

# PeopleSoft Deployment Packages for Update Images Installation (PeopleSoft PeopleTools 8.59)

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

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

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

See Oracle University, <a href="https://education.oracle.com">https://education.oracle.com</a>.

## **Typographical Conventions**

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

Convention	Description
Monospace	Indicates a PeopleCode program or other code, such as scripts that you run during the install. Monospace is also used for messages that you may receive during the install process.
Italics	Indicates field values, emphasis, and book-length publication titles. Italics is also used to refer to words as words or letters as letters, as in the following example:
	Enter the letter <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 < <i>PS_CFG_HOME</i> >/appserv/< <i>domain</i> > 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, <a href="https://www.oracle.com/products/oracle-a-z.html">https://www.oracle.com/products/oracle-a-z.html</a>.

#### **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, <a href="https://docs.oracle.com/en/applications/peoplesoft/index.html">https://docs.oracle.com/en/applications/peoplesoft/index.html</a>.

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,

 $\underline{https://docs.oracle.com/en/applications/peoplesoft/peopletools/index.html.}$ 

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, <a href="https://docs.oracle.com/en/applications/peoplesoft/index.html">https://docs.oracle.com/en/applications/peoplesoft/index.html</a>.

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, <a href="https://support.oracle.com">https://support.oracle.com</a>.

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, <a href="https://docs.oracle.com/en/">https://docs.oracle.com/en/</a>.

## **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**

## **Prerequisites**

#### This chapter discusses:

- Reviewing Hardware Requirements
- Reviewing Software Requirements
- Installing Required Packages for Oracle 19c on Linux
- Reviewing System Parameter Changes on Linux
- Reviewing the Oracle Central Inventory File Location and Permissions on Linux

## Task 1-1: Reviewing Hardware Requirements

#### This section discusses:

- Reviewing Hardware Requirements for Oracle VirtualBox
- Reviewing Hardware Requirements for Microsoft Windows
- Reviewing Hardware Requirements on Linux

### Task 1-1-1: Reviewing Hardware Requirements for Oracle VirtualBox

This section describes the hardware requirements for deploying the PeopleSoft Deployment Packages (DPKs) in Oracle VM VirtualBox. Keep in mind that individual performance is expected to vary depending upon the specific hardware, CPU speed, disk type and speed, and disk fragmentation in your setup.

**Note.** This documentation uses virtual appliance, image or DPK to refer to the archive that is downloaded from My Oracle Support. The term "virtual machine (VM)" is used in this documentation to refer to the environment created from the virtual appliance.

The requirements listed below apply to the machine used to run Oracle VM VirtualBox. Oracle VM VirtualBox deployed on a Microsoft Windows host is used to set up an Oracle Linux virtual machine to run the PeopleSoft server environment. Note that the PeopleSoft environment also requires a Microsoft Windows host to run PeopleTools client utilities. That Microsoft Windows host could be same host that is running the Oracle VM Virtual Box or it could be a different one.

See My Oracle Support, Certifications, to review the certification information for the PeopleSoft Microsoft Windows client.

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

• *Host computer*: You need a physical host (not a virtual machine) computer to install VirtualBox and deploy the PeopleSoft Update Image (PI). This host computer can be located remotely and accessed by network-based desktop visualization methods such as RemotePC™ or Microsoft Remote Desktop Connection.

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However, the VirtualBox instance that runs them cannot be run in another virtual machine.

**Note.** The requirement for a physical machine was present in previous releases of the PIs, and is specific to the use of VirtualBox.

• *Host operating system*: The host operating system must be a 64-bit platform certified by Oracle for PeopleSoft systems (servers and PeopleTools clients).

See the Certification pages for PeopleSoft PeopleTools to view the supported Microsoft Windows operating systems.

Oracle's PeopleSoft supports the use of VirtualBox for deploying PUM. The required version of VirtualBox should be installed on a Microsoft Windows 64-bit operating system that is certified for the PeopleTools version for your PI. For 8.59, Windows versions currently supported are Windows 10, Windows Server 2016 and 2019, all 64-bit.

See My Oracle Support, Certifications.

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

• *CPU capabilities*: The processor must be a 64-bit processor with hardware virtualization capabilities. These features must be enabled in the BIOS before the machine is booted.

The host computer on which the PeopleSoft VirtualBox appliances run must have a 64-bit processor that can support hardware virtualization.

PeopleSoft VirtualBox appliance relies on 64-bit Oracle Linux guest operating systems (OSs). VirtualBox does not support software virtualization for 64-bit OSs. So the host system should support hardware virtualization. Your host system must have 64-bit CPUs that support Intel™ Virtualization Technology (Intel VT, first released in 2005) or AMD Virtualization (AMD-V™) Technology (first released in 2006) hardware-virtualization features.

Most newer CPUs from Intel and AMD contain the required virtualization extensions. These virtualization extensions are not normally enabled by default in a new machine. It is necessary to enter BIOS in your system and enable virtualization extensions before attempting to run any virtual machines. Consult the documentation provided with your computer for information on accessing the BIOS on your machine.

- *CPU capabilities for the PeopleTools Client*: To run Change Assistant on a Microsoft Windows 2016 server requires a virtual machine with a 4-core CPU or a physical machine with a 2-core CPU.
- *RAM (Memory)*: Each PeopleSoft VirtualBox appliance requires a minimum of 8 GB available RAM to run *in addition* to the requirements of the host OS and the applications previously running on it.
  - Note that the memory used by the VirtualBox appliance will not be available to the host OS while the appliance is running. The available RAM refers to memory not used by other processes on the host OS.
- *Disk space*: 150 GB free disk space is required to download the necessary files and initialize each virtual appliance.

**Note.** The running VM deployed from the VirtualBox DPK can reside on a different physical disk. For example, the DPKs can be downloaded to drive D: on the Microsoft Windows host, and the running VirtualBox VM can reside on drive C:.

**Note.** The size may vary depending upon the specific virtual appliance.

The disk space requirement includes:

• 25–35 GB for the downloaded zip files

You may remove these files after you have successfully initialized your virtual machine.

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- About 75 GB for the virtual appliance archive (.OVA) after extraction.
- *Network*: During the installation using the DPK setup script, you are given the option to select a "host-only" or "bridged" network configuration.

If you wish the VM to join the network you will need to make sure that you are able to configure the network stack within the VM in such a way that it will be able to join the local area network (LAN) on which it will reside.

See *Understanding PeopleSoft Deployment Packages for Update Images (PeopleSoft PeopleTools 8.59)*, "Preparing to Deploy."

#### Task 1-1-2: 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 used with the PeopleSoft Update Manager. This should be a machine that is not used for other PeopleSoft purposes.

See "Deploying the PeopleSoft Application Deployment Packages," Deploying the PeopleTools Client DPK in Update Manager 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.

**Note.** This applies to the deployment of the Native OS PeopleSoft DPKs directly on a Microsoft Windows VM, not the VirtualBox 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.

- *CPU capabilities for the PeopleTools Client*: To run Change Assistant on a Microsoft Windows 2016 server requires a virtual machine with a 4-core CPU or a physical machine with a 2-core CPU.
- RAM (Memory): A minimum of 8 GB RAM is required to run a PeopleSoft environment.
- *Disk space*: The disk space requirements include the following:
  - 25–35 GB free disk space for the downloaded zip files
     You may remove these files after you have successfully initialized your virtual machine.
  - 150 GB free disk space is required to deploy and set up a full tier PeopleSoft environment.

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#### See Also

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

#### Task 1-1-3: Reviewing Hardware Requirements on Linux

You can install the PeopleSoft Application Image deployment packages (DPKs) directly on a system running an Oracle Linux operating system. The PeopleSoft Application Images are certified to run on those operating systems that are certified for the current PeopleSoft PeopleTools release. The Linux 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 Linux host, either a physical computer or virtual machine.

If you deploy the Native OS DPKs 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 7.6.

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.
  - 25–35 GB free disk space for the downloaded zip files
     You may remove these files after you have successfully initialized your virtual machine.
  - 150 GB free disk space is required to deploy and set up a full tier PeopleSoft environment.

#### 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

#### 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

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#### Secure shell client

You will need a secure shell (SSH) client, for example PuTTY, to log in to the virtual machine after initialization.

• 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.
- You have the option to use VirtualBox to deploy a PeopleSoft environment from the DPKs.

Before deploying, you must install Oracle VM VirtualBox.

- Oracle VirtualBox is only required if the PeopleSoft environment is set up as a VM running inside VirtualBox. With PeopleSoft DPKs, Oracle VirtualBox is an optional way to set up a PeopleSoft environment.
- Download the current version of VirtualBox from the Oracle VM VirtualBox web site.
   See Oracle VM VirtualBox, https://www.virtualbox.org.
- VirtualBox 6.1 is the minimum supported version.
- Web Browser

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

When using PeopleSoft Update Manager you must use a web browser certified for the PeopleTools release that the PeopleSoft 9.2 Update Images are built on. See the manifest for your PeopleSoft 9.2 Update Image is determine the PeopleTools release. To locate the manifest, go to the update image page for your PeopleSoft application on the PeopleSoft Update Manager (PUM) Home Page.

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 PERLSUB environment variable.

The deployment of a full PeopleSoft environment includes the installation of Oracle 19c Database server, which requires the version of Perl that is packaged with the Oracle Database Server DPK. The deployment may fail if your system has a previously-set PERLSUB environment variable, because the DPK setup will try to use the Perl installation specified by the PERLSUB environment variable. To avoid this conflict, check for the PERLSUB environment variable, and if it exists, remove or rename it before the deployment.

• Check for the USERPROFILE environment variable.

If USERPROFILE is set, verify that there is full access to the location set for 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

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setup script. You may see this referred to as the "Relocatable Puppet."

- Puppet Agent 6.16.0 (open source, and stand-alone architecture)
- Hiera 3.6.0
- Facter 4.0.49
- Ruby 2.5.8
- Python 3.8.7 is included with the DPKs.
- Microsoft Visual C++ Redistributable files

The current PeopleSoft PeopleTools release was developed using Microsoft Visual Studio 2019. PeopleSoft PeopleTools programs require Microsoft Visual C++ Redistributable for Visual Studio 2019 files to be present or the programs will not run. The required Visual C++ Redistributable for Visual Studio 2019 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\psvccrt.

• 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.

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 PeopleSoft PeopleTools 8.59 Deployment Packages Installation, "Completing the DPK Initialization with Customizations."

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 *PeopleSoft PeopleTools 8.59 Deployment Packages Installation*, "Completing the DPK Initialization with Customizations."

#### 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 on a Linux Host with a Non-Root User."
- 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, psadm3, oracle2, and esadm1) 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.

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• 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.

• Operating system requirements for Oracle 19c Database server

The deployment of a full PeopleSoft environment includes the installation of Oracle 19c Database server. If you are deploying a full PeopleSoft environment (full-tier deployment), you must fulfill the prerequisites for the Oracle 19c Database server on your Linux operating system. Ensure that you install the required packages before beginning the deployment.

See the section Installing Required Packages for Oracle 19c on Linux for more information.

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.

- Samba
  - The DPK deployment makes Samba shared drive folders available when you select the PUM installation type. If you use the Native OS for Linux DPKs, verify that your Linux operating system includes the latest version of Samba.

**Note.** The Samba shared drive folders are not available for FRESH installations.

- Note that the DPK process overwrites the configuration file for Samba (smb.conf).
  - See "Deploying the PeopleSoft Application Deployment Packages," Using the Samba Shared Drive Folders.
- If SELinux is used in enforcing mode on the Linux system, certain SELinux-related utilities must be present for the Samba shares to be made accessible. Before beginning the DPK deployment, the Linux System Administrator should install the latest versions of the packages listed in the following table.

SELinux-related Utility	Required Package
/usr/bin/chcon	coreutils
/usr/sbin/semanage	policycoreutils-python
/bin/getfattr	attr

#### 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 *PeopleSoft PeopleTools 8.59 Deployment Packages Installation*, "Completing the DPK Initialization with Customizations."

• 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 *PeopleSoft PeopleTools 8.59 Deployment Packages Installation*, "Completing the DPK Initialization with Customizations."

• These Puppet components are included with the DPKs.

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

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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 6.16.0 (open source, and stand-alone architecture)
- Hiera 3.6.0
- Facter 3.14.11
- Ruby 2.5.8
- Python 3.8.7 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 1-3: Installing Required Packages for Oracle 19c on Linux

The deployment of a full PeopleSoft environment includes the installation of Oracle 19c Database server. If you are deploying a full PeopleSoft environment (full-tier deployment), you must fulfill the prerequisites for the Oracle 19c Database server on your Linux operating system. Ensure that you install the required packages before beginning the deployment. For complete information, consult the installation documentation for Oracle 19c Database server.

See Installing the Oracle Preinstallation RPM From Unbreakable Linux Network in the Database Installation Guide for Linux, Oracle 19c Database documentation, <a href="https://docs.oracle.com/en/database/oracle/oracle-database/19/ladbi/installing-the-oracle-preinstallation-rpm-from-unbreakable-linux-network.html">https://docs.oracle.com/en/database/oracle/oracle-database/19/ladbi/installing-the-oracle-preinstallation-rpm-from-unbreakable-linux-network.html</a>.

My Oracle Support Certification notes include information about the PeopleSoft PeopleTools components that are certified for each operating system. Review the information for Oracle Database Server and Linux operating systems.

See My Oracle Support, Certifications, <a href="https://support.oracle.com/epmos/faces/CertifyHome?\_adf.ctrl-state=zqvfs9v81">https://support.oracle.com/epmos/faces/CertifyHome?\_adf.ctrl-state=zqvfs9v81</a> 4& afrLoop=145874269658082.

Before you install the PeopleSoft environment, carry out these steps:

1. As the root user, download and install the Oracle preinstallation RPM.

Here are examples of commands to install the RPM:

• On Oracle Linux 7:

```
# yum -y install oracle-database-preinstall-19c
```

• On Red Hat Enterprise Linux 7.0:

```
# curl -o oracle-database-preinstall-19c-1.0-1.el7.x86_64.rpm https:>
//yum.oracle.com/repo/OracleLinux/OL7/latest/x86_64/getPackage/oracle->
database-preinstall-19c-1.0-1.el7.x86_64.rpm
# yum -y localinstall oracle-database-preinstall-19c-1.0-1.el7.x86_>
64.rpm
```

2. As the root user, check for glibc packages.

For example, use this command on both Oracle Linux and Red Hat Enterprise Linux:

```
# rpm -qa | grep glibc
```

3. Look for glibc-devel.x86\_64 in the results from the previous step.

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If glibc is not present, you must install it. There are various ways to install glibc. Here is one example:

```
# yum install glibc-devel
```

#### See Also

Oracle Database (RDBMS) on Unix AIX, HP-UX, Linux, Solaris and MS Windows Operating Systems Installation and Configuration Requirements Quick Reference (12.1/12.2/18c/19c), My Oracle Support, Doc ID 1587357.1, <a href="https://support.oracle.com/epmos/faces/DocumentDisplay?id=1587357.1">https://support.oracle.com/epmos/faces/DocumentDisplay?id=1587357.1</a>

Requirements for Installing Oracle Database 19c on OL7 or RHEL7 64-bit (x86-64), My Oracle Support, Doc ID 2551169.1, <a href="https://support.oracle.com/epmos/faces/DocumentDisplay?id=2551169.1">https://support.oracle.com/epmos/faces/DocumentDisplay?id=2551169.1</a>

## Task 1-4: Reviewing System Parameter Changes on Linux

When you run the DPK setup script on Linux, the script overwrites certain system-level parameters.

**Note.** You cannot use the DPK customizations to prevent the DPK setup script from touching these system-level files.

• The script updates the /etc/sysctl.conf file on Linux.

The following sysctl parameters are included in *BASE\_DIR/* dpk/puppet/production/data/psft\_unix\_system.yaml.

```
sysctl:
    kernel.msqmnb:
                                   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:
    net.ipv4.ip local port range: '10000 65500'
```

• The script updates the /etc/security/limits.conf file on Linux.

The following ulimits parameters are included in *BASE\_DIR/* dpk/puppet/production/data/psft\_unix\_system.yaml.

```
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
```

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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

• The script updates the /etc/samba/smb.conf file for Samba on Linux.

# Task 1-5: Reviewing the Oracle Central Inventory File Location and Permissions on Linux

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 (oralnst.loc)**

The installation of Oracle products on Linux creates a central inventory location file named /etc/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.

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 full-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.

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• If /etc/oraInst.loc exists, 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 --prereg 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 /etc/oraInst.loc does not exist, 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.

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 .
```

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```
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 full-tier deployment, this step completes the Oracle Database Server setup and installs Samba.

