash DPK."
You can find the installation guide on the PeopleSoft PeopleTools page on Oracle Help Center.
5. Set the CONTAINER_HOME environment variable to the location of the OraclePeopleTools directory that holds the container files in your environment.

This documentation uses `${CONTAINER_HOME}` in code samples to refer to this location.

```
export CONTAINER_HOME=<Path to Container Code directory OraclePeople=>
Tools>
```

For example, if you installed *PS_HOME* in the directory `/opt/oracle/ps_home8.62`:

```
export CONTAINER_HOME=/opt/oracle/ps_home8.62/containers/OraclePeople=>
Tools
```

Task E-3-2: Preparing to Deploy the OSK Container

To prepare to deploy the OSK (OpenSearch, OpenSearch Dashboards, and Logstash) container:

1. Review the instructions in `CONTAINER_HOME/containerfiles/osk/README.md`.
2. Copy the OSK DPK zip files into `CONTAINER_HOME/in/osk`.
Don't unzip the files. Don't use symbolic links.
3. Review the installation command in `CONTAINER_HOME/in/osk/install-osk.file`, but do not make any changes.

The command deploys the OSK DPK in silent installation mode.

4. Open `CONTAINER_HOME/containerfiles/osk/pt_osk.config` for editing.

The `pt-osk.config` file is the silent installation response file for OpenSearch. This file is called by the silent installation command, which is contained in `install-osk.file` in the same `./in/osk` directory. Use the response file sample in the Search Components installation guide and modify it for your requirements.

See *PeopleSoft Deployment Package Installation for Search Components*, "Installing OpenSearch and OpenSearch Dashboards on Linux in Silent Mode."

Verify these values in `pt-osk.config`:

- For `IB_REST_URL`, enter the Integration Broker REST service URL in the PeopleSoft mid-tier container deployment.

To locate the REST service URL, see the Integration Broker product documentation.

See *PeopleTools: Integration Broker Administration*, "Using the Target Locations Page to Set Target Locations for Services."

- Enter encrypted user ID and passwords, as described in the Search Components installation guide.

See *PeopleSoft Deployment Package Installation for Search Components*, "Installing OpenSearch and OpenSearch Dashboards on Linux in Silent Mode."

Task E-3-3: Building the OSK Container Image

To build the container image:

1. Change to the `CONTAINER_HOME/containerfiles/osk` directory.
`cd ${CONTAINER_HOME}/containerfiles/osk`
2. Set an environment variable to support HEALTHCHECK as specified in Containerfile.
`export BUILDHA_FORMAT=docker`
3. Set an environment variable that is required while building the container image in rootless mode.
`export BUILDHA_ISOLATION=chroot`

4. Run the Podman command to build the container image.

```
podman build --no-cache -f ./Containerfile -t [image_name:tag] . | tee⇒
  bldimg.log
```

For `[image_name:tag]` substitute a tagged name to apply to the built image. Use lower-case letters for the name.

If building in a local VM, use this format: `oracle/peopletools/osk:2.3.0`.

If you are planning to push the container image to Oracle Container Registry (OCR), use this format: `<region-key>.ocir.io/<oci tenancy>/oracle/peopletools/osk:2.3.0`

See Preparing for Container Registry, <https://docs.oracle.com/en-us/iaas/Content/Registry/Concepts/registryprerequisites.htm>.

The image build process is completed when the build output shows "Successfully tagged localhost/<[image_name:tag]>" followed by the long image id.

5. If you want to push the container image to OCR, use this command:

```
podman push[image_name:tag]
```

6. The build generates intermediate images of large size. Remove these images using following commands.

```
podman images -a
podman rmi $(podman images -a | grep "<none>.*<none>" | awk '{ print=>
$3; }') 2>/dev/null
podman images -a
```

7. Use these commands to get information on the image:

```
podman images -a
podman inspect <[image_name:tag]>
```

Task E-3-4: Running the OSK Container Image

This section describes two options to run the container image. Use the podman command and define the setup with command parameters, or edit a compose-osk.yaml file and run a podman-compose command.

For both options, first ensure that the CONTAINER_HOME environment variable is set to the location of the OraclePeopleTools directory that holds the container files in your environment.

```
export CONTAINER_HOME=<Path to Container Code directory OraclePeopleTools>
```

Option 1: To run the OSK container image with the podman command:

1. Ensure that the PeopleTools mid-tier container is up and running.

Sign in to PIA for the PeopleTools mid-tier container at least once before running the OSK container.

2. Set these environment variables with the values for the PeopleTools mid-tier container image:

```
export MIDTIER_SERVICE_HOST=<MIDTIER HOST FQDN / IP>
export MIDTIER_SERVICE_PORT_HTTP=<MIDTIER PORT HTTP>
export IB_NODE_NAME=<IB NODE NAME> # example PSFT_LOCAL
export DBNAME=<DB Name>
```

3. Change to the CONTAINER_HOME/in/osk directory.

```
cd ${CONTAINER_HOME}/in/osk
```

4. Run this command:

```
podman run -d --name <osk container name> \
--hostname <container hostname> \
-e <env. variables> \
-p <Add Container Port Mapping> \
-v [<host mount point>:]/in/pt \
<[image_name:tag]>
```

Use these guidelines for the command parameters:

- `--name`

(Optional): The name of the container. If no name is entered, it will be auto generated by default. For example: `osk.oraclevcn.com`

- `--hostname`

The parameter `<osk container hostname>` will be used as the host name for the container. PeopleTools uses the hostname for various processes, so it is important to set the hostname properly.

The container hostname must not contain any underscores (`_`).

Do not use the FQDN of the VM host or machine where the container runs for `<container hostname>`. For example, if your mid-tier container VM host or machine FQDN is `server.example.one.oraclevcn.com`, then set `<osk container hostname>` as `osk.oraclevcn.com`.

This will set:

`hostname -f to osk.oraclevcn.com` — container long host name (FQDN)

`hostname -d to oraclevcn.com` — container DNS domain name

`hostname -a to osk` — container alias name

- -e

Specify the environment variables listed in this table. To specify multiple environment variables, preface each one with -e. For example:

```
-e "OPENSEARCH_JAVA_OPTS=-Xms512m -Xmx512m" \
-e bootstrap.memory_lock=true \
-e IB_REST_URL="http://${MIDTIER_SERVICE_HOST}:${MIDTIER_SERVICE_PORT_HTTP}/PSIGW/RESTListeningConnector/${IB_NODE_NAME}/PT_CREATEJSON_REST.v1/json="
```

Environment Variable	Comment
MT_WAIT_TIMEOUT=<wait time for MT in seconds>	This environment variable is optional. Enter the time to wait for the connection to the mid-tier container.
"OPENSEARCH_JAVA_OPTS=-Xms512m -Xmx512m"	This is required for the OSK deployment.
bootstrap.memory_lock=true	Set to true to disable JVM heap memory swapping.
IB_REST_URL="http://\${MIDTIER_SERVICE_HOST}:\${MIDTIER_SERVICE_PORT_HTTP}/PSIGW/RESTListeningConnector/\${IB_NODE_NAME}/PT_CREATEJSON_REST.v1/json="	For IB_REST_URL, enter the Integration Broker REST service URL in the PeopleSoft mid-tier container deployment. To construct the URL, enter the hostname and HTTP port for the PeopleTools mid-tier container. For information on the REST service URL, see the Integration Broker product documentation. See <i>PeopleTools: Integration Broker Administration</i>, "Using the Target Locations Page to Set Target Locations for Services."
IB_REST_PRCS_URL="http://\${MIDTIER_SERVICE_HOST}:\${MIDTIER_SERVICE_PORT_HTTP}/PSIGW/RESTListeningConnector/\${DBNAME}/PTPRCS_GETMETRICS.v1/getMetrics"	Enter the REST service URL for the Process Scheduler.
http_proxy	Do not provide a value for this.
https_proxy	Do not provide a value for this..
no_proxy	Do not provide a value for this.

- **-p**

The port mapping of the host port to the container port, in the format < host ports >:< fixed container ports >.

Ensure that the ports are not in use. Each container must use different ports.

Container Type	Port Mapping String
osk	-p 9200:9200 -p 9300:9300 -p 9800:9800 -p 5601:5601

- **-V**

Enter one of the following for the host mount point:

`${CONTAINER_HOME}/in/osk:/in/osk:ro`

`${CONTAINER_HOME}/in/osk:/in/osk:z` if you are using shared volume/storage

The syntax for the volumes definition is <directory_on_host>:<directory_in_container>:<options>. The first line means that the directory `CONTAINER_HOME/in/pt` on the Linux host will map to `in/pt` in the container, and the volume will be read-only (ro). The second line uses the option `z` for shared volume or storage.

- **<[image_name:tag]>**

The name for the container image; for example, `peopletools:8.6x`.

- **--network**

(Optional): `ps-net`

Using the same value for this variable ensures the mid-tier and OSK containers are running on the same Podman network.

5. Verify that the container is up and running.

The container is up and running when it shows the following message in the container logs:

```
=====
PEOPLETOOLS OSK IS READY TO USE!
=====
```

Option 2: Specify the parameters for running the container image in the `compose.yaml` file, and then run a `podman-compose` command::

1. Open `CONTAINER_HOME/compose-osk.yaml` for editing.
2. Enter the container image name for the image parameter, in the format `image_name:tag`. In this example, the image name is `oracle/peopletools/osk`, and the tag is `2.3.0.862`.