```
./psft-dpk-setup.sh --postcfg --psft base dir BASE DIR
```

#### **Chapter 2**

## Deploying the PeopleSoft Application Deployment Packages

#### This chapter discusses:

- Obtaining the PeopleSoft Update Images
- Using the PT-INFRA DPK for Additional Component Software
- Reviewing the DPK Setup Script Options
- Deploying the VirtualBox Update Image
- Deploying the Native OS Update Image
- Cleaning Up Orphaned Language Data
- Using the Samba Shared Drive Folders (Linux)
- Deploying the PeopleTools Client DPKs in Update Manager Mode

### Task 2-1: Obtaining the PeopleSoft Update Images

The PeopleSoft DPKs for PeopleSoft Update Images (PIs) are available on 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 Update Manager Home Page, My Oracle Support, Doc ID 1641843.2, to find the information on locating and downloading the current PI for your PeopleSoft application.
  - The page includes links to PeopleSoft Update Manager documentation, as well as links to the individual PIs.
- 2. Go to the PeopleSoft Update Image Home Page for your PeopleSoft application.
- 3. In the Update Image Link section, select the link for the format you prefer, either VirtualBox, Native OS for Linux, or Native OS for Windows.

4. Download the zip files for the PI 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 table lists and describes the downloaded zip files for VirtualBox DPKs, and the zip files after extraction:

**Note.** Do not extract the zip files before reviewing the deployment instructions in this chapter.

VirtualBox: Downloaded Zip Files	Files After First Extraction <sup>1</sup>	Description
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_1of12.zip	The setup folder and other files	Setup ("bootstrap") DPK
<product>-920-UPD-<pi_number>- <os>_2of12.zip</os></pi_number></product>	PT-DPK-< <i>OS</i> >-8.59.xx-1of2.zip	PeopleTools server, Part 1
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_3of12.zip	PT-DPK-< <i>OS</i> >-8.59.xx-2of2.zip	PeopleTools server, Part 2
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_4of12.zip	PTC-DPK-WIN8.57.xx-1of1.zip	PeopleTools Client for 8.57
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_5of12.zip	PTC-DPK-WIN8.58.xx-1of1.zip	PeopleTools Client for 8.58
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_6of12.zip	PTC-DPK-WIN8.59.xx-1of1.zip	PeopleTools Client for 8.59
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_7of12.zip	ODC-DPK-WIN-19.3.0.0-xxxxxx-1of1.zip	Oracle Database client
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_8of12.zip	ODS-DPK-< <i>OS</i> >-19.3.0.0- <i>xxxxxx</i> -1of1.zip	Oracle Database server
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_9of12.zip	APP-DPK-< <i>OS</i> >-HCM92-8.59. <i>xx</i> -1of3.zip	PeopleSoft Application DPK, Part 1
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_10of12.zip	APP-DPK-< <i>OS</i> >-HCM92-8.59. <i>xx</i> -2of3.zip	PeopleSoft Application DPK, Part 2
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_11of12.zip	APP-DPK-< <i>OS</i> >-HCM92-8.59. <i>xx</i> -3of3.zip	PeopleSoft Application DPK, Part 3
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_12of12.zip	VBOX_8_59_xxxxxx_SHELL.ova	VirtualBox Shell <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> The filenames will vary depending upon the date posted or the associated release and patch.

This table lists and describes the downloaded zip files for Native OS DPKs, and the zip files after extraction:

<sup>&</sup>lt;sup>2</sup> The VirtualBox Shell OVA is available for VirtualBox DPKs. It is not included for the Native OS DPKs for Microsoft Windows and Linux.

Note. Do not extract the zip files before reviewing the deployment instructions in this chapter.

Native OS: Downloaded Zip Files	Files After First Extraction <sup>1</sup>	Description
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_1of11.zip	The setup folder and other files	Setup ("bootstrap") DPK
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_2of11.zip	PT-DPK-< <i>OS</i> >-8.59. <i>xx</i> -1of2.zip	PeopleTools server, Part 1
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_3of11.zip	PT-DPK-< <i>OS</i> >-8.59. <i>xx</i> -2of2.zip	PeopleTools server, Part 2
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_4of11.zip	PTC-DPK-WIN8.57.xx-1of1.zip	PeopleTools Client for 8.57
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_5of11.zip	PTC-DPK-WIN8.58.xx-1of1.zip	PeopleTools Client for 8.58
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_6of11.zip	PTC-DPK-WIN8.59.xx-1of1.zip	PeopleTools Client for 8.59
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_7of11.zip	ODC-DPK-WIN-19.3.0.0-xxxxxx- 1of1.zip	Oracle Database client
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_8of11.zip	ODS-DPK-< <i>OS</i> >-19.3.0.0- <i>xxxxxxx</i> -1of1.zip	Oracle Database server
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_9of11.zip	APP-DPK-< <i>OS</i> >-HCM92-8.59. <i>xx</i> -1of3.zip	PeopleSoft Application DPK, Part 1
<product>-920-UPD-<pi_number>- <os>_10of11.zip</os></pi_number></product>	APP-DPK-< <i>OS</i> >-HCM92-8.59. <i>xx</i> -2of3.zip	PeopleSoft Application DPK, Part 2
< <i>Product</i> >-920-UPD-< <i>PI_Number</i> >- < <i>OS</i> >_11of11.zip	APP-DPK-< <i>OS</i> >-HCM92-8.59. <i>xx</i> -3of3.zip	PeopleSoft Application DPK, Part 3

<sup>&</sup>lt;sup>1</sup> The filenames will vary depending upon the date posted or the associated release and patch.

The names for the downloaded zip files have the following format:

<*Product*>-920-UPD-<*PI\_Number*>-<*OS*>-#ofn.zip

For example:

HCM-920-UPD-027-LNX\_1of11.zip

HCM-920-UPD-027-LNX\_2of11zip

...

HCM-920-UPD-027-LNX\_11of11.zip

The files names are comprised of the following parts:

• <*Product>* is an abbreviation that represents the PeopleSoft application name, as described in the following table.

PeopleSoft Application	Product Name Abbreviation
PeopleSoft Customer Relationship Management	CRM
PeopleSoft Campus Solutions	CS
PeopleSoft Enterprise Learning Management	ELM
PeopleSoft Financials and Supply Chain Management	FSCM
PeopleSoft Human Capital Management	НСМ
PeopleSoft Interaction Hub	ІН

- <*PI\_Number>* is the Update Image (PI) number, such as 024.
- <OS> is the operating system, LNX for the Native OS DPKs for Oracle Linux, WIN for the Native OS DPKs for Microsoft Windows, or OVA for the VirtualBox DPKs.
- *n* represents the total number of zip files.
- 5. Use the DPK setup script or Oracle VirtualBox to deploy the files.

The way that you proceed with the zip files depends upon how you choose to use the DPKs.

- If you use the DPK setup script (with both the Native OS DPKs and the VirtualBox DPKs), the script takes care of extracting the zip archives.
  - See Deploying the Native OS Update Image.
  - See Setting Up the VirtualBox VM Using the DPK Setup Script.
- If you import the VirtualBox shell OVA directly into Oracle VirtualBox, you must first complete a manual procedure to extract the zip archives.
  - See Using the VirtualBox Shell to Set Up the PeopleSoft Virtual Machine.

**Note.** The downloaded zip files include PeopleSoft PeopleTools client DPKs for all currently supported releases. Download and extract all of the PeopleTools client DPKs, and the Oracle Database client DPK, even if you do not plan to use them. They are required for successful creation of the Samba shared drive folders.

See Deploying the PeopleTools Client in Update Manager Mode.

**Note.** The databases deployed from the PeopleSoft PIs are Unicode only. Do not attempt to use the DPK customizations to change this setting.

# 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
- JDK
- Oracle OPatch

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 8.59)*, Oracle's PeopleSoft PeopleTools 8.59 Home Page, Installation and Upgrade tab, My Oracle Support, Doc ID 2753448.2.

### 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\_lofn.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 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 environment.

**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.

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. The suffix  $\langle ext \rangle$  in the table refers to the operating system specific extension.

See the appendix "Deploying on a Linux Host with a Non-Root User" for additional script options.

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

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

Deployment	DPK Setup Script Command
<ul> <li>Install Puppet software in BASE_DIR/     psft_puppet_agent.</li> <li>Deploy a full PeopleSoft environment.</li> </ul>	<pre>psft-dpk-setup.<ext>   env_type fulltier or psft-dpk-setup.<ext></ext></ext></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 fulltier  dpk_src_dir <full_dpk_path></full_dpk_path></ext></pre>
Use this option to deploy in Oracle VirtualBox when there are previously deployed images running.  If there are existing images in Oracle VirtualBox, and you run the DPK setup script to start a second image <i>without</i> this option, the script stops the VirtualBox process and aborts all running images in the same Microsoft Windows host. To avoid this behavior, run the DPK setup script with this option.	<pre>psft-dpk-setup.<ext>  keep_vbox_alive</ext></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>silentresponse_file=<response_file></response_file></ext></pre>
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>silentresponse_file=<response_file>customization_file=<dpk_⇒ customization_file=""></dpk_⇒></response_file></ext></pre>
Remove a deployed environment.  See "Using and Maintaining the PeopleSoft Environment," Removing a Deployed PeopleSoft Environment.	<pre>psft-dpk-setup.<ext>   cleanup</ext></pre>
List the DPK setup script usage.	<pre>psft-dpk-setup.<ext>help</ext></pre>

Deployment	DPK Setup Script Command
Reduce the size of the log file produced by the DPK setup script by adding the nodebug option to any of the other commands in this table.  This option turns off debug messages generated by Puppet. Be aware that 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 log file produced when you use this option also does not record the underlying steps performed by the Puppet lookup with Hiera. This may also affect your debugging.	Combine the option with other DPK setup script commands; for example:  psft-dpk-setup. <ext>env_type fulltiernodebug</ext>
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:  psft-dpk-setup. <ext>env_type fulltierlog_file <log file=""></log></ext>
This option requires the presence of the PT-INFRA DPK. Apply CPUs for installed software components on an existing environment.  See PT-INFRA Deployment Package Installation (PeopleSoft PeopleTools 8.59).	<pre>psft-dpk-setup.<ext>   psft_base_dir <full_path_base_⇒ dir="">   apply_infra_cpu</full_path_base_⇒></ext></pre>

#### 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

When using the Native OS on Linux images, you have the option to deploy the PeopleSoft environment as a non-root user.

See "Deploying on a Linux Host as a Non-Root User."

FRESH or PUM installation type

For this documentation, select the PUM installation type.

The PUM installation type is used with the PeopleSoft Update Image DPKs to create and set up a PeopleSoft environment to be used as the source for the PeopleSoft Update Manager. If you select the PUM installation type, the DPK setup script installs an Oracle DEMO multi-lingual database without presenting you with other options. For the PUM installation type the script installs directories used by the PeopleSoft Update Manager process, including *PI\_HOME* and *PS\_APP\_HOME*. It also installs and configures Change Assistant and supporting directories used for PUM Automated Updates.

**Note.** Do not modify the Change Assistant settings after installation. This Change Assistant installation is for the exclusive use of PUM Automated Updates and should not be used for any other purpose.

See *PeopleTools: Change Assistant and Update Manager*, "Using PeopleSoft Automated Updates." See the documentation on the PeopleSoft Update Manager (PUM) Home Page, My Oracle Support, Doc ID 1641843.2.

#### • 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 *PeopleTools 8.59 Deployment Packages Installation*, "Completing the DPK Initialization with Customizations."

#### 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.

For PeopleSoft PeopleTools 8.59.01 and 8.59.02, do not include any special characters when supplying passwords to the DPK setup script. For PeopleSoft PeopleTools 8.59.03 and later patch releases, the restrictions for special characters are listed in the following article.

See E-DPK - PeopleTools 8.59 - 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:

- UNIX root ID (for VirtualBox setup)
- 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
- VirtualBox networking options

When using the VirtualBox setup, you choose either a host-only or bridged adapter. You also choose between creating a dynamic IP address, or specifying a static IP address. If you plan to use a static IP address, you should have available a valid IP address, as well as addresses for the Domain Name System (DNS) server, gateway, and netmask.

See Understanding PeopleSoft Deployment Packages for Update Images.

#### • 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 the VirtualBox Update Image

This section discusses:

- Setting Up the VirtualBox VM Using the DPK Setup Script
- Using the VirtualBox Shell to Set up the PeopleSoft Virtual Machine

#### Task 2-4-1: Setting Up the VirtualBox VM Using the DPK Setup Script

The DPK setup script can be used to automate most of the procedure for setting up a VirtualBox VM for update maintenance (PUM) or a Demo environment on a Microsoft Windows host. This procedure assumes that:

- You have installed Oracle VM VirtualBox.
  - See Understanding PeopleSoft Deployment Packages for Update Images, "Preparing to Deploy."
- The location where Oracle VirtualBox creates the virtual disks, called the Default Machine Folder, has enough space for the extracted files used to set up the environment, including the PeopleSoft files, Oracle database server files, and so on.

To determine the location of the VirtualBox Machine Folder, open Oracle VM VirtualBox. Select File, Preferences, General, and look at the Default Machine Folder. If necessary, create more space for the Default Machine Folder, or change it to a location with enough space for the environment setup. Close VirtualBox before running the script.

**Note.** Setup of a full PeopleSoft environment requires about 150 GB of disk space.

See "Prerequisites," Reviewing Hardware Requirements.

- If you plan to set up the VirtualBox VM to use a static IP address, you have the necessary information.
  - When using the VirtualBox setup, you have the option to use a static or dynamic IP address. If you plan to use a static IP address, you will need to provide a valid IP address, as well as addresses for the Domain Name System (DNS) server, gateway, and netmask in this procedure. A static setup works best with the Bridged Adapter network configuration. If you enter the values for a static networking setup in this procedure, but you have chosen to use host-only networking when importing the virtual appliance, the system will not be able to contact the DNS and validate the hostname.
  - See Understanding PeopleSoft Deployment Packages for Update Images, "Preparing to Deploy."
- You have the user IDs and passwords required by the script.
  - See Preparing to Run the DPK Setup Script.
- You have downloaded all of the required DPKs and saved them in a location referred to as *DPK\_INSTALL*. For this task, download the VirtualBox DPKs. In the examples below, *DPK\_INSTALL* is C:\DPK\_INSTALL. See Obtaining the PeopleSoft Update Images.

**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 folder.

• The user running the script *must have administrative permission*.

**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.

To use the DPK setup script to set up a PeopleSoft VM on VirtualBox:

1. Extract the first zip file (FILENAME\_1ofn.zip) in the same directory, DPK\_INSTALL.

This section uses *FILENAME*\_1of*n*.zip to refer to the downloaded zip files for convenience. Keep in mind that the actual names will vary depending upon the operating system, PeopleSoft application and so on.

**Note.** Be sure to extract into the same directory where you downloaded the zip files.

The extraction creates the *DPK\_INSTALL*/setup folder and other files.

- 2. Open a command prompt with Run as Administrator.
- 3. Go to the *DPK\_INSTALL*\setup directory and run the script using the following command:

```
psft-dpk-setup.bat
```

If there are existing images, which you do not want cleaned up, running in your Oracle VirtualBox installation, use the following command:

```
psft-dpk-setup.bat --keep vbox alive
```

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

**Note.** Portions of the messages may be omitted for brevity.

• 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 ]
```

• The script then validates to make sure the downloaded DPKs belong to a single OS platform. If it finds packages that belong to multiple platforms, the script outputs an error message and exits the PeopleSoft environment setup process.

```
The DPK Folder C:/DPK_INSTALL contains PeopleSoft DPKs for different platforms.
Please ensure that the folder contains DPKs that belong to a single platform.
Exiting the PeopleSoft environment setup process.
```

4. Review the validation messages related to VirtualBox.

If the downloaded DPKs are labeled for a Linux operating system, the DPK setup script assumes that the DPKs will be used in a Linux guest on Oracle VirtualBox. It runs the following VirtualBox related validations before proceeding with the PeopleSoft environment setup process.

• It checks if the VirtualBox software is installed on the Microsoft Windows host computer. If the VirtualBox software is not installed, it displays the following warning message and exits the PeopleSoft environment setup process. In this case, you must install VirtualBox and restart the script.

```
Checking if VirtualBox Software is installed on the Windows Host: \Rightarrow [WARNING]
```

```
VirtualBox software is not installed on the Windows Host. This software is required to automate the process of importing
```

a PeopleSoft appliance. Please install VirtualBox software from www.virtualbox.org and rerun this script if you want to automate the process of setting up a PeopleSoft environment.

Exiting the PeopleSoft environment setup process.

• It then validates if the VirtualBox Machine Folder (folder where the imported VirtualBox VM disks are stored) drive has enough free space. If enough free space is not available, the script displays an error message and exits the PeopleSoft environment setup process.

```
Checking if VirtualBox Software is Installed on the Windows Host: [⇒
   OK ]
Checking if VirtualBox Default Machine Folder has Enough Free Space: ⇒
[FAILED]
```

There is not enough free space on the Drive C. The PeopleSoft environment setup requires about 150GB of free space. Please make sure the Drive C has the required space and rerun the script.

Exiting the PeopleSoft environment setup process.

• If there is enough space, the script then checks if VirtualBox Manager is already up and running. If so, it stops it. The DPK setup process imports the PeopleSoft appliances on the command line, and to do so, the VirtualBox Manager cannot be running.

```
Checking if VirtualBox Software is Installed on the Windows Host:
[ OK ]
Checking if VirtualBox Default Machine Folder has enough Free Space:
[ OK ]
Stopping the VirtualBox Manager Processes on the Windows Host:
[ OK ]
```

• It checks if a VirtualBox appliance shell (OVA) is present in *DPK\_INSTALL*. If the process does not find any VirtualBox appliance or finds more than one appliance, the PeopleSoft environment setup process stops with a warning message.

```
Checking if PeopleSoft Appliance (OVA) is Available to Import: ⇒ [WARNING]
```

No PeopleSoft VirtualBox appliance (OVA) found in the DPK folder C:\DPK\_INSTALL. Please download the appliance from MoS and re-run the script to continue with the PeopleSoft environment process.

If the process finds more than one appliance, the PeopleSoft environment setup process stops with a warning message.

```
Checking if PeopleSoft Appliance (OVA) is Available to Import: \Rightarrow [WARNING]
```

Found 2 PeopleSoft VirtualBox appliances (OVA) in the DPK folder C:/DPK\_INSTALL. Please ensure there is only a single OVA file present in the folder and re-run the script to continue with the PeopleSoft environment process.

5. Specify how to proceed if the PeopleSoft appliance was previously imported into VirtualBox Manager.

Before importing the VirtualBox appliance into the VirtualBox Manager, it checks if this appliance is already

imported. If there is an existing virtual appliance with the same name, the DPK setup script displays a warning message.

Checking if PeopleSoft Appliance is Already Imported: [WARNING]

A PeopleSoft Appliance with the same name is already available in the VirtualBox Manager. You can either reset the VM and re-initialize it with the downloaded PeopleSoft DPKs. Or, you can keep the existing VM and instantiate a new VM by importing the PeopleSoft Appliance into VirtualBox.

Do you want to continue with the import of PeopleSoft Appliance into the VirtualBox? [Y|n]:

- If you want to continue with the setup process, answer *y* at the prompt. The DPK setup script will use the existing PeopleSoft virtual appliance to create a new VM.
- If you want to exit the setup process, answer *n* to the prompt.
- 6. If all the validations succeed, you see a prompt asking if you want to automate the process of importing the PeopleSoft VirtualBox appliance into VirtualBox.

If you answer *Y*, the process continues. If you answer *n*, the process exits.