Refer to the previous section for descriptions of the remaining parameters.

```
version: 1
services:
  osk:
    image: oracle/peopletools/osk:2.3.0.862
    hostname: osk.oraclevcn.com
    container_name: osk.oraclevcn.com
    network: net
    tty: true
    environment:
      - "OPENSEARCH_JAVA_OPTS=-Xms512m -Xmx512m"
```

```

- bootstrap.memory_lock=true # Disable JVM heap memory swapping
- IB_REST_URL=http://mt.oraclevcn.com:8000/PSIGW/RESTListeningConnector/PSFT_LOCAL/PT_CREATEJSON_REST.v1/json=
- IB_REST_PRCS_URL=http://mt.oraclevcn.com:8000/PSIGW/RESTListeningConnector/PT862123/PTPRCS_GETMETRICS.v1/getMetrics
- http_proxy=
- https_proxy=
- no_proxy=
ports:
- "${PORT_OSSERVER:-9200}:9200"
- "${PORT_OSSERVER_NODE:-9300}:9300"
- "${PORT_LOGSTASH:-9800}:9800"
- "${PORT OSDASHBOARD:-5601}:5601"
volumes:
- ${CONTAINER_HOME}/in/osk:/in/osk:ro # For shared type of volume, use :z instead of :ro
networks:
  net:
    name: ps-net
    driver: bridge

```

3. Run this command:

```
podman-compose -f ${CONTAINER_HOME}/compose-osk.yaml up -d
```

4. To view the container logs, open a new terminal window and enter this command.

```
podman logs <container-name>
```

The container is up and running when it shows the following message in the podman logs:

```

=====
PEOPLETOLS OSK IS READY TO USE!
=====

```

5. To view the DPK logs, log in to <container-name>.

If the deployment was successful, the logs will be in /ps/OSKInstall.log. Use this command:

```
podman exec -ti <container-name> vi /ps/OSKInstall.log
```

If the deployment failed, the logs will be in /in/tmp/setup/psft_dpk_setup.log.

Use these commands to view and copy the DPKs logs to the current location on the Linux VM:

```
podman exec -ti <container-name> vi /in/tmp/setup/OSKInstall.log
```

```
podman cp -a <container-name>:/in/tmp/setupOSKInstall.log
```

In case the deployment results in errors, you can find information on error messages associated with the PeopleSoft containers in *CONTAINER_HOME/FAQ.md*.

Task E-3-5: Reviewing the Search Components Container

Use these commands to review and maintain the container:

- Log in to the container.

```
podman exec -ti <osk-container-name> bash
```

- View the container logs.

```
podman container logs --color -fn <osk-container-name>
```

- Stop the container.

```
cd $PS_HOME/containers/OraclePeopleTools
```

```
podman-compose -f compose-osk.yaml down -t<time in secs>
```

Task E-3-6: Integrating PeopleTools Mid-tier with OpenSearch

This is an optional task. After you build containers for PeopleTools mid-tier and search components, use these steps to integrate OpenSearch and the PeopleSoft environment using Automated Configuration Management (ACM) plug-ins.

To set up the PTSFConfigureSrchInstance plug-in:

1. Create a property file named OSK_SEARCH_TEMPLATE.

Use the sample given in *CONTAINER_HOME*/containerfiles/osk/README.md as a guide, and modify it for your environment.

Note. The sample includes parameters with "Kibana." Be aware that Kibana is not supported for PeopleTools 8.62. These parameters are used for configuration for OpenSearch Dashboards. The sample parameters are subject to change in future releases of the OSK DPK. Review the product documentation when preparing your template.

```
tee -a "OSK_SEARCH_TEMPLATE" <<EOF
```

```
configure=true
```

```
verify=true
```

```
decrypt_password=false
```

```
#TEMPLATE VARIABLES SECTION
```

```
template.domain=@webhist.SESSIONCOOKIEIDOM
```

```
template.host=@webhist.WEBSERVERNAME
```

```
template.httpport=@webhist.PORTALHTTPPORT
```

```
template.nodename=%LocalNode
```

```
template.searchhost=search.com
```

```
template.searchport=9200
```

```
template.sslport=@webhist.PORTALHTTPSPORT
```

```
template.userid=%UserId
```

```
#END: TEMPLATE VARIABLES SECTION
```

```
#####
```

```
#Configure Peoplesoft system to talk to Search Server and assign roles
```

```
#####
```

```
plugin.0=PTEM_CONFIG:PTSFConfigureSrchInstance
```

```
env.search_nodes=1
```

```
env.search_provider=OS
```



```

env.ptsf_search_instance=<Search Instance Name>
env.node1_search_host=<osk-container-name>
env.node1_search_port=9200
env.node1_search_use_ssl=false
env.node1_search_admin_user=
env.node1_search_admin_password=
env.node1_search_read_user=osadmin
env.node1_search_read_password=

#Kibana
env.kibana_host=<osk-container-name>
env.kibana_port=5601
env.kibana_use_ssl=false

#Logstash
env.logstash_host=<osk-container-name>
env.logstash_port=9800
env.logstash_use_ssl=false

#Search call back properties
env.search_call_back_user=
env.search_call_back_password=
env.ps_search_administrator_user=
env.ps_search_developer_user=
env.enable_global_menu_search=ALL
env.use_ssl_gateway=false
env.gateway_host=<mt-container-name>
env.gateway_port=8000
env.gateway_ssl_port=8443
env.default_local_node=<IB NODE NAME>

#####
#Deploy, Undeploy, Schedule index generation for search definitions \=>
#categories from a selected list
#####

plugin.SRCH_GROUP.1=PTEM_CONFIG:PTSFAdministerSearch
env.prcsscheduleserver=PSUNX
scheduleviaprcs=true
env.ptsf_selection_type=GLOBAL
env.ptsf_exclude_definitions=
env.ptsf_check_audit_errors=false
env.ptsf_admin_operations=DEPLOY,INDEX
env.ptsf_index_all_languages=false

EOF

```

2. Copy the property file OSK_SEARCH_TEMPLATE with your entries to the PeopleTools mid-tier container host.

```
podman cp OSK_SEARCH_TEMPLATE <mt-container-name>:/home/psadm2/
```

3. Access the PeopleTools mid-tier container host remotely.

This command sets environment variables and uses the `psrunACM.sh` script to run the plug-in.

```
podman exec -ti <mt-container-name> su - psadm2 -c 'export PS_FILEDIR=>
/home/psadm2; \
export PS_SERVER_CFG=$PS_CFG_HOME/appserv/prcs/PRCSDOM/psprcs.cfg; \
$PS_HOME/utility/psrunACM.sh <mt-container-name> ORACLE <DBNAME>=>
<OPRID> <OPRPWD> OSK_SEARCH_TEMPLATE'
```

- `DBNAME` is the name of the database that the PeopleTools mid-tier connects to.
- `OPRID` is the operator ID, or user ID, for the PeopleSoft environment, such as PS or VP1.
- `OPRPWD` is the password for the operator ID.

To set up the `PTSFMonitorConfiguration` plug-in:

1. Create a property file named `OSK_MONITOR_CFG_TEMPLATE`.

Use the sample given in `CONTAINER_HOME/containerfiles/osk/README.md` as a guide, and modify it for your environment.

```
tee -a "OSK_MONITOR_CFG_TEMPLATE" <<EOF
configure=true
verify=true
decrypt_password=false
#decrypt_password=true

#####
#Opensearch Monitoring Configuration Plugin
#####
plugin.0=PTM_CONFIG:PTSFMonitorConfiguration
env.prcsscheduleserver=PSUNIX
env.monitor_es_host=<osk-container-name>
env.monitor_es_port=9200
env.monitor_es_ssl=False
env.monitor_es_user=
env.monitor_es_password=

env.monitor_kibana_host=<osk-container-name>
env.monitor_kibana_port=5601
env.monitor_kibana_ssl=False
env.scan_interval=5
env.purge_retention=1
env.enable_index_metrics=True
env.enable_system_metrics=True
env.dashboard_selection=ALL

EOF
```

2. Copy the property file `OSK_MONITOR_CFG_TEMPLATE` with your entries to the PeopleTools mid-tier container host.

```
podman cp OSK_MONITOR_CFG_TEMPLATE <mt-container-name>:/home/psadm2/
```

3. Access the PeopleTools mid-tier container host remotely.

This command sets environment variables and uses the `psrunACM.sh` script to run the plug-in.

```
podman exec -ti <mt-container-name> su - psadm2 -c 'export PS_FILEDIR=>
```

```
/home/psadm2; \
export PS_SERVER_CFG=$PS_CFG_HOME/appserv/prcs/PRCSDOM/psprcs.cfg; \
$PS_HOME/utility/psrunACM.sh <mt-container-name> ORACLE <DBNAME>=>
<OPRID> <OPRPWD> OSK_MONITOR_CFG_TEMPLATE'
```

- DBNAME is the name of the database that the PeopleTools mid-tier connects to.
- OPRID is the operator ID, or user ID, for the PeopleSoft environment, such as PS or VP1.
- OPRPWD is the password for the operator ID.

Configure PeopleSoft Health Center alerts manually.

Note. Because the OSK container host is a virtual host, it cannot be accessed from outside using the virtual host name. To access PeopleSoft Health Center or Open Dashboard page from a browser, include the container host name and IP address in the `/etc/hosts` file of the client host machine.

See Also

PeopleTools: Automated Configuration Management

PeopleTools: Performance Monitor, "Configuring Health Center Alerts."

Task E-4: Working With PeopleSoft Containers

After the container is up and running, you can connect to the PeopleSoft environment in the container from a Microsoft Windows-based PeopleTools Client to use utilities such as Change Assistant. Use the IP address for the Linux VM, the port numbers from the setup YAML file, and the user IDs and passwords from the silent response file for the connection.

Use these commands to review and maintain the containers. These are examples of commands to perform actions without logging into the container.

- To perform a health check on the container:


```
podman ps -a --filter "name=<container-name>"

podman healthcheck run <container-name>
```
- To list all of the port mappings in use in the container:


```
podman port -a
```
- To display the Podman disk usage:


```
podman system df -v
```
- To inspect container or image information:


```
podman inspect <name>
```
- To log in to the container as the psadm2 user, which is one of the default Linux users that is created by the DPK setup script.


```
podman exec -ti <container-name> su - psadm2
```
- To view the PeopleSoft PIA URL:


```
echo "http://$(hostname -f):${PORT_PIA:-8000}"
```

- To view the peopletools.properties file:

```
podman exec -ti <container-name> su - psadm2 -c 'cat ${PS_HOME}⇒  
/peopletools.properties'
```

- To view the PeopleTools release:

```
podman exec -ti <container-name> su - psadm2 -c 'psreleaseinfo'
```

- To view the location of *PS_HOME*:

```
podman exec -ti <container-name> su - psadm2 -c 'echo $PS_HOME'
```

- To run the PSADMIN utility:

```
podman exec -ti <container-name> su - psadm2 -c 'psadmin'
```

- To run Data Mover on the command line:

```
podman exec -ti <container-name> su - psadm2 -c 'psdmtx'
```

- To run Application Designer on the command line:

```
podman exec -ti <container-name> su - psadm2 -c 'psidex'
```

- To run Application Engine:

```
podman exec -ti <container-name> su - psadm2 -c 'psae'
```

- To view the tnsnames.ora file, used for connectivity to the Oracle Database:

```
podman exec -ti <container-name> su - psadm2 -c 'cat ${TNS_ADMIN}⇒  
/tnsnames.ora'
```

- To connect to the database with sqlplus (enter the user and password):

```
podman exec -ti <container-name> su - psadm2 -c 'sqlplus <user>⇒  
/<password>@<dbname>'
```

- To run the Automated Configuration Management (ACM) script:

```
podman exec -ti <container-name> su - psadm2 -c '$PS_HOME/utility/psrun⇒  
ACM.sh'
```

- To run the top command to list the psadm2 processes.

```
podman exec -ti <container-name> su - psadm2 -c 'top'
```

Appendix F

Deploying PeopleSoft Containers on Oracle Kubernetes Engine

This appendix discusses:

- Understanding the Oracle Kubernetes Engine Deployment
- Prerequisites for the OKE Deployment
- Building Container Images and Pushing to Oracle Container Registry
- Creating File System Storage and Uploading DPKs
- Creating and Accessing the Kubernetes Cluster
- Creating and Configuring an Ingress NGINX Load Balancer
- Creating Oracle Container Registry Secret
- Running PeopleSoft Containers on the Kubernetes Cluster
- Running PeopleSoft Containers on the Kubernetes Cluster with Helm

Understanding the Oracle Kubernetes Engine Deployment

Run PeopleSoft containers Oracle Kubernetes Engine (OKE) on Oracle Cloud Infrastructure. OKE uses Kubernetes, which is an open-source system for automating deployment, scaling, and management of containerized applications across clusters of hosts. This process supports the deployment of PeopleTools mid-tier and search components (OpenSearch, OpenSearch Dashboards, Logstash).

See Overview of Kubernetes Engine (OKE) in Oracle Cloud Infrastructure documentation, <https://docs.oracle.com/en-us/iaas/Content/ContEng/Concepts/contengoverview.htm>.

Read these sections if you want to deploy PeopleSoft containers on a Kubernetes cluster (OKE):

- Understanding the Oracle Kubernetes Engine Deployment
- Prerequisites for the OKE Deployment
- Building Container Images and Pushing to Oracle Container Registry
- Creating File System Storage and Uploading DPKs
- Creating and Accessing the Kubernetes Cluster
- Creating and Configuring an Ingress NGINX Load Balancer
- Creating Oracle Container Registry Secret
- Running PeopleSoft Containers on the Kubernetes Cluster

You also have the option to deploy PeopleSoft containers on a Kubernetes cluster (OKE) with Helm. Helm is a package manager for Kubernetes that helps to manage deployment, scaling, and upgrades.

See Using Helm, https://helm.sh/docs/intro/using_helm.

Read these sections if you want to deploy PeopleSoft containers on a Kubernetes cluster with Helm:

- Understanding the Oracle Kubernetes Engine Deployment
- Prerequisites for the OKE Deployment
- Building Container Images and Pushing to Oracle Container Registry
- Creating File System Storage and Uploading DPKs
- Creating and Accessing the Kubernetes Cluster
- Creating and Configuring an Ingress NGINX Load Balancer
- Creating Oracle Container Registry Secret
- Running PeopleSoft Containers on the Kubernetes Cluster with Helm

See Also

Kubernetes Evolution: Streamlining Deployments with Helm,
<https://blogs.oracle.com/developers/post/kubernetes-evolution-streamlining-deployments-with-helm>

Prerequisites for the OKE Deployment

Before beginning the deployment, you must fulfill the following requirements:

- Access to My Oracle Support to download the DPKs
Download the four DPKs for PeopleTools mid-tier, and the search components DPK (OpenSearch, OpenSearch Dashboards, and Logstash, or OSK DPK). You will use the DPKs to install *PS_HOME*, to create container images, and to deploy the container images to OKE.
- Oracle Cloud Infrastructure account
Verify that the Oracle Cloud Account includes subscriptions for Compute, Block Storage, File Storage service, and Oracle Kubernetes Engine (OKE). You will also need a subscription to Database Cloud Service if you host your database on Oracle Cloud Infrastructure.
- Knowledge of OKE administration, Kubernetes clusters, OKE and Kubernetes commands.
- Access to Oracle Container Registry
The Oracle Linux 8 platform image for the installation will be downloaded from this location during the container build process. After you create the container image, you upload it to the registry to be used by OKE.
See Oracle Container Registry, <https://container-registry.oracle.com>.
- An Oracle Linux VM
The Oracle Linux VM is the host for the container, and must be configured to use Podman as described in this documentation.
- Podman and podman-compose
Each user that builds and runs containers and the prebuilt container images must be able to run Podman and podman-compose. The task Configuring the Linux VM for Container Deployment includes steps to verify that Podman and podman-compose are available.
- A non-root user with sudo root permission
To configure the Linux VM, build and run containers, the user must be able to use the sudo command.
- Access to Helm and familiarity to Helm commands.

Task F-1: Building Container Images and Pushing to Oracle Container Registry

To build the container images:

1. Create a virtual machine (VM) instance in OCI Compute with an Oracle Linux 8 operating system.
See Creating an Instance in the OCI documentation, <https://docs.oracle.com/en-us/iaas/Content/Compute/Tasks/launchinginstance.htm>.
2. In OCI, provision a block volume and attach it to the instance.
See Working with Block Volumes in the OCI documentation, <https://docs.oracle.com/en-us/iaas/Content/Block/blockvolumes.htm>.
3. Install and configure Podman on the instance.
See "Deploying PeopleSoft DPKs in Containers," Configuring the Linux VM for Container Deployment.
4. Build the container images on the Compute instance.
See "Deploying PeopleSoft DPKs in Containers," Building and Running the Container for Mid-tier Deployment.
See "Deploying PeopleSoft DPKs in Containers," Building and Running the Container for Search Components.
5. Push the container image to Oracle Cloud Infrastructure Registry, which the OCI documentation refers to as Container Registry.
See Overview of Container Registry, <https://docs.oracle.com/en-us/iaas/Content/Registry/Concepts/registryoverview.htm>.
See Pushing Images Using the Docker CLI, <https://docs.oracle.com/en-us/iaas/Content/Registry/Tasks/registrypushingimagesusingthedockercli.htm>.

Task F-2: Creating File System Storage and Uploading DPKs

OCI File System storage is used to store the PeopleTools DPKs. The DPKs are required after building the container images for deployment in OKE.

1. Create a File Storage service file system and mount point.
See Create File Systems in the Oracle Cloud Infrastructure documentation, <https://docs.oracle.com/en-us/iaas/Content/File/Tasks/creatingfilesystems.htm>.
2. Obtain the PeopleTools and search DPKs from My Oracle Support.
3. Upload the DPKs to the OCI file system.
See Transferring Data To and From File Storage in the Oracle Cloud Infrastructure documentation, <https://docs.oracle.com/en-us/iaas/Content/File/Tasks/transferring-data-to-and-from-file-storage.htm>.