**Note.** The default action (if you press ENTER without any input) is to import the appliance.

```
Found a PeopleSoft VirtualBox appliance [VBOX_8_59_01_SHELL.ova] in the DPK source folder C:/DPK_INSTALL. We can automate the process of importing the appliance into the VirtualBox Manager on the Windows Host.

Do you want to Import the OVA into VirtualBox Manager? [Y|n]:
```

If the PeopleSoft VirtualBox appliance is imported successfully, the *DPK\_INSTALL* folder is automatically added as a Shared Folder to the VirtualBox VM. If the import process or the ensuing addition of Shared Folder fails, the PeopleSoft environment setup process is aborted and the user is notified with an error message.

```
Checking if the PeopleSoft Appliance (OVA) is already imported: \Rightarrow [ OK ] Importing the PeopleSoft Appliance (OVA) into the VirtualBox Manager: \Rightarrow [ OK ]
```

See the section Using the VirtualBox Shell to Set Up the PeopleSoft Virtual Machine for more information on the Shared Folder.

7. At the next prompt, select the network adapter.

Answer 1 to select Host-Only adapter and 2 to select Bridged adapter. This example specifies the Host-Only Network Adapter.

See Understanding PeopleSoft Deployment Packages for Update Images, "Preparing to Deploy."

The Network Adapter lets the VM be available either in a Sand-Box mode or accessible to other hosts in the network.

```
1. Host-Only Network Adapter
2. Bridged Network Adapter
Enter 1 or 2: 1
```

```
Getting the HostOnly Network Adapter Name from the VirtualBox Manager:
[ OK ]
Setting Up HostOnly Network Adapter for the VM:
[ OK ]
Setting up the Shared Folder [c:\DPK_INSTALL] on the VM:
[ OK ]
```

8. The script concludes by starting the newly added VirtualBox VM.

You see the console window for the Oracle VM VirtualBox VM.

#### **Note.** You may need to minimize other windows to see the console.

```
Starting the VirtualBox Manager on the Windows Host: [ OK ] Starting the Imported PeopleSoft Appliance VM: [ OK ]
```

The PeopleSoft Appliance (OVA) is successfully imported into the VirtualBox Manager and the new VM is started successfully. Please use the VM's console to continue with the PeopleSoft initializating process.

The PeopleSoft Environment Setup Process Ended.

9. Specify a strong password for the root user at the following prompt.

The password is not visible as you type. Take note of the value that you provide as it is essential for performing administrative operations on the virtual machine.

```
Changing password for user root.

New UNIX password:

Retype new UNIX password:

passwd: all authentication tokens updated successfully.
```

10. Choose whether to use dynamic IP configuration for this virtual machine at the following prompt.

```
Configuring network interface.

Network device: eth0

Hardware address: 00:11:22:33:AA:BB

Do you want to enable dynamic IP configuration (DHCP) (Y|n)? Y
```

These instructions assume that you are using Host-only networking, as discussed earlier in this document, and therefore you enter Y (yes). This will result in a dynamic IP address being assigned by the VirtualBox network adapter (this configuration is referred to as Dynamic Host Configuration Protocol, or DHCP).

11. (Optional) If you wish to assign a static IP address, enter n (no) to the prompt in the preceding step.

You must provide a valid IP address to ensure that the virtual host can join the network. You will also need the DNS server IP address, gateway, and netmask. If you do not satisfy these criteria, you see the following prompt:

```
The DNS server entered is not reachable. This is due to either the Virtual Machine's network is attached to a Host-only Adapter (applies to VM's running on VirtualBox) or some other network issue. It is not recommended to continue the installation with static IP configuration without basic network functionality. Some of components will not initialize properly.
```

Do you want to stop the initialization process to correct this condition? [Y|n]:

If you enter Y (yes), the system shows the following message, and shuts down.

Please refer to the Install document for further instructions regarding Network Adapter Configuration.

The Virtual Machine will be shutdown now.

If you enter n (no), the initialization continues.

Use the following information in understanding this prompt:

- If the entered static IP address and the DNS server IP address are valid, the DNS is reachable, and you selected Bridged Adapter when importing the virtual appliance, the system displays the DNS host name and prompts for confirmation.
- If the entered static IP address and the DNS server IP address are valid, but you selected the Host-only networking option when importing the virtual appliance, the system cannot reach the DNS to deduce the hostname and prompts the user to enter the hostname manually. This can be problematic. Rather than entering the hostname manually in the next step, shut down the virtual machine and start again at the beginning of this procedure.
- If either the static IP address or the DNS server IP address is invalid, the system cannot deduce the hostname and prompts the user to enter the hostname manually. This can be problematic. Rather than entering the hostname manually in the next step, shut down the virtual machine and start again at the beginning of this procedure.

#### 12. Choose a hostname.

Use the following considerations in specifying the hostname:

- If you want the virtual machine to access an external network, you must use a legitimate hostname and fully qualified domain name for that network.
  - See Understanding PeopleSoft Deployment Packages for Update Images, "Preparing to Deploy."
- If you do not need to access an external network, you can manually configure the hostname. In this case, specify a hostname that is comprised of any alphanumeric name of your choosing, plus a fully qualified domain name; that is, <hostname>.<domainname>. For example, hcm.example.com. This should not be a hostname that is currently in use on your network.
- If you do not enter a hostname, the default hostname localhost. < domain name > will be assigned.
- The hostname must be 30 characters or less.

#### 13. Specify the hostname.

• If you chose to enable dynamic IP configuration (DHCP) in the earlier step, you see the following prompt:

```
Shutting down interface eth0:

Shutting down loopback interface:

[ OK ]

Configuring network settings.

IP configuration: DHCP

Bringing up loopback interface:

Bringing up interface eth0:

Determining IP information for eth0... done.

Do you want to manually configure the hostname (y|N)? y
```

```
Enter hostname (e.g. host.domain.com): hostname.example.com

Network configuration changed successfully.
   IP configuration: DHCP
   IP address: 192.0.2.103
   Netmask: 255.255.255.0
   Gateway:
   DNS Server:
```

• (Optional) If you chose not to enable dynamic IP configuration (that is, you are using a static IP address), you see this prompt:

```
Shutting down interface eth0:
                                                             OK
                                                                 1
Shutting down loopback interface:
                                                             OK ]
Configuring network settings.
  IP configuration: Static IP address
Bringing up loopback interface:
                                                             OK ]
Bringing up interface eth0:
                                                             OK
Enter hostname (e.g. host.domain.com): static hostname.example.com
Network configuration changed successfully.
  IP configuration: Static IP address
                     192.0.2.103
  IP address:
                    255.255.255.0
  Netmask:
  Gateway:
                    192.0.2.54
  DNS Server:
                     192.0.2.70
  Hostname: static hostname.example.com
```

14. If you want to change any of the values you supplied for the IP configuration and hostname in the previous steps, enter n (no) to the following prompt:

```
Are you happy with your answers? [Y/n]: n
```

Hostname: hostname.example.com

The system repeats the prompts in the previous steps, beginning with Configuring network interface.

15. If you are satisfied with the values you supplied for the IP configuration and hostname in the previous steps, enter *y* when asked if you are happy with your answers.

After checking the setup, the initialization process validates the files found in the shared folder, and then extracts the DPKs from the zip files.

**Note.** At the step Checking if VBox Guest Additions are Installed on the VM, you may see a message beginning "Input: Unspecified device as ....". You can safely ignore this message and allow the script to continue.

```
Preparing the VirtualBox VM for PeopleSoft Environment:

Checking if VBox Guest Additions are Installed on the VM:

Installing VirtualBox Guest Additions into the VM:

[ OK ]

Validating the Shared Folder setup in the VM: [ OK ]
```

Checking if DPKs are Present in the Shared Folder:	[	OK	]
Downloading the DPKs into the VM:	[	OK	]
Validating the DPKs in the VM:			
Validating the PeopleSoft Application DPK:	[	OK	]
Validating the PeopleSoft PeopleTools DPK:	[	OK	]
Validating the Oracle Database Server DPK:	[	OK	]
Validating the DPK dependencies in the VM:	[	OK	]
Validating the Manifest Information in DPKs:	[	OK	]
Extracting the DPK Archives in the VM:			
Extracting the Oracle Database Server DPK Archive:	[	OK	]
Extracting the PeopleSoft Application Database DPK Archive:	[	OK	]
Extracting the PeopleSoft PeopleTools DPK Archive:	[	OK	]
The initialization process sets up the PeopleSoft Puppet file system.			
Setting up Puppet on the VM:			
Generating Hiera-Eyaml Puppet Backend Encryption Keys	Г	OK	1
Copying PeopleSoft Puppet Modules:	L	OK	J
Updating the Puppet Hiera YAML Files:	L	OK	J
	L		J
Updating the Puppet Site File for the VM:	L	OK	]

#### 16. Enter PUM as the installation type.

Enter the PeopleSoft installation [PUM or FRESH] type [PUM]: PUM

17. Enter the database name, or accept the default name, following the requirements given in the prompt.

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 [HCM92U26]:

18. Enter the database listener port number:

**Note.** Verify that there is no database listener running on port 1521. If so, do not accept the default value; use another port.

Enter the PeopleSoft database listener port [1521]:

19. Enter the password for the database SYS or SYSTEM user.

The password is not visible as you type, and the window does not display masking characters.

There is no default password. The DPK setup script does not restrict or validate your entry. It will accept whatever you enter. However, there may be restrictions imposed by the database platform or by other processes. In order to avoid problems later in the installation, be sure to check the password requirements for your database platform.

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

Enter a new PeopleSoft database admin users [SYS/SYSTEM] password. Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the database admin users password:

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

The default is people.

Enter a new PeopleSoft database Connect ID. Ensure that the ID contains only alphanumeric characters [people]:

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

The password is not visible as you type, and the window does not display masking characters.

There is no default password. The DPK setup script does not restrict or validate your entry. It will accept whatever you enter. However, there may be restrictions imposed by the database platform or by other processes. In order to avoid problems later in the installation, be sure to check the password requirements for your database platform.

See E-DPK - PeopleTools 8.59 - 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:

22. Enter the password for the Access ID for the database.

The password is not visible as you type, and the window does not display masking characters.

There is no default password. The DPK setup script does not restrict or validate your entry. It will accept whatever you enter. However, there may be restrictions imposed by the database platform or by other processes. In order to avoid problems later in the installation, be sure to check the password requirements for your database platform.

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

Enter a new PeopleSoft database Access ID [SYSADM] password. Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft Access ID password:

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

The password is not visible as you type, and the window does not display masking characters. There is no default password.

Enter a new 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 Operator ID password:

24. 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 contains only alphanumeric characters and is between 8 and 30 characters in length. You may include these special characters  $!@\#\$\%^\&$ : Re-Enter the Application Server Domain connection password:

25. 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:
```

26. Enter the password for the PTWEBSERVER web profile user at the following prompt:

```
Enter a new PeopleSoft Web Profile user [PTWEBSERVER] password. Ensure that the password is between 8 and 30 characters in length. You may include these special characters !@\#\$\%^\&: Re-Enter the PeopleSoft Web Profile user password:
```

27. 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:
```

28. 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 that the password is between 8 and 30 characters in length. You may include these special characters !0\#\$\%^\&: Re-Enter the PeopleSoft Integration Gateway Keystore password:
```

29. 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]: y
```

30. 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 ]
```

31. 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]:
```

The initialization process updates the Puppet data file with the information you supplied.

```
Updating the Puppet Hiera YAML Files with User Input: [ OK
```

32. 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.

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]:

#### 33. Review the status of the setup steps.

The system displays messages indicating the steps in the setup process. The success or failure of a step is indicated by [OK] or [FAILED]. See the log file mentioned at the end of this section for information on failed steps. This example shows portions of the configuration messages:

**Note.** At the step Setting Up System Settings, you may see a message such as "nr\_pdflush\_threads exported in /proc is scheduled for removal. sysctl: The scan\_unevictable\_pages sysctl/node-interface has been disabled for lack of a legitimate use case. If you have one, please send an email to linux-mm@kvack.org."

You can safely ignore this message and allow the script to proceed.

You may also see other logging messages during the deployment, which normally can be ignored.

Setting Up System Settings: Deploying Application Component: Deploying PeopleTools Components: Deploying Oracle Database Server: Setting Up PeopleSoft OS Users Profile: .	[ OK ] [ OK ] [ OK ] [ OK ]
•	
Starting PeopleSoft Domains: Configuring Post-Boot PeopleSoft Environment:	[ OK ]
The initialization of PeopleSoft HCM fulltier environment is	successful
Template configuration disabled. Starting OSWatcher:	[ OK ]

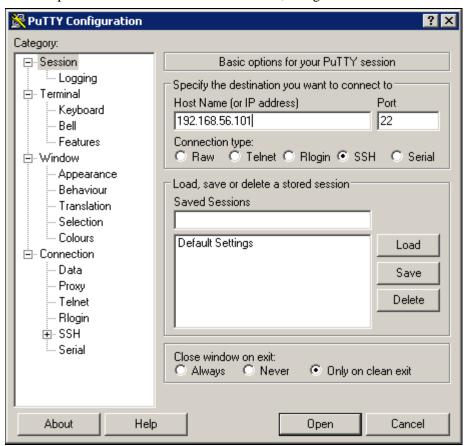
#### 34. The login prompt appears in the VM console window.

The PeopleSoft environment is available for use. You can log in as root or as one of the other users.

See Using and Maintaining the PeopleSoft Environment for information on accessing the environment in a browser, the file structure and default users.

35. To confirm external shell access to the virtual machine, log in to the virtual machine from your host OS using Secure Shell (SSH) with a telnet client.

PuTTY is the SSH client used in the example below. In order to connect with SSH you will need the IP address of the virtual machine, which was displayed during the setup. The IP address can also be identified, for example in the VirtualBox console window, using the Linux command ifconfig.



PuTTY Configuration dialog box

After the SSH client connects to the host, before you can access the virtual machine, you will need to supply the root user and the password that you provided earlier in this procedure. Establishing a connection to the virtual machine verifies its accessibility from the host OS.

**Note.** You can also log in to the VM on the console using one of the default accounts described in the task Using the PeopleSoft Installation.

- 36. To copy the log file for the deployment from the virtual machine to the Microsoft Windows host:
  - a. Log in to the VM as the root user.

Use SSH or PuTTY with the IP address for the VM as mentioned in the previous step.

b. Change directory to /var/log.

The log file is found in this directory, with the format psft\_setup.log.<date>, where <date> has the format YYYYMMDD. For example, psft\_setup.log.20160205.

```
🧬 root@infodev1:/var/log
login as: root
Authorized uses only. All activity may be monitored and reported.
root@192.168.56.101's password:
Last login: Fri Jul 7 17:42:42 2017 from 192.168.56.1
Authorized uses only. All activity may be monitored and reported.
[root@infodev1 ~]# cd /var/log
[root@infodev1 log]# ls
          maillog
                                    samba.log.smbd
boot.log messages
                                    secure
btmp
                                    spooler
                                    tallylog
cron oraclevm-template.log
                                   vboxadd-install.log
                                    vboxadd-install-x11.log
          psft-db.log
dmesg
          psft setup.log.20170707 VBoxGuestAdditions.log
dracut.log puppetlabs
                                    wtmp
lastlog
                                    yum.log
[root@infodev1 log]#
```

VM directory showing the log file

c. Copy the file to the Microsoft Windows host using FTP or SCP.

### Task 2-4-2: Using the VirtualBox Shell to Set up the PeopleSoft Virtual Machine

Use these instructions to install DPKs by importing the PeopleSoft VirtualBox shell into the Oracle VM VirtualBox Manager. This procedure assumes that:

- You have installed Oracle VM VirtualBox on a Microsoft Windows machine.
  - As you use Oracle VM VirtualBox Manager, you may see messages concerning keyboard and mouse control. See the VirtualBox documentation for details about these messages.
  - See Oracle VM VirtualBox User Manual, "First Steps."
- You downloaded the zip files for the PeopleSoft VirtualBox shell OVA, PeopleSoft application, PeopleSoft
  PeopleTools, and any other required DPKs to the same machine that is running Oracle VM VirtualBox, and
  saved it in a temporary location referred to here as DPK\_INSTALL.

**Note.** For this task, download the VirtualBox DPKs.

Before you use VirtualBox to import the PeopleSoft VirtualBox shell OVA, you must complete manual steps to extract the files.

• If you plan to set up the VirtualBox VM to use a static IP address, you have the necessary information.

When using the VirtualBox setup, you have the option to use a static or dynamic IP address. If you plan to use a static IP address, you will need to provide a valid IP address, as well as addresses for the Domain Name System (DNS) server, gateway, and netmask in this procedure. A static setup works best with the Bridged Adapter network configuration. If you enter the values for a static networking setup in this procedure, but you have chosen to use host-only networking when importing the virtual appliance, the system will not be able to contact the DNS and validate the hostname.

See Understanding PeopleSoft Deployment Packages for Update Images, "Preparing to Deploy."

- You have the user IDs and passwords required by the script.
  - See Preparing to Run the DPK Setup Script.

To extract the DPKs and initialize the virtual machine:

- 1. Save all of the zip files in a directory on the same machine as VirtualBox.
- 2. Extract (unzip) the files using a standard zip utility into the installation directory, *DPK\_INSTALL*.
  - Extract all of the zip files into the same location. The installation location should have enough disk space for deploying all PeopleSoft components.
  - See Obtaining the PeopleSoft Update Images.

#### 3. Start VirtualBox.

The Oracle VM VirtualBox Manager appears. This example shows the Welcome page. If you start Oracle VM VirtualBox Manager with a previously-imported appliance, you see a page showing that appliance.



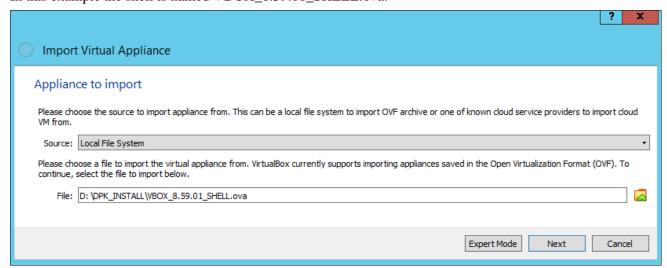
Oracle VM VirtualBox Manager Welcome window

#### 4. Select File, Import Appliance.



File, Import Appliance menu selection in the Oracle VM VirtualBox Manager window

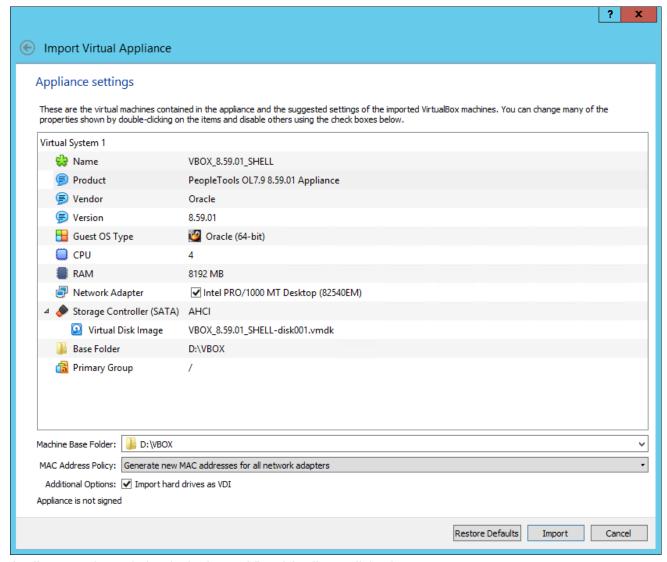
5. Browse to the location where you saved the PeopleSoft VirtualBox shell. In this example the shell is named VBOX\_8.59.01\_SHELL.ova.