Task F-3: Creating and Accessing the Kubernetes Cluster

To set up the Kubernetes cluster:

1. Create a Kubernetes cluster in OCI.

The Quick Create feature creates a cluster with default settings and a new Virtual Cloud Network (VCN).

The Kubernetes cluster node pool is a cluster of Compute instances. Specify enough nodes to meet your requirements. For example, create a cluster with four nodes for four PeopleTools Compute instances.

See [Using the Console to create a Cluster with Default Settings](https://docs.oracle.com/en-us/iaas/Content/ContEng/Tasks/contengcreatingclusterusingoke_topic-Using_the_Console_to_create_a_Quick_Cluster_with_Default_Settings.htm) in the 'Quick Create' workflow, https://docs.oracle.com/en-us/iaas/Content/ContEng/Tasks/contengcreatingclusterusingoke_topic-Using_the_Console_to_create_a_Quick_Cluster_with_Default_Settings.htm.

2. Create a Compute instance with a Linux 8 operating system to access and work with the Kubernetes cluster.

The cluster access instance must be in the same VCN and same subnet as the Kubernetes cluster.

See [Creating an Instance in the Oracle Cloud Infrastructure documentation](https://docs.oracle.com/en-us/iaas/Content/Compute/Tasks/launchinginstance.htm), <https://docs.oracle.com/en-us/iaas/Content/Compute/Tasks/launchinginstance.htm>.

3. Configure the instance to access the Kubernetes cluster.

See [Setting Up Cluster Access in the Oracle Cloud Infrastructure documentation](https://docs.oracle.com/en-us/iaas/Content/ContEng/Tasks/contengdownloadkubeconfigfile.htm), <https://docs.oracle.com/en-us/iaas/Content/ContEng/Tasks/contengdownloadkubeconfigfile.htm>.

4. Install kubectl on the Kubernetes cluster control plane.

For information on the kubectl commands cited in this documentation, see the Kubernetes documentation. You can also use the command `kubectl -h` to see help on the command line.

See Kubernetes documentation, <https://kubernetes.io/docs/reference/kubectl>.

5. Log in to each node in the cluster and extend the root partition.

The node partitions do not expand automatically, so it is necessary to extend them after creating the OKE cluster.

See [Extending the Root Partition of Worker Nodes](https://docs.oracle.com/en-us/iaas/Content/ContEng/Tasks/contengextendingrootpartitionmanually.htm), <https://docs.oracle.com/en-us/iaas/Content/ContEng/Tasks/contengextendingrootpartitionmanually.htm>.

Task F-4: Creating and Configuring an Ingress NGINX Load Balancer

This section discusses:

- Installing Ingress NGINX Controller
- Configuring NGINX Deployment
- Configuring NGINX Service

Task F-4-1: Installing Ingress NGINX Controller

Set up an ingress NGINX controller to load balance and handle HTTP and HTTPS traffic originating from outside a Kubernetes cluster. The NGINX controller is a third-party ingress controller that you install and configure separately from the Kubernetes cluster. Use the latest version of the NGINX controller.

See [Managing Ingress Controllers](https://docs.oracle.com/en-us/iaas/Content/ContEng/Tasks/contengmanagingingresscontrollers.htm), in the Oracle Cloud Infrastructure documentation, <https://docs.oracle.com/en-us/iaas/Content/ContEng/Tasks/contengmanagingingresscontrollers.htm>.

To install the controller:

1. Locate the version number for the latest version of the controller in the GitHub documentation.

You can find the versions listed in Supported Versions table in the Readme section. For example, the latest version at the time of this publication is 1.12.0.

See GitHub, kubernetes/ingress-nginx, <https://github.com/kubernetes/ingress-nginx>.

2. Enter this kubectl command to create the load balancer, substituting the version number for <vnum>:

```
kubectl apply -f https://raw.githubusercontent.com/kubernetes/ingress-nginx/controller-v<vnum>/deploy/static/provider/cloud/deploy.yaml
```

See Deploying the Ingress Controller and associated resources, in the Oracle Cloud Infrastructure Documentation, https://docs.oracle.com/en-us/iaas/Content/ContEng/Tasks/contengsettingupingresscontroller.htm#settingupcontroller_creatingerviceaccount.

3. To view the public IP address for the ingress NGINX load balancer, in the OCI console, select Networking, then Load balancer.

The public IP address is included on the Details page.

You can also find information about connections to the Kubernetes cluster nodes, such as private IP addresses, after completing this setup.

4. If you need to delete the load balancer, enter this kubectl command:

```
kubectl delete -f https://raw.githubusercontent.com/kubernetes/ingress-nginx/controller-v<vnum>/deploy/static/provider/cloud/deploy.yaml
```

See Also

Ingress NGINX Controller documentation, <https://kubernetes.github.io/ingress-nginx/deploy/#oracle-cloud-infrastructure>

Task F-4-2: Configuring NGINX Deployment

To configure the NGINX deployment:

1. Enter this command to display details about the NGINX deployment:


```
kubectl describe deployment/ingress-nginx-controller -n ingress-nginx
```
2. Enter the `kubectl edit` command to edit and update the NGINX deployment file using the default editor.

Enter the number of nodes in the Kubernetes cluster for the replicas parameter in the spec section.

Add or change the port entries in the ports section.

Note. The NGINX controller by default opens ports 80 and 443 on a public load balancer. For PeopleTools mid-tier, port 80 maps to port 8000, and port 443 maps to 8443. When you access the PIA URL, it is not necessary to include the port number. For HTTP it uses 80 (mapped to 8000), and for HTTPS it uses 443 (mapped to 8443). However, the OSK ports (9200, 9800, and 5601) are not opened by the NGINX controller by default, so it is necessary to open them for the OSK Kubernetes deployment and service.

```
kubectl edit deployment/ingress-nginx-controller -n ingress-nginx

spec:
  replicas: <number of oke nodes>

ports:
- containerPort: 9200
  name: osk9200
```

```

    protocol: TCP
-   containerPort: 9800
    name: osk9800
    protocol: TCP
-   containerPort: 5601
    name: osk5601
    protocol: TCP

```

Task F-4-3: Configuring NGINX Service

To configure the NGINX service:

1. Enter this command to display details about the NGINX controller service:

```
kubectl describe service/ingress-nginx-controller -n ingress-nginx
```

2. Enter the `kubectl edit` command to edit and update the NGINX service file using the default editor.

Add or change the port entries in the ports section.

```
kubectl edit service/ingress-nginx-controller -n ingress-nginx
```

```

-   appProtocol: http
    name: osk9200
    nodePort: 30952
    port: 9200
    protocol: TCP
    targetPort: http
-   appProtocol: http
    name: osk9800
    nodePort: 30955
    port: 9800
    protocol: TCP
    targetPort: http
-   appProtocol: http
    name: osk5601
    nodePort: 30958
    port: 5601
    protocol: TCP
    targetPort: http

```

Task F-5: Creating Oracle Container Registry Secret

Before you can pull container images from OCI Container Registry you must create a registry secret. Use the following `kubectl` command:

See the description for the command options in the OCI documentation.

See Pulling Images from Container Registry During Kubernetes Deployment, <https://docs.oracle.com/en-us/iaas/Content/Registry/Tasks/registrypullingimagesfromocir.htm>.

```

kubectl create secret docker-registry oracle-container-registry-secret \
--docker-server=<registry-domain> \
--docker-username=<username> \

```

```
--docker-password='<password>' \
--docker-email=<email>
```

- The secret name is oracle-container-registry-secret, which you enter in the Helm values.yaml file in a later task.
- For registry-domain, specify a region key or region identifier for the Container Registry region you're using.
- Enter the OCI account credentials for <username> and '<password>' (in single quotes).
The username is the one to use when pulling the image, so it must have access to the tenancy that holds the registry.
- The <email> value is required, but it does not have to be a real email.

The namespace will be used as the host name in the pod FQDN:

```
<hostname>.<subdomain>.<namespace>.svc.cluster.local
```

Task F-6: Running PeopleSoft Containers on the Kubernetes Cluster

To run the PeopleTools containers on the Kubernetes cluster:

1. Log in to the Compute instance hosting the Kubernetes cluster control plane.
2. Change directory to containers/OraclePeopleTools/k8s.
3. Open deployment.yaml for editing, for example with vi editor.
4. Update the following fields:
 - Specify your node CPUs and memory in the resources section under Deployment.


```
apiVersion: apps/v1
kind: Deployment
[content omitted]
resources:
  limits:
    memory: 64G
    cpu: "8"
  requests:
    memory: 16G
    cpu: "2"
```
 - Enter the name of the PeopleSoft database for <DBNAME> in the value for IB_REST_PRCS_URL.

Note. Replace 86x with your PeopleTools release.

```
apiVersion: apps/v1
kind: Deployment
labels:
  app.kubernetes.io/name: peopletools
  app.kubernetes.io/instance: peopletools-osk
  app.kubernetes.io/version: "2.3.0"
  app.kubernetes.io/component: search
  app.kubernetes.io/part-of: peopletools
  app.kubernetes.io/managed-by: k8s-admin
```

```

    name: osk
    namespace: 86x-env
[content omitted]
- name: IB_REST_PRCES_URL
  value: "http://pt.mt.862x-env.svc.cluster.local:8000/PSIGW⇒
/RESTListeningConnector/<DBNAME>/PTPRCS_GETMETRICS.v1/getMetrics"

```

- Enter the IP address to the OCI File Storage server for <oci filestorage ip>. Enter the path to the PeopleTools DPKs uploaded to the File Storage server for </path/to/86x/dpk>.