Appliance to import window in the Import Virtual Appliance dialog box

6. Click Next.

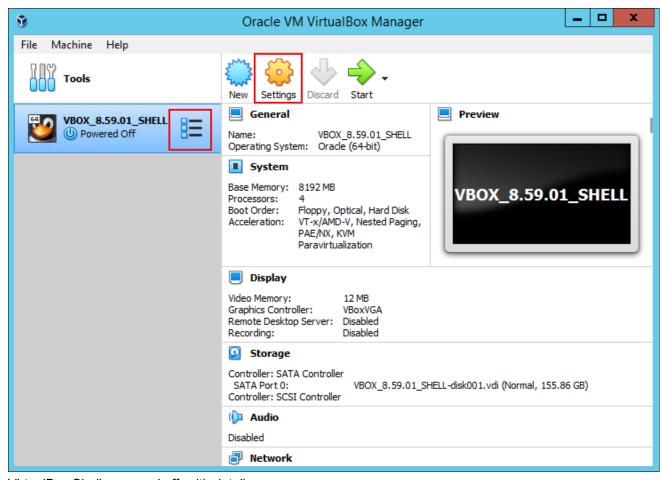
7. Select *Generate new MAC addresses for all network adapters* from the MAC Address policy drop-down list, and then click Import.



Appliance settings window in the Import Virtual Appliance dialog box

You see a progress indicator as the VirtualBox shell is imported. When the importing process is complete, the VirtualBox shell appears in the Oracle VirtualBox Manager with the status Powered Off.

If the details are not visible on the right side of the window, click the menu icon for the shell (with a red border in this example) and select Details.

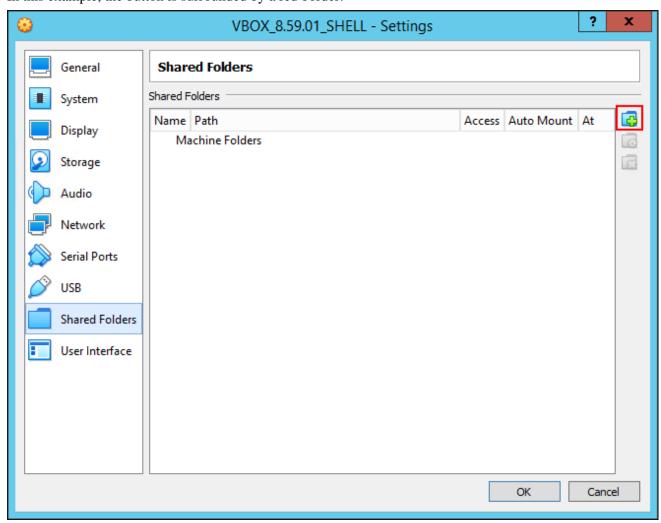


VirtualBox Shell, powered off, with details

- 8. Click Settings.
- 9. On the Settings window, select Shared Folders.

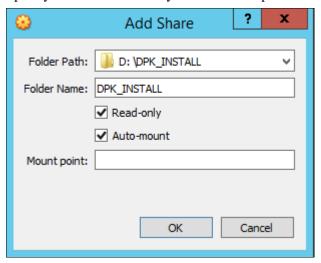
The Oracle VirtualBox Manager shared folders are used to access file systems existing on the Microsoft Windows host machine. They should not be confused with the Samba shared folders discussed later in this documentation, which allow the Microsoft Windows host machine to view files on the Linux VM.

10. Click the add shared folder button (with the green plus sign) in the top right-hand border of the window. In this example, the button is surrounded by a red border.



Shared Folders window

11. Specify the location where you saved the zip files in the Add Share dialog box.

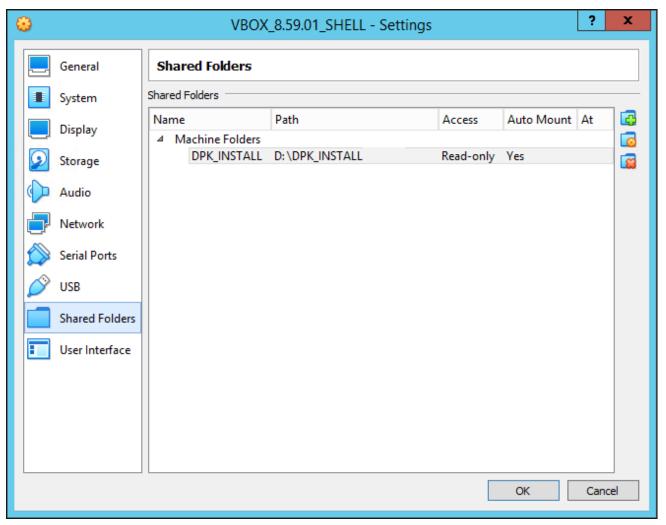


Add Share dialog box

- For Folder Path, enter or browse to the *DPK\_INSTALL* folder, D:\DPK\_INSTALL in this example.
- Accept the folder name, or enter another descriptive name, DPK\_INSTALL in this example, for the share folder in the Folder Name field.
- Select the Read-only and Auto-mount options.
- In the Mount point field enter the location to mount the Shared Folder in the guest (optional). If you do not specify a mount point, VirtualBox will assign one.

#### 12. Click OK.

The selected folder is included in the folder list.



Shared Folders window with folder added

#### 13. Click Start in the Oracle VirtualBox Manager.

The virtual machine console window appears displaying initialization messages for the virtual machine, similar to those shown here. The messages will vary depending upon the zip files you selected for installation. The initialization process carries out a series of validations, and displays OK or FAILED at each step.

#### **Note.** A portion of the messages has been omitted for brevity.

Starting crond: Starting SMB services .	[ OK ]
•	
Starting sshd:	[ OK ]

14. Specify a strong password for the root user at the following prompt.

The password is not visible as you type. Take note of the value that you provide as it is essential for

performing administrative operations on the virtual machine.

```
Changing password for user root.

New UNIX password:

Retype new UNIX password:

passwd: all authentication tokens updated successfully.
```

15. Choose whether to use dynamic IP configuration for this virtual machine at the following prompt.

```
Configuring network interface.

Network device: eth0

Hardware address: 00:11:22:33:AA:BB

Do you want to enable dynamic IP configuration (DHCP) (Y|n)? Y
```

These instructions assume that you are using Host-only networking, as discussed earlier in this document, and therefore you enter Y (yes). This will result in a dynamic IP address being assigned by the VirtualBox network adapter (this configuration is referred to as Dynamic Host Configuration Protocol, or DHCP).

16. (Optional) If you wish to assign a static IP address, enter n (no) to the prompt in the preceding step.

You must provide a valid IP address to ensure that the virtual host can join the network. You will also need the DNS server IP address, gateway, and netmask. If you do not satisfy these criteria, you see the following prompt:

```
The DNS server entered is not reachable. This is due to either the Virtual Machine's network is attached to a Host-only Adapter (applies to VM's running on VirtualBox) or some other network issue. It is not recommended to continue the installation with static IP configuration without basic network functionality. Some of components will not initialize properly.
```

Do you want to stop the initialization process to correct this  $\Rightarrow$  condition? [Y|n]:

If you enter Y (yes), the system shows the following message, and shuts down.

Please refer to the Install document for further instructions regarding⇒ Network Adapter Configuration.

The Virtual Machine will be shutdown now.

If you enter n (no), the initialization continues.

Use the following information in understanding this prompt:

- If the entered static IP address and the DNS server IP address are valid, the DNS is reachable, and you selected Bridged Adapter when importing the virtual appliance, the system displays the DNS host name and prompts for confirmation.
- If the entered static IP address and the DNS server IP address are valid, but you selected the Host-only networking option when importing the virtual appliance, the system cannot reach the DNS to deduce the hostname and prompts the user to enter the hostname manually. This can be problematic. Rather than entering the hostname manually in the next step, shut down the virtual machine and start again at the beginning of this procedure.
- If either the static IP address or the DNS server IP address is invalid, the system cannot deduce the hostname and prompts the user to enter the hostname manually. This can be problematic. Rather than entering the hostname manually in the next step, shut down the virtual machine and start again at the beginning of this procedure.

#### 17. Choose a hostname.

Use the following considerations in specifying the hostname:

- If you want the virtual machine to access an external network, you must use a legitimate hostname and fully qualified domain name for that network.
  - See Understanding PeopleSoft Deployment Packages for Update Images, "Preparing to Deploy."
- If you do not need to access an external network, you can manually configure the hostname. In this case, specify a hostname that is comprised of any alphanumeric name of your choosing, plus a fully qualified domain name; that is, <hostname>.<domainname>. For example, hcm.example.com. This should not be a hostname that is currently in use on your network.
- If you do not enter a hostname, the default hostname localhost. < domain name > will be assigned.
- The hostname must be 30 characters or less.

#### 18. Specify the hostname.

• If you chose to enable dynamic IP configuration (DHCP) in the earlier step, you see the following prompt:

```
Shutting down interface eth0:
                                                         [ OK ]
Shutting down loopback interface:
                                                         [ OK ]
Configuring network settings.
 IP configuration: DHCP
Bringing up loopback interface:
                                                         [ OK ]
Bringing up interface eth0:
                                                         [ OK ]
Determining IP information for eth0... done.
Do you want to manually configure the hostname (y|N)? y
Enter hostname (e.g. host.domain.com): hostname.example.com
Network configuration changed successfully.
  IP configuration: DHCP
  Gateway:
  DNS Server:
  Hostname: hostname.example.com
```

• (Optional) If you chose not to enable dynamic IP configuration (that is, you are using a static IP address), you see this prompt:

```
Shutting down interface eth0: [ OK ]
Shutting down loopback interface: [ OK ]

Configuring network settings.
IP configuration: Static IP address

Bringing up loopback interface: [ OK ]
Bringing up interface eth0: [ OK ]

Enter hostname (e.g. host.domain.com): static_hostname.example.com

Network configuration changed successfully.
```

IP configuration: Static IP address
IP address: 192.168.1.103
Netmask: 255.255.255.0
Gateway: 10.147.68.1
DNS Server: 192.168.190.70
Hostname: static hostname.example.com

19. If you want to change any of the values you supplied for the IP configuration and hostname in the previous steps, enter n (no) to the following prompt:

```
Are you happy with your answers? [Y/n]: n
```

The system repeats the prompts in the previous steps, beginning with Configuring network interface.

20. If you are satisfied with the values you supplied for the IP configuration and hostname in the previous steps, enter *y* when asked if you are happy with your answers.

After checking the setup, the initialization process validates the files found in the shared folder, and then extracts the DPKs from the zip files.

**Note.** At the step Checking if VBox Guest Additions are Installed on the VM, you may see a message beginning "Input: Unspecified device as ....". You can safely ignore this message and allow the script to continue.

```
Preparing the VirtualBox VM for PeopleSoft Environment:
Checking if VBox Guest Additions are Installed in the VM:
Installing VirtualBox Guest Additions into the VM:
                                                             [ OK ]
Validating the Shared Folder setup in the Linux VM:
                                                             [ OK ]
Checking if DPKs are Present in the Shared Folder:
                                                             [ OK ]
Downloading the DPKs into the VM:
                                                             [ OK ]
Extracting the DPK ZIP file FILENAME 1of12.zip: [ OK ]
Extracting the DPK ZIP file FILENAME 12of12.zip: [ OK ]
Verifying if eYAML Hiera Backend is Installed:
                                                             [ OK ]
Preparing the Redhat Linux VM for PeopleSoft Environment:
                                                             [ OK ]
Checking if PeopleSoft DPKs are present:
                                                             [ OK ]
Validating the PeopleSoft DPKs in the Linux VM:
Validating the PeopleSoft Application DPK:
                                                             [ OK ]
Validating the PeopleSoft PeopleTools Server DPK:
                                                             [ OK ]
Validating the Oracle Server Database DPK:
                                                             [ OK ]
Validating the PeopleSoft PeopleTools Client DPK:
                                                             [ OK ]
Validating the Manifest Information in PeopleSoft DPKs: [ OK ]
Extracting the DPK Archives in the Linux VM:
Extracting the Oracle Database Server DPK Archive:
                                                             [ OK ]
```

Extracting the	PeopleSoft	PeopleTools Server DPK Archives:	[	OK	]
Extracting the	PeopleSoft	<pre><product> Application DPK Archive</product></pre>	}:[	OK	]
Extracting the	8.59 Tools	Client DPK Archive:	[	OK	]
Extracting the	8.58 Tools	Client DPK Archive:	[	OK	]
Extracting the	8.57 Tools	Client DPK Archive:	[	OK	]
Extracting the	Oracle Data	abase Client DPK Archive:	[	OK	]

The initialization process sets up the PeopleSoft Puppet file system.

```
Setting up Puppet on the Linux VM:

Generating Eyaml Hiera Backend Encryption Keys [ OK ]

Copying PeopleSoft Puppet Modules: [ OK ]

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

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

21. Enter PUM as the installation type.

```
Enter the PeopleSoft installation [PUM or FRESH] type [PUM]: PUM
```

22. Enter the database name, or accept the default name, following the requirements given in the prompt.

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 [HCM92026]:

23. Enter the database listener port number:

**Note.** Verify that there is no database listener running on port 1521. If so, do not accept the default value; use another port.

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

24. Enter the password for the database SYS or SYSTEM user.

The password is not visible as you type, and the window does not display masking characters.

There is no default password. The DPK setup script does not restrict or validate your entry. It will accept whatever you enter. However, there may be restrictions imposed by the database platform or by other processes. In order to avoid problems later in the installation, be sure to check the password requirements for your database platform.

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

Enter a new PeopleSoft database admin users [SYS/SYSTEM] password. Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the database admin users password:

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

The default is people.

```
Enter a new PeopleSoft database Connect ID. Ensure that the ID contains only alphanumeric characters [people]:
```

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

The password is not visible as you type, and the window does not display masking characters.

There is no default password. The DPK setup script does not restrict or validate your entry. It will accept whatever you enter. However, there may be restrictions imposed by the database platform or by other processes. In order to avoid problems later in the installation, be sure to check the password requirements for your database platform.

See E-DPK - PeopleTools 8.59 - 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:

27. Enter the password for the Access ID for the database.

The password is not visible as you type, and the window does not display masking characters.

There is no default password. The DPK setup script does not restrict or validate your entry. It will accept whatever you enter. However, there may be restrictions imposed by the database platform or by other processes. In order to avoid problems later in the installation, be sure to check the password requirements for your database platform.

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

Enter a new PeopleSoft database Access ID [SYSADM] password. Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft Access ID password:

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

The password is not visible as you type, and the window does not display masking characters. There is no default password.

Enter a new 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 Operator ID password:

29. 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:

30. 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:
```

31. Enter the password for the PTWEBSERVER web profile user at the following prompt:

```
Enter a new PeopleSoft Web Profile user [PTWEBSERVER] password. Ensure that the password is between 8 and 30 characters in length. You may include these special characters !@#$%^&:

Re-Enter the PeopleSoft Web Profile user password:
```

32. 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:
```

33. 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 that the password is between 8 and 30 characters in length. You may include these special characters !0#$\%\%: Re-Enter the PeopleSoft Integration Gateway Keystore password:
```

34. 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]: y
```

35. 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 ]
```

36. 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]:
```

The initialization process updates the Puppet data file with the information you supplied.

```
Updating the Puppet Hiera YAML Files with User Input: [ OK
```

37. 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.

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]:

#### 38. Review the status of the setup steps.

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

The system displays messages indicating the steps in the setup process. The success or failure of a step is indicated by [OK] or [FAILED]. See the log file mentioned at the end of this section for information on failed steps. This example shows portions of the configuration messages:

**Note.** At the step Setting Up System Settings, you may see a message such as "nr\_pdflush\_threads exported in /proc is scheduled for removal. sysctl: The scan\_unevictable\_pages sysctl/node-interface has been disabled for lack of a legitimate use case. If you have one, please send an email to linux-mm@kvack.org."

You can safely ignore this message and allow the script to proceed.

You may also see other logging messages during the deployment, which normally can be ignored.

Setting Up System Settings: Deploying Application Component: Deploying PeopleTools Components: Deploying Oracle Database Server: Setting Up PeopleSoft OS Users Profile: .	[ OK ] [ OK ] [ OK ] [ OK ]
. Starting PeopleSoft Domains: Configuring Post-Boot PeopleSoft Environment:	[ OK ]
The initialization of PeopleSoft HCM fulltier environment is	successful
Template configuration disabled. Starting OSWatcher:	[ OK ]

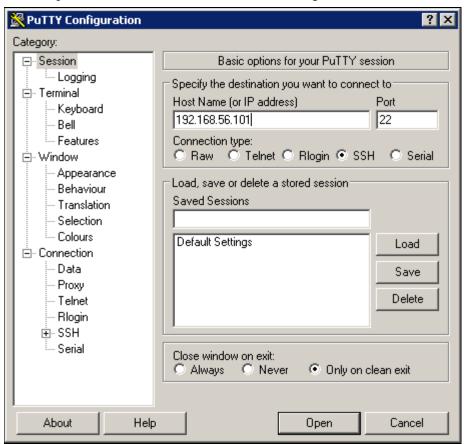
#### 39. The login prompt appears in the VM console window.

The PeopleSoft environment is available for use. You can log in as root or as one of the other users.

See Using and Maintaining the PeopleSoft Environment for information on accessing the environment in a browser, the file structure and default users.

40. To confirm external shell access to the virtual machine, log in to the virtual machine from your host OS using Secure Shell (SSH) with a telnet client.

PuTTY is the SSH client used in the example below. In order to connect with SSH you will need the IP address of the virtual machine, which was displayed during the setup. The IP address can also be identified, for example in the VirtualBox console window, using the Linux command ifconfig.



PuTTY Configuration dialog box

After the SSH client connects to the host, before you can access the virtual machine, you will need to supply the root user and the password that you provided earlier in this procedure. Establishing a connection to the virtual machine verifies its accessibility from the host OS.

**Note.** You can also log in to the VM on the console using one of the default accounts described in the task Using the PeopleSoft Installation.

- 41. To copy the log file for the deployment from the virtual machine to the Microsoft Windows host:
  - a. Log in to the VM as the root user.

Use SSH or PuTTY with the IP address for the VM as mentioned in the previous step.

b. Change directory to /var/log.

The log file is found in this directory, with the format psft\_setup.log.<date>, where <date> has the format YYYYMMDD.

For example, psft\_setup.log.20160205.

```
₽ root@infodev1:/var/log
                                                                           _ 🗆 ×
login as: root
Authorized uses only. All activity may be monitored and reported.
root@192.168.56.101's password:
Last login: Fri Jul 7 17:42:42 2017 from 192.168.56.1
Authorized uses only. All activity may be monitored and reported.
[root@infodev1 ~] # cd /var/log
[root@infodev1 log]# ls
       maillog
                                    samba.log.smbd
boot.log
           messages
                                    secure
btmp
                                    spooler
                                    tallylog
cron oraclevm-template.log
                                    vboxadd-install.log
cups
          psft-db.log
                                    vboxadd-install-x11.log
           psft setup.log.20170707 VBoxGuestAdditions.log
dmesg
dracut.log puppetlabs
                                    wtmp
lastlog
                                    yum.log
[root@infodev1 log]#
```

VM directory showing the log file

c. Copy the file to the Microsoft Windows host using FTP or SCP.

### Task 2-5: Deploying the Native OS Update Image

This section discusses:

- Setting Up the PeopleSoft Virtual Machine on a Microsoft Windows Host Using the PeopleSoft Application DPK Setup Script
- Setting Up the PeopleSoft Virtual Machine on a Linux Host Using the PeopleSoft Application DPK Setup Script as the Root User
- Setting Up the PeopleSoft Virtual Machine on a Linux Host Using the PeopleSoft Application DPK Setup Script as a Non-Root User

# Task 2-5-1: Setting Up the PeopleSoft Virtual Machine on a Microsoft Windows Host Using the PeopleSoft Application DPK Setup Script

Use this procedure on a physical or virtual Microsoft Windows host. This procedure assumes that:

You are setting up the full environment for the Native OS Update Image on a single Microsoft Windows host.

• You have downloaded all of the required DPKs and saved them in a location accessible to the Microsoft Windows host, referred to as *DPK INSTALL*.

For this task, download the Native OS DPKs for Microsoft Windows.

See Obtaining the PeopleSoft Update Images.

**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.

- There is at least 150 GB available space on the host for the full-tier PeopleSoft environment.
- The user running the script has administrative permission.

**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 have the user IDs and passwords required by the DPK setup script.

See Preparing to Run the DPK Setup Script.

1. Extract the first zip file (FILENAME\_1ofn.zip) in the same directory, DPK\_INSTALL.

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

The extraction creates the *DPK\_INSTALL*/setup directory and other files.

- 2. Open a command prompt window; for example:
  - a. Select Start, and navigate to command prompt.
  - b. Right-click and select Run as Administrator.
- 3. Run the script *DPK\_INSTALL*/setup/psft-dpk-setup.bat.

```
psft-dpk-setup.bat
```

**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. 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].

The script locates the valid PeopleSoft zip files and extracts them.

Starting the PeopleSoft Environment Setup Process:

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

5. At the following prompt, enter 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. When entering the full path for the base directory, use forward slashes (/). Enclose any names with special characters in double quotes. Do not use a name for the base directory that begins with a number. The directory C:/psft is used in this example.

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 to 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.** Setup of a full PeopleSoft environment requires about 150 GB of disk space.

The script creates the following sub-directories under the user provided base directory, BASE\_DIR:

• BASE DIR\db

The script uses this directory to deploy Oracle database server and deploy the PeopleSoft database data files.

BASE\_DIR\dpk

The script uses this directory to extract the archives from the PeopleSoft DPKs.

• BASE\_DIR\lcm

The script uses this directory to install Change Assistant and directories used for PUM Automated Updates.

BASE\_DIR\psft\_puppet\_agent

The script uses this directory to install the Puppet software.

BASE DIR\pt

The script uses this directory to deploy PeopleSoft PeopleTools and PeopleSoft application components. This directory also includes Oracle Tuxedo and Oracle WebLogic software needed for the Application Server, Process Scheduler, and web server (PIA).

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.

7. Review the status messages as the script extracts the archives from the DPKs.

**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:
[...]
```

8. 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 (*BASE\_DIR*/production/puppet/data) and updates the YAML files to reflect the type of PeopleSoft

#### environment setup.

```
Setting up Puppet on the Host:

Generating eYAML Hiera Backend Encryption Keys: [ OK ]

Updating the Puppet Hiera YAML Files in the Windows VM: [ OK ]

Updating the Role in Puppet Site File for the Windows VM: [ OK ]
```

9. Enter PUM as the installation type:

```
Enter the PeopleSoft installation [PUM or FRESH] type [PUM]: PUM
```

10. Enter a name for the database, such as HCM92, following the guidelines in the prompt, or press ENTER to accept the default.

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 [HCM92U26]:

11. Enter a port number for the database listener, or press ENTER to accept the default, 1521.

**Note.** Verify that there is no database listener running on port 1521. If so, do not accept the default value; use another port.

```
Enter the PeopleSoft database listener port [1521]: 1522
```

12. Enter a password for the database SYS or SYSTEM user, following the guidelines in the prompt, and enter again on the next line.

The password is not visible as you type, and the window does not display masking characters.

There is no default password. The DPK setup script does not restrict or validate your entry. It will accept whatever you enter. However, there may be restrictions imposed by the database platform or by other processes. In order to avoid problems later in the installation, be sure to check the password requirements for your database platform.

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

Enter a new PeopleSoft database admin users [SYS/SYSTEM] password. Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the database admin users password:

13. Enter the PeopleSoft connect ID, following the guidelines in the prompt.

Press ENTER to accept the default, people.

```
Enter a new PeopleSoft database Connect ID. Ensure that the ID contains only alphanumeric characters [people]:
```

14. Enter a password for the PeopleSoft Connect ID, following the guidelines in the prompt, and enter again on the next line.

The password is not visible as you type, and the window does not display masking characters.

There is no default password. The DPK setup script does not restrict or validate your entry. It will accept whatever you enter. However, there may be restrictions imposed by the database platform or by other processes. In order to avoid problems later in the installation, be sure to check the password requirements for your database platform.

E-DPK - PeopleTools 8.59 - 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:
```

15. Enter a password for the PeopleSoft database access ID, following the guidelines in the prompt, and enter again on the next line.

The password is not visible as you type, and the window does not display masking characters.

There is no default password. The DPK setup script does not restrict or validate your entry. It will accept whatever you enter. However, there may be restrictions imposed by the database platform or by other processes. In order to avoid problems later in the installation, be sure to check the password requirements for your database platform.

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

```
Enter a new PeopleSoft database Access ID [SYSADM] password. Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft Access ID password:
```

16. Enter a password for the PeopleSoft user, or operator ID, such as VP1 or PS, using the guidelines in the prompt, and enter again on the next line.

The password is not visible as you type, and the window does not display masking characters. There is no default password.

```
Enter a new PeopleSoft database Operator ID [VP1] password. Ensure that the password is between 1 and 32 characters in length. You may include these special characters !0#$\%\%: Re-Enter the PeopleSoft Operator ID password:
```

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

The password is not visible as you type, and the window does not display masking characters. 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 the password is between 8 and 30 characters in length. You may include these special characters !@\#\$\%^\&: Re-Enter the Application Server Domain connection password:
```

18. Enter the Oracle WebLogic Server Admin Password, following the guidelines in the prompt.

The password is not visible as you type, and 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:
```

19. Enter a password for the PeopleSoft Web Profile user, following the guidelines in the prompt, and enter again

on the next line.

Enter a new PeopleSoft Web Profile user [PTWEBSERVER] 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 a password for the PeopleSoft Integration Gateway user, following the guidelines in the prompt, and enter again on the next line.

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

21. 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 that the password is between 8 and 30 characters in length. You may include these special characters !0\#\$\%^\&: Re-Enter the PeopleSoft Integration Gateway Keystore password:
```

22. 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]: y
```

23. 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 ]
```

24. 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.

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?  $[y|n]:\Rightarrow y$ 

#### 25. Review the status of the setup steps.

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:

```
Deploying Application 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 environment.

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

Exiting the PeopleSoft environment setup process.

See PeopleSoft PeopleTools 8.59 Deployment Packages Installation.

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

Deploying Application Components:	[	OK	]
Deploying PeopleTools Components:	[	OK	]
Deploying Oracle Database Server:	[	OK	]
Setting up PeopleSoft OS Users Environment:	[	OK	]
Setting up PeopleSoft Database:	[	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 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: Setting Up the PeopleSoft Virtual Machine on a Linux Host Using the PeopleSoft Application DPK Setup Script as the Root User

Use this procedure on a virtual or physical Linux host, or on Oracle Exalogic Elastic Cloud. This procedure assumes that:

- You are setting up the full environment for the Native OS Update Image on a single Linux host.
- You have downloaded all of the required DPKs and saved them in a location accessible to the Linux host, referred to as *DPK\_INSTALL*.

For this task, download the Native OS DPKs for Linux.

See Understanding the PeopleSoft DPK Setup DPK.

**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.

- There is at least 150 GB available space on the Linux host for the full-tier PeopleSoft environment.
- There is a writable directory available for the home for the users that own the PeopleSoft runtime. The default is /home.

**Important!** The DPK setup script installs a read-only *PS\_HOME* under the base directory (*BASE\_DIR*) that you specify during the setup process in this section. Do not specify the directory for the users' home to be the same as the *PS\_HOME*. The PeopleSoft DPKs are not supported for a setup where the users' home directory is the same as the *PS\_HOME* directory.

• The user running the script *must have root permission*.

See the appendix "Deploying on a Linux Host with a Non-Root User" for instructions on installing the PeopleSoft environment with a non-root user.

• You have the user IDs and passwords required by the DPK setup script.

See Preparing to Run the DPK Setup Script.

1. Extract the first zip file (*FILENAME*\_1of*n*.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 directory and other files.

2. Open a terminal window as a user with root access, and run the script *DPK\_INSTALL*/setup/psft-dpk-setup.sh; for example:

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

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].

The script locates the valid PeopleSoft zip files and extracts them.

Starting the PeopleSoft Environment Setup Process:

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

4. At the following prompt, enter 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. When entering the full path for the base directory, use forward slashes (/). Enclose any names with special characters 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, /var/psft/ will give an error). The directory /cs1/psft is used in this example.

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 : /csl/psft

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

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 full setup of a PeopleSoft environment (database and mid-tier) takes about 150 GB of disk space.

The script creates the following sub-directories under the user provided base directory, BASE\_DIR:

BASE DIR/db

The script uses this directory to deploy Oracle database server and deploy the PeopleSoft database data files.

BASE\_DIR/dpk

The script uses this directory to extract the archives from the PeopleSoft DPKs.

• BASE DIR/1cm

The script uses this directory to install Change Assistant and directories used for PUM Automated Updates.

BASE\_DIR/psft\_puppet\_agent

The script uses this directory to install the Puppet software.

• BASE\_DIR/pt

The script uses this directory to deploy PeopleSoft PeopleTools and PeopleSoft application components. This directory also includes Oracle Tuxedo and Oracle WebLogic software needed for the Application Server, Process Scheduler, and web server (PIA).

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 a directory on the Linux Host 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.

7. Review the status messages as the script extracts the archives from the DPKs.

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. It then copies the PeopleSoft Puppet modules to the standard location (*BASE\_DIR*/dpk/puppet/production) and updates the YAML files to reflect the type of PeopleSoft environment setup.

```
Setting up Puppet on the Host:

Generating eYAML Hiera Backend Encryption Keys: [ OK ]

Updating the Puppet Hiera YAML Files in the Windows VM: [ OK ]

Updating the Role in Puppet Site File for the Windows VM: [ OK ]
```

9. Enter PUM as the installation type:

```
Enter the PeopleSoft installation [PUM or FRESH] type [PUM]: PUM
```

10. Enter a name for the database, such as HCM92, following the guidelines in the prompt, or press ENTER to accept the default.

```
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 [HCM92U26]:
```

11. Enter a port number for the database listener, or press ENTER to accept the default, 1521.

**Note.** Verify that there is no database listener running on port 1521. If so, do not accept the default value; use another port.

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

12. Enter a password for the database SYS or SYSTEM user, following the guidelines in the prompt, and enter again on the next line.

The password is not visible as you type, and the window does not display masking characters. .

There is no default password. The DPK setup script does not restrict or validate your entry. It will accept whatever you enter. However, there may be restrictions imposed by the database platform or by other processes. In order to avoid problems later in the installation, be sure to check the password requirements for your database platform.

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

```
Enter a new PeopleSoft database admin users [SYS/SYSTEM] password. Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the database admin users password:
```

13. Enter the PeopleSoft connect ID, following the guidelines in the prompt.

Press ENTER to accept the default, people.

```
Enter a new PeopleSoft database Connect ID. Ensure that the ID contains only alphanumeric characters [people] :
```

14. Enter a password for the PeopleSoft Connect ID, following the guidelines in the prompt, and enter again on the next line.

The password is not visible as you type, and the window does not display masking characters.

There is no default password. The DPK setup script does not restrict or validate your entry. It will accept whatever you enter. However, there may be restrictions imposed by the database platform or by other processes. In order to avoid problems later in the installation, be sure to check the password requirements for your database platform.

E-DPK - PeopleTools 8.59 - 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:
```

15. Enter a password for the PeopleSoft database access ID, following the guidelines in the prompt, and enter again on the next line.

The password is not visible as you type, and the window does not display masking characters.

There is no default password. The DPK setup script does not restrict or validate your entry. It will accept whatever you enter. However, there may be restrictions imposed by the database platform or by other processes. In order to avoid problems later in the installation, be sure to check the password requirements for your database platform.

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

```
Enter a new PeopleSoft database Access ID [SYSADM] password. Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft Access ID password:
```

16. Enter a password for the PeopleSoft user, or operator ID, such as VP1 or PS, using the guidelines in the prompt, and enter again on the next line.

The password is not visible as you type, and the window does not display masking characters. There is no default password.

```
Enter a new PeopleSoft database Operator ID [VP1] password. Ensure that the password is between 1 and 32 characters in length. You may include these special characters !0\#\$\%\&: Re-Enter the PeopleSoft Operator ID password:
```

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

The password is not visible as you type, and the window does not display masking characters. 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:
```

18. Enter the Oracle WebLogic Server Admin Password, following the guidelines in the prompt.

The password is not visible as you type, and 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:

19. Enter a password for the PeopleSoft Web Profile user (PTWEBSERVER), following the guidelines in the prompt, and enter again on the next line.

```
Enter a new PeopleSoft Web Profile user [PTWEBSERVER] password. Ensure that the password is between 8 and 32 characters in length. You may include these special characters !0\#\$\%^\&: Re-Enter the PeopleSoft WebProfile user password:
```

20. Enter a password for the PeopleSoft Integration Gateway user, following the guidelines in the prompt, and enter again on the next line.

```
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:
Re-Enter the PeopleSoft Integration Gateway user password:
```

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

22. 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]: y
```

23. 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 ]
```

24. 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.

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]: \Rightarrow y
```

#### 25. Review the status of the setup steps.

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:

```
Setting Up System Settings: [FAILED]
```

The initialization of PeopleSoft environment setup failed. Check the log file [/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.

See PeopleSoft PeopleTools 8.59 Deployment Packages Installation.

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

Setting Up System Settings:	[	OK	]
Deploying Application Components:	[	OK	]
Deploying PeopleTools Components:	[	OK	]
Deploying Oracle Database Server:	[	OK	]
Setting up PeopleSoft OS Users Environment:	[	OK	]
Setting up PeopleSoft Database:	[	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 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: Setting Up the PeopleSoft Virtual Machine on a Linux Host Using the PeopleSoft Application DPK Setup Script as a Non-Root User

You have the option of downloading the DPK zip files and deploying the PeopleSoft environment as a non-root user. For information, see the appendix "Deploying on a Linux Host as a Non-Root User."

### Task 2-6: Cleaning Up Orphaned Language Data

Perform this task if you are a Multilingual customer and are installing non-English languages. This task assumes that you have loaded the necessary language files. If you have not yet loaded the language files, follow the instructions in the Global Technology product documentation.

See PeopleTools: Global Technology, "Adding Oracle-Provided Translations."

When you install a PI, the DPK setup script installs an Oracle multi-lingual database. The first time you set up the PeopleSoft Update Manager PIA Application in the PI, it will automatically load the required language data based on the language selections in your target environment.

See PeopleTools: Change Assistant and Update Manager, "Selecting Update Manager Action."

The Application Engine program PTIACLNLNGCA removes any orphaned related language objects that do not have a matching base language object.

Run the PTIACLNLNGCA application engine program. From the command line utility, the syntax is:

```
<PS_HOME>\bin\client\winx86\psae -CD <dbname> -CT ORACLE -CO <oprid> -CP⇒ <password> -R <run control> -AI PTIACLNLNGCA -FP <log path>
```

Use the values for the database name and user ID that you entered on the startup tab of the Configuration Manager for <dbname> and <oprid> respectively. However, be aware that password> is not the same as the connect password you entered on the Configuration Manager startup tab. Enter a value for password> that is the password associated with the <oprid>. For <log\_path>, specify the path where you want the log file for the application engine program to be generated, such as C:\temp\.

### Task 2-7: Using the Samba Shared Drive Folders (Linux)

This section discusses:

- Understanding Samba and File System Access
- Accessing the Samba Shared Drive Folders on the PeopleSoft Virtual Machine

### **Understanding Samba and File System Access**

The Linux file system location in the virtual machine is made available using Samba. This makes files residing in the Oracle Linux OS on the virtual machine accessible to Microsoft Windows systems. The files are accessible to the host Microsoft Windows machine when the network configuration is host-only, and both the host and your network when the network configuration is bridged.