Note. Replace 8.6x with your PeopleTools release.

```

apiVersion: apps/v1
kind: Deployment
metadata:
  labels:
    app.kubernetes.io/name: peopletools
    app.kubernetes.io/instance: midtier
    app.kubernetes.io/version: "8.6x"
    app.kubernetes.io/component: midtier
    app.kubernetes.io/part-of: peopletools
    app.kubernetes.io/managed-by: k8s-admin
  name: midtier
  namespace: 86x-env
[content omitted]
volumes:
  - name: in
    nfs:
      server: <oci filestorage ip>
      path: </path/to/86x/dpk>
      readOnly: true

```

- Enter the IP address to the OCI File Storage server for <oci filestorage ip>. Enter the path to the search DPKs uploaded to the File Storage server for </path/to/osk/dpk>.

```

apiVersion: apps/v1
kind: Deployment
metadata:
  labels:
    app.kubernetes.io/name: peopletools
    app.kubernetes.io/instance: peopletools-osk
    app.kubernetes.io/version: "2.3.0"
    app.kubernetes.io/component: search
    app.kubernetes.io/part-of: peopletools
    app.kubernetes.io/managed-by: k8s-admin
  name: osk
  namespace: 862-env
[content omitted]
volumes:
  - name: in
    nfs:
      server: <oci filestorage ip>
      path: </path/to/osk/dpk>
      readOnly: true

```

- Update the name for the PeopleTools mid-tier container image.

```
containers:
  - name: midtier
    image: <image name>
```

- Update the name for the search (osk) container image.

```
containers:
  - name: osk
    image: <image_name>
```

5. Run this command to run the containers in the cluster:

```
kubectl apply -f deployment.yaml
```

6. Update the hosts file with the public IP address for the load balancer and the fully qualified domain name for the mid-tier or search node.

On Windows, the hosts file is typically in C:\Windows\System32\drivers\etc. Open with Run as Administrator.

To determine the public IP address for the load balancer, in the OCI console, select Networking > Load balancers.

PeopleTools mid-tier:

```
<Ingress-Nginx Controller load balancer public IP address>=>
peopletools.midtier.86x-env.svc.cluster.local
```

Search (OSK):

```
<Ingress-Nginx Controller load balancer public IP address>=>
peopletools.osk.86x-env.svc.cluster.local
```

7. Use this URL to sign in to PIA in a browser:

```
http://peopletools.midtier.86x-env.svc.cluster.local
```

Task F-7: Running PeopleSoft Containers on the Kubernetes Cluster with Helm

This section discusses:

- Using Helm with OKE
- Installing Helm
- Configuring values.yaml
- Configuring the CPU and Memory Resources
- Deploying PeopleTools Containers Using the Helm Chart

Using Helm with OKE

Helm is a package manager for Kubernetes. You have the option to set up Helm configuration files and use a Helm command instead of using the kubectl commands to deploy the PeopleTools mid-tier and search containers in the Kubernetes cluster. After you have the Helm configuration set up, you can change the values in the configuration files for various scenarios such as different test cases, simplifying repeated deployments.

The files needed to use Helm with PeopleSoft containers are located in *PS_HOME/containers/OraclePeopleTools/helm-charts*. The files comprise a package that contains all the resources required to deploy the application in the Kubernetes cluster. The instructions in this section are similar to those in *PS_HOME/containers/OraclePeopleTools/helm-charts/oraclepeopletools/README.md*.

See Helm web site, <https://helm.sh/docs/intro/quickstart>.

To use Helm to run PeopleSoft Containers on the Kubernetes cluster (OKE), first perform the tasks described earlier in this appendix:

- Prerequisites for OKE
- Building Container Images and Pushing to Oracle Container Registry
- Creating File System Storage and Uploading DPKs
- Creating and Accessing the Kubernetes Cluster
- Creating and Configuring an Ingress NGINX Load Balancer
- Creating Oracle Container Registry Secret

Task F-7-1: Installing Helm

The requirements for using Helm are:

- Kubernetes 1.30 or greater
- Helm 3.x

Log in to the OCI Compute instance hosting the Kubernetes control plane and install Helm v3.15.4 or greater, following the instructions on the Helm web site.

See Helm installation instructions, <https://helm.sh/docs/intro/install>.

Task F-7-2: Configuring values.yaml

Specify the values for your container images.

1. Log in to the OCI Compute instance hosting the Kubernetes control plane.
2. Change directory to *PS_HOME/containers/OraclePeopleTools/helm-charts/oraclepeopletools* and locate values.yaml.

3. Open values.yaml for editing.

These tables list the configurable parameters to be used by Helm in running the containers in the Kubernetes cluster. Change the default values as required, and supply values for all parameters that do not have default values.

Global parameters:

Parameter	Description	Default
peopletoolsns*	PeopleTools Kubernetes namespace.	<i>Value required</i>
registry	Name of the OCI Container Registry name holding the container images.	<i>Value required</i>
username	User name to access the OCI Container Registry.	<i>Value required</i>
password	Enter the password in double quotes for the OCI Container Registry user.	<i>Value required</i>
email	Email for the OCI Container Registry user.	<i>Value required</i>
imagePullPolicy	Policy that controls when the image is pulled from the OCI Container Registry.	Always
imagePullSecret	Enter the image pull secret you created in the earlier task.	oracle-oci-container-registry-secret
ociFileStorageIP	IP address for the OCI File Storage system holding the PeopleSoft DPKs.	<i>Value required</i>
dbname	Enter the 8-character database name in uppercase. This is the same as the DBNAME you entered in the deployment.yaml file for the IB_REST_PRCES_URL parameter.	<i>Value required</i>

PeopleTools mid-tier container parameters:

Parameters	Description	Default
hostname*	Host name for the PeopleTools mid-tier container.	peopletools
subdomain*	Subdomain where the PeopleTools mid-tier container resides.	midtier
image	Image name for the PeopleTools mid-tier container.	<i>Value required</i>

Parameters	Description	Default
cookieExpires	PIA cookie expiration time in seconds.	172800
cookieMaxAge	PIA cookie maximum age in seconds.	172800
cookieName	PIA cookie name.	midtier
dpkPath	Path to the PeopleTools DPKs on OCI File Storage system.	<i>Value required</i>
replicaCount	PeopleTools mid-tier container replica count. This is the number of Kubernetes nodes.	2

Search (osk) container parameters:

Parameters	Description	Default
hostname**	Host name for the PeopleTools search container.	peopletools
subdomain**	Subdomain where the PeopleTools search container resides.	osk
image	Image name for the PeopleTools search container.	<i>Value required</i>
dpkPath	Path to the OSK DPKs on OCI File Storage system.	<i>Value required</i>
replicaCount	PeopleTools search container replica count. This is the number of Kubernetes nodes.	1

* PeopleTools container FQDN is constructed with the hostname and subdomain you supplied in the midtier section of values.yaml:

```
<hostname>.<subdomain>.<namespace>.svc.cluster.local
```

** PeopleTools Search container FQDN is constructed with the hostname and subdomain you supplied in the osk section of values.yaml:

```
<hostname>.<subdomain>.<namespace>.svc.cluster.local
```

Task F-7-3: Configuring the CPU and Memory Resources

To configure the CPU and memory resources:

1. On the instance hosting the Kubernetes control plane, change directory to *PS_HOME*/containers/OraclePeopleTools/helm-charts/oraclepeopletools/templates.
2. Open deployment.yaml for editing.

3. Search for parameters for CPU and memory and make any necessary adjustments to match the values for the Kubernetes nodes.

This example is from the section for the mid-tier container:

```
apiVersion: apps/v1
kind: Deployment
[content omitted]
containers:
  - name: midtier
    image: {{ .Values.image }}
    imagePullPolicy: {{ .Values.imagePullPolicy | default "IfNot⇒
Present" | quote }}
    env:
      - name: DB_WAIT_TIMEOUT
        value: "1"
    ports:
      - containerPort: 10100
      - containerPort: 10101
      - containerPort: 7000
      - containerPort: 7010
      - containerPort: 8000
      - containerPort: 8001
    resources:
      limits:
        memory: 64G
        cpu: "8"
      requests:
        memory: 16G
        cpu: "2"
```

Task F-7-4: Deploying PeopleTools Containers Using the Helm Chart

To use Helm to deploy PeopleTools containers in Kubernetes cluster:

1. On the instance hosting the Kubernetes control plane, change directory to *PS_HOME/containers/OraclePeopleTools/helm-charts/oraclepeopletools*.
2. Run this command to run the Helm chart and set up the PeopleSoft containers.
Replace "8.6x" with your PeopleTools release. The final period in the command refers to the current directory.
`helm install 8.6x .`

Run this command to include debugging log files:
`helm install 8.6x . --debug --wait`
3. If you need to remove the Helm chart, run this command:
`helm uninstall 8.6x .`

Run this command to include debugging log files:
`helm uninstall 8.6x . --debug --wait`
4. Update the hosts file with the public IP address for the load balancer and the fully qualified domain name for the mid-tier or search node

On Windows, the hosts file is typically in C:\Windows\System32\drivers\etc. Open with Run as Administrator.