The Samba shared drives are available for virtual machines on Oracle Linux OS, whether they were deployed on VirtualBox on a Microsoft Windows Host, or directly on an Oracle Linux machine.

**Note.** Samba is Open Source software under the GNU General Public licence that allows for interoperability between Linux and UNIX servers and Microsoft Windows-based clients.

By default Samba is set up to make some of the installation directories under the *BASE\_DIR*/pt (for Native OS for Linux) or /opt/oracle/psft/pt/ (for VirtualBox) directory of the virtual machine available to the host as shared drives. The repository directory for Change Assistant is also made available. You can map to these shared drives from the host machine or other Microsoft Windows machines. A later section describes how to access the shared drives and map to them.

See Accessing the Shared Drive Folders on the PeopleSoft Virtual Machine

The following table describes the Oracle Linux directories on the virtual machine, and the shared drive folders that are made available to a Microsoft Windows:

Directory on Oracle Linux VM	Shared Drive Folder on Microsoft Windows	Description
/opt/oracle/psft/pt/tools_client  On Native OS for Linux, BASE_DIR/pt/tools_client  On VirtualBox, /opt/oracle/psft/pt/tools_client	tools_client	This directory includes installation software for all current PeopleTools client versions, and the Oracle database client.
On Native OS for Linux,     BASE_DIR/pt/ <product>_pi_home     On VirtualBox, /opt/oracle/psft/pt/     <product>_pi_home <product> is an abbreviation for the PeopleSoft application, such as hcm for PeopleSoft Human Capital Management.</product></product></product>	pi_home	Change Assistant file repository
On Native OS for Linux,     BASE_DIR/pt/ <product>     _apphome      On VirtualBox, /opt/oracle/psft/pt/     <product>_apphome  <product> is an abbreviation for the PeopleSoft application, such as hcm for PeopleSoft Human Capital Management.</product></product></product>	ps_apphome	The PS_APP_HOME location holds the PeopleSoft application installation files.

See *PeopleTools: Change Assistant and Update Manager*, "Configuring the Microsoft Windows Client Running Change Assistant" for more information on selecting the appropriate client installations for your environment.

As delivered, the Samba shared drive folders are configured as read only. You may modify the Samba configuration file in /etc/samba/smb.conf to change which content is accessed from outside the guest OS. See the samba man page in the virtual machine and the web site www.samba.org for more information about configuration options for Samba.

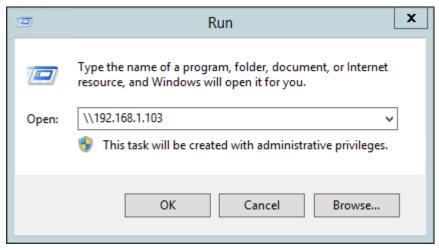
#### See Also

"Deploying on a Linux Host as a Non-Root User," Running the DPK Setup Post-Configuration Step

### Task 2-7-1: Accessing the Samba Shared Drive Folders on the PeopleSoft Virtual Machine

Use these instructions to access the shared drive folders in the file system made available on the virtual machine.

From Windows Explorer access the virtual appliance file system from your Microsoft Windows host by selecting Start, Run, and entering the Microsoft Windows UNC path containing your virtual machine IP address, as shown in this example:



Microsoft Windows Run dialog box with IP address

This is the IP address used for your virtual machine in the section Using the VirtualBox Shell to Set Up the PeopleSoft Virtual Machine.

Windows Explorer opens a window displaying a file system location within the virtual machine with several share drives. Use the IP address used for your virtual machine to map to one of the shared drive folders. Use the format \\<\VM IP address>\<folder name>; for example, \\192.168.1.103\tools client.

The tools client share drive includes:

- SetupPTClient.bat script
- tnsnames.ora file
- source.properties file
- client-857 folder
- client-858 folder
- client-859 folder

On Microsoft Windows operating systems there may be certain network security policy settings that may prevent you from accessing the Samba shared drives. If you find that you can see the shared drives in Windows Explorer but cannot access any of the files contained within them, check with your network administrator to gain access.

**Note.** If your organization's security policies do not allow you to gain access, an alternative is to use SFTP to copy the shared folder contents to local folders on your machine.

# Task 2-8: Deploying the PeopleTools Client DPKs in Update Manager Mode

The PeopleSoft virtual machine environment includes a client installer for setting up PeopleTools client tools such as Change Assistant, Configuration Manager, and Application Designer, as well as an Oracle database client.

Oracle strongly recommends that you dedicate a Microsoft Windows machine for the PeopleTools client for each PeopleSoft Update Image (PI). This should be a machine that is not used for other PeopleSoft purposes. You should install or upgrade the PeopleTools client tools each time the PeopleTools patch release increments as noted in the PI manifest. Install on a Microsoft Windows host that is certified for PeopleTools client installation.

In addition to the Update Manager Mode deployment described in this section, it is possible to deploy the PeopleTools Client DPK in standalone mode. Standalone mode deployment can be used, for example, to install Change Assistant, Change Impact Analyzer, and PeopleSoft Test Framework, as well as the PeopleTools Client directory. Use standalone mode for applying PeopleTools patches or PeopleTools-only upgrade.

See *PeopleSoft PeopleTools 8.59 Deployment Packages Installation*, PeopleSoft PeopleTools on Oracle Help Center, <a href="https://docs.oracle.com/en/applications/peoplesoft/peopletools/index.html">https://docs.oracle.com/en/applications/peoplesoft/peopletools/index.html</a>.

For the Update Mode deployment, this section assumes that:

You downloaded the PeopleSoft DPKs to a location knows as DPK\_INSTALL on a Microsoft Windows
computer.

The downloaded zip files include PeopleTools client installations for all supported PeopleSoft PeopleTools versions.

• You completed the setup of the PeopleSoft virtual machine as described in this chapter.

To install the PeopleTools client in Update Manager mode, you must have selected the PUM installation type for the installation.

If you deployed on a Linux operating system, either using VirtualBox or using the DPK setup script, and you selected the PUM installation type, the DPK setup script creates a Samba Shared Drive folder system, which you access to carry out this procedure.

See Using the Samba Shared Drive Folders.

If you deployed on a Microsoft Windows operating system, the DPK setup script created a tools\_client directory under *BASE\_DIR*\pt. For example, if you used the default name for the base directory, the tools\_client location is C:\psft\pt\tools\_client.

• To run the script you must have administrative permission.

The script to install the PeopleTools Client includes the following options:

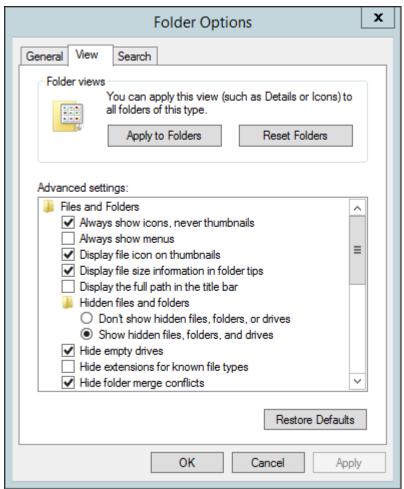
Deployment	Script Commands
Install the PeopleTools client software in update manager mode.	SetupPTClient.bat
The setup script deploys to drive C by default. To deploy to a different drive, you can use the option -d <drive>  This option installs all specified software (Change Assistant, Change Impact 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.</drive>	SetupPTClient.bat -d <drive> For example, to install to drive E: SetupPTClient.bat -d E</drive>
Install the PeopleTools client software in update manager mode and enable logging.	SetupPTClient.bat -1
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 8.59).</i>

To set up the PeopleTools Client DPK:

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:

**Note.** Depending upon the Microsoft Windows operating system, you may use a different method to set the folder options.

- a. Open Windows Explorer and select View, 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

- d. Click OK to close the box.
- e. Alternatively, on the View toolbar, verify that the check box for File Name Extensions is selected.
- 2. Open a command prompt, running as administrator.
- 3. If you deployed the PeopleSoft environment on a Microsoft Windows operating system, on the Microsoft Windows machine you have designated for the PeopleTools client, go to the *BASE\_DIR*\pt\tools\_client directory.

If you deployed the PeopleSoft environment on a Linux operating system, map a drive to the Samba Share

Drive folder for the PeopleSoft virtual machine.

For example, map drive T: to \\192.168.1.103.

The tools\_client directory includes the following:

client-857

The client-857 directory includes a Readme file, a manifest with version information, archives, and scripts for deployment of the PeopleSoft PeopleTools 8.57 client home directory.

• client-858

The client-858 directory includes a Readme file, a manifest with version information, archives, and scripts for deployment of the PeopleSoft PeopleTools 8.58 client home directory.

• client-859

The client-859 directory includes a Readme file, a manifest with version information, archives, and scripts for deployment of the PeopleSoft PeopleTools 8.59 client home directory.

· oracle-client

The oracle-client directory includes a Readme file, a manifest with version information, archives, and scripts for deployment of the Oracle database client home directory.

SetupPTClient.bat

Interactive script that installs the PeopleSoft PeopleTools components such as Application Designer and Change Assistant. When you run the script, you supply information such as the PeopleSoft PeopleTools release and the RDBMS platform for your target database.

**Note.** There are also SetupPTClient.bat scripts in the subdirectories. Be sure to use the top-level script to install in Update Manager mode.

• source.properties — A text file that includes information required for the setup.

**Important!** Do not edit this file. The information is supplied by the setup scripts.

Here is a sample source.properties file:

```
TOOLSCLIENT_VERSION=8.59.05

PIA_URL=http://<host_name>:8000/ps/signon.html

DB_USER=VP1

DB_USER_PWD=

CONNECT_USER=people

CONNECT_USER_PWD=

PI_HOME=C:/psft/pt/<app>_pi_home

ACCESS_ID=accessid

ACCESS_PWD=
```

• tnsnames.ora — Oracle database connectivity file.

The file includes the information for the source (PI) database.

Note that the CONNECT\_DATA entry uses SERVICE\_NAME rather than SID as in previous releases. When setting up the PI, if you do not replace your existing the thin setting up the PI, if you do not replace your existing the thin setting in order for your People Tools or Change Assistant clients to connect to the PUM source database. For example:

```
HCMDB =
   (DESCRIPTION =
```

See the PeopleTools: Change Assistant and Update Manager product documentation for more information on setting up the client.

4. Go to the tools\_client directory, and run the setup script to install to drive C.

See the table at the beginning of this section for other options.

```
SetupPTClient.bat
```

**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.

5. Answer *y* (yes) at the following prompt to set up a PeopleTools Client to use with PUM:

```
This script will guide you through the deployment of PeopleTools Client components for your environment. Is this deployment for a Update Manager Environment? A 'Y' will prompt you to setup a Target PeopleTools client deployment in addition to the Source PeopleTools client.) [Y/N]: \begin{tabular}{ll} Y/N]: \begin{tabular}{ll}
```

6. Answer *y* (yes) at the following prompt to set up a PeopleSoft PeopleTools client to connect to your target environment:

```
Do you want to deploy Tools Client for Target (Y/N): y
```

7. At the following prompt, specify the version of the PeopleSoft PeopleTools for your target environment.

The PI source always uses a PeopleSoft PeopleTools 8.59 client. The target database may use an earlier version. Select the option for the PeopleSoft PeopleTools release that the target database was built on. The options include the latest patches for the supported PeopleSoft PeopleTools releases. For example, if your target database was built on PeopleSoft PeopleTools 8.58.10, select option 2, 8.58.14.

**Note.** Oracle recommends that you install the PeopleTools client tools from the installation directories found on the latest PI in order to obtain the latest fixes. See your PI home page for release/patch information for the PeopleTools Client. The link for your PI home page can be found on PeopleSoft Update Manager Home Page, My Oracle Support, Doc ID 1641843.2.

In this example, the target client selected is option 2, 8.58.14. Choose the release/patch for your target environment.

```
Setting up the Target PeopleTools client deployment.
Please select a Target client to deploy:
1. 8.57.24
2. 8.58.14
3. 8.59.05
```

```
Enter your choice [1-3] : 2

Target Tools Version: 8.58.14
```

8. Specify the RDBMS type for the target database.

In this example, the target database RDBMS is option 1, Oracle.

```
Please Select the Database Platform:
1. Oracle
2. Microsoft SQL Server
3. DB2 for zOS
Enter your choice [1-4] : 1
```

#### 9. Review the setup steps.

```
Starting Tools Client Deployment!

Validating compatible Oracle DB Client for Target PeopleTools 8.57.14

Deploying Target PeopleTools 8.57.14 Client in C:\PT8.57.14_Client

Validating compatible Oracle DB Client for Source PeopleTools 8.59.05

Deploying Source PeopleTools 8.59.05 Client in C:\PT8.59.05_Client

Installing Change Assistant for PeopleTools 8.59.05 Client in

C:\Program Files\PeopleSoft\Change Assistant

Deployment of PeopleTools Clients and installation of

Change Assistant Complete.

Please launch Change Assistant to complete and

validate your Source and Target environment setup.

Tools Client Deployment Ended.

***** SetupPTClient ended at 18:17:21.15 ******

Please review C:\PeopleSoft\PTClientDeploy.log for

additional information.
```

The script uses the information you supplied and carries out the following validations and deployments:

• Oracle database client for the source (PI)

The setup process determines whether a 64-bit Oracle 19c database client is present on the Microsoft Windows client machine for connectivity to the source database. If not, the setup process installs it.

Oracle database client for the target database.

If the target is an Oracle database, the setup process determines whether the correct Oracle database client is present. The current PeopleSoft PeopleTools release requires a 64—bit Oracle 19c Database Client installation. If the correct Oracle database client is not present, the setup process installs it.

**Note.** PeopleSoft PeopleTools 8.58, 8.57, 8.56, and 8.55 require a 64-bit Oracle 12c Database Client installation.

• PeopleSoft PeopleTools Client for the source (PI).

The source client tools are installed in C:\PT<\telease\_number>\text{Client}, where <\text{release\_number}> \text{refers to the PeopleSoft PeopleTools release and patch; for example, C:\PT8.59.05\text{Client}.

• PeopleSoft PeopleTools Client for the target.

The source client tools are installed in C:\PT<\textit{release\_number}\$-Client, where <\text{release\_number}\$ refers to the PeopleSoft PeopleTools release and patch; for example, C:\PT8.57.14\_Client.

• Change Assistant installation

Change Assistant is installed in C:\Program Files\PeoplesSoft\Change Assistant.

If there is an earlier Change Assistant installation on the machine, the setup script removes it.

10. 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 3**

# Deploying the PeopleSoft Application Deployment Packages in Silent Mode

#### This chapter discusses:

- Understanding Silent Mode Installation
- Reviewing the Response File Sample for Full-Tier Installation
- Reviewing the Response File Samples for VirtualBox Deployment
- Reviewing the Response File Sample to Install PS\_HOME Only
- Reviewing the Response File Sample to Install PS\_APP\_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 "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.

See *PeopleTools 8.59 Deployment Packages Installation*, "Completing the DPK Initialization with Customizations."

- 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, fulfill the requirements in the appendix "Deploying on a Linux Host as a Non-Root User." Before you run the silent mode installation as a non-root user, the root user must run the DPK setup prereq step. After you run the silent mode installation as a non-root user, the root user must

run the DPK postcfg step to set up the Samba shared drive folders.

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 fulltier as the type of DPK deployment.
- install\_type Specify PUM as the installation type for this task.
  - See Reviewing the DPK Setup Script Options for information on the allowed installation types.
- 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.
- db\_is\_ml Specify false if you do not want translated files for a multi-language deployment, or true to include the translated files.
- 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, use forward slashes (/) for the base directory. For example, /csl/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 /dsl/psft/).

- user\_home\_dir On Linux, if you are performing the deployment as the root user, enter a writable directory for the home directory for the script-created users (psadm1, psadm2, psadm3, oracle2, and esadm1). Enter the full path, and enclose the path in double quotes.
- user\_config\_home\_dir On Linux, 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, and enclose the path in double quotes.
- db\_platform Specify ORACLE as the database platform.
- 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".

- db host Enter the name of the host where the database is installed.
- db port Enter the database port.
- db\_listener\_port Enter the port for the Oracle Database listener for a full-tier deployment.
- 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 DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.
- admin pwd Enter the password for the PeopleSoft database admin (SYS/SYSTEM) user See E-DPK - PeopleTools 8.59 - DPK setup does not support some special characters for passwords, My Oracle Support, Doc ID 2765013.1.
- access\_id Enter the Access ID user.
- access password Enter the password for the Access ID (SYSADM) for the database.
  - See E-DPK PeopleTools 8.59 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\_server\_name Enter the name defined for the Process Scheduler server.
  - The Process Scheduler Server includes the Process Scheduler Server Agent and the Distribution Agent. Predefined names include PSNT (Microsoft Windows), PSUNX (UNIX), and PSOS390 (Db2 z/OS). When you run the DPK setup script with default initialization, the Process Scheduler Server name is PRCSxxxx, where xxx is a number.

- prcs\_domain\_id Enter one of the predefined Process Scheduler Server names, PSNT (Microsoft Windows), PSUNX (UNIX), and PSOS390 (Db2 z/OS).
- 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 !@#\$%^&.
- network\_adapter\_type Use this parameter with the silent mode VirtualBox deployment.
  - Enter 1 to use a Host-only network adapter, or 2 for a Bridged Network Adapter.
  - See Understanding the PeopleSoft Deployment Packages for Update Images, "Preparing to Deploy."
- os\_root\_pwd For the silent mode VirtualBox deployment, enter the root user password for the guest Linux operating system, in clear text.
- os\_use\_dhcp For the silent mode VirtualBox deployment, enter *y* (yes) to use Dynamic Host Configuration Protocol (DHCP) to generate an IP address dynamically, or *n* (no) to use a static IP address.
- os\_hostname For the silent mode VirtualBox deployment, enter a host name for the VM.
- os\_static\_ipaddr Use this parameter with the silent mode VirtualBox deployment. If you specified *n* for the os\_use\_dhcp parameter, supply a valid static IP address.
- os\_netmask Use this parameter with the silent mode VirtualBox deployment.
  - If you specified *n* for the os\_use\_dhcp parameter, supply a valid netmask.
- os\_gateway\_ipaddr Use this parameter with the silent mode VirtualBox deployment.
  - If you specified *n* for the os\_use\_dhcp parameter, supply a valid gateway IP address.
- os\_dns\_ipaddr Use this parameter with the silent mode VirtualBox deployment. If you specified *n* for the os\_use\_dhcp parameter, supply a valid DNS server IP address.

# Task 3-1: Reviewing the Response File Sample for Full-Tier Installation

#### This section discusses:

- Reviewing the Response File Sample for Full-Tier Installation on Microsoft Windows
- Reviewing the Response File Sample for Full-Tier Installation on Linux as the Root User
- Reviewing the Response File Sample for Full-Tier Installation on Linux as a Non-Root User

### Task 3-1-1: Reviewing the Response File Sample for Full-Tier Installation on Microsoft Windows

Here is a sample response file for a full-tier installation on a Microsoft Windows operating system.

env type=fulltier install type=PUM psft base dir="c:/psft silent" db name=HCM92U30 db listener port=1521 db service name=HCM92U30 connect id=people connect pwd=password opr id=PS opr pwd=password admin pwd=password access id=SYSADM access\_pwd=password weblogic admin pwd=password webprofile user id=PTWEBSERVER 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 Full-Tier Installation on Linux as the Root User

Here is a sample response file for a full-tier installation on a Linux operating system.

env type=fulltier install type=PUM psft\_base\_dir="/opt/oracle/psft\_silent" user home dir="/opt/psftuserhome" db name=HCM92U30 db listener port=1521 db service name=HCM92U30 connect id=people connect pwd=password opr id=PS opr pwd=password admin pwd=password access id=SYSADM access\_pwd=password weblogic admin pwd=password webprofile user id=PTWEBSERVER 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 Full-Tier Installation on Linux as a Non-Root User

Here is a sample response file for a non-root user to perform a full-tier installation on a Linux operating system.

See "Deploying on a Linux Host as a Non-Root User" for prerequisites for the non-root deployment.

```
env type=fulltier
install type=PUM
psft base dir="/opt/oracle/psft silent"
user config home dir="/opt/psftuser/pscfg pt859 silent"
db name=HCM92U30
db listener port=1521
db service name=HCM92U30
connect id=people
connect pwd=password
opr id=PS
opr pwd=password
admin pwd=password
access id=SYSADM
access pwd=password
weblogic admin pwd=password
webprofile user id=PTWEBSERVER
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 Samples for VirtualBox Deployment

This section discusses:

- Reviewing the Response File Sample for VirtualBox with Dynamic IP Configuration
- Reviewing the Response File Sample for VirtualBox with Static IP Configuration

# Task 3-2-1: Reviewing the Response File Sample for VirtualBox with Dynamic IP Configuration

Perform the silent mode deployment on a Microsoft Windows machine with Oracle VM VirtualBox installed. Before beginning the silent mode deployment, ensure that you have fulfilled the requirements for a VirtualBox deployment.

See "Deploying the PeopleSoft Application Deployment Packages," Deploying the VirtualBox Update Image.

Here is a sample response file for a full-tier deployment on a VirtualBox environment. This sample uses dynamic host configuration protocol (DHCP) to assign a dynamic IP address. Do not add additional parameters to this response file sample. For example, psft\_base\_dir and user\_home\_dir are set by the deployment and cannot be changed.

**Note.** Do not use a customizations file when you run this silent mode deployment.

```
network adapter type=1
os root pwd=password
os use dhcp=y
os hostname=myhost.example.com
env type=fulltier
install type=PUM
db type=DEMO
db platform=ORACLE
db name=HCM92U30
db service name=HCM92U30
connect id=people
connect pwd=password
opr id=PS
opr pwd=password
admin pwd=password
access id=SYSADM
access_pwd=password
weblogic admin pwd=password
webprofile user id=PTWEBSERVER
webprofile user pwd=password
domain conn pwd=password
gw user id=administrator
gw user pwd=password
gw keystore pwd=password
```

# Task 3-2-2: Reviewing the Response File Sample for VirtualBox with Static IP Configuration

Perform the silent mode deployment on a Microsoft Windows machine with Oracle VM VirtualBox installed. Before beginning the silent mode deployment, ensure that you have fulfilled the requirements for a VirtualBox deployment.

See "Deploying the PeopleSoft Application Deployment Packages," Deploying the VirtualBox Update Image.

Here is a sample response file for a full-tier deployment on a VirtualBox environment. This sample uses requires a static IP address. Do not add additional parameters to this response file sample. For example, psft\_base\_dir and user\_home\_dir are set by the deployment and cannot be changed.

**Note.** Do not use a customizations file when you run this silent mode deployment.

```
network_adapter_type=2
os_root_pwd=password
os_static_ipaddr=nnn.nnn.nnn
os_netmask=nnn.nnn.nnn.n
os_gateway_ipaddr=nnn.nnn.nnn.nnn
os_dns_ipaddr=nnn.nnn.nnn.nnn
env_type=fulltier
install_type=PUM
db_type=DEMO
db_platform=ORACLE
db_name=HCM92U30
```

```
db_service_name=HCM92U30
connect_id=people
connect_pwd=password
opr_id=PS
opr_pwd=password
admin_pwd=password
access_id=SYSADM
access_pwd=password
weblogic_admin_pwd=password
webprofile_user_id=PTWEBSERVER
webprofile_user_pwd=password
domain_conn_pwd=password
gw_user_id=administrator
gw_user_pwd=password
gw keystore pwd=password
```

# Task 3-3: 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 on Linux

### Task 3-3-1: 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.

```
env_type=midtier
install_type=PUM
db_type=DEMO
db_is_ml=True
deploy_only=True
deploy_type=tools_home
db_platform=ORACLE
psft_base_dir="C:\psft"
db_is_unicode=False
```

### Task 3-3-2: Reviewing the Response File Sample to Install PS\_HOME Only on Linux

Here is a sample response file for installing only the *PS\_HOME* installation directory, which includes the PeopleSoft PeopleTools server utilities.

```
env_type=midtier
install_type=PUM
db_type=DEMO
```

```
db_is_ml=True
deploy_only=True
deploy_type=tools_home
db_platform=ORACLE
psft base dir="/opt/oracle/psft"
```

# Task 3-4: Reviewing the Response File Sample to Install PS\_APP\_HOME Only

This section discusses:

- Reviewing the Response File Sample to Install PS\_APP\_HOME Only on Microsoft Windows
- Reviewing the Response File Sample to Install PS\_APP\_HOME Only on Linux

### Task 3-4-1: Reviewing the Response File Sample to Install PS\_APP\_HOME Only on Microsoft Windows

Here is a sample response file for installing only the *PS\_APP\_HOME* installation directory, which includes the PeopleSoft application files.

```
env_type=midtier
install_type=PUM
db_type=DEMO
db_is_ml=True
deploy_only=True
deploy_type=app_home
db_platform=ORACLE
psft_base_dir="C:\psft"
db_is_unicode=True
```

# Task 3-4-2: Reviewing the Response File Sample to Install PS\_APP\_HOME Only on Linux

Here is a sample response file for installing only the *PS\_APP\_HOME* installation directory, which includes the PeopleSoft application files.

```
env_type=midtier
install_type=PUM
db_type=DEMO
db_is_ml=True
deploy_only=True
deploy_type=app_home
db_platform=ORACLE
psft_base_dir="/opt/oracle/psft"
db is unicode=True
```

# Task 3-5: 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, fulfill the requirements in the appendix "Deploying on a Linux Host as a Non-Root User." Before you run the silent mode installation, the root user must run the DPK setup prereq step. In addition, after the silent mode installation is complete, the root user must run the post-configuration step to set up the Samba shared drive folders.

- 1. Prepare the response file, using the examples in this section.
- 2. Extract the first zip file (*FILENAME*\_1of*n*.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:

```
./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 3-6: 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, fulfill the requirements in the section Deploying on a Linux Host as a Non-Root User. Before you run the silent mode installation, the root user must run the DPK setup prereq step. In addition, after the silent mode installation is complete, the root user must run the post-configuration step to set up the Samba shared drive folders.

**Note.** Do not run this task for the silent mode VirtualBox deployment. Follow the instructions in Running the DPK Setup Script in Silent Mode for Default Initialization.

**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*\_1of*n*.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:

```
./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**

# Using and Maintaining the PeopleSoft Environment

#### This chapter discusses:

- Using the PeopleSoft Installation
- Using COBOL
- Installing the Elasticsearch, Logstash, and Kibana DPK
- Removing a Deployed PeopleSoft Environment
- Completing Post-Deployment Activities

### Task 4-1: Using the PeopleSoft Installation

#### This section discusses:

- Accessing the PeopleSoft Environment
- Reviewing the Deployment File System
- Reviewing the DPK-Created Users for Root Deployments on Linux
- Working with PeopleSoft Utilities and Programs for Root Deployments on Linux

### Task 4-1-1: Accessing the PeopleSoft Environment

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 4-1-2: 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.

Directory	Description	Default Location	Access
PS_HOME	PS_HOME is a secure location for the PeopleTools binary installation files.	<ul> <li>On Native OS for Linux or Windows,         <pre></pre></li></ul>	This directory can only be written to by the PeopleSoft administrator, psadm1 (Linux).
		<pre><ptools_patch_ver> is the PeopleSoft PeopleTools full release, for example 8.59.01.</ptools_patch_ver></pre>	

Directory	Description	Default Location	Access
PS_CFG_HOME	The PS_CFG_HOME location holds the configuration and log files for the PeopleSoft Application Server and Process Scheduler server domains.	On Native OS for Linux, when deploying as the root user, <user_home>/ psadm2/psft/pt/ <ptools_major_ver>.  You supply the location for the USER_HOME when you run the DPK setup script. The default value is /home.</ptools_major_ver></user_home>	This directory is owned by psadm2 (Linux).
		On Native OS for Linux, when deploying as a non-root user, <pre> <pre> <pre> <pre> <pre> // cols_major_ver&gt; </pre> <pre> You supply the location for for prompted_ps_cfg_home </pre></pre></pre></pre></pre>	
		when you run the DPK setup script.  On Native OS for Windows, C:\%USERPROFILE%\ psft\pt\	
		<pre> <pre> <pre> <pre> <pre> <pre></pre></pre></pre></pre></pre></pre>	
		• On VirtualBox, /home/psadm2/psft/pt/ <ptools_major_ver> The descriptor <ptools_major_ver> is the PeopleSoft PeopleTools major release without patch numbers; for example, 8.59.</ptools_major_ver></ptools_major_ver>	

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 Native OS for Linux, when deploying as the root user, <ul> <li>USER_HOME&gt;/         psadm2/psft/pt/         <pre></pre></li></ul>	This directory is owned by psadm2 (Linux).
		You supply the location for the <i>USER_HOME</i> when you run the DPK setup script. The default value is /home.	
		On Native OS for Linux, when deploying as a non-root user, <pre></pre>	
		You supply the location for prompted_ps_cfg_home when you run the DPK setup script.	
		• On Microsoft Windows, C:\%USERPROFILE%\ psft\pt\ <pre>cptools_major_ver&gt;\ webserv</pre>	
		For example, if the USERPROFILE environment variable is C:\Users\username, the location is C:\Users\username\psft\p t\8.59\webserv.	
		On VirtualBox, /home/psadm2/psft/pt/ <ptools_major_ver>/ webserv</ptools_major_ver>	
		The descriptor <pre><ptools_major_ver> is the PeopleSoft PeopleTools major release without patch numbers; for example, 8.59.</ptools_major_ver></pre>	

Directory	Description	Default Location	Access
PS_APP_HOME	The PS_APP_HOME location holds the PeopleSoft application installation files.	On Native OS for Linux or Windows, BASE_DIR/pt/ <product> _app_home      On VirtualBox, /opt/oracle/psft/pt/ <product>_app_home  The descriptor <product> is an abbreviation for the PeopleSoft application, such as hcm for PeopleSoft Human Capital Management</product></product></product>	This directory can only be written to by psadm3 (Linux).  Note. The user running the Environment Management Agent (PSEMAgent) needs write permission to PS_APP_HOME. After using PSEMAgent, you can revoke the permission.
PI_HOME	This is the file repository that Change Assistant uses when you define a Change Package in PeopleSoft Update Manager.  Note. The directory contents will be accessed by Change Assistant. Manual changes are not recommended.	On Native OS for Linux or Windows, <pre></pre>	This directory requires read access for Change Packages, and read and write access to apply PeopleSoft Release Patchsets (PRPs).
lem	This directory includes the Change Assistant installation directory. The DPK setup script installs Changes Assistant and configures it with information for the PUM source database. The PUM Automated Updates feature uses the commandline version of Change Assistant on both Linux and Microsoft Windows.  Note. Do not modify the Change Assistant settings after installation. This Change Assistant installation is for the exclusive use of PUM Automated Updates and should not be used for any other purpose.  See PeopleTools: Change Assistant and Update Manager, "Using PeopleSoft Automated Updates."	On Native OS for Linux or Windows,          < BASE_DIR > /lcm     On VirtualBox,          /opt/oracle/psft/lcm     The lcm/ca_work_dir directory includes      subdirectories download,      staging, and output, which      are used in Change Assistant      jobs.	The psadm2 user (Linux) has read, write, and execute permission for this directory.

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 database listener for the RDBMS hosting the PeopleSoft PeopleTools tables is 1522.	On Native OS for Linux or Windows, BASE_DIR/db/oracle-server     On VirtualBox, /opt/oracle/psft/db/oracle-server	This directory is owned by user oracle2 (Linux).
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/</i> webserv.	<ul> <li>On Native OS for Linux or Windows, BASE_DIR/pt/bea/wlserver</li> <li>On VirtualBox, /opt/oracle/psft/pt/bea/wl server</li> </ul>	This directory is owned by psadm1 (Linux).
Oracle Tuxedo	This directory includes the installation files for Oracle Tuxedo.	<ul> <li>On Native OS for Linux or Windows, BASE_DIR/pt/bea/tuxedo</li> <li>On VirtualBox, /opt/oracle/psft/pt/bea/tuxedo</li> </ul>	This directory is owned by psadm1 (Linux).
PeopleSoft database files (on Oracle RDBMS)	This directory includes the Oracle database files and tables for the PeopleSoft application.	<ul> <li>On Native OS for Linux or Windows, BASE_DIR/db/oradata</li> <li>On VirtualBox, /opt/oracle/psft/db/oradat a</li> </ul>	The owner of the database tables is oracle2 and its group is oinstall (Linux).  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 4-1-3: Reviewing the DPK-Created Users for Root Deployments on Linux

When deploying on Linux as the root user, the deployed configuration includes the default users and default passwords described in the following table.

**Important!** All passwords for the users created by the DPK setup script are set to expire immediately. On the first login of one of the DPK-created users listed in the following table, 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 remains in effect.

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	Oradmin (the first character is the number zero)	VSER_HOME/psadm1 You supply the location for the USER_HOME 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	Oradmin (the first character is the number zero)	USER_HOME/psadm2 You supply the location for the USER_HOME 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 PS_HOME, but has readexecute access.
psadm3	Oradmin (the first character is the number zero)	USER_HOME/psadm3 You supply the location for the USER_HOME when you run the DPK setup script. The default value is /home.	The PeopleSoft installation administrator who owns <i>PS_APP_HOME</i> .
oracle2	oracle	VSER_HOME/oracle2 You supply the location for the USER_HOME when you run the DPK setup script. The default value is /home.	The Oracle Database Server user name.

User Name	Default Password	Home Directory	Role Definition
esadm1	Oradmin (the first character is the number zero)	VSER_HOME/esadm1 You supply the location for the USER_HOME when you run the DPK setup script. The default value is /home.	This user is not needed for the current release.

# Task 4-1-4: Working with PeopleSoft Utilities and Programs for Root Deployments on Linux

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.

### Task 4-2: Using COBOL

COBOL is not needed for PeopleSoft PeopleTools or for PeopleSoft applications that do not contain COBOL programs. Consult the PeopleSoft information on My Oracle Support to verify whether your application requires COBOL. In addition, you do not need to install a COBOL compiler or runtime software on a PeopleSoft Update Image that you deploy for applying PUM maintenance.

You may choose to deploy a PeopleSoft Update Image for purposes other than applying maintenance, such as demonstration or testing. In this case, if you plan to use any PeopleSoft applications that require COBOL, see the information on obtaining, installing, compiling and running Micro Focus Visual COBOL in the PeopleSoft installation documentation.

Note that you must use a properly licensed Micro Focus Visual COBOL compiler, as discussed in the following references. Contact your Oracle sales representative to obtain a license for the Micro Focus compiler.

If you deploy the VirtualBox version of a PeopleSoft Update Image, and you want to install the Micro Focus Visual COBOL Development Hub compiler on the VirtualBox VM, be sure to fulfill the Micro Focus prerequisites for Linux operating systems.

#### See Also

PeopleSoft 9.2 Application Installation documentation on Oracle's PeopleSoft PeopleTools 8.59 Home Page, My Oracle Support, Doc ID 2753448.2.

PeopleSoft Enterprise Frequently Asked Questions About PeopleSoft and COBOL Compilers, My Oracle Support, Doc ID 747059.1.

Using Visual COBOL with PeopleSoft, My Oracle Support, Doc ID 2523494.1.

### Task 4-3: Installing the Elasticsearch, Logstash, and Kibana DPK

Elasticsearch is the search engine for the PeopleSoft Search Framework. To install Elasticsearch for the PeopleSoft Search Framework, you download and deploy the Elasticsearch, Logstash, and Kibana (ELK) DPK for Linux or Microsoft Windows from Oracle Software Delivery Cloud or My Oracle Support. The DPK delivers the required Elasticsearch, Logstash, and Kibana software versions, Java-based plug-ins needed for integration with PeopleSoft environments, and customized code where required. Kibana is used for analytics and data visualizations, and Logstash is used for PeopleSoft Health Center and as part of the external data integration feature. Be sure to obtain and use the ELK DPKs provided for use with the PeopleSoft installation.

See PeopleSoft Search and Kibana Analytics Home Page, My Oracle Support, Doc ID 2205540.2.

### Task 4-4: 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
- 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
- Manually Removing the PeopleSoft Environment on Microsoft Windows
- Manually Removing the PeopleSoft Environment on Linux
- Removing the PeopleSoft VM from the VirtualBox Manager

### **Understanding the Removal Process**

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 4-4-1: 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 4-4-2: Using the DPK Setup Script to Remove the PeopleSoft Environment on Linux

Use these steps to remove a deployed PeopleSoft environment using the PeopleSoft DPK setup script on Linux:

- 1. Open a terminal window as a user with root permission.
- 2. Go to *DPK\_INSTALL*\setup and run the following command:

```
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, and you are removing the most recent deployment. If there is a single deployment, or if you are removing a second deployment, the script does not display this prompt. 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. 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 your

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.
- 8. If any files or processes remain, the cleanup process was not successful. 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.