To determine the public IP address for the load balancer, in the OCI console, select Networking > Load balancers.

For PeopleTools mid-tier, use the hostname and subdomain you supplied in the midtier section of values.yaml.

```
<Ingress-Nginx Controller load balancer public IP address> <mid-tier>  
hostname>.<mid-tier subdomain>.<namespace>.svc.cluster.local
```

For the search container, use the hostname and subdomain you supplied in the osk section of values.yaml.

```
<Ingress-Nginx Controller load balancer public IP address> <hostname>.<subdomain>.<namespace>.svc.cluster.local
```

5. Use this URL to sign in to PIA in a browser, using the mid-tier values for hostname and subdomain.

<http://<hostname>.<subdomain>.<namespace>.svc.cluster.local>

Appendix G

Learning About the PeopleSoft Deployment Process

This appendix discusses:

- Understanding the PeopleSoft Deployment Framework
- Understanding PeopleSoft Components
- Understanding Puppet and the PeopleSoft Puppet Modules
- Understanding the Deployment Packages Uses and Contents
- Reviewing the PeopleSoft PeopleTools Patch DPKs
- Reviewing the PeopleTools Client DPK

Understanding the PeopleSoft Deployment Framework

Oracle recommends that you use the PeopleSoft Deployment Packages (DPKs) to install and configure your PeopleSoft environment. DPKs offer out-of-the-box functionality that greatly enhances the installation and configuration of your PeopleSoft environment, which is not available with the standard VCD installation.

DPKs allow fast deployment of a PeopleSoft environment on any hardware platform — physical hardware ("bare metal") or virtual. The DPKs allow you to skip the manual steps associated with the following:

- Gathering the necessary installation programs
- Installing third-party products such as Oracle Tuxedo and WebLogic and the latest patches (CPUs)
- Installing Application Home (PS_APP_HOME) (for PI DPKs)
- Installing both PeopleTools and the PeopleTools patch binaries
- Configuring the PeopleSoft domains

The DPKs can be installed on Oracle Linux and Red Hat Enterprise Linux, and on Microsoft Windows platforms supported by Oracle for PeopleSoft systems.

The DPKs include a setup script that deploys a default instance of each of the PeopleSoft mid-tier domains—PeopleSoft Pure Internet Architecture (PIA), Application Server and Process Scheduler domains. These domains are fully functional out-of-the-box. However, it is assumed that you will need to make changes to these deployments. These changes will be required to reflect your organizational standards, preferences, and customizations. DPKs set up your infrastructure for you—"infrastructure as a code," which allows you to customize the environments to produce various topologies to serve different functionality, such as test environments, environments for performance testing or development environments, and so on. Notably, these customizations can be retained across maintenance application (upgrades, patches, and updates).

The best practice for environments deployed with the DPKs is to modify the environments using the methods provided by the PeopleSoft customizations. With the delivered customization method you have the ability to safely modify a wide variety of installation locations, integration definitions, and other configuration settings, while at the same time ensuring that the customizations are retained after applying software patches.

See [Understanding Puppet and the PeopleSoft Modules](#)

See the sections on customizing a PeopleSoft environment in the chapters on deploying the DPKs.

Using DPKs to create a PeopleTools middle-tier environment (Application Server, Process Scheduler, and PIA) typically takes less than 15 minutes. This allows for dynamic scaling and quick patching. With such fast creation of the middle-tier components, you can optimize hardware resources by creating middle-tier virtual machines (VMs) on demand. These VMs can be removed to release the resources when not in use, yet be quickly recreated as needed.

DPKs are integrated with PeopleSoft Automated Configuration Management (ACM) to provide PeopleSoft application configuration using plug-ins delivered by the PeopleSoft Application. For example, for all deployed environments, the Integration Broker and Gateway are set with ACM plug-ins.

DPKs allow for fast environment cloning. After creating an environment clone, you can use PeopleSoft ACM plug-ins to modify the configuration settings, such as those for Integration Broker, from those used in the original environment, to those required for the cloned environment, during the deployment of the middle-tier using PeopleTools DPK. DPKs can be used, to easily and effectively, create a fresh clone from your existing environments. Using database snap cloning, an environment clone can be achieved in less than 30 minutes.

Understanding PeopleSoft Components

Here are brief descriptions of some of the terms referenced in this documentation for components included in a PeopleSoft environment. The components included for each deployment depend upon the types of DPKs downloaded and method used to deploy them. PeopleSoft components, including PeopleSoft Pure Internet Architecture (PIA), application server and Process Scheduler, are described in the PeopleSoft PeopleTools product documentation.

See the PeopleTools System and Server Administration product documentation for an explanation of PeopleSoft architecture fundamentals.

- **PeopleSoft Pure Internet Architecture (PIA)**
This is the Web Server component of the PeopleSoft system.
- **Application server and Process Scheduler**
The application server acts as the business logic engine of the PeopleSoft system. The Process Scheduler is responsible for processing scheduled tasks or jobs that typically do not happen during the course of a user's browser request.
- **PeopleSoft application database**
This document uses the term "PeopleSoft applications" to refer to Oracle PeopleSoft products such as PeopleSoft Customer Relationship Management (CRM), PeopleSoft Enterprise Learning Management (ELM), PeopleSoft Financials and Supply Chain Management (FSCM), PeopleSoft Human Capital Management (HCM), and PeopleSoft Interaction Hub.
- **Mid-tier components**
This documentation uses the term "mid-tier" to refer to PeopleSoft Application Server, Process Scheduler, and PIA, and the software required to deploy them, including Oracle Tuxedo and Oracle WebLogic.
- **AppBatch components**
This documentation uses the term "AppBatch" to refer to the Application Server and Process Scheduler server.

Understanding Puppet and the PeopleSoft Puppet Modules

This section discusses:

- Understanding Puppet
- Understanding Hieradata-bbox="83 205 267 222">
- Understanding Puppet Modules
- Understanding How the PeopleSoft DPKs Use Puppet
- Understanding PeopleSoft Puppet Component Modules
- Understanding PeopleSoft Puppet Profiles and Roles Modules
- Understanding Puppet Third-Party Modules

Understanding Puppet

The DPKs are delivered with the PeopleSoft Puppet modules, which are initialization and management scripts based upon the open-source Puppet software. The PeopleSoft Puppet modules can be used to customize and control the PeopleSoft environments deployed from the DPKs. This section includes a brief introduction to Puppet. For detailed information, see the documentation on the Puppet Labs Web site.

See Puppet Labs Documentation, <http://docs.puppetlabs.com>.

Puppet is a tool designed to manage the configuration of UNIX-like and Microsoft Windows systems declaratively. The user describes system resources and their state, either using Puppet's declarative language or a Ruby DSL (domain-specific language). This information is stored in files called "Puppet manifests." Puppet discovers the system information and compiles the Puppet manifests into a system-specific catalog containing resources and resource dependency, which are applied against the target systems. Any actions taken by Puppet are then reported. Puppet consists of a custom declarative language to describe system configuration, which can be either applied directly on the system, or compiled into a catalog and distributed to the target system with a client-server paradigm (using a REST API), and the agent uses system-specific providers to enforce the resource specified in the manifests. The resource abstraction layer enables administrators to describe the configuration in high-level terms, such as users, services, and packages without the need to specify OS specific commands (such as rpm, yum, or apt).

Puppet has been chosen by Oracle as a solution for provisioning PeopleSoft environments for the following reasons:

- Community

Puppet has a significant presence in the configuration management marketplace and a strong user community. This community contributes to improving and testing Puppet core functionality.
- Open source and Enterprise solutions

Puppet Open Source is sufficiently rich in features to meet the requirements of Oracle for orchestrating the provisioning of large numbers of PeopleSoft environments in a fully automated fashion.
- Lightweight

Puppet can be run in standalone (master-less) mode and therefore does not require complex steps to get started.
- Data and code separation

Puppet encourages clean separation of the data that describes your environment and the way in which it is provisioned.

- Component modules

The creation of Application Component modules allows vendors such as Oracle to create lightweight, isolated modules that can be independently obtained and plugged into existing Puppet environments.

- Role isolation — separation of infrastructure instructions and application instructions

This allows your system administrators to provision the OS independently of the Application steps. Puppet facilitates this role separation and allows the administrators to focus on the operational needs of the environments.

- OS platform support

Puppet agent can run on all supported PeopleSoft OS platforms.

Understanding Hieradata

Hiera is a feature of Puppet that allows data to be stored and subsequently queried from any number of file formats ("back-end" structures). These structures may be in a number of different formats, the most preferable being YAML, which is a readable properties file format with hierarchical structure support. The value of Hiera to the PeopleSoft modules is that it allows separation of the data from the code that performs the actual system configuration. In the context of a PeopleSoft environment, the database connectivity information and any other custom configuration settings to be applied to the Application Server domain are placed in a Hiera data file. Any number of domains with varying configuration settings can be represented in a Hiera data file. Hiera data files can be associated with a particular environment such as Dev, Test or Production. A Production Hiera data file may contain connectivity information for a single database with a number of Application Server domains. A Dev Hiera data file on the other hand may only contain a single Application Server domain and may have specific configuration features enabled such as the Work Station Listener process for three-tier PeopleSoft connections. This ability to define all abstractions of the PeopleSoft environment in Hiera completely decouples the runtime characteristics of your environment from the code that actually creates it. This is a very powerful feature.

Understanding Puppet Modules

A Puppet module can be thought of as a self-contained bundle of code that implements a related set of functionality. Developers write custom modules and combine these with pre-built modules from the Puppet Labs repository, Puppet Forge. Modules are how Puppet finds the classes and types it can use — it automatically loads any class, defined type, or custom types stored in its modules. A module can be thought of as being somewhat like an EAR file in the sense that it is a container or archive that stores a self-contained archive of functionality. A Puppet module contains some of the following:

- Puppet source files — manifests with the .pp extension, which implement the functionality exhibited by the module
- Test manifests that allow your module to be tested in an isolated fashion
- Library of types and providers
- Template files into which custom values may be substituted
- Metadata file that describes the version and purpose of the modules

Understanding How the PeopleSoft DPKs Use Puppet

The PeopleSoft DPKs use Puppet to automate the process of deploying and configuring a PeopleSoft environment. Oracle has created custom modules and types to deploy and configure a PeopleSoft environment. These modules make use of pre-built modules from Puppet Forge. All the PeopleSoft developed modules and types along with the pre-built modules are packaged with PeopleTools server DPKs as well as PeopleSoft application DPKs. In addition, the PeopleSoft and PeopleTools DPKs package Hiera YAML files with default data values that can be used to set up a fully working PeopleSoft environment out-of-the-box.

The modules delivered with the PeopleSoft DPKs adhere to the following Puppet design patterns:

- Use Hiera as an external data store
See Understanding Hiera.
- Do not use Hiera at any point in component modules
- Apply the Puppet Roles and Profiles pattern
See Understanding PeopleSoft Puppet Profiles and Roles Modules.
- Ensure idempotency in component modules so that your modules create the same result regardless of the initial state of the underlying resource
- Follow the module naming and documentation guidelines from Puppet Labs.

PeopleSoft Puppet modules are broadly divided into the following three categories. These modules are described in more detail in the following sections.

- Component Modules
 - Atomic — building block modules that work on a single abstraction
 - Low-level — contain minimal dependencies on other modules
- Profiles Modules
 - Assemble data from Hiera to be used for configuring the hosts
 - Do not operate on single artifacts such as files or users
- Roles Modules
 - Focus on operational responsibilities of the hosts

See Modules Fundamentals on the Puppet Labs documentation Web site,
http://docs.puppetlabs.com/puppet/latest/reference/modules_fundamentals.html.

Understanding PeopleSoft Puppet Component Modules

Component modules are a specific sub-category of Puppet modules. They typically deal with a specific technical abstraction. The PeopleSoft DPKs are delivered with such building-block component modules to free you from needing to create platform-specific shell scripts to automate environment provisioning (deployment and configuration). These scripts typically invoke the Oracle Universal Installer (OUI) for installing components like Oracle WebLogic, Oracle Database Server or Database Client, and Oracle Tuxedo. The scripts use PeopleSoft utilities like PSADMIN, PeopleSoft Application Engine (psae) and other low-level utilities for configuring a PeopleSoft environment.

All the PeopleSoft Puppet component modules are implemented as custom resource types using Puppet Types and Providers paradigm. This paradigm provides a powerful way to extend Puppet by separating the interface and implementation of each resource managed by Puppet.

The PeopleSoft Puppet component modules are packaged as two separate modules:

- `pt_deploy` — This component module contains PeopleSoft custom resource types for deploying various PeopleSoft components.
- `pt_config` — This component module contains PeopleSoft custom resource types for configuring various parts of a PeopleSoft environment.

Understanding PeopleSoft Puppet Profiles and Roles Modules

Roles and Profiles are considered to be Puppet modules that contain manifests that operate at a higher level of abstraction than the component modules which act directly on manageable system components. Understanding the purpose of Roles and Profiles modules is crucial when taking full advantage of Puppet in your PeopleSoft architecture. Roles and Profiles refer to an established pattern in the Puppet community for increasing the reusability of modules. This pattern encourages the separation of how Application components are configured from which components should be configured. The use of this pattern is fundamental to the way in which the PeopleSoft component modules have been created.

Note that the word "roles" and "profiles" as used in the context of Puppet development have quite different meanings than the accepted definitions.

See The Puppet Labs installation guide, https://docs.puppetlabs.com/guides/install_puppet/pre_install.html.

The primary purpose of the Roles and Profiles pattern is to isolate and abstract functionality along the separate lines of business and technical perspectives. In such cases we want to isolate the description of an environment from the way in which it is implemented while retaining a relationship between these abstractions. For example, consider a PeopleSoft deployment comprised of three distinct pillars: PeopleSoft Human Capital Management 9.1, PeopleSoft Human Capital Management 9.2 and PeopleSoft Financials 9.2, all in production. There is a Dev and Test environment for each of these PeopleSoft application pillars.

Now consider the business and technical perspectives on this system. The business managers see the systems as being independent of one another servicing different business functions. The technical team sees them as variants of the same tech stack, as all of the systems contain JEE servers, databases, firewalls and so on. In the PeopleSoft DPK implementation, the business perspectives are associated with Puppet roles, and the technical perspectives with profiles.

The Roles and Profiles pattern implemented in PeopleSoft DPKs is comprised of two separate modules:

- `pt_role` — This module contains pre-defined roles that can be assigned to an host.
- `pt_profile` — This module contains PeopleSoft classes and defined types to set up various aspects of a PeopleSoft environment. The classes and defined types in this module interact with Hiera to access the data, and call in the low-level custom types to deploy and configure the PeopleSoft environment.

Understanding Puppet Third-Party Modules

The PeopleSoft DPKs are delivered with modules made available to the Puppet community through the Puppet Forge. These external modules are required by the PeopleSoft component modules in order to efficiently implement their functionality. This helps the developer to write cleaner Puppet code and not have to rewrite code that has already been implemented elsewhere. The following are external modules that are included as dependencies by the PeopleSoft component modules:

- `stdlib` — provides data structure and string manipulation capabilities
- `concat` — allows construction of files from multiple ordered fragments of text
- `easy_type` — provides an easy way to build custom Puppet resource types
- `sysctl` — supports the modification of kernel parameters

Understanding the Deployment Packages Uses and Contents

This section discusses:

- Understanding How Deployment Packages are Used
- Defining the Types of Deployment Packages

Understanding How Deployment Packages are Used

The PeopleSoft DPKs are the delivery method for many PeopleSoft installation and maintenance products. Depending upon the usage, you may see a variety of terms used in connection with the DPKs. Some of the products mentioned in this documentation include:

- A DPK is a zip file which includes specific PeopleSoft functionality.

The PeopleSoft products delivered as DPKs include one or more zip files numbered sequentially. Normally you need to extract only the first zip file to obtain documentation and scripts. The DPK setup script will extract the rest. See the appropriate documentation for details.

- PeopleTools patches are provided to update the PeopleSoft PeopleTools software.

A PeopleTools patch is comprised of four DPKs. The PeopleTools patch DPKs are available for Linux, IBM AIX, Oracle Solaris, and Microsoft Windows operating systems.

See "Applying PeopleTools Patches Using DPKs."

See PeopleSoft PeopleTools Patches Home Page, My Oracle Support, Doc ID 2062712.2.

The DPKs delivered for the PeopleTools patches can also be used to install the PeopleSoft mid-tier components for an existing database.

- PeopleSoft Update Images (PIs) are used for applying maintenance for PeopleSoft applications (Campus Solutions, CRM, ELM, Interaction Hub, FSCM, and HCM).

A PI is comprised of eleven or more DPKs. The PIs are available for Microsoft Windows, Linux, and for VirtualBox.

See PeopleSoft Update Manager (PUM) Home Page, My Oracle Support, Doc ID 1641843.2.

These images can also be used for carrying out a fresh installation, with some differences in the installation procedure. When used for fresh installation, the documentation uses the term PeopleSoft Application Images. The installation guides are located on the pages for the PeopleSoft applications (such as PeopleSoft Human Capital Management) on Oracle Help Center.

See PeopleSoft Human Capital Management on the Oracle Help Center, Install and Upgrade, <https://docs.oracle.com/en/applications/peoplesoft/human-capital-management/index.html>.

Defining the Types of Deployment Packages

Here are some of the DPKs that are available to use in installing PeopleSoft software, with references for further information.

- DPK Setup Zip file

The first zip file that you download will include a setup folder with the scripts needed to automate the deployment process and documentation. You follow the instructions in this documentation to extract the first zip file to obtain the setup script to begin the installation. The subsequent zip files are extracted during the deployment. Each zip file includes a manifest that lists the software versions included in the DPK.

- PeopleSoft PeopleTools server DPKs

Two PeopleSoft PeopleTools server DPKs are included with both the PeopleSoft PeopleTools patches, and with the PeopleSoft application images.