# Task 4-4-3: 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 4-4-4: Using the psft\_puppet\_apply.sh Script to Remove the PeopleSoft Environment on Linux

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:

- 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 4-4-5: 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.** 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
sc delete OracleOraDB19cHomeTNSListener
sc delete PsftAppServerDomain
sc delete PsftAppServerDomain
sc delete PsftPrcsDomain
sc delete PsftPrcsDomain
sc delete PsftPIADomain
```

- 5. In the Services window, stop ORACLE ProcMGR V12.2.2.0.0\_VS2017 and TListen 12.2.2.0.0\_VS2017(Port3050) 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 OraTux1222Home< 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 12.2.2.0.0\_VS2017 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="OraTux1222Home<date_time>" LOC="C:\psft\pt\bea\tuxedo" TYPE=> "O"
```

```
IDX="17"/>
<HOME NAME="OraDB19Home1" LOC="C:\psft\db\oracle-server\19.0.0"
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\8.59 (PS\_CFG\_HOME).
- 18. If you performed a customized deployment that installed software such as Oracle Tuxedo or Oracle WebLogic, or 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 4-4-6: Manually Removing the PeopleSoft Environment on Linux

This section includes advanced steps to be used only if the previous procedures in this section failed, or if you were not able to use the previous procedures for any reason.

If the cleanup process on Linux 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.sh --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, try the following steps.

Here are a few things to check for the advanced manual cleanup on Linux. 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 five PeopleSoft user IDs using these commands

```
id psadm1
id psadm2
id psadm3
id oracle2
id esadm1
```

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, PS\_HOME, PS\_CFG\_HOME, PS\_APP\_HOME).

#### Task 4-4-7: Removing the PeopleSoft VM from the VirtualBox Manager

To remove a PeopleSoft VM:

- 1. In the console window for the PeopleSoft VM, select File, ACPI shutdown.
- 2. Wait until the shutdown process is complete and the console window disappears.
- 3. In VirtualBox Manager, select the PeopleSoft VirtualBox shell and right-click.
- 4. Select Remove from the menu.
- 5. Select Delete All Files to remove the files containing the VM from the host machine.

The files are located in the VirtualBox Default Machine Folder.

6. After the VM has been removed, close the VirtualBox Manager.

#### Task 4-5: Completing Post-Deployment Activities

This section assumes that you have started the PeopleSoft VM. Depending upon the selections that you made when configuring the VM you may wish to do any of the following:

Test the VM to ensure that it was configured correctly.

Testing the VM will typically involve logging in to PIA to make sure that the server is accessible. For Process Scheduler servers this will involve running test reports or audits. Note that you must set up report distribution to see the posted reports.

See the section Setting Up Process Scheduler to Transfer Reports and Logs to the Report Repository in the product documentation *PeopleSoft 9.2 Application Installation for Oracle*, "Setting Up Process Scheduler on UNIX."

See PeopleSoft PeopleTools on Oracle Help Center, <a href="https://docs.oracle.com/en/applications/peoplesoft/peopletools/index.html">https://docs.oracle.com/en/applications/peoplesoft/peopletools/index.html</a>.

- Make additional configuration changes to the configured Application Server, Process Scheduler, web server, or other components. For example, change port numbers, log file locations, and so on.
- Check for any Critical Patch Updates (CPUs) for any of the installed components at My Oracle Support.
   Deploy these CPUs to each of the required VM.

**Note.** To determine the versions of the installed components, review the README file provided with the DPK.

Harden and secure the VM.

See *PeopleTools: Security Administration*.

See Securing Your PeopleSoft Application Environment, Oracle Technology Network, <a href="https://download.oracle.com/peopletools/documents/Securing\_PSFT\_App\_Environment\_May2010%20v4.pdf">https://download.oracle.com/peopletools/documents/Securing\_PSFT\_App\_Environment\_May2010%20v4.pdf</a>

Prepare the PeopleSoft application.

If your *PS\_APP\_HOME* has not been previously provisioned to a shared location it may be necessary to take additional steps to ensure that the software contains the most recent updates for your application; for example:

- Use PeopleSoft Lifecycle Management tools to update the environment. See the *PeopleTools: Change Assistant and Update Manager* and the *PeopleTools: PeopleSoft Application Designer Lifecycle Management Guide* product documentation for information.
- Apply customizations to the PeopleSoft application. This is frequently in the areas of COBOL and SQR.
- Set up the COBOL environment.

Install COBOL Compiler and Runtime and compile the COBOL source code that was delivered with PeopleSoft PeopleTools or the PeopleSoft application.

See Using COBOL.

#### Appendix A

# Deploying on a Linux Host as a Non-Root User

#### This appendix discusses:

- Preparing to Deploy as a Non-Root User
- Running the DPK Setup Prerequisite Step
- Deploying the PeopleSoft Environment as a Non-Root User
- Running the DPK Setup Post-Configuration Step
- Using the DPK Setup Script Cleanup Option as a Non-Root User
- Setting Environment Variables for the Non-Root User

#### Preparing to Deploy as a Non-Root User

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

Note that before a non-root user deploys the PeopleSoft environment, the root user must perform a prerequisite task. After the non-root deployment, the root user must perform a post-deployment task.

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

- You are setting up the full environment for the Native OS Update Image on a single Linux host.
- You have downloaded all of the required DPKs and saved them in a location accessible to the Linux host, referred to as *DPK\_INSTALL*.

**Note.** The contents of the *DPK\_INSTALL* directory may be used for deployments by more than one non-root user.

For this task, download the Native OS DPKs for Linux.

See "Deploying the PeopleSoft Application Deployment Packages," Obtaining the PeopleSoft Update Images.

**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 folder.

- There is at least 150 GB available space on the Linux host for the full-tier PeopleSoft environment.
- You have the user IDs and passwords required by the DPK setup script.
  - See "Deploying the PeopleSoft Application Deployment Packages," Preparing to Run the DPK Setup Script.
- 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 that deploys the PeopleSoft environment must be configured to use the Bash, Bourne, or Korn shell.
  - In addition, the process requires a root user.
- 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.
- Before a non-root user deploys the PeopleSoft environment, the root user must perform a prerequisite task. After the non-root deployment, the root user must perform a post-deployment task.
- 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 "Prerequisites," Reviewing the Oracle Central Inventory File Location and Permissions on Linux.

After the non-root user completes the deployment:

- The non-root user owns all of the deployed environment, including *PS\_HOME*, *PS\_APP\_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 --fulltier, or another deployment command, the log file is /home/psft\_user/psft\_dpk\_work/psft\_dpk\_setup\_5678.log.

The following table lists the high-level steps required to deploy a PeopleSoft environment by a non-root user, with a root user performing prerequisite and post-deployment steps.

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

Step	Reference	Comment
1. Obtain the DPK zip files and extract the first zip file.	Chapter 2 "Deploying the PeopleSoft Application Deployment Packages," Task 2-1 Obtaining the PeopleSoft Update Images	NA
2. Select and run one or more prerequisite commands.	Task A-1 Running the DPK Setup Prerequisite	Important! This step must be run by the root user.
3. Run the DPK setup script; for example: ./psft-dpk-setup.sh	Task A-2 Deploying the PeopleSoft Environment as a Non-Root User	The script deploys the full-tier PeopleSoft environment.

Step	Reference	Comment
4. Run the post-deployment command:  ./psft-dpk-setup.shpostcfgpsft_base_dir BASE_DIR	Task A-3 Running the DPK Setup Post-Configuration Step	Set up the Samba shared drive folders.  Important! This step must be run by the root user.
5. Source the script to set environment variables:  source BASE_DIR/pt⇒ /psft_env.sh	Task A-5 Setting Environment Variables for the Non-Root User	Before using PeopleSoft utilities and programs, source the script to set the required environment variables.
6. If necessary, run the cleanup command: ./psft-dpk-setup.shcleanup	Task A-4 Using the DPK Setup Script Cleanup Option as a Non-Root User	Use the DPK setup script to clean up the environment (optional).

### Task A-1: Running the DPK Setup Prerequisite Step

This section discusses:

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

#### **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.

Action	DPK Setup Script Command
Set system configuration variables such as kernel parameters, user and group ulimits. Use this option in combination with theprereq option.	./psft-dpk-setup.shprereqsyscfg
Validate the Oracle central inventory location and set up a default central inventory location with the correct permissions if none exists.	./psft-dpk-setup.shprereq

### Task A-1-1: Running the DPK Setup Prerequisite Step to Validate the Oracle Central Inventory Location and Set the System Configuration

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
```

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 "Prerequisites," Reviewing the Oracle Central Inventory File Location and Permissions on Linux.

The setup log for the prerequisite step is written to <*ROOT\_HOME*>/psft\_dpk\_work/psft\_dpk\_setup\_<*PID*>.log, where *ROOT\_HOME* is the user's home directory, and *PID* refers to a process ID number.

### Task A-1-2: 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
```

4. After the script completes the Puppet software installation, 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 "Prerequisites," Reviewing the Oracle Central Inventory File Location and Permissions on Linux.

The complete setup log for the prerequisite step is written to <*ROOT\_HOME*>/psft\_dpk\_work/psft\_dpk\_setup\_ <*PID*>.log, where *ROOT\_HOME* is the user's home directory, and *PID* refers to a process ID number.

### Task A-2: Deploying the PeopleSoft Environment as a Non-Root User

To deploy the PeopleSoft environment as a non-root user:

- 1. Open a terminal window and change directory to *DPK\_INSTALL*/setup.
- 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
```

• 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\_B*.

```
./psft-dpk-setup.sh --dpk src dir DPK INSTALL B
```

3. Answer y (yes) to 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 prerequite 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 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 for 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. When entering the full path for the base folder, use forward slashes (/). The directory /cs1/psft is used in this example. Enclose any names with special characters in double quotes. Do not use a name for the base folder that begins with a number. Do not end the base directory name with a forward slash (for example, /var/psft/will give an error).

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]: **y** 

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.** Setup of a full PeopleSoft environment requires about 150 GB of disk space.

The script creates the following sub-directories under the user provided base directory, BASE\_DIR:

BASE\_DIR/db

The script uses this directory to deploy Oracle database server and deploy the PeopleSoft database data files.

BASE\_DIR/dpk

The script uses this directory to extract the archives from the PeopleSoft DPKs.

• BASE\_DIR/1cm

The script uses this directory to install Change Assistant and directories used for PUM Automated Updates.

• BASE\_DIR/psft\_puppet\_agent

The script uses this directory to install the Puppet software.

BASE DIR/pt

The script uses this directory to deploy PeopleSoft PeopleTools and PeopleSoft application components. This directory also includes Oracle Tuxedo and Oracle WebLogic software needed for the Application Server, Process Scheduler, and web server (PIA).

6. Enter a writable directory with at least 10 GB available space for PS\_CFG\_HOME.

The default is *USER\_HOME*/psft/pt/8.59. 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/8.59]: 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.

8. Review the status messages as the script validates the DPKs and extract the archives.

**Note.** Only a sample of the messages is shown here.

```
Validating the PeopleSoft DPKs in the Linux Host: [ OK ] [...]

Extracting the PeopleSoft DPK Archives in the Linux 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 (*BASE\_DIR*/dpk/puppet/production) 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. Enter PUM as the installation type:

```
Enter the PeopleSoft installation [PUM or FRESH] type [PUM]: PUM
```

11. Enter a name for the database, such as HCM92, following the guidelines in the prompt, or press ENTER to accept the default.

```
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 [HCM92U26]:
```

12. Enter a port number for the database listener, or press ENTER to accept the default, 1521.

**Note.** Verify that there is no database listener running on port 1521. If so, do not accept the default value; use another port.

```
Enter the PeopleSoft database listener port [1521]: 1522
```

13. Enter a password for the database SYS or SYSTEM user, following the guidelines in the prompt, and enter again on the next line.

The password is not visible as you type, and the window does not display masking characters.

There is no default password. The DPK setup script does not restrict or validate your entry. It will accept whatever you enter. However, there may be restrictions imposed by the database platform or by other processes. In order to avoid problems later in the installation, be sure to check the password requirements for your database platform.

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

```
Enter a new PeopleSoft database admin users [SYS/SYSTEM] password. Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the database admin users password:
```

14. Enter the PeopleSoft connect ID, following the guidelines in the prompt.

Press ENTER to accept the default, people.

```
Enter a new PeopleSoft database Connect ID. Ensure that the ID contains only alphanumeric characters [people]:
```

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

The password is not visible as you type, and the window does not display masking characters.

There is no default password. The DPK setup script does not restrict or validate your entry. It will accept whatever you enter. However, there may be restrictions imposed by the database platform or by other processes. In order to avoid problems later in the installation, be sure to check the password requirements for

your database platform.

See E-DPK - PeopleTools 8.59 - 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:

16. Enter a password for the PeopleSoft database access ID, following the guidelines in the prompt, and enter again on the next line.

The password is not visible as you type, and the window does not display masking characters.

There is no default password. The DPK setup script does not restrict or validate your entry. It will accept whatever you enter. However, there may be restrictions imposed by the database platform or by other processes. In order to avoid problems later in the installation, be sure to check the password requirements for your database platform.

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

Enter a new PeopleSoft database Access ID [SYSADM] password. Ensure that the password meets the length and complexity requirements for your database platform:

Re-Enter the PeopleSoft Access ID password:

17. Enter a password for the PeopleSoft user, or operator ID, such as VP1 or PS, using the guidelines in the prompt, and enter again on the next line.

The password is not visible as you type, and the window does not display masking characters. There is no default password.

Enter a new 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 Operator ID password:

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

The password is not visible as you type, and the window does not display masking characters. 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 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 Oracle WebLogic Server Admin Password, following the guidelines in the prompt.

The password is not visible as you type, and 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:
```

20. Enter a password for the PeopleSoft Web Profile user, following the guidelines in the prompt, and enter again on the next line.

```
Enter a new PeopleSoft WebProfile user [PTWEBSERVER] password. Ensure that 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 a password for the PeopleSoft Integration Gateway user, following the guidelines in the prompt, and enter again on the next line.

```
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:
```

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 that 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. 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]: y
```

24. 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 ]
```

25. 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.

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?  $[y|n]: \Rightarrow y$ 

26. Review the status of the setup steps.

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:

Setting Up System Settings:

[FAILED]

The initialization of PeopleSoft environment setup failed. Check the log file [/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.

See PeopleSoft PeopleTools 8.59 Deployment Packages Installation.

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

The PeopleSoft Environment Setup Process Ended.

The complete setup log is written to *<USER\_HOME>/*psft\_dpk\_work/psft\_dpk\_setup\_*<PID>*.log, where *USER\_HOME* is the user's home directory, and *PID* refers to a process ID number.

See "Deploying the PeopleSoft Application Deployment Packages," Using the DPK Setup Script Options for other deployment options.

#### Task A-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 set up the Samba shared drive folders. The command also creates the Oracle central inventory file if necessary.

```
./psft-dpk-setup.sh --postcfg --psft base dir BASE DIR
```

In order for the Samba shared drive folders to be accessible, all of the directories in the full path of the *BASE\_DIR* must have read and execute permissions for "others", all the way to the top-level parent directory.

For example, if the absolute path of the *BASE\_DIR* is /dir1/dir2/dir3/dir4/base\_dir, then you must verify that all the parents of base\_dir, from /dir1 to dir4, have read+execute permission for others.

**Note.** The DPK process sets the permissions of the BASE DIR, so those do not need to be changed.

The shared drive folders are named based on the user and base directory. The following table describes the directories on the Oracle Linux guest VM, and the shared drive folders that you can access from a Microsoft Windows machine:

Directory on Oracle Linux	Shared Drive Folder on Microsoft Windows	Description
On Native OS DPK for Linux:  BASE_DIR/pt/tools_client	<user_name>_tools_client_ <base_dir></base_dir></user_name>	This directory includes installation software for all current PeopleTools client versions, and the Oracle database client.
On Native OS DPK for Linux: <pre> <base_dir>/pt/<product>_pi_home <product> is an abbreviation for the PeopleSoft application, such as hcm for PeopleSoft Human Capital Management</product></product></base_dir></pre>	<user_name>_pi_home_ <base_dir></base_dir></user_name>	Change Assistant file repository
On Native OS for Linux, BASE_DIR/pt/ <product>_apphome <product> is an abbreviation for the PeopleSoft application, such as hcm for PeopleSoft Human Capital Management.</product></product>	<user_name>_ps_apphome_ <base_dir></base_dir></user_name>	The PS_APP_HOME location holds the PeopleSoft application installation files.

The log for the post-configuration step is written to <*ROOT\_HOME*>/psft\_dpk\_work/psft\_dpk\_setup\_<*PID*>. log, where *ROOT\_HOME* is the user's home directory, and *PID* refers to a process ID number.

See "Deploying the PeopleSoft Application Deployment Packages," Using the Samba Shared Drive Folders.

## Task A-4: Using the DPK Setup Script Cleanup Option as a Non-Root User

Use the ./psft-dpk-setup.sh --cleanup command to remove a deployed PeopleSoft environment. The cleanup log is written to <*USER\_HOME*>/psft\_dpk\_work/psft\_dpk\_setup\_cleanup\_<*PID*>.log, where *USER\_HOME* is the user's home directory, and *PID* refers to a process ID number. This PID suffix ensures that subsequent cleanups do not overwrite the file contents.

See "Using and Maintaining the PeopleSoft Environment," Removing a Deployed PeopleSoft Environment

#### Task A-5: Setting Environment Variables for the Non-Root User

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, 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 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 sets environment variables for 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 entropy collection problems with the default random number generation.
- The script sets the TUXDIR, PATH, and LD\_LIBRARY\_PATH environment variables to reference the Tuxedo installation.
- The script sets the TNS\_ADMIN, ORACLE\_HOME, and LD\_LIBRARY\_PATH environment variables to reference the installations of the Oracle database and Oracle database client.
- The script sets the language or locale.
- The script sets the *PS CFG HOME* environment variable.
- 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 in previous releases 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.