- PeopleSoft PeopleTools Client DPK

The PeopleSoft PeopleTools Client DPK for the current release is included with the PeopleTools patches. The PeopleSoft application images include PeopleTools Client DPKs for the last three releases.

- PeopleSoft application DPKs

Three PeopleSoft application DPKs are included with the PeopleSoft application images. They include the following features:

- PeopleSoft application installation directory (*PS_APP_HOME*)
- PeopleSoft Update Manager data files (*PI_HOME*)
- Application database (Oracle pluggable database)

- Oracle Database Client DPK

The Oracle Database Client (ODC) DPK is included with the PeopleSoft application images.

- Oracle Database Server DPK

The Oracle Database Server (ODS) DPK is included with the PeopleSoft application images. It is used for full-tier deployments.

- OpenSearch, OpenSearch Dashboards, and Logstash DPK

The OpenSearch, OpenSearch Dashboards, and Logstash (OSK) DPK deploys open-source software used for the PeopleSoft Search Framework, as well as monitoring and analytics. The OSK DPKs for Linux and Microsoft Windows are posted on My Oracle Support. You can also obtain the OSK DPKs in the PeopleSoft PeopleTools for PSFT Application products installation files from Oracle Software Delivery Cloud.

See PeopleSoft Search and Insights Home Page, My Oracle Support, Doc ID 2205540.2.

- Infrastructure (PT-INFRA) DPK

The PT-INFRA DPKs (sometimes abbreviated IDPK) contain supporting (third-party) software that is required for a PeopleSoft installation. Separate PT-INFRA DPKs for Microsoft Windows, Linux, AIX, or Solaris are delivered as needed to provide security updates or other patches for one or more of the components. You can use these separate PT-INFRA DPKs in a new or existing installation to take advantage of up-to-date patches and security updates (CPUs).

See *PT-INFRA Deployment Package Installation (PeopleSoft PeopleTools 8.62)*, PeopleSoft PeopleTools on Oracle Help Center, <https://docs.oracle.com/en/applications/peoplesoft/peopletools/index.html>.

- Db2 z/OS DPK

Use the Db2 z/OS DPK (PT-DB2ZOS-DPK-WIN) on a Microsoft Windows operating system to install the utilities required to set up a batch environment for Db2 z/OS. This installation is required to install pstrans.exe and other utilities needed to set up a batch environment for Db2 z/OS. These utilities are not included in the installation of the PeopleTools DPKs or the PeopleSoft application images.

See *PeopleSoft Deployment Package for Db2 z/OS Batch Setup (PeopleSoft PeopleTools 8.62)*, PeopleSoft PeopleTools on Oracle Help Center, <https://docs.oracle.com/en/applications/peoplesoft/peopletools/index.html>.

Task G-1: Reviewing the PeopleSoft PeopleTools Patch DPKs

To apply a PeopleTools patch, including the PeopleSoft PeopleTools server and client, on Microsoft Windows and Linux physical hardware and virtual operating systems, use the PeopleSoft PeopleTools patch DPKs. The DPKs replace the patch delivery mechanism used in previous releases for Microsoft Windows and Linux operating systems. For patch application on other operating systems, download the patch and follow the instructions included in the Readme file, as in previous releases.

For more information, review the various scenarios for using the PeopleTools Patch DPKs later in this documentation.

See "Applying PeopleTools Patches Using DPKs."

The PeopleSoft PeopleTools patch DPKs set up a mid-tier environment to connect to an existing PeopleSoft database. You should be prepared to supply information about the existing database before applying the patch.

This table describes the usage, requirements, and results associated with using the PeopleTools Patch DPKs:

Usage	• Install PeopleSoft PeopleTools Server using the mid-tier option on Microsoft Windows or Linux, and connect to an existing database to apply a PeopleTools patch. • Install the PeopleSoft PeopleTools Client on a Microsoft Windows host.
	Note. This usage can be part of the patch application or carried out separately.
	As with a traditional installation, you may not need to perform a separate installation of the PeopleTools Client if your environment is installed on a Microsoft Windows host. If your environment is installed on Linux, you need to install the PeopleTools Client on a Microsoft Windows host to set up Change Assistant. • Install the new release for PeopleTools-only upgrade. If you are upgrading to PeopleSoft PeopleTools 8.62 on Microsoft Windows or Linux, you can use the PeopleTools 8.62.02 or higher patch DPK to install the new release. The PeopleTools patch DPKs contain the upgrade documentation, upgrade template for Change Assistant, and files. Follow the instructions in the upgrade getting started guide, included in the DPK. See <i>Getting Started on Your PeopleTools Upgrade</i> • Install selected PeopleSoft components You can choose to deploy only mid-tier components, or only the <i>PS_HOME</i> installation directory, for example, using the PeopleTools DPKs. See <i>Reviewing the Options for Selective Deployment</i>.
Requirements	• The latest PeopleTools DPKs (4 zip files) • Database specifications for the customer target database • Microsoft Windows or Linux hosts that are supported for PeopleTools servers, such as database, application server, Process Scheduler.

**PeopleTools Server
installation**

- *PS_HOME*
- *PS_CFG_HOME*

Note. The PIA installation is found under *PS_CFG_HOME*.

- Oracle Tuxedo
- Oracle WebLogic
- Oracle database Client, if required
- Microsoft Windows DPKs include Microsoft Visual C++ Redistributable Packages for Visual Studio, which include required Microsoft C++ runtime libraries.
- PeopleTools utilities and scripts including:
 - *PS_HOME/appserv/PSADMIN.exe*
 - *PS_HOME/bin/client/winx86/pscfg.exe* (Configuration Manager)
 - *PS_HOME/bin/client/winx86/psdmt.exe* (Data Mover)
 - *PS_HOME/bin/client/winx86/pside.exe* (Application Designer)
 - *PS_HOME/scripts*
 - Other PeopleTools utilities
- Setup utilities including:
 - *PS_HOME/setup/PsMpPIAInstall* (PeopleSoft Pure Internet Architecture installer)
 - *PS_HOME/setup/PsMpDbInstall* (Database installer)
 - *PS_HOME/setup/PsCA* (Change Assistant installer)
 - *PS_HOME/setup/PsCIA* (Change Impact Analyzer installer)
 - *PS_HOME/setup/PsMpWebAppDeployInstall* (Web Application Deployment installer)

**PeopleTools Client
installation**

See the next section, Reviewing the PeopleTools Client DPK.

Task G-2: Reviewing the PeopleTools Client DPK

One of the DPKs provided with PeopleSoft PeopleTools patches is a PeopleSoft PeopleTools Client DPK. Deploy the PeopleTools Client DPK, for example, to use with a PeopleTools-only upgrade, or to install utilities such as Application Designer to connect to an existing environment.

You can deploy the PeopleSoft PeopleTools Client in Standalone mode or Update Manager mode. Update Manager mode requires the presence of PeopleSoft PeopleTools Client DPKs for the last three supported versions of the PeopleSoft PeopleTools Client.

See *PeopleSoft Deployment Packages for Update Images Installation (PeopleSoft PeopleTools 8.62, "Deploying the PeopleTools Client DPKs in Update Manager Mode."*

This table describes the PeopleTools Client DPK for use in Standalone mode.

See "Deploying the PeopleTools Client DPK" in this documentation.

Usage

- Install the PeopleSoft PeopleTools Client on a Microsoft Windows host.

Note. As with a traditional installation, you may not need to perform a separate installation of the PeopleTools Client if your environment is installed on a Microsoft Windows host. If your environment is installed on Linux, you need to install the PeopleTools Client on a Microsoft Windows host to set up Change Assistant.

- Install Change Assistant and Change Impact Analyzer.
- Install and configure PeopleSoft Test Framework (PTF).

Requirements

The last zip file of the 4 PeopleTools DPKs.

Microsoft Windows host that is supported for the PeopleTools client.

PeopleTools Client installation

- *PS_CLIENT_HOME*
- Oracle database client, if not already installed
- Microsoft Windows DPKs include Microsoft Visual C++ Redistributable Packages for Visual Studio, which include required Microsoft C++ runtime libraries.
- PeopleTools utilities including:
 - *PS_CLIENT_HOME/bin/client/winx86/pscfg.exe* (Configuration Manager)
 - *PS_CLIENT_HOME/bin/client/winx86/psdmt.exe* (Data Mover)
 - *PS_CLIENT_HOME/bin/client/winx86/pside.exe* (Application Designer)
 - *PS_CLIENT_HOME/bin/sqr*
- Setup utilities including:
 - *PS_CLIENT_HOME/setup/PsCA* (Change Assistant installer)
 - *PS_CLIENT_HOME/setup/PsCIA* (Change Impact Analyzer installer)
 - *PS_CLIENT_HOME/setup/PsTestFramework* (PeopleSoft Test Framework installer)
- Upgrade deployment mode files

If you select the People Tools Full Upgrade deployment type, the client setup script installs the directories needed for a PeopleSoft PeopleTools-only upgrade, such as data, projects, and scripts directories.
- Patch deployment mode files

If you select the People Tools Patch deployment type, the client setup script installs the directories needed for a PeopleSoft PeopleTools patch application, such as the data, PTP, and scripts directories.
- None of the above deployment mode files

If you select the None of the above deployment type, the client setup script installs the basic client directories.